

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

June 3, 2010 Meeting

10:00 AM – 2:00 PM, State Transportation Building, Conference Room 4, 10 Park Plaza,
Boston

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

Decisions

The Transportation Planning and Programming Committee voted to take the following
actions:

- release Amendment Five to the federal fiscal years (FFYs) 2010 – 2013
Transportation Improvement Program (TIP) for a 30-day public comment period
- approve an administrative modification to the FFY 2010 Unified Planning Work
Program (UPWP), which adds in Appendix A the *MBTA/MART Belmont Station
Consolidation and Development Study*
- approve the work programs for the *State Fiscal Year 2011 National Transit
Database Directly Operated Bus and Rail Passenger-Miles and Boardings
Estimates* and the *State Fiscal Year 2011 National Transit Database Purchased
Bus Transportation Passenger-Miles and Boardings Estimates*
- approve the MPO's Pedestrian Transportation Plan, as amended
- join with the other large MPOs in the nation and allow the Boston Region MPO
logo to appear on the document, "Proposed Transportation Reauthorization
Principles for Major Metros."

Meeting Agenda

1. Public Comments

Bill Deigman, City of Cambridge, requested a correction to the TIP tables in Amendment
Five of the FFYs 2010 – 2013 TIP to clarify that the funds for the *Cambridge –
Cambridge Common* project are for design, not construction. He requested that the
construction funds be included in the FFY 2012 TIP element.

State Senator James Eldridge requested the MPO's support for the *Southborough – Route
30/Main Street* project and for second year Suburban Mobility (now Clean Air and
Mobility) funding for the Town of Acton's van service. He thanked the MPO for the
continuing support for the *Bruce Freeman Rail Trail* project.

Tom Kelleher, of the Assabet River Rail Trail volunteers, requested that the MPO
program construction funding for the Acton/Maynard segment of the trail in the FFY
2013 and 2014 elements of the TIP.

Trish Domigan, Vanasse Hangen Brustlin, Inc., representing the Town of Danvers,
requested that the MPO program funding for the *Danvers – Liberty Street* project in the

FFY 2010 or 2011 element of the TIP. She noted that the final design will be submitted to MassDOT by June 25, all right-of-way has been secured, and the environmental permitting is nearly complete.

John Woodsmall, Town of Southborough, requested the MPO's support for the *Southborough – Route 30/Main Street* project. He stated that the project will be ready for construction in FFY 2012.

Dick Williamson, Friends of the Bruce Freeman Rail Trail, reported that the opening of the first segment of the Bruce Freeman Rail Trail was a success and that there is strong civic support for the project. He noted that the next segments of the trail are ready to go forward and urged the MPO to program funding for the project on the TIP.

Marzi Galazka, City of Everett, asked for the MPO's support for the City of Everett's application for enhancement funding for lighting improvements on Route 99.

Kevin McHugh, Coneco Engineers and Scientists, requested the MPO's support for the *Ipswich – Route 133* project. He reported that the proponents will be ready to submit 75% design plans to MassDOT as soon as they receive comments on the 25% designs, and that the environmental permitting is complete.

2. Chair's Report – *Clinton Bench, MassDOT*

The City of Somerville and the Town of Framingham have been re-elected to their seats on the MPO. Tom Bent, City of Somerville, and Ginger Esty, Town of Framingham, expressed their thanks for the support they received.

MassDOT has started a series of public hearings regarding the Commonwealth's goals to reduce greenhouse gas emissions. The Chair distributed and described a policy directive issued by MassDOT, which outlines the agency's GreenDOT initiative. It serves as the blueprint for how MassDOT will do its part in reducing the Commonwealth's greenhouse gas emissions. The GreenDOT goals are to reduce greenhouse gas emissions, promote healthy transportation modes (walking, bicycling, and public transit), and support smart growth development. MassDOT is proposing to reduce emissions from the transportation sector to 7.3% below 1990 levels by 2020, and to 12.3% below 1990 levels by 2050. (See attached.)

In response to questions about the implications of this initiative for the MPO, the Chair noted that statewide and regional plans will have to be integrated in to these goals. MPOs will not be assigned additional emission targets beyond the state targets.

3. Subcommittee Chairs' Reports – *Paul Regan, MBTA Advisory Board, Mary Ellen Sullivan, UPWP Manager, MPO Staff, and Eric Bourassa, Metropolitan Area Planning Council (MAPC)*

The Administration and Finance Subcommittee will bring recommendations to the next Transportation Planning and Programming Committee regarding the CTPS budget and changes to the CTPS hiring procedures.

Today's UPWP Subcommittee meeting has been rescheduled for June 10 at 1:00.

The Clean Air and Mobility Subcommittee is making recommendations that will be addressed under the TIP action items.

4. Regional Transportation Advisory Council – *Laura Wiener, Regional Transportation Advisory Council*

The Advisory Council will meet next on June 9. The agenda will include discussions of the TIP, the long-range transportation plan, the Clean Air and Mobility Program, and American Recovery and Reinvestment Act (ARRA) funding. The Council will produce a comment letter to the MPO.

5. Director's Report – *Arnie Soolman, Director, CTPS*

This year's Walkable Community Workshops are underway. The MPO held a workshop in Needham on May 13, and in Bedford on May 14. Two more are scheduled in June in North Reading on June 21 and in Walpole on June 24. Communities that would like to host a workshop should contact MPO staff at (617) 973-7100 or at walkable@ctps.org.

6. TIP Amendment Five – *Hayes Morrison, TIP Manager, MPO Staff*

Members were provided with draft TIP tables for Amendment Five of the FFYs 2010 – 2013 TIP. (See attached.)

H. Morrison gave an overview of the changes, which are summarized below:

- change to the cost estimates for the *Weymouth – Route 53, Lexington – Intersection Improvements at Route 2A and Waltham Street, and Everett/Boston – Route 99* projects
- change to an earmark for the *Boston – East Boston Haul Road (Design)*
- addition of the projects that were granted Clean Air and Mobility funding
- reprogramming of the *Boston – Morton Street over the MBTA* project to the FFY 2011 element (according to MassDOT Highway, the project will not be ready for advertising in FFY 2010)
- removal of the *Boston – South Bay Harbor Trail*, which is not ready for advertising in FFY 2010 due to right-of-way issues; the project will be addressed in the FFY 2011 – 2014 TIP
- increase of Enhancement funding for the *Cambridge – Cambridge Common (Design)* project and for lighting and streetscape improvements associated with the *Everett/Boston – Route 99* project
- addition of four ARRA-funded projects: *Arlington – Reconstruction of Forest Street, Braintree – Reconstruction of Union Street, Canton – Improvements on Route 138, and Lynn – Intersection Improvements at Route 129, Millard and Parker Hill Avenues and Den Quarry Road*
- removal of High-Priority Project earmarks for *Boston – Huntington Avenue/Symphony Area Streetscape (Construction)* and *Somerville – Improvements to Broadway in Somerville (Construction)* because the projects will not be ready to advertise in FFY 2010

- addition of an alternatives analysis study for possible consolidation of stations on the Fitchburg commuter rail line in Belmont
- adjustments to cash flows associated with MBTA programs including: a reduction in funding to the *MBTA Accessibility Program, Blue Line Modernization Program, and the Columbia Junction project*, and an increase in funding to the *Parking Program, Bridge and Tunnel Program, and Signal System Upgrades Program*

With the above changes implemented, the MPO would have an additional \$1.4 million to program in this TIP.

T. Bent noted that the *Somerville – Improvements to Broadway in Somerville (Construction)* project is being held up due to the acquisition of temporary construction easements, but indicated that the project would be ready for advertising in October 2010. He stated that the City of Somerville would be comfortable programming the project in the FFY 2011 element of the TIP at this time.

In response to questions from Mayor Joseph Sullivan, Town of Braintree, regarding the *Braintree – Reconstruction of Union Street* project, H. Morrison stated that the project needs to be advertised (not awarded) by the end of the federal fiscal year in September 2010 if it is, as proposed, in the FFY 2010 element of the TIP. The project cannot be advertised until the MPO votes on this amendment.

Mayor Sullivan then inquired about the cost estimate for the *Weymouth – Route 53* project. H. Morrison explained that the project estimate is still fluid, but that the Town of Weymouth should be preparing to advertise the project. Marie Rose, MassDOT Highway, indicated that MassDOT Highway is not confident that the Weymouth project will be ready for advertising in FFY 2010, but is confident that the Braintree project will be ready.

H. Morrison then summarized the proposed changes to projects in the bridge elements of the amendment, summarized below:

- cost adjustment to *Boston – Route 145 over Belle Isle Inlet*
- addition of *Wayland – Pelham Island Road over Sudbury River*
- removal of *Littleton – Taylor Street over I-495*
- addition of *Littleton – Route 2A over I-495*
- cost adjustment to *Maynard – Route 27 over the Assabet River*
- reprogramming of *Boston – Morton Street over the MBTA* to the FFY 2011 element

E. Bourassa asked if the reprogramming of the *Boston – Morton Street over the MBTA* project would affect the completion date of the Fairmount commuter rail line improvement project, which is a requirement of the State Implementation Plan (SIP). Joe Cosgrove, MBTA, stated that the Fairmount work would be affected, but that it would not affect the deadline of the project.

Members paused from their discussion of the TIP amendment to hear public comments from State Senator Bruce Tarr and State Representative Bradford Hill. Senator Tarr expressed concern that the *Ipswich – South Main Street* project is not on the TIP and that the reason may have to do with a disconnect in the planning process. He stated that the project is at 25% design, and may be farther along in the MassDOT process. He expressed his wish that channels of communication remain open in regards to this project. He asked that the MPO program the project in the FFY 2011 element of the TIP at the latest.

In response to questions from members about the project, Kevin McHugh, Coneco Engineers and Scientists, stated that the project cost estimate is about \$2.5 million, that the proponents are awaiting complete comments from MassDOT Highway on the 25% design, and that they have submitted preliminary 75% designs to MassDOT Highway. He stated that the project will be constructed in the existing right-of-way. Members then identified agency contacts for the project proponents to contact for further assistance in moving forward with the process.

Robert Markell, Town of Ipswich, spoke further on the importance of the project to the Ipswich community, as part of a 25-year effort to make Ipswich (a historic center) more attractive to visitors, for access to Cape Ann, and for environmental reasons. The project includes stormwater drainage improvements that will help protect the Ipswich River and clam flats that sustain what he described as the largest soft shell clam industry in the Northeast.

Returning to the TIP amendment, Victor Rivas, Deputy Director of Capital Budget, MBTA, gave a presentation on the transit portion of the amendment. He explained that the MBTA is focused on state of good repair; approximately 99% of its capital projects are for state of good repair and enhancement projects while only 1% is for expansion. The MBTA is aiming to maximize the use of federal funds and to invest in projects that improve safety and system reliability.

The MBTA is proposing three changes to be incorporated in TIP Amendment Five. None of the changes would eliminate or slow down existing projects. The changes involve reallocation of funds to enable projects that are ready to proceed to go forward and to maximize the use of federal funds. The proposed changes are to reallocate:

- \$16 million from the *Light Rail Accessibility Program* to the *Parking Program*, to fund repairs to parking garages at three transit stations (the South Shore garage in Braintree, and the Quincy Adams and Quincy Center garages in Quincy) and bring the facilities into compliance with modern building codes
- \$30 million from the *Blue Line Modernization Program* to the *Bridge and Tunnel Program*
- \$17.4 million from the *Red Line – Columbia Junction* project to *Signal System Upgrades* (this is a cash flow adjustment)

Mayor Sullivan asked if the cost estimate for the repairs to the garage in Braintree include any repairs to the Union Street Bridge, which carries the Old Colony commuter

rail line and Red Line and is connected to the garage. He advised that MassDOT and the MBTA coordinate construction on the garage in Braintree with repairs to the Union Street Bridge and the project to replace the railroad ties on the Old Colony line, and he asked that the agency have sensitivity to the impact that these projects will have on commuters.

V. Rivas replied that the funds are specifically for the parking garage, and that the MBTA project manager could provide more detail. He also stated that the MBTA's Design and Construction Department is responsible for the projects to repair the garage and the Old Colony line, and presumably would coordinate the work.

In response to a question from Mayor Sullivan regarding the timeframe for the garage projects, V. Rivas explained that originally the work on the garages was slated to be finished by now. The projects were originally funded by bond revenue, which has since been frozen. This amendment is designed to apply available federal funding to these projects to keep them moving forward. If the amendment is approved, construction could begin on the garages immediately.

M. Pratt asked for more detail about how the proposed shift of funds from the *Blue Line Modernization Program* to the *Bridge and Tunnel Program* would affect work on the Blue Line. V. Rivas explained that there is currently enough money for work to continue on the Blue Line and that the MBTA is expecting that more funds will be allocated to that project in FFY 2011.

P. Regan asked about what the effect would be on the capacity of the garages during construction. J. Cosgrove replied that the MBTA intends to keep the garages open during construction.

P. Regan asked if the completion dates for the *Red Line – Columbia Junction* project would have to be adjusted. V. Rivas stated that the MBTA has not requested a schedule change. He added that there is \$9 million programmed for the project now, and the project is not moving along as quickly as expected in terms of dollars spent.

P. Regan recommended that the MBTA upgrade signal cables and power cables on the Red Line at the same time. V. Rivas noted that the MBTA is working to encourage all its departments to coordinate on projects.

C. Bench asked the MBTA representatives to have project managers attend the MPO meeting on June 24 to answer questions about projects under consideration in the amendment.

J. Cosgrove added that the MBTA is also proposing to add a \$37.5 million project for *Locomotive Procurement*, for the replacement of the existing locomotive fleet with lower-emission locomotives.

A motion to release Amendment Five to the FFYs 2010 – 2013 TIP, as proposed, for a 30-day public comment period was made by John Romano, MassDOT Highway, and seconded by Ginger Esty, Town of Framingham.

During a discussion of the motion, members considered another aspect of the amendment, which shows the individual projects that the MPO's Clean Air and Mobility Subcommittee are recommending to receive funding through the Clean Air and Mobility Program. H. Morrison noted that nearly \$2 million worth of projects are programmed, but that the MPO received over \$7 million in requests. E. Bourassa and H. Morrison explained why several projects – proposed by Acton, Boston, and Hull – will not need funding until FFY 2011 and 2012.

A motion to end the debate on circulating Amendment Five was made by J. Sullivan, and seconded by G. Esty. The motion passed. MAPC and the City of Newton voted no. The following voted yes: MassDOT; MassDOT Highway; Massachusetts Port Authority; Regional Transportation Advisory Board; MBTA; MBTA Advisory Board; the cities of Boston, Braintree, and Somerville; and the towns of Bedford, Framingham, and Hopkinton.

Members then acted on the first motion to release Amendment Five to the FFYs 2010 – 2013 TIP, as proposed, for a 30-day public comment period. The motion passed unanimously.

7. UPWP Administrative Modification – *Mary Ellen Sullivan, UPWP Manager, MPO Staff*

Members addressed a proposed administrative modification to the FFY 2010 UPWP. The modification would add text to Appendix A to describe the *MBTA/MART Belmont Station Consolidation and Development Study* and would program a Section 5339 federal earmark for the project. M.E. Sullivan explained that the study would examine issues regarding the consolidation of commuter rail stations on the Fitchburg commuter rail line, including the identification of possible station locations and the development of cost estimates. (See attached study description.)

J. Cosgrove added that this would be a land use and feasibility study. It would inform the planning aimed at improving travel time on the Fitchburg line. The \$142,500 earmark must be programmed by June in order that the federal funds do not lapse. The Town of Belmont is providing \$28,500 for the local match.

A motion to approve an administrative modification to the FFY 2010 UPWP to add the *MBTA/MART Belmont Station Consolidation and Development Study* was made by Tom Kadzis, City of Boston, and seconded by M. Pratt.

During a discussion of the motion, D. Koses commented that the members should have had more time to consider and discuss this action, which is also a part of the TIP amendment. He expressed frustration that members did not have information about the

reasons for the potential station closures or comments from the Town of Belmont about its position in regards to this study.

Jim Gallagher, MAPC, suggested that the MPO should take this action at the same the TIP is adopted since, if the study were removed from the draft TIP, it would not be able to go forward. M.E. Sullivan and J. Cosgrove explained that the study must be in the UPWP by June 30 in order for the MBTA be able to submit a grant application for the project to the Federal Transit Administration.

D. Koses asked for information about how the study was initiated. J. Cosgrove explained that the Town of Belmont initiated the request for a federal earmark.

D. Koses suggested that part of the study include examining what could be done to improve the existing stations. J. Cosgrove indicated that there might not be enough money in the project budget to do that work.

P. Regan asked about the status of the local match. J. Cosgrove reported that the Town of Belmont's Board of Selectmen will vote next Monday on whether to provide the matching funds. The project cannot proceed without the local match.

P. Regan expressed concern that, if the study recommends that the stations should be consolidated, the MBTA would have to finance the project. J. Cosgrove noted that there is a possibility of obtaining future earmarks for the project.

M. E. Sullivan noted that the project budget includes funding for a public process.

Members then took action the motion to approve an administrative modification to the FFY 2010 UPWP to add the *MBTA/MART Belmont Station Consolidation and Development Study* to Appendix A. The motion passed. The MBTA Advisory Board and the City of Newton abstained. The following members voted yes: MAPC; MassDOT; MassDOT Highway; Massachusetts Port Authority; MBTA; Regional Transportation Advisory Board; the cities of Boston, Braintree, and Somerville; and the towns of Bedford, Framingham, and Hopkinton.

8. National Transit Database Work Programs – Karl Quackenbush, Deputy Technical Director, CTPS

Members took action on two work programs that were presented at the meeting of May 20.

A motion to approve the work programs for the *State Fiscal Year 2011 National Transit Database Directly Operated Bus and Rail Passenger-Miles and Boardings Estimates* and the *State Fiscal Year 2011 National Transit Database Purchased Bus Transportation Passenger-Miles and Boardings Estimates* was made by G. Esty, and seconded by T. Bent. The motion passed unanimously.

9. Pedestrian Transportation Plan – Eric Bourassa, MAPC

Members heard a presentation on the MPO's draft Pedestrian Transportation Plan at the meeting of May 20. MAPC staff distributed edited copy from certain pages of the plan that reflected members' comments from the May 20 meeting. (See attached.)

A motion to approve the MPO's Pedestrian Transportation Plan, as amended, was made by E. Bourassa, and seconded by J. Romano. The motion passed unanimously.

10. Major Metros Principles for Reauthorization – *Pam Wolfe, Manager of Certification Activities, MPO Staff*

Staff provided members with background information related to the proposed transportation reauthorization principles being advanced by MPOs of some of the largest metropolitan areas of the nation. The Boston Region MPO was asked to sign-on to a document outlining those principles, which would then be sent to Senator Barbara Boxer, Chair of the U.S. Senate's Committee on Environment and Public Works, who will be playing an important role in the reauthorization. (See attached principles and backgrounder.)

P. Wolfe explained that many of the ideas proposed by the MPOs are rooted in proposed legislation that was circulated last year by Congressman James Oberstar, Chair of the Transportation and Infrastructure Committee. These ideas are circulating among the transportation community now. She noted that some the concerns voiced by members at the meeting of May 20 are addressed in the backgrounder. Specifically, she noted that the MPOs share the Boston Region MPO's concerns about transit, that they believe major metropolitan areas need special attention for funding (given that 80% of people in the United States live in metropolitan areas), and that many of the proposed ideas are already advancing.

A motion to allow the Boston Region MPO logo to appear on the document outlining the "Proposed Transportation Reauthorization Principles for Major Metros" was made by Lourenço Dantas, Massachusetts Port Authority, and seconded by E. Bourassa.

Members then discussed the motion.

J. Cosgrove noted that the principles should include an acknowledgement of the need for more flexibility in terms of allocating operating and capital funds, as this is an issue for all transit agencies. P. Regan expressed agreement adding that the ten largest transit agencies in the nation have problems with their operating budgets. He discussed the need for transit agencies to be able to use capital funds to maintain service.

T. Kadzis expressed concern that the principles do not include the words "public transportation" or "transit", and that the MPO group is missing the opportunity to address the topic of climate change in the document. He also remarked on the proposed principle that calls for a federal program that "incentivizes states and regions to raise and spend funds locally through a wide menu of options, including the ability to toll existing facilities and through public-private partnerships." He expressed concern that the principle does not convey enough detail to adequately explain this point to a reader. He

also spoke about a school of thought that says that public-private partnerships would produce only a small percentage of revenue for the transportation system.

L. Dantas stated that by not endorsing the document, the Boston Region MPO would be sending a message that says that the status quo is acceptable. He recommended that the Boston Region MPO endorse the existing document as written; later the MPO could send its own comments to legislators to expand upon the issues of concern.

P. Wolfe added that the document before the MPO today marks a beginning for MPOs' input to Congress on reauthorization and that as the process moves forward in the coming months, the Boston Region MPO can provide more input to the other MPOs.

M. Pratt expressed concern about the focus on freight in the principles, and concern that the reauthorization could result in a set-aside for freight projects that could take funding away from public transportation projects.

T. Bent expressed frustration that the Boston Region MPO was not involved in the drafting of the document. He recommended that the MPO express that it wants to be involved in the MPO working group. P. Wolfe stated that the MPO will be involved as the process goes forward based on the direction staff received from the members at the meeting of May 20.

At members' request, staff will participate in future major metro MPO discussions and keep the members briefed.

A motion to end debate on this issue was made by L. Wiener, and seconded by E. Bourassa. The motion passed unanimously.

Members then took action the motion to allow the Boston Region MPO logo to appear on the document outlining the "Proposed Transportation Reauthorization Principles for Major Metros." The motion passed. The City of Boston voted no. The following members voted yes: MAPC; MassDOT; MassDOT Highway; Massachusetts Port Authority; MBTA; Regional Transportation Advisory Board; the cities of Braintree, Newton, and Somerville; and the towns of Bedford, Framingham, and Hopkinton.

11. Draft FFYs 2011 – 2014 TIP Staff Recommendation – Hayes Morrison, TIP Manager, MPO Staff

Members were provided with draft TIP tables showing the staff recommendation for the draft FFYs 2011 – 2014 TIP. (See attached.) Staff provided cash flow information on page one that shows the total amount of advanced construction projects already programmed in FFYs 2011 – 2014 as amounting to \$212.5 million, leaving nearly \$23.6 million of target funding available for additional programming. (Targets for this year are not finalized.) There is nearly \$22.3 million worth of projects in the FFYs 2010 – 2013 TIP that are yet to be advertised. If these projects remain programmed, only \$1.3 million of target money would remain. There is a total of \$81 million worth of projects that staff would recommend for programming if funding were available. In light of these figures,

staff is recommending that the remaining \$1.3 million be programmed for projects in the Clean Air and Mobility Program.

Members asked questions and made comments:

E. Bourassa noted that Massachusetts has received an additional \$38 million in obligation authority, which could be distributed to MPOs. H. Morrison noted that the amount is for the entire state, and that the Boston Region could receive a 43% share in FFY 2011. She also noted that MassDOT's Office of Transportation Planning has advised MPOs to prepare for level funded targets, but that MassDOT and the Massachusetts Association of Regional Planning Agencies (MARPA) have not finalized the targets. E. Bourassa reported that there is a MassDOT and MARPA working group that is developing the MPO targets. MassDOT recently presented information to MARPA regarding funding shortfalls. The group will be engaging MPOs in the discussions.

L. Weiner raised the idea of incorporating the *Cambridge – Cambridge Common* project by using funds for the *Concord/Lincoln – Route 2 (Crosby's Corner)* project that are not ready to be spent on that project. H. Morrison stated that the *Crosby Corner* funds were programmed based on recommendations from the project managers, and she indicated that it would not be advisable to change the cash flows.

D. Koses asked if there were any design earmarks included in the TIP for projects that the MPO has no funds to construct. H. Morrison replied no. D. Koses then asked if there were any projects in the long-range transportation plan that did not appear on this TIP. H. Morrison replied that there were not any this TIP's timeframe.

P. Regan remarked that the funding situation clearly demonstrates that the MPO will need to "get back to basics" and focus on funding basic transportation projects.

E. Bourassa pointed out that 90% of MPO funds are being directed to major highway projects and about 10% to local roads. He stated that it is the responsibility of the MPO to strike a balance in its funding, and he emphasized that many local road improvements are state of good repair projects.

Tim Kochan, MassDOT Highway District 5, apprised members of the status of the *Marshfield – Route 139* project, the top priority for District 5. (State Representative Jim Cantwell and Pamela Haznar, MassDOT Highway District 5, spoke in support of this project at the Municipal TIP Input Day.) The \$7 million project is at the 25% design stage. T. Kochan spoke about the economic benefits of the project and its importance for enabling an industrial park project to move forward. The project is not in the TIP, but is programmed in the long-range transportation plan. In response to a question from M. Pratt, T. Kochan stated that he was unaware if the project proponents received mitigation funds from the industrial park developer.

Members had further discussion about the difficult situation the MPO is facing in terms of lack of funding. M. Pratt emphasized that the MPO needs to address necessary

roadway projects, such as the Ipswich projects, rather than non-roadway projects such as the *Somerville – Somerville Community Path*. T. Bent countered that the City of Somerville believes that projects should remain on the TIP once they are programmed (unless they are not ready to go forward) to send a signal that the MPO keeps its commitments.

Members talked about the need to convey the message about the MPO's financial situation to the state legislature, project proponents, and the public. C. Bench suggested that the public workshops about the long-range transportation plan could be one avenue. G. Esty suggested that members educate legislators to the issue when they come before the MPO to advocate for projects by asking questions about how they voted on bills related to transportation and how they are communicating transportation issues to their constituents.

Some project proponents and members of the public in the audience offered their views as well. Their suggestions and comments included the following:

- The MPO should present the issue in testimony before the state legislature.
- MassDOT should state in its Project Review Committee (PRC) documents that PRC approval does not guarantee funding, or it should not give PRC approval to projects for which there is no funding.
- The MPO's Municipal TIP Input Days outreach gives false hope to project proponents.
- There is a lack of communication between the MPO, MassDOT, and municipalities.
- The MPO should provide information about the financial situation to municipalities and work with them in partnership to bring the issue before the legislature.
- The Secretary of Transportation should be the person to communicate the funding crisis to the legislature.

Patrick McNally, Town of Ipswich, then addressed the MPO to request support for the Ipswich project.

Members did not take action on the FFYs 2011 – 2014 TIP at this meeting.

12. Members Items

T. Bent recommended that the MPO form a subcommittee that would focus on issues concerning the reauthorization of the federal transportation legislation.

P. Wolfe announced that the next meeting of the UPWP Subcommittee will be held on June 10 at 1PM.

Members discussed their meeting schedule for July. They agreed to cancel the meeting of July 1, and schedule a meeting on July 8 to vote on TIP Amendment 5.

13. Adjourn

Transportation Planning and Programming Committee Meeting Attendance
Thursday, June 3, 2010, 10:00 AM

Member Agencies

MassDOT
MassDOT Highway

City of Boston
City of Newton
City of Somerville
Federal Highway
Administration
MAPC

Massachusetts Port
Authority
MBTA

MBTA Advisory Board
Regional Transportation
Advisory Council
Town of Bedford
Town of Braintree
Town of Framingham
Town of Hopkinton

Representatives and Alternates

Clinton Bench
John Romano
Marie Rose
Thomas Kadzis
David Koses
Thomas Bent
Michael Chong

Eric Bourassa
Jim Gallagher
Lourenço Dantas

Joe Cosgrove
Victor Rivas
Ron Morgan
Paul Regan
Laura Wiener

Richard Warrington
Mayor Joseph Sullivan
Ginger Esty
Mary Pratt

MPO Staff/CTPS

Mike Callahan
Maureen Kelly
Anne McGahan
Hayes Morrison
Sean Pfalzer
Karl Quackenbush
Arnie Soolman
Mary Ellen Sullivan
Pam Wolfe

Other Attendees

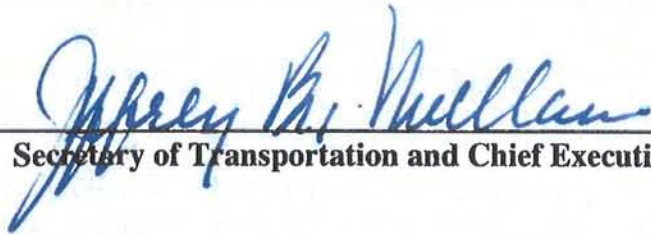
Lynn Ahlgren

Rachel Bain
Rob Cahoon
Richard Clarke
Bill Deigman
John DePriest
Trish Domigan
James Eldridge
Alison Felix
Marzie Galazka
Mark Guenard
Bradford Hill
Tom Kelleher
L. Kiessling
Tim Kochan
David Loutzenheiser
Meaghen Hamill

MetroWest Regional Transit
Authority
MassDOT
Coler & Colantonio, Inc.
Town of Ipswich
City of Cambridge
City of Chelsea
Vanasse Hangen Brustlin, Inc.
State Senator
MAPC
City of Everett
MassDOT
State Representative
ARRT, Inc.
Kiessling Transit, Inc.
MassDOT District 5
MAPC
Office of State Senator McGee

Robert Markel	Town of Ipswich
Kevin McHugh	Coneco Engineers and Scientists
Patrick McNally	Town of Ipswich
Sue McQuaid	Neponset Valley Chamber of Commerce
Steve Olanoff	Regional Transportation Advisory Council
Joe Onorato	MassDOT District 4
Amanda Richard	Office of State Senator McGee
Bryan Slack	MassDOT District 3
Bob Sloane	WalkBoston
John Sullivan	Kiessling Transit, Inc.
Bruce Tarr	State Senator
Sheri Warrington	Office of State Senator McGee
Dick Williamson	Friends of Bruce Freeman Rail Trail
John Woodsmall	Town of Southborough
Wig Zamore	Somerville Transportation Equity Partnership / Mystic View Task Force

POLICY DIRECTIVE



Secretary of Transportation and Chief Executive Officer

GreenDOT is the Massachusetts Department of Transportation's sustainability initiative.

GreenDOT Vision: The Massachusetts Department of Transportation will be a national leader in promoting sustainability in the transportation sector. Through the full range of our activities, from strategic planning to construction and system operations, MassDOT will promote sustainable economic development, protect the natural environment, and enhance the quality of life for all of the Commonwealth's residents and visitors. This will enable MassDOT to use resources in a manner that serves its existing customers while preserving our resources for future generations.

State Policy Context. GreenDOT is designed to support implementation of the following existing state laws, Executive Orders, and MassDOT policies:

- Climate Protection and Green Economy Act (Mass. Gen. L. c. 21N)
- Green Communities Act (Chapter 169 of the Acts of 2008)
- Healthy Transportation Compact (section 33 of Chapter 25 of the Acts of 2009)
- Leading by Example (Executive Order of Governor Patrick, no. 488)
- MassDOT's youMove Massachusetts planning initiative
- The "Complete Streets" design standards of the 2006 MassDOT Highway Division Project Development and Design Guide, as amended

Three GreenDOT Goals. The following three mutually-reinforcing goals form the foundation of GreenDOT:

- Reduce greenhouse gas (GHG) emissions
- Promote the healthy transportation modes of walking, bicycling, and public transit
- Support smart growth development

GreenDOT Policy. MassDOT will pursue the GreenDOT Vision and achieve the three GreenDOT goals by making sustainability an integral part of every MassDOT employee's job, and by integrating these objectives into our organizational vision and mission.

- We will address short- and long-term greenhouse gas emissions at every stage of design, construction, and operation of our transportation system in order to minimize climate disruption and its effects on the environment and on our customers.
- We will consider the needs of all our customers, regardless of mode choice or ability, in the design and operation of MassDOT transportation facilities. We will be guided by the MassDOT Complete Streets design philosophy articulated in the Highway Division Project Development and Design Guide and the principles of safe and full access to and within transit, rail, and other transportation facilities.
- We will distribute staff resources and define department objectives in a manner that ensures adequate attention to all customers and modes.
- We will design, build and operate our transportation system so that it supports smart growth development; this in turn will facilitate travel by the healthy transportation modes of walking, bicycling, and public transit; improve air quality; preserve the environment; and enhance quality of life for all of our customers.
- We will measure our performance toward the GreenDOT goals with a robust set of performance measures that evaluate sustainability and service to our customers – the users of our transportation facilities.

MassDOT will pursue the GreenDOT Policy with the objective of achieving the greenhouse gas emissions reductions specified in Exhibit A to this Policy Directive. Exhibit B to this Policy Directive sets forth an initial list of specific steps that MassDOT has taken, or will take, in order to achieve these reductions. This list is illustrative only, and will be updated as appropriate to reflect new technologies and new MassDOT policies that support the GreenDOT goals.

Exhibit A: Specific Targets

GreenDOT policy implementation will be guided by a target for greenhouse gas reductions under the Climate Protection and Green Economy Act (Mass. Gen. L. c. 21N), which Governor Deval Patrick signed into law in August 2008. This law will make Massachusetts one of the first states in the nation to move forward with a comprehensive regulatory program to address climate change. The law requires the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), in consultation with other state agencies and the public, to set economy-wide greenhouse gas (GHG) emission reduction goals for Massachusetts to achieve:

- By 2020, a reduction of between 10 percent and 25 percent below statewide 1990 GHG emission levels, which were 94.4 million metric tons of CO₂ equivalent (MMTCO₂e); and
- By 2050, a reduction of 80 percent below statewide 1990 GHG emission levels.

The following is a summary of the projected reductions in greenhouse gas emissions levels that are expected to result from the GreenDOT Policy.

GreenDOT Policy Projected GHG Reductions in 2020 and 2050, in million metric tons of CO₂ equivalent (MMTCO₂e)

Comparison Conditions			
1990 Baseline Case – Economy-wide GHG Emissions			94.4
1990 Baseline Case – Transportation Sector GHG Emissions			28.9
GreenDOT Policy Goals	2020 (% below 1990 level)	2050 (% below 1990 level)	Notes and Assumptions
Reduce Greenhouse Gas Emissions	1.53 (5.3 %)	1.65 (5.7 %)	Reduced GHG emissions from construction and operations, more efficient fleets, travel demand management programs, eco-driving, and mitigation of development projects
Promote Healthy Transportation Modes of Walking, Bicycling and Public Transit	0.20 (0.7 %)	0.37 (1.3 %)	Reduced automobile travel resulting from MassDOT transportation investments that improve pedestrian, bicycle, and public transit infrastructure and operations
Support Smart Growth Development	0.38 (1.3 %)	1.53 (5.3 %)	Reduced automobile travel that is enabled by denser, smart growth development patterns
GreenDOT Subtotal	2.11 (7.3 %)	3.56 (12.3 %)	

The GreenDOT Policy is expected to result in the following GHG emissions reductions:

- By 2020, the proposed GreenDOT Policy would produce a reduction of 7.3 percent below 1990 transportation GHG emissions.
- If left unchecked by GreenDOT and other GHG reduction policies of the Commonwealth and the Federal government, transportation GHG emissions would be expected to increase to 34.4 MMTCO_{2e} by 2020, a 19.0 percent increase from 1990 levels. Instead, according to EOEEA, the GreenDOT Policy, combined with other state and federal government policies, is expected to reduce 2020 transportation GHG emissions by almost 30 percent below the “business as usual” level of 34.4 MMTCO_{2e}.
- The GreenDOT Policy measures extrapolated to 2050 are expected to reduce transportation GHG emissions by a total of 12.3 percent below 1990 levels. This reflects only the further GHG reductions resulting from those policies that are within MassDOT’s direct control, such as impacts of travel behavior that are shaped by MassDOT project priorities, MassDOT design and construction practices, and MassDOT fleet emissions. In order to meet the 80 percent GHG emissions reduction called for in the Climate Protection and Green Economy Act, many other changes in the transportation sector that lie outside MassDOT’s direct control are necessary. These changes relate largely to the issues of vehicle efficiency, fuel type, and pricing of fuel and emissions. The Commonwealth of Massachusetts will continue to work with other states and the Federal government in order to facilitate the changes that will be required in these areas.

Exhibit B

The following is a summary of the specific measures, initiatives, and programs that MassDOT will implement and is implementing in order to affect the GreenDOT Policy. In this way, the GreenDOT Policy is supported through all of MassDOT's activities, from long-range planning through system operation and maintenance, and it informs decision-making throughout MassDOT. This list is illustrative only, and will be updated as appropriate to reflect new technologies and new MassDOT policies that support the GreenDOT goals.

Statewide and Regional Long-Range Planning

- Statewide planning documents (including the Strategic Plan and Capital Investment Plan) and the Metropolitan Planning Organization's (MPO) long-range Regional Transportation Plans (RTPs) will integrate the three GreenDOT Goals. These planning documents will evaluate GHG emissions and ensure that GHG emissions are reduced over time, consistent with the Climate Protection and Green Economy Act.

Project Prioritization and Selection

- Regional Transportation Improvement Programs (TIPs) and State Transportation Improvement Program (STIP) will include an evaluation of overall greenhouse gas emissions from the project programs, and will need to be developed in a manner that fits into an overall state greenhouse gas reduction target. This will require that the MPOs and MassDOT balance highway system expansion projects with other projects that support smart growth development and promote public transit, walking and bicycling.

Project Design and Construction

Complete Streets

- Pedestrian and Bicycle Accommodation. All MassDOT projects must include accommodation of pedestrians and bicycles per the MassDOT Highway Division Project Development and Design Guide.
- Online Plans. Plans for all MassDOT projects will be posted online at 25 percent design review, along with a basic project checklist that includes measures of pedestrian and bicycle accommodation.
- Pedestrian and Bicycle Safety Education. The RMV is updating its educational and licensing materials to increase focus on safety for pedestrians and bicyclists.
- Permit Requirements. Recipients of highway access permits will be required to adhere to Highway Division Project Development and Design Guide standards on Complete Streets design.
- Grantee Obligations. Recipients of state discretionary funding, such as Public Works Economic Development (PWED) and the Transit-Oriented Development (TOD) Bond Program funds, will be required to adhere to Highway Division Project Development and Design Guide standards on Complete Streets design.

Rail Transportation

- **MBTA System Improvements.** The MBTA is working enhance subway and commuter rail service, which will increase transit system capacity, enable a mode shift from auto to transit travel, and reduce greenhouse gas emissions. Major projects include the Green Line Extension, Fitchburg Line Improvements, Fairmount Line Improvements, Framingham/Worcester Line service improvements, the South Coast Rail Project, and South Station Track Expansion, which will facilitate increased commuter rail service.
- **Knowledge Corridor Improvements.** Using \$70 million in Federal funds from the FRA's High Speed and Intercity Passenger Rail (HSIPR) program, MassDOT is working with Pan Am Railways to upgrade the Connecticut River rail line to enable Amtrak service to shift back to this corridor. This will also support service along the Inland Route (from Boston to Springfield via Worcester) to Montreal.
- **CSX Freight Rail Improvements.** The Commonwealth will purchase property rights on the Boston to Worcester rail line from CSX Transportation. CSXT will concentrate its freight rail operations to the west; MassDOT and CSXT will work together to enable double-stack rail clearances from the New York border to Westborough. This will increase the freight rail capacity of the CSXT line, and increase the potential for additional commuter service while also taking control of dispatching and maintenance of the line.
- **Pan Am Southern Rail Line.** This joint venture of Pan Am Railways and Norfolk Southern will bring a second Class I railroad to the Commonwealth, and will entail the rehabilitation of the Pan Am Southern Main Line between Ayer and Mechanicville, NY. The partnership will rehabilitate 138 miles of track, increase the line's weight capacity, replace ties, and add just over 35 miles of new rail. The \$47.5 million effort that began in 2009 and is expected to be completed in 2010 is one of the largest new private investments in the Commonwealth's rail system in decades.
- **MassDOT Freight and Rail Plan.** This ongoing MassDOT planning initiative will produce a comprehensive multi-modal freight plan and a state rail plan with a vision for the future and a program of improvement priorities. This will put the Commonwealth in good position to receive federal rail funding and enter into public-private partnerships to improve freight and rail infrastructure, facilitate economic development, and enhance the environment and quality of life for Massachusetts residents.

Bicycle and Pedestrian Transportation

- **Transportation Enhancements (TE) Program.** In order to revitalize the Massachusetts TE program, MassDOT is streamlining the TE application process, conducting early screening for technical feasibility of TE projects, and enabling greater technical support for TE projects.
- **Bay State Greenway (BSG).** MassDOT is mapping this 740-mile network of seven statewide on- and off-road bicycle corridors, a key recommendation of the 2008 Massachusetts Bicycle Transportation Plan, and will promote it as the state's bicycle network vision. MassDOT has identified an additional 100 miles of high priority BSG shared-use paths that connect to urban areas and/or extend existing shared-use paths that connect to urban areas.
- **Accelerated Bridge Program.** Through its Accelerated Bridge Program, which will rehabilitate nearly 600 bridges over 8 years, MassDOT is working to improve pedestrian and bicycle accommodation on the bridges that it repairs, including those in the Charles River Basin.
- **Bicycle Facility Data.** MassDOT has developed an online bicycle mapping tool, has publicly released its bicycle facility data layer, and is incorporating bicycle accommodation into Roadway Inventory to be updated annually by municipalities.

- **Bike to Transit.** The MBTA has allocated \$4.8 million in ARRA funds to enhance and expand bicycle parking facilities at MBTA stations. Building on the success of the Alewife and Forest Hills bike cages, this program will fund the construction of 6-8 additional bike cages at major transit stations, and will expand the number of conventional bike racks at other stations. All commuter rail stations have bike racks, as do about 95 percent of subway stations. Seventy percent of MBTA buses are equipped with bicycle racks, and the full fleet will be equipped by 2013.
- **MassDOT Bike Pool.** MassDOT will implement a “bike pool” at appropriate locations for travel to and from meetings.

Sustainable Design and Construction Best Practices

- **Drainage and Water Resources.** MassDOT employs best practices in drainage design to maximize groundwater recharge and minimize run-off by designing projects to maximize stormwater detention and permeable cover.
- **Pavement.** MassDOT currently uses a range of recycled materials in pavement, including recycled asphalt pavement, recycled tires, and shingles in its pavement, as well as warm mix asphalt. MassDOT is working to increase the use of these environmentally-friendly technologies, and continues to conduct research so that it can maximize use of recycled materials and warm-mix asphalt paving.
- **Lighting.** For new and replacement traffic signals, MassDOT installs only high-efficiency light-emitting diode (LED) traffic signals, and is replacing red bulbs with LEDs on a systematic basis.
- **Facility Design and Construction.** MassDOT will design and build resource-efficient buildings, and pursue LEED certification for new or rehabilitated buildings.

System Operations, Maintenance and Customer Service

Fuel Use and Vehicle Emissions

- **MBTA Fleet.** The full MBTA fleet is low emission: electric, CNG, or emission control diesel (ECD), as well as 25 new diesel – electric hybrid buses purchased with ARRA funds. MBTA new bus procurements will include at least 10 percent diesel – electric hybrid buses, or a technology with comparable GHG emission reduction. The MBTA will continue to evaluate vehicle technology and life-cycle costs, including the on-road and maintenance performance of its new diesel – electric hybrid buses, and work with bus manufacturers to improve bus technology.
- **MassDOT Fleet.** MassDOT has procured efficient hybrid electric and CNG fleet vehicles, has used ARRA funding to retrofit its on-road diesel light truck fleet with emission controls, and is pursuing retrofit of hybrid electric fleet vehicle to make them plug-in capable.
- **Diesel Bus Retrofit.** A DEP/MassDOT program has retrofitted over 500 school buses with emission control devices; MassDOT is working with the Regional Transit Authorities to implement a program to retrofit RTA transit buses with emission control devices.
- **Truck Stop Electrification.** MassDOT will be doing a procurement for this project that is designed to reduce emissions from idling trucks.
- **Shore Side Power at the Port of New Bedford.** MassDOT will fund this project that is designed to reduce emissions from idling ships.
- **Contractor Vehicles.** MassDOT requires that contractors install emission control devices in all off-road diesel vehicles; as a result, private construction companies have retrofitted over 800 vehicles.
- **Eco-Driving.** Significant improvements to vehicle fuel efficiency and emissions can be realized through what some have termed “smart driving” or “eco-driving,” i.e. moderating speed,

accelerating less aggressively, and keeping tires properly inflated. MassDOT will promote eco-driving through internal education for MassDOT staff and contractors; external education of all Commonwealth drivers through website content, RMV manual and testing content, signage, and brochures; and development of a plan to improve tire inflation infrastructure.

Travel Demand Management and Traveler Information

- Travel Demand Management. MassDOT will continue to promote and deliver travel demand management (TDM) information and services, including ridematching, traveler information, real-time bus tracking, and other measures for the general public and among MassDOT employees.
- New Ridematching and Trip Planning System. MassDOT is currently working to procure a new ridematching/trip planning system to facilitate carpooling, vanpooling, and mode shifting from automobile travel.

Renewable Power

- MassDOT is pursuing several renewable power generation projects along our state highways and other MassDOT property. This includes Highway Division projects (a solar photovoltaic array in Carver, solar PV installation at District 2 Ashley Ave Depot, wind turbine at Blandford rest area, and solar PV at park and ride lots) and MBTA projects (a wind turbine at the Kingston commuter rail layover facility, a wind turbine in Bridgewater, and a solar photovoltaic array on the roof of the proposed Wonderland Garage). MassDOT will continue to identify opportunities for renewable power projects, and will work with municipalities and stakeholders to increase implementation.

Facilities Management

- MBTA Environmental Management System. The MBTA has implemented an Environmental Management System (EMS), a comprehensive management tool for implementing its pollution prevention and environmental compliance responsibilities and programs in a comprehensive, systematic, planned and documented manner. The MBTA's EMS has broad coverage, with a particular focus on the operations and management of its maintenance facilities, (e.g., hazardous material handling and disposal, wastewater management, vehicle management, facility upgrades and compliance, infrastructure management, etc.), as well as at its storage areas, bus and rail garages, its procurement systems as well as the environmental management of the design and construction activities on new projects and project upgrades. Other MassDOT divisions will review the MBTA's EMS to identify best practices and opportunities for technology transfer.
- Energy Audits. MassDOT has conducted energy audits and is pursuing energy conservation programs at a number of facilities.

Performance Management

- Sustainability measures will be embedded in all aspects of the MassDOT performance management system, based on best practices.

Please Post _____

Do Not Post _____

Amendment Five FFYs 2010 - 2013 TIP FFY 2010

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 Funds	Total Funds	Project Notes
Boston	604761	South Bay Harbor Trail (construction)	\$0	\$0	\$0	\$3,850,000 -- Project is not ready for FFY 2010, at 25% design, ROW still outstanding
Weymouth	114906	Route 53 (Washington Street)/Middle Street	\$1,820,656	\$455,164	\$2,275,820	
				<i>State/Local/In-Kind/MBTA/RTA</i>		
			<i>Federal Funds</i>	<i>Funds</i>	<i>Total Funds</i>	
Boston Region	Regionwide CMAQ Program		\$1,600,000	\$400,000	\$2,000,000	
	<i>Boston</i>	<i>Boston Bike Share Amenities and Employee Bike Share</i>	<i>\$325,000</i>	<i>\$81,250</i>	<i>\$406,250</i>	See Clean Air and Mobility handout for more information
	<i>Cambridge</i>	<i>City of Cambridge Social Marketing Year 3</i>	<i>\$58,768</i>	<i>\$14,692</i>	<i>\$73,460</i>	
	<i>Cambridge</i>	<i>Cambridge Clean Cabs</i>	<i>\$150,000</i>	<i>\$37,500</i>	<i>\$187,500</i>	
	<i>Green Sts and Somerville DPH</i>	<i>Green Streets Walk/Ride Day Regionalization</i>	<i>\$164,683</i>	<i>\$41,171</i>	<i>\$205,854</i>	
	<i>Newton</i>	<i>Citywide Traffic Signal Timing Improvements</i>	<i>\$160,000</i>	<i>\$40,000</i>	<i>\$200,000</i>	
	<i>Salem</i>	<i>North Shore TMA Year 3</i>	<i>\$53,160</i>	<i>\$13,290</i>	<i>\$66,450</i>	
	<i>WalkBoston</i>	<i>Local Pedestrian Activity Maps</i>	<i>\$29,000</i>	<i>\$7,250</i>	<i>\$36,250</i>	
	<i>MetroWest RTA</i>	<i>Route 1 Service Year 3</i>	<i>\$252,206</i>	<i>\$63,052</i>	<i>\$315,258</i>	
	<i>MetroWest RTA</i>	<i>Route 7 Service Year 2</i>	<i>\$43,155</i>	<i>\$10,789</i>	<i>\$53,944</i>	
	<i>GATRA</i>	<i>Marshfield and Duxbury Service Year 3</i>	<i>\$132,000</i>	<i>\$33,000</i>	<i>\$165,000</i>	
	<i>CATA</i>	<i>Stage Fort Park Shuttle</i>	<i>\$8,000</i>	<i>\$2,000</i>	<i>\$10,000</i>	
	<i>MBTA</i>	<i>Bikes on Buses</i>	<i>\$217,785</i>	<i>\$54,446</i>	<i>\$272,231</i>	
Regionwide CMAQ Program Total			\$1,593,757	\$398,439	\$1,992,196	
Congestion Mitigation and Air Quality Improvement Program Total			\$3,414,413	\$853,603	\$4,268,016	
<i>Minimum CMAQ Regional Target</i>					<i>\$0</i>	

National Highway System

			Federal Funds	State Funds	Total Funds
Canton, Randolph & Westwood	87800	Route 128 Improvement Program Contract 3, Year Four of Six	\$5,600,000	\$1,400,000	\$7,000,000
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4, Year Two of Six	\$8,000,000	\$2,000,000	\$10,000,000
National Highway System Total			\$13,600,000	\$3,400,000	\$17,000,000

Surface Transportation Program

			Federal Funds	State Funds	Total Funds	
Danvers/Peabody	87612	Route 128 at Route 35 and Route 62	\$7,360,000	\$1,840,000	\$9,200,000	
Lexington	602133	Intersection Improvements at Route 2A and Waltham St	\$1,790,464	\$447,616	\$2,238,080	\$1,611,950
Everett, Boston	602382	Route 99 (Broadway)	\$3,274,032	\$818,508	\$4,092,540	\$3,463,860
Weymouth, Rockland	604510	East-West Parkway	\$10,400,000	\$4,600,000	\$15,000,000	
Surface Transportation Program Total			\$22,824,496	\$7,706,124	\$30,530,620	

Amendment Five FFYs 2010 - 2013 TIP

FFY 2010

Highway Safety Improvement Program (HSIP) Project

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Danvers/Peabody	87612	Route 128 at Route 35 and Route 62	\$3,867,039	\$429,671	\$4,296,710
Highway Safety Improvement Program Total			\$3,867,039	\$429,671	\$4,296,710
			<i>Minimum HSIP Regional Target</i>		<i>\$4,296,710</i>

Surface Transportation Program/Enhancement

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Cambridge	605188	Cambridge Common (Construction)	\$144,000	\$36,000	\$180,000
Everett, Boston	602382	Route 99 (Broadway)	\$480,000	\$120,000	\$600,000
Surface Transportation Program/Enhancement Total			\$624,000	\$156,000	\$780,000

Project was programmed last year and was not advertised
Transportation Enhancement award for this project

Total Regional Target Programming **\$54,875,346**
Boston Region MPO Regional Target with State Match *\$56,607,514*

FEDERAL AID NON-TARGET PROJECTS

American Recovery and Reinvestment Act of 2009

			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Arlington	605748	Reconstruction of Forest Street	\$1,672,580		\$1,672,580
Arlington, Cambridge, Somerville	605372	Minuteman Connector	\$3,600,000		\$3,600,000
Bellingham	602493	Pulaski Blvd	\$12,982,190		\$12,982,190
Boston		Resurfacing on Federal Aid Roads within Boston	\$21,500,000		\$21,500,000
Boston, Newton, Watertown	605662	Nonantum Rd Improvements	\$7,926,360		\$7,926,360
Boston Region		Massachusetts Emergency Transportation Fiber Optic Network	\$1,700,000		\$1,700,000
Boston Region		Key Bus Route Investment (flex money to MBTA)	\$10,000,000		\$10,000,000
Braintree	602027	Resurfacing of Route 37	\$2,700,000		\$2,700,000
Braintree	602593	Reconstruction of Union Street	\$5,553,856		\$5,553,856
Cambridge		Red Line Floating Slab Work - Harvard to Alewife (flex money to MBTA)	\$4,311,700		\$4,311,700
Canton	605807	Improvements on Route 138	\$1,230,430		\$1,230,430
Danvers/Peabody	605383	Resurfacing and Related work on Route 114	\$3,300,000		\$3,300,000
Framingham, Natick	604991	Route 9	\$12,500,000		\$12,500,000
Lynn	604651	Intersection Improvements at Rt 129, Millard and Parker Hill Avs. And Den Quarry Rd.	\$1,017,530		\$1,017,530
Lynnfield, Wakefield	605756	Improvements at Walnut St and I-95 and Salem St and Audubon Road and I-95	\$5,922,500		\$5,922,500
Medford	605122	Clippership Drive	\$1,000,000		\$1,000,000
Norwood	604916	Pleasant St at Morse St	\$1,151,600		\$1,151,600
Quincy	604664	Quincy Center Concourse, Phase II	\$8,100,000		\$8,100,000
Revere		Wonderland Station Garage (flex money to MBTA)	\$22,700,000		\$22,700,000
Somerville	605680	Assembly Square Access Improvements	\$15,000,000		\$15,000,000
Somerville	603288	Reconstruction of Washington St	\$1,750,000		\$1,750,000
Winchester		Wedgemere Commuter Rail Accessibility Enhancement	\$2,000,000		\$2,000,000
American Recovery and Reinvestment Act Total			\$147,618,746		\$147,618,746

Project Notes

\$138,144,350

Amendment Five FFYs 2010 - 2013 TIP

FFY 2010

High-Priority Projects (TEA-21)

		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Boston	Huntington Ave/Symphony Area Streetscape Constriction (HPP 447)	\$0	\$0	\$0
Boston	Huntington Ave/Symphony Area Streetscape Construction (HPP 1811)	\$0	\$0	\$0

\$2,675,290 -- Project not ready, to be moved to 2012
 \$1,025,100 -- Project not ready, to be moved to 2012

High-Priority Projects (SAFETEA-LU)

		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Acton to Stow	604531 Assabet River Rail Trail Design (HPP 1761)	\$1,079,881	\$269,970	\$1,349,851
Boston	Chelsea St Bridge Replacement Construction (HPP 2592)	\$1,700,000	\$425,000	\$2,125,000
Boston	Chelsea St Bridge Replacement Construction (HPP 4265)	\$6,008,000	\$1,502,000	\$7,510,000
Boston	604997 Museum Way Improvements Construction (HPP 1960)	\$2,871,997	\$717,999	\$3,589,996
Boston	604997 Museum Way Improvements Right of Way Acquisition (HPP 4275)	\$3,004,425	\$751,106	\$3,755,531
Boston	Northern Avenue Bridge Design (HPP 4271)	\$800,000	\$200,000	\$1,000,000
Boston	East Boston Haul Road Design (HPP 2032)	\$716,800	\$179,200	\$896,000
Boston	Rutherford Ave Design (HPP TI 174)	\$2,400,000	\$600,000	\$3,000,000
Boston	Sullivan Square, Phase 1 Design (HPP 3568)	\$897,498	\$224,375	\$1,121,873
Boston	North Washington St Bridge Design (HPP 2586)	\$1,760,000	\$440,000	\$2,200,000
Hudson & Stow	Assabet River Rail Trail Design (HPP 1761)	\$269,250	\$67,312	\$336,562
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
Somerville	604872 Assembly Square Multimodal Access Improvements Construction (HPP 4281)	\$5,007,375	\$1,251,844	\$6,259,219
Somerville	605219 Improvements to Broadway in Somerville Construction (HPP 431)*	\$0	\$0	\$0
Sudbury	Assabet River NWR Parking Design and Construction (HPP 451)**	\$336,000	\$84,000	\$420,000
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
Weymouth	Weymouth Multi-Modal Center Construction (HPP 4276)	\$8,011,800	\$2,002,950	\$10,014,750

\$2,484,748 -- Project not ready, to be moved to 2012

Section 112

Medford	605122 Clippership Drive Streetscape Construction	<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
		\$990,000		\$990,000

Section 117

Milton	East Milton Square Parking Study (#871)	<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
		\$150,000		\$150,000
Somerville	Adaptive Reuse and Streetscape Improvements Construction	<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
		\$350,000		\$350,000

Section 330

Winthrop	Winthrop Ferry Improvements Construction	<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
		\$496,750		\$496,750

PLHD Awards (2003)

Boston	Long Island Pier Improvements	<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
		\$35,000		\$35,000

2004 Ferry Boat Discretionary Commuter Ferry

Winthrop	Winthrop Ferry Improvements Construction	<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
		\$264,232	\$66,058	\$330,290

2005 Ferry Boat Discretionary Ferry Infrastructure

Winthrop	Winthrop Ferry Improvements Construction	<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
		\$208,167	\$52,042	\$260,209

Eastern Federal Lands Highway Division

Minuteman National Park (Concord)	Pavement Management Project	<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
		\$230,000		\$230,000
Faneuil Hall Marketplace	Visitor Center Renovation	<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
		\$3,691,604	\$922,901	\$4,614,505

High-Priority Projects Total \$54,821,562

*Additional money to be provided from outside sources

**Project management by US Fish and Wildlife

Amendment Five FFYs 2010 - 2013 TIP FFY 2010

National Highway System - Non Target

Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4	\$12,400,000	\$3,100,000	\$15,500,000
NHS Non Target Total			\$12,400,000	\$3,100,000	\$15,500,000

FEDERAL-AID BRIDGE PROJECTS

Bridge			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Boston	604388	Route 145 over Belle Isle Inlet	\$4,228,424	\$1,057,106	\$5,285,530
Framingham	604013	Fountain St over MBTA	\$3,120,000	\$780,000	\$3,900,000
Wayland	602723	Pelham Island Road over the Sudbury River	\$3,206,784	\$801,696	\$4,008,480

Major Bridge Total **\$10,555,208** **\$2,638,802** **\$13,194,010**

Advance Construction Bridge

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Boston	604517	Chelsea Street Bridge	\$9,200,000	\$2,300,000	\$11,500,000
Boston	603370	Route 99 (Alford Street) over Mystic River	\$7,200,000	\$1,800,000	\$9,000,000
Lynn & Saugus	26710	Route 107 (Fox Hill) Bridge, Year Four	\$6,880,000	\$1,720,000	\$8,600,000

Advance Construction Bridge Total **\$23,280,000** **\$5,820,000** **\$29,100,000**

Special Bridge Program

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Bellingham/Franklin	605239	Bridge Preservation on I-495 (5 Bridges)	\$5,034,588	\$1,258,647	\$6,293,235
Littleton	604841	Taylor Street over I-495	\$0	\$0	\$0
Littleton	605504	Route 2A over I-495	\$3,931,058	\$982,765	\$4,913,823
Maynard	603658	Route 27 over the Assabet River	\$2,728,130	\$682,033	\$3,410,163

Special Bridge Total **\$11,693,777** **\$2,923,444** **\$14,617,221**

Project will not be ready for 2010, no future advertising date given

Accelerated Bridge Program - Federal Aid GANS Projects***

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Ashland	603602	Route 135 (Union Street) over the Sudbury River			\$3,150,000
Boston/Cambridge	604361	Longfellow Bridge (Cambridge Street over the Charles River)			\$60,000,000
Boston	603654	Morton Street over the MBTA			\$4,157,100
Boston	603443	River Street over the MBTA and Amtrak			\$9,633,664
Wellesley	600776	Rockland Street over CSX			\$2,286,129

Accelerated Bridge Program Total **\$79,226,893**

***GANs conversion to federal aid to begin in 2015

Federal-Aid Bridge Total **\$151,638,124**

FEDERAL AID MAJOR INFRASTRUCTURE AND STATEWIDE CATEGORIES

Interstate Maintenance

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Waltham	604710	Interstate 95	\$23,916,555	\$2,657,395	\$26,573,950

Interstate Maintenance Total **\$23,916,555** **\$2,657,395** **\$26,573,950**

Total Highway Program **\$435,527,728**

Amendment Five FFYs 2010 - 2013 TIP FFY 2010

CENTRAL ARTERY/TUNNEL PROJECT

	<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
National Highway System (NHS)	\$70,000,000		\$70,000,000
Bridge	\$50,000,000		\$50,000,000
State Transportation Program (STP)/ Flex	\$20,000,000		\$20,000,000
State Transportation Program (STP)	\$11,290,000		\$11,290,000
Federal-Aid Subtotal	\$151,290,000		
Federal-Aid Matching Funds Subtotal			\$151,290,000
2010 Central Artery/Tunnel Funds Total			\$151,290,000

Commonwealth Funding Commitments

STATE IMPLEMENTATION PLAN

	<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Green Line Extension Project****	\$38,300,000	\$10,300,000	\$48,600,000
Fairmount Improvements		\$46,900,000	\$46,900,000
Red Line-Blue Line Connector Design		\$6,000,000	\$6,000,000
1,000 Parking Spaces		\$3,000,000	\$3,000,000
State Implementation Plan Total			\$104,500,000

FTA New Starts funding. Should New Starts funding not be awarded, the

COMMONWEALTH I-CUBED PROGRAM

	<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Somerville 605680 Assembly Square Access Improvements		\$13,000,000	\$13,000,000
I-CUBED Program Total			\$13,000,000

Amendment Five FFYs 2010 - 2013 TIP FFY 2010

<i>Indicates a change in project cost</i>
<i>Indicates removed from TIP (cost not reflected in total)</i>
<i>Indicates a project moved in from another TIP funding category</i>
<i>Indicates a project moved in from another TIP element (cost not reflected in total)</i>
<i>Indicates a new addition to the TIP (action taken as denoted)</i>
<i>Indicates a new funding category</i>

Regional Transit Program

American Recovery and Reinvestment Act of 2009

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Systemwide	Operating Assistance for FFY 2010	\$18,067,444		\$18,067,444
Blue Line	Orient Heights Track Reconstruction	\$19,000,000		\$18,910,000
Systemwide	Emergency Station Lighting Program	\$1,500,000		\$1,500,000
Systemwide	Substation Control Battery Set Replacement	\$3,200,000		\$3,200,000
Systemwide	Tunnel Dewatering Pump Station Rehab Program	\$2,307,556		\$2,307,556
Orange Line/Commuter Rail	Back Bay Re-Roofing Project	\$1,625,000		\$1,625,000
Red Line	North Quincy Station Platform Repairs	\$4,000,000		\$4,000,000
Red Line/Commuter Rail	Braintree Station Parking Garage Structural Repairs	\$4,500,000		\$4,500,000
American Recovery and Reinvestment Act Total		\$54,200,000		\$54,110,000

American Recovery and Reinvestment Act of 2009

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
MetroWest RTA	Reimbursement for Operating	\$75,000		\$75,000
Cape Anne Transit Authority	Reimbursement for Operating	\$67,615		\$67,615
American Recovery and Reinvestment Act Total		\$142,615		\$142,615

Section 5307

		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>
Systemwide	Locomotive and Coach Procurement	\$12,000,000	\$3,000,000	\$15,000,000
Systemwide	ITS Initiatives	\$5,000,000	\$1,250,000	\$6,250,000
Red Line	Power System Improvements	\$7,000,000	\$1,750,000	\$8,750,000
Systemwide	Station Rehab Program	\$8,000,000	\$2,000,000	\$10,000,000
Green Line	MBTA Accessibility Program	\$12,000,000	\$3,000,000	\$15,000,000
Bus	`	\$10,000,000	\$2,500,000	\$12,500,000
Bus	Everett Maintenance Facility	\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Elevator Replacement/Rehabilitation	\$5,000,000	\$1,250,000	\$6,250,000
Systemwide	Grant Anticipation Notes (GANs) Program	\$18,000,000	\$4,500,000	\$22,500,000
Systemwide	Preventative Maintenance	\$10,000,000	\$2,500,000	\$12,500,000
Systemwide	Bus Arrival LCD Signage	\$2,400,000	\$600,000	\$3,000,000
Systemwide	Specialized Non-Revenue Vehicles	\$4,000,000	\$1,000,000	\$5,000,000
Systemwide	Parking Program	\$21,000,000	\$5,250,000	\$26,250,000
Systemwide	Station Accessibility Program	\$0	\$0	\$0
Commuter Rail	Commuter Rail Accessibility Program	\$5,000,000	\$1,250,000	\$6,250,000

\$6,250,000
\$20,000,000

Amendment Five FFYs 2010 - 2013 TIP

FFY 2010

Section 5307 cont.

Commuter Rail	System Upgrades	\$3,600,000	\$900,000	\$4,500,000
Systemwide	Environmental Program	\$2,000,000	\$500,000	\$2,500,000
Ferry System	Ferry System Upgrades	\$4,000,000	\$1,000,000	\$5,000,000
Section 5307 MBTA Match Total		\$134,000,000	\$33,500,000	\$167,500,000

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Cape Ann	Cape Ann Transportation Authority	\$501,362	\$125,341	\$626,703
MetroWest	MetroWest Transportation Authority	\$1,446,082	\$361,521	\$1,807,603
Section 5307 State Match Total		\$1,947,444	\$486,862	\$2,434,306

Section 5307 (carryover)

Systemwide	Locomotive and Coach Procurement (2009 funds)	\$19,200,000	\$4,800,000	\$24,000,000
Systemwide	ITS Initiatives (2009 funds)	\$4,000,000	\$1,000,000	\$5,000,000
Systemwide	Power (2009 funds)	\$4,000,000	\$1,000,000	\$5,000,000
Systemwide	Station Rehab (2009 funds)	\$4,000,000	\$1,000,000	\$5,000,000
Green Line	MBTA Accessibility Program (2009 funds)	\$21,600,000	\$5,400,000	\$27,000,000
Systemwide	Station Management Program (2009 funds)	\$2,800,000	\$700,000	\$3,500,000
Bus	CNG Bus Overhaul Program (2009 funds)	\$12,000,000	\$3,000,000	\$15,000,000
Bus	Everett Maintenance Facility (2009 funds)	\$4,400,000	\$1,100,000	\$5,500,000
Bus	Everett Maintenance Facility (2008 funds)	\$6,400,000	\$1,600,000	\$8,000,000
Systemwide	Elevator Replacement /Rehabilitation (2009 funds)	\$25,862,679	\$6,465,670	\$32,328,349
Systemwide	MBTA Enhancement Program (2009 funds)	\$1,354,482	\$338,621	\$1,693,103
Systemwide	Bus and Train Arrival LCD Signage (2009 funds)	\$4,800,000	\$1,200,000	\$6,000,000
Orange Line	Orange Line Vehicles (2008 funds)	\$2,000,000	\$500,000	\$2,500,000
Systemwide	Maintenance Facilities - Equipment (2008 funds)	\$3,000,000	\$750,000	\$3,750,000
Section 5307 carryover MBTA Match Total		\$115,417,161	\$28,854,290	\$144,271,451

Section 5309

		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Blue Line	Blue Line Modernization	\$0	\$0	\$0	\$10,625,000
Red Line	Red Line Number 2 Car	\$14,000,000	\$3,500,000	\$17,500,000	
Systemwide	Kawasaki Coaches	\$2,000,000	\$500,000	\$2,500,000	
Systemwide	Locomotive and Coach Procurement	\$8,000,000	\$2,000,000	\$10,000,000	
Green Line	Positive Train Control	\$1,000,000	\$250,000	\$1,250,000	
Subway	Station Platform Program	\$7,000,000	\$1,750,000	\$8,750,000	
Commuter Rail	Coach Rehabilitation and Safety Program (CRAPS)	\$8,500,000	\$2,125,000	\$10,625,000	
Subway	Vehicle Programs	\$22,000,000	\$5,500,000	\$27,500,000	
<i>Section 5309 Infrastructure Program</i>		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Red Line	Columbia Junction	\$7,000,000	\$1,750,000	\$0	\$8,750,000
Systemwide	Bridge and Tunnel Program	\$6,000,000	\$1,500,000	\$18,125,000	\$7,500,000
Systemwide	Track Upgrades	\$5,000,000	\$1,250,000	\$6,250,000	
Systemwide	Signal System Upgrades	\$22,000,000	\$5,500,000	\$27,500,000	\$6,250,000
Section 5309 MBTA Match Total		\$102,500,000	\$25,625,000	\$130,000,000	

Amendment Five FFYs 2010 - 2013 TIP

FFY 2010

<i>Section 5309 (carryover)</i>		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Blue Line	Blue Line Modernization (2009 funds)	\$0	\$0	\$0	\$27,000,000
Red Line	Red Line No. 2 Car Overhaul (2009 funds)	\$14,190,124	\$3,547,531	\$17,737,655	
Red Line	Red Line No. 2 Car Overhaul (2008 funds)	\$2,678,793		\$3,348,491	
Systemwide	Kawasaki Coaches (2009 funds)	\$1,600,000	\$400,000	\$2,000,000	
Systemwide	Locomotive and Coach Procurement (2009 funds)	\$33,295,500	\$8,323,875	\$41,619,375	
<i>Section 5309 Infrastructure Program (carryover)</i>					
Red Line	Columbia Junction (2009 funds)	\$0	\$0	\$0	\$13,000,000
Systemwide	Power Improvements (2009 funds)	\$7,080,000	\$1,770,000	\$8,850,000	
Systemwide	Power Improvements (2008 funds)	\$4,000,000	\$1,000,000	\$5,000,000	
Systemwide	Bridge and Tunnel Program (2009 funds)	\$26,400,000	\$6,600,000	\$33,000,000	\$6,000,000
Systemwide	Bridge and Tunnel Program (2008 funds)	\$11,924,000	\$2,981,000	\$14,905,000	
Section 5309 Carryover MBTA Match Total		\$101,168,417	\$25,292,104	\$126,460,521	
MetroWest	MetroWest Transportation Authority (2009 funds)	\$406,296	\$101,574	\$507,870	
Section 5309 Carryover State Match Total		\$406,296	\$101,574	\$507,870	
 <i>Section 5309 (carryover) Earmark Funds</i>					
		<i>Federal Funds</i>	<i>Funds</i>	<i>Total Funds</i>	
Beverly/Salem	Beverly/Salem Intermodal Center (2009 funds)	\$783,750	\$195,938	\$979,688	
Beverly/Salem	Beverly/Salem Intermodal Center (2008 funds)	\$245,000	\$61,250	\$306,250	
Blue Line/North Shore	Feasibility Study - Blue Line Extension to Lynn (2008 funds)	\$1,960,000	\$490,000	\$2,450,000	
Salem	Beverly/Salem Intermodal Center (2008 funds)	\$434,720	\$108,680	\$543,400	
Salem	Beverly/Salem Intermodal Center (2007 funds)	\$401,280	\$100,320	\$501,600	
Boston	Commonwealth Avenue/Green Line (2008 funds)	\$656,600	\$164,150	\$820,750	
Commuter Rail	Auburndale Station/Newton RT Handicap (2009 funds)	\$380,000	\$95,000	\$475,000	
Commuter Rail	Auburndale Station/Newton RT Handicap (2008 funds)	\$392,000	\$98,000	\$490,000	
Commuter Rail	Rockport Improvements (2008 funds)	\$597,740	\$149,435	\$747,175	
Commuter Rail	Rockport Improvements (2007 funds)	\$551,760	\$137,940	\$689,700	
Commuter Rail	Fitchburg Line Improvements (2009 funds)	\$30,000,000	\$7,500,000	\$37,500,000	
Commuter Rail	Fitchburg Line Improvements (2008 funds)	\$5,880,000	\$1,470,000	\$7,350,000	
Medford	Medford Downtown Parking (2008 funds)	\$434,720	\$108,680	\$543,400	
Medford	Medford Downtown Parking (2007 funds)	\$401,280	\$100,320	\$501,600	
Melrose	Commuter Rail Station Improvement (2008 funds)	\$686,000	\$171,500	\$857,500	
Revere	Wonderland Station Intermodal (2009 funds)	\$406,296	\$101,574	\$507,870	
Revere	Wonderland Station Intermodal (2010 funds)	\$750,000	\$187,500	\$937,500	
Revere	Wonderland Station Intermodal (2009 funds)	\$950,000	\$237,500	\$1,187,500	
Woburn	Woburn Park and Ride Facility (2008 funds)	\$391,248	\$97,812	\$489,060	
Woburn	Woburn Park and Ride Facility (2009 funds)	\$406,296	\$101,574	\$507,870	
Section 5309 Carryover Earmark Other Match Total		\$46,708,690	\$11,677,173	\$58,385,863	

Amendment Five FFYs 2010 - 2013 TIP

FFY 2010

Congestion Mitigation and Air Quality Improvement Program		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>	<i>Project Notes</i>
Systemwide	Locomotive Procurement	\$30,000,000	\$7,500,000	\$37,500,000	
Congestion Mitigation and Air Quality Improvement Program Total		\$30,000,000	\$7,500,000	\$37,500,000	
Section 115 Earmarks		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Green Line	Lechmere Station Relocation	\$1,000,000		\$1,000,000	
Beverly/Salem	Beverly/Salem Intermodal Centers	\$1,100,000		\$1,100,000	
Revere	Wonderland Station Improvements	\$300,000		\$300,000	
Revere	Wonderland Station Improvements	\$1,900,000		\$1,900,000	
Section 330		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Winthrop	Water Transportation Ferry FY03	\$496,750		\$496,750	
Ferry Boat Discretionary (Carryover Earmarked Funds)		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Winthrop	Water Transportation Service Ferry (2007 funds)	\$472,399	\$118,100	\$590,499	
Winthrop	Water Transportation Service Ferry (2009 funds)	\$950,000	\$237,500	\$1,187,500	
Ferry	Ferry System Improvements (2008 funds)	\$4,103,000	\$1,025,750	\$5,128,750	
Previous Flex Funds (Carryover)		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Systemwide	FFY2007 CMAQ Funds for Diesel Oxidation Catalysts	\$250,000	\$50,000	\$300,000	
Woburn	FFY2007 STP Funds for Anderson RTC	\$120,000	\$30,000	\$150,000	
Various Carryover Earmarks Total		\$10,692,149	\$1,461,350	\$12,153,499	
Transit Investment for Greenhouse Gas and Energy Reductions Grant Awards		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Kingston and Newburyport Layovers	Wind Turbine Program	\$2,500,000		\$2,500,000	
TIGGER Grant Total		\$2,500,000		\$2,500,000	
Transportation Investment Generating Economic Recovery Grant Awards		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Revere	Wonderland Station Transit Oriented Development (TOD) Plaza	\$20,000,000		\$20,000,000	
TIGER Grant Total		\$20,000,000		\$20,000,000	
Federal-Aid Subtotal		\$589,133,861			
Federal-Aid State/Local Matching Funds Subtotal			\$1,948,212		
Federal-Aid MBTA Matching Funds Subtotal				\$127,448,567	
FFY 2010 Regional Transit Funds Total				\$718,466,125	
FFY 2010 TIP Total				\$1,422,783,853	

Clean Air and Mobility Subcommittee Programming Recommendations for FFYs 2010 - 13

		Request	2010 Recommendation	Description	
TDM and TSM Programs	Boston	Boston Bike Share Amenities	\$325,000	\$325,000	A request for \$325,000 to augment the already committed (from multiple sources) \$1.677M investment in a city-wide bike share program. Public Bike Systems Company will be the facility vendor and the project will service subscribers and non subscribers at 50 locations in Boston (to expand to up to 290 regionally) starting in March/April 2011.
	Cambridge	City of Cambridge Social Marketing Year 3	\$58,768	\$58,768	Year three funding for the Cambridge CitySmart program. The program goal is to shift 10% of drive alone trips to a more sustainable mode. The program operates on a neighborhood level and was implemented in the Cambridgeport and Zone 7 neighborhoods.
	Cambridge	Cambridge Clean Cabs	\$150,000	\$150,000	To provide an incentive to taxicab owners to replace their existing, gas powered cabs with hybrid vehicles thereby reducing emissions. This will be done by using funds provided through this grant to pay up to \$10,000 per vehicle to help cover the additional cost of purchasing a hybrid model vehicle. Funding will cover conversion of up to 18 cabs. There is an existing 12 cab waiting list.
	Green Sts and Somerville	Green Streets Walk/Ride Day Regionalization	\$164,683	\$164,683	Working in collaboration with the Somerville Department of Public Health and Wellness, the Green Streets Initiative proposes to expand its Walk/Ride Day program over a three-year period to encompass 6 densely populated communities in the MPO area using a TDM strategy to change commuting habits. Walk/Ride Days will be held 12 times per year and provide incentives for people to leave their automobiles at home.
	Newton	Citywide Traffic Signal Timing Improvements	\$160,000	\$160,000	A study and implementation project to reduce delays and vehicle stops at signalized intersections in Newton. The majority of the traffic signals in Newton run on a fixed timing program throughout the day and do not adjust to changes in traffic flow, direction, or intensity caused by commuting demands. This project will implement changes to the current system to reduce idling and congestion and improve efficiency of the system.
	Salem	North Shore TMA Year 3	\$53,160	\$53,160	Year three funding for the North Shore TMA.
	WalkBoston	Local Pedestrian Activity Maps	\$29,000	\$29,000	To increase walking in four metropolitan Boston communities by producing walking maps. WalkBoston will develop targeted walking maps and help communities identify low-cost safety improvements for one or more of the walking routes. The selected communities will provide matching funds to cover the costs of publicizing and distributing the maps.

Clean Air and Mobility Subcommittee Programming Recommendations for FFYs 2010 - 13

				2010	
			Request	Recommendation	Description
Transit Programs	MetroWest RTA	Route 1 Service Year 3	\$252,206	\$252,206	Year three funding for the Route 1 service of the MetroWest RTA. This service is also known as the Green Line Shuttle and runs from 37 Waverly in Framingham (the MWRTA hub) to the Woodland T Station on the Green Line.
	MetroWest RTA	Route 7 Service Year 2	\$43,155	\$43,155	Year two funding for the Route 7 service of the MetroWest RTA. This service is also know as the Marlborough line and runs from 37 Waverly in Framingham (the MWRTA Hub) to Southborough, Marlborough, MBTA Commuter Rail and terminates at Solomon Pond Mall.
	GATRA	Marshfield and Duxbury Service Year 3	\$132,000	\$132,000	Year three funding for the Marshfield/Duxbury service of the Greater Attleborough Regional Transit Authority's (GATRA) service. This service runs from the Stop and Shop in Duxbury to the Marshfield seashore.
	CATA	Stage Fort Park Shuttle	\$8,000	\$8,000	To implement a Saturday and Sunday shuttle utilizing a trolley-replica vehicle, operating from June to September. The shuttle route would connect a 500-car parking lot at the Stage Fort Park Welcoming Center with numerous tourist attractions in downtown Gloucester.
Infrastructure	MBTA	Bikes on Buses	\$217,785	\$217,785	To make all MBTA buses and routes bike accessible by 2012 which will result in enhanced customer convenience by eliminating confusion about which routes have bike racks on buses available and encouraging bike connections to transit; this will also reduce complaints among passengers as to the reliability of their bus route accommodating bikes.
Total			\$1,593,757	\$1,593,757	*Requests for funding above do not include the 20% match. Different programs and projects have different matching requirements.
			available*	\$1,600,000	
2011 recommendation					
				2011	
			Request	Recommendation	Description
2011 Projects and Programs	Acton	Acton Shuttle Year 2	\$99,913	\$99,913	Year two funding for the Acton Commuter Rail Shuttle. The program is being advanced into the 2011 year because the program is not anticipated to start operation until mid-June.
	Boston	Boston Bike Maps Year 2	\$30,000	\$30,000	Year two funding for Bike Maps of Boston. The project is being advanced to the 2011 year to coincide with the opening of the Bike Share facilities.
	Hull	Hull Ferry Service Year 2	\$33,116	\$33,116	Year two funding for a Hull Ferry Service. The program is being advanced into the 2011 year because the town of Hull has not yet secured a vendor for the service. Year two funding will be held until a year one service has been established
Total			\$163,029	\$163,029	

Clean Air and Mobility Subcommittee Programming Recommendations for FFYs 2010 - 13

2012 and 2013 recommendation

These projects have not entered into the MassDOT design/review process and therefore will not be ready for advertisement in 2010 or 2011

		Request	2012 or 13 Recommendation	Description
2012 and 2013 Projects	Arlington	Intersection of Route 3 and Route 60	\$115,000	For MassDOT - Highway Division to determine To improve the function of the intersection of Route 3 and Route 60 to better accommodate the bicycle and pedestrian traffic coming in from the Minuteman Bikeway and to update the crossing to ADA standards.
	Framingham	Cochituate Rail Trail	\$585,000	For MassDOT - Highway Division to determine To provide amenities to a utility access road that is currently under development so that it can be used as a trail. Without these elements, the town will not be able to open the rail trail to the public and the paved path will continue as a DPW maintenance road only. These elements include upgraded crossings, improved sidewalks, signs, pavement markings, and street furniture.
	Hopkinton	Crosswalk Beacon at Church and Main Sts.	\$30,000	For MassDOT - Highway Division to determine To install a flashing pedestrian beacon in downtown Hopkinton at the Main St./Church St. crosswalk to alert motorists going westbound on Route 135 of pedestrians. This will improve pedestrian safety at the intersection. The topography and road design make it difficult for motorists to see pedestrians there.
	Scituate	Scituate Sidewalk Installation and Improvements	\$160,000	For MassDOT - Highway Division to determine To close gaps in and expand the existing sidewalk network in Scituate in three locations. This will allow for greater pedestrian access to the Greenbush Commuter Rail Line and other town destinations. Will also link Scituate and Cohasset.
Total			\$890,000	

Clean Air and Mobility Subcommittee Programming Recommendations for FFYs 2010 - 13

Projects not recommended at this time				
			Request	Description
	Boston	Improved Traveler Information Platform (VehicleSense)	\$350,000	To implement a public-private partnership between the City of Boston (responsible for overall direction) and VehicleSense (will handle the day-to-day management) to deploy and operate a real-time traveler information and in-vehicle payment system in two areas of the region that have persistent mobility issues – Boston’s Financial District (regular weekday traffic and commuters) and Gloucester’s beach parking (seasonal weekend traffic of non-regular users). Committee questioned if this project could be implemented with \$650,000, may have a secondary effect of encouraging driving, and could possibly contribute to distracted driving. Additionally, there seems to be similarity between this project and the PrimoSpot application for iPhone and Android available now.
	Boston	Boston Employee Bike Share	\$60,000	Year two funding for the city of Boston Employee Bike Share program. Committee advises that this service could be folded into the larger bike share program.
	Cohasset	Parking Incentives	\$3,436	To increase use of the Cohasset commuter rail station by waiving fees for weekend parking in the parking lot and allow for overnight parking in the area adjacent to the built Transit Oriented Development area that is most remote from the platform. Committee is recommending that the members of the MPO write a letter to the MBTA asking that the policy of charging for parking at lots on weekends be investigated.
	Dedham	Dedham Square Improvements	\$575,000	To improve pedestrian access and continuity in the downtown Dedham area in accordance with the current master plan for streetscape improvements in historic Dedham Square. This project will involve two intersections; one with an outdated signal, and the other with no current signalization. The committee questioned why this project did not provide for bicycle accommodations and thought the design seemed auto oriented.
	Hingham	Route 228 Intersection Improvements	\$300,000	To reduce congestion and backups on Cushing and South Pleasant Sts. by installing a signal at their intersection with Route 228. Staff thinks that the signalization of the street with a larger traffic volume (Route 228) to reduce backup on the less traveled roadways would likely exclude the project from CMAQ funding by not producing an air quality benefit. If the project advances in design further investigation of the projects air quality benefit can be determined.
	Quincy	Traffic Improvements at Hancock and Squantum Sts.	\$2,900,000	To fund improvements to the intersections (and vicinity of) Hancock Street from Glover Avenue, north to the signalized access drive of the North Quincy MBTA Station/Hunt Street, an overall distance of 1200 LF. Hancock Street is a major north-south regional arterial with significant commercial land use under the jurisdiction of the City. Staff does not know if the project would have any effect on air quality. The committee stated that the project is larger than expected for this program and should continue to seek traditional TIP funding.
	128 Business Council	Area Shuttle and commuter preference survey	\$155,802	To fund a new shuttle in the Waltham business district in the vicinity of Totten Pond Rd. Staff asked if the shuttle may be redundant as it follows much of the same route as the existing route 70A MBTA bus service. The proposed shuttle may only take passengers away from the existing service, therefore, providing little to no air quality benefit. Committee would like to see the 128 Business Council formally ask the MBTA for route changes and possibly re-apply with a revised proposal during a future solicitation.
Total			\$4,344,238	

**Proposed Administrative Modification for the
FFY 2010 Unified Planning Work Program**

The following text would be added to Appendix A of the Federal Fiscal Year 2011 Unified Planning Work Program:

**MBTA/MART Belmont Station Consolidation
and Development Study**

Agency: Town of Belmont

Section 5339 funding (MA Earmark Identification E2009-ALTA-015) in the amount of \$142,500 from the Federal Transit Administration, with an additional \$28,500 in matching funds from the Town of Belmont, has been earmarked for an alternatives analysis to be conducted for the Town of Belmont. The study, which will comply with all pertinent federal regulations, will explore the feasibility of combining the two existing stations into a single multimodal transportation facility at which commuter rail, local and regional transit routes, and other modes would converge. Transportation services will be readily accessible to all patrons including those who come by bus, rail, shuttle, taxi, private automobile, bicycle, or on foot.

By consolidating the two stations into a single, more central location, MBTA commuter rail service will improve by having to stop at one location fewer, and by achieving better spacing of stops. Additionally, a new Belmont Central Station would offer greater transit amenities to its riders. A new station, would replace the two older, decaying stations currently used by Belmont riders. The new station would be designed to meet modern standards for accessibility and safety. High level platforms would be installed to facilitate boarding and alighting and reduce dwell times.

bridges and work zones. Chapter 3, Basic Design Controls, and Chapter 5, Cross-Section and Roadside Elements, have sections which specifically address pedestrian design. Chapter 11, Shared Use Path and Greenways, and Chapter 16, Traffic Calming and Traffic Management, address trails and traffic calming respectively.

e. Roadway and Bridge Design

As part of the process for designing, constructing and implementing state funded roadway and bridge projects, a public hearing is held when 25% design plans have been submitted. Comments received at the hearing are reviewed and considered for incorporation in the 75% design plans. Questions and concerns regarding pedestrian access, such as the inclusion of sidewalks, are required to be addressed at the 25 percent design stage.

f. Massachusetts Environmental Policy Act (MEPA)

The Massachusetts Environmental Policy Act (MEPA) requires that proponents of projects meet certain size and/or impact thresholds. The intent of MEPA review is to inform project proponents and state agencies of potential adverse environmental impacts while a proposal is still in the planning stages. MEPA is a uniform system of environmental impact review to reduce the potential for harm to the environment from certain development, construction or other projects. MAPC is responsible for reviewing and providing feedback on proposed projects that are submitted as part of the MEPA process. MAPC strongly advocates for the inclusion of sidewalks and pedestrian connections, signage, and an overall pedestrian-friendly environment as part of their MEPA review.

g. National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) requires an environmental analysis for any major Federal action. The NEPA project development process includes balanced transportation decision making by taking into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation. Federal-aid highway projects require a NEPA analysis.

e. Rail Trails

A rail trail is the conversion of an unused railway easement into a shared-use path, typically for walking and bicycling. Most rail trails are flat, long and can run through historic areas. Rail trails are often graded and covered in gravel or crushed stone, paved with asphalt, or left as dirt. Since both Federal and state laws are involved, rail trail conversions can be complex. Where possible, rail trails should connect to corridors to enable both transportation and recreation.

Best Practice - Bikeway

Minuteman Commuter Bikeway

Running for approximately 12 miles through Bedford, Lexington and Arlington, the [Minuteman Commuter Bikeway](#) is an example of a rail trail conversion. The Minuteman Commuter Bikeway is a popular rail trail which is frequently used for both transportation and recreational purposes. On an average day, approximately 1,100 pedestrians use the Minuteman Commuter Bikeway. Of the users, 68 percent are pedestrians.⁹

f. Education and Programs

Education and program efforts in pedestrian planning should include training and education of planning and engineering professionals, transportation maintenance workers, school boards, teachers, law enforcement officials, elected officials as well as the public at large.

Educational efforts directed at motorists (e.g., obeying speed limits), pedestrians (e.g., legally crossing the street) and bicyclists (e.g., obeying traffic signals) can be an effective means to improve safety. School curricula should include programs instructing children on issues of pedestrian safety. Driver education programs should incorporate the rights of pedestrians (e.g., yield to pedestrians when turning). Effective education programs need to be designed with an understanding of the diverse needs and skill levels of various user groups (e.g., children, adults and people with disabilities).

Driver Education

Driver Education and Pedestrians

Educational material provided by the Registry of Motor Vehicles (RMV) addresses motor vehicle laws with regard to pedestrians. Pedestrian safety is addressed in the RMV's [Commonwealth of Massachusetts' Driver's Manual](#).

The Driver's Manual clearly conveys that drivers must always yield to pedestrians who are walking in or are crossing a roadway. The Manual tells drivers to take extra care to look for pedestrians, how to drive defensively, and discusses right-of-way rules. Pedestrian signals and signage are graphically depicted in the Manual. The Driver's Manual also addresses accommodating pedestrians in roundabouts and rules for passing pedestrians in a roadway. A section on rules for pedestrians to follow is even included in the Driver's Manual.

⁹ Data is compiled from counts conducted by the Central Transportation Planning Staff (CTPS) in 2009 for the Boston Region MPO Bicycle / Pedestrian Traffic Count Report.

As a means of standardizing driver education throughout the state, the Registry of Motor Vehicles has developed a [Driver Education Program](#). The Driver Education Program contains sections on accommodating pedestrians in its Traffic Signals and Sharing the Road modules. While materials for driver education do exist, there is room for pedestrian safety to be more strongly emphasized in driver education materials, programs and driver tests.

Education and Programs in Schools

Established in 2005, the [Massachusetts Safe Routes to School \(SRTS\)](#) program helps to teach and inspire children to start walking and bicycling more often – to and from school. The SRTS program aims to reduce congestion, air pollution, and traffic conflicts near participating schools, while increasing the health, safety, and mobility of elementary and middle school students. The program is managed by MassDOT and funded by FHWA. It includes separate programs for education and encouragement (delivered by MassRIDES) and for infrastructure improvements.

To date, the SRTS program worked with over 230 elementary and middle schools in over 100 communities statewide, reaching over 85,000 students. Over half of these communities are in the MAPC region. Through this program, schools receive a range of direct professional services to educate students, parents, and school and community officials about the benefits of walking and bicycling to school while addressing safety concerns. The SRTS program includes education, encouragement, enforcement, engineering, and evaluation strategies to ensure a comprehensive and successful program to increase walking and bicycling to and from school.

Technical assistance in designing, implementing, marketing, and evaluating initiatives tailored to each school's needs and priorities is offered through this program. Participating schools receive free promotional materials to implement SRTS, plus no-cost educational materials targeted to students, parents, and community leaders. Training prepares school stakeholders to identify school access challenges and design solutions. Participating schools represent diverse socio-economic communities with varying population densities statewide.

The SRTS program held its third annual Massachusetts Walk to School Day in May 2009. On Massachusetts Walk to School Day, children, parents, school and local officials walked to school together on a designated day. This event is intended to remind everyone of the joy of walking to school, the health benefits of regular daily activity, and the need for safe places to walk. Walk to School Day aims to create long term change by increasing physical activity among children, enhancing pedestrian safety, reducing traffic congestion, improving the environment, and building strong communities.

As communities participated in this event, schools across the state reported a dramatic increase in walking. For example, at Braintree Ross Elementary School, even though all students live within a mile, 80 percent of children are driven to and from school each day. In May 2008, nearly all students walked to school. The collaboration among the school, town, and community contributed to the event's success. To develop a broader program, the school implemented a Pedestrian Safety Training and sponsored 'Trekking Tuesdays.' In the fall, the school organized a Walking School Bus program¹⁰ and participated in International Walk to School Day. Canton, Hingham and Scituate also have Walking School Bus programs.

¹⁰ A Walking School Bus program is a group of children walking to school with one or more adults.

h. Snow and Ice Clearance

Prompt and effective snow clearance on sidewalks is critical to maintaining safe walking conditions. If walkways, crosswalks, islands, and curb ramps are icy or unshoveled, travel is both difficult and dangerous for pedestrians. Children, the elderly and people with disabilities are most affected. Although there are challenges with enforcement, it is critical that municipalities improve sidewalk and road snow and ice clearance and enforce their regulations to encourage walking and increase pedestrian safety. Depending upon jurisdiction, snow and ice removal may be the responsibility of state and municipal agencies or private abutters (e.g., homes, businesses, property owners or tenants).

Both MassDOT and the Department of Conservation and Recreation (DCR) are responsible for maintaining their respective roadways reasonably safe for public travel by keeping them sufficiently clear of ice and snow. Both state agencies carry out these responsibilities under a snow and ice removal partnership. MassDOT is responsible for providing curb-to-curb snow removal for specifically designated DCR Parkways in the Greater Boston Area. However, DCR is responsible for clearing sidewalks related to these parkways. [DCR's Winter Storm Plan and Priority Map](#) and [MassDOT's snow removal responsibilities](#) further delineate snow removal roles for both agencies.

In dense urban areas property and business owners are required to clear sidewalks (often including curb cuts and ramps) that abut their property. Usually, property and business owners have between three and twenty-four hours to clear sidewalks. Subsequently, communities may issue a warning or a ticket. Communities primarily clear sidewalks adjacent to municipally owned buildings or property. In some cases, communities clear the most heavily traveled sidewalks. **To ensure pedestrian access and safety, it is critical that a community's snow removal program address both roadways and sidewalks.**

The following is an inventory of snow clearing policies of select communities in the Boston Region. Densely developed mature cities as well as suburban and rural communities have been selected for comparative purposes.

Newton's ordinance (Section 26-8) states that snow and ice must be removed from sidewalks in defined business districts within twenty-four hours. There is no fine indicated in the ordinance if snow removal does not take place. Woburn's ordinance (Title 12, Section 6) requires snow removal from specifically designated sidewalks. The property owner has two hours to remove the snow (6 hours if there is ice) after snowfall and is subject to a onetime 50 dollar fine. If an individual removes ice or snow from public and private property, and places the ice or snow without permission on public or private property they can be subject to a 300 dollar fine. In Westwood, if a person lays, throws, or places snow or ice on any paved town street or sidewalk that creates a hazardous condition or public safety concern, a minimum 300 dollar fine can be issued (Ordinance - Article 10, Section 3).

Bolton has a 100 dollar fine in its ordinance for persons who pile, push, or blow snow or ice onto a public way that is already plowed and sanded by the Town. The Towns of Concord and Essex will issue a 50 dollar fine for the same activity. The Towns of Lincoln and Carlisle can issue a ten dollar fine if a vehicle is parked to prevent the plowing or removal of snow and ice.

Residential and commercial property owners in Boston are required to remove snow within three hours after a snowfall. Cleared paths must be a minimum of 42 inches wide. Removal should be conducted in a manner "that ensures the orderly flow and safety of pedestrian traffic upon such sidewalks." Depending on the severity of the violation, fines range between 50 and 250 dollars per day.

Mid-Block Crosswalks

A mid-block crosswalk is a marked crosswalk located away from an intersection that may be either signalized or unsignalized. According to the MUTCD, mid-block crosswalks must be marked. Mid-block crosswalks serve to bridge long gaps between intersections and to serve high pedestrian demand.

The following guidelines can assist in evaluating whether mid-block crosswalks should be installed:

- Assess the relationship of roadway width, the preference to cross at mid-block, and crossing safety;
- Evaluate location (e.g.; the distance to nearby intersections) and the relationship to adjacent land uses (e.g.; a building entry placed at mid-block with a parking lot directly across the street can create a demand for mid-block pedestrian movements); and
- Analyze traffic volumes and speeds as well as pedestrian volumes.

If a mid-block crosswalk is designated for installation, then warning indicators such as signs, pavement markings, flashing lights, and pedestrian-activated traffic control signals need to be determined¹⁵. It has been debated that providing signs and markings at mid-block crosswalks gives pedestrians a false sense of security. There is no guarantee that a driver may be aware of the mid-block crosswalk and will exercise caution at the intersection.

Some general principles for mid-block crossings include:

- Reduce the number of lanes. Fewer lanes limit pedestrian crossing distances and generally lessen the likelihood of a collision.;
- Install geometric changes that narrow or divide crossing the roadway (e.g.; curb extensions and raised islands or medians);
- Improve crossing visibility (e.g.; restrict parking and manage landscaping in the vicinity of the mid-block crosswalk);
- Mark mid-block crosswalks with highly reflective material;
- Use flashing yellow warning beacons, often referred to as flashers, in conjunction with advance warning signs; and
- Provide adequate lighting to increase pedestrian safety.

In the early 1990s, the National Highway Traffic Safety Administration evaluated crash types for more than 5,000 pedestrian crashes in six states. The results showed that mid-block accidents were the second major grouping of crash types, accounting for 26.5 percent of all crashes. Increased enforcement and driver education will contribute towards a higher percentage of vehicles yielding as required by law to pedestrians.

Marked or Unmarked Crosswalks

A Federal Highway Administration (FHWA) study on whether it is safer for crosswalks to be marked or unmarked where there are no traffic signals or STOP signs present was conducted in 2005¹⁶. This study analyzed five years of pedestrian crash data at 1,000 marked crosswalks and 1,000 unmarked comparison sites. The study concluded that on two-lane roads, the presence of marked crosswalks alone at an uncontrolled location was associated with no difference in pedestrian crash rates, compared to unmarked crosswalks. However, marked crosswalks on multi-lane roads with traffic volumes above

¹⁵ Walkinginfo.org

¹⁶ Safety Effects of Marked versus Unmarked Crosswalks at Uncontrolled Locations, USDOT, FHWA, September 2005.

about 12,000 vehicles per day were associated with higher pedestrian crash rates compared to unmarked crosswalks.

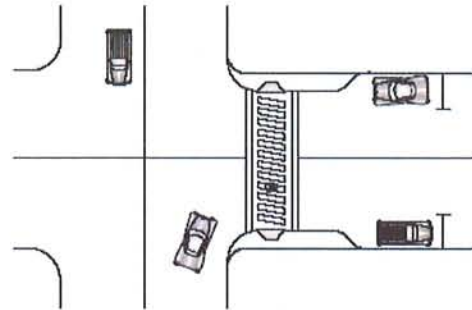
Raised Pedestrian Crossing

A raised pedestrian crossing can be designed to slow drivers' speeds, which will increase the likelihood of yielding to crossing pedestrians. The FHWA study concluded that raised medians significantly lower pedestrian crash rates at multi-lane sites with both marked and unmarked crosswalks¹⁷. This type of pedestrian crossing is most appropriate on local or neighborhood streets with low speed limits.

Curb Extensions

Curb extensions extend the sidewalk into the street, reducing the time and distance it takes a pedestrian to cross. Curb extensions can also prevent drivers from parking in front of crosswalks and blocking curb ramps. The visibility between drivers and pedestrians is also improved with curb extensions because pedestrians start crossing farther out into the street. Curb extensions also reduce the curb turning radius and narrow the roadway. Curb extensions should not extend more than 6 feet from the curb.¹⁸ In addition they must not extend into travel or bicycle lanes and are only appropriate when there is on-street parking.¹⁹ Figures 29 and 30, 'Curb Extensions,' are model examples of curb extensions.

Figure 27 Curb Extensions



Source: Cambridge Pedestrian Plan, 2000.

¹⁷ *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations*, FHWA, USDOT, Research, Development, and Technology Turner-Fairbank Highway Research Center, September 2005.

¹⁸ Except as shown in Figure 27 which is a curb in conjunction with angled parking.

¹⁹ FHWA, *Pedestrian Facilities Users Guide*, 2002, page 69.

Audible Tones and Speech Messages - Accessible Pedestrian Signals (APS) are devices that communicate information about pedestrian timing in nonvisual formats such as audible tones, verbal messages that provide standard information about the status of the signal cycle (e.g., WALK, DON'T WALK) and/or vibrating surfaces. Information on the location, direction of travel, and the name of the street to be crossed is sometimes also included. APS units are recommended in PROWAC²² whenever pedestrian signal systems are added or altered at intersections. Refer to either the [Access Board \(R306\)](#) or walkinginfo.org for more information.

The MUTCD recommends that accessible pedestrian signals have both audible and vibrotactile indications²³. Audible walk indications are broadcast from a speaker that is incorporated into the pedestrian pushbutton housing. The MUTCD requires that the volume of the audible walk indication be carefully adjusted to be heard a minimum of 6 feet and a maximum of 12 feet from the pushbutton, or to the building line, whichever is less²⁴. The MUTCD standard for automatic volume adjustment in response to ambient traffic sound level is a maximum volume of 100 dBA. Audible tone walk indications shall repeat at eight to ten ticks per second. Vibrotactile pedestrian devices provide information to pedestrians who are blind and deaf. These accessible pedestrian signals communicate, by touch, information about pedestrian timing using a vibrating surface. A vibrotactile walk indication is usually an arrow on the pushbutton that vibrates during the walk interval. The placement of audible and vibrotactile indicators on pedestrian signals is determined by appropriate engineering judgment.

For the past 25 years, APS units have been provided at certain intersections at the request of people who are impaired. The incorporation of APS for all new and altered signal systems with pedestrian indicators will become required if PROWAC is approved in its present form by the Access Board and FHWA.

Signage - Signs can provide important information that can improve road safety. By letting people know what to expect and how to behave, prudently installed signs can guide appropriate reactions for both pedestrians and drivers. For example, giving motorists advance warning of an upcoming pedestrian crossing will alert them to modify their speed.

Crosswalks - Marked crosswalks at signals should always be installed. Crosswalks encourage pedestrians to cross at the signal and discourage motorists from encroaching into the crossing area.

Best Practice – Pedestrian Signal

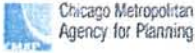
Accessible Pedestrian Signals (APS)

As part of a signalization upgrade in 2001, Community Development Block Grant (CDBG) funds were used to install [Accessible Pedestrian Signals \(APS\)](#) at 19 intersections in Newton, Massachusetts. APS features of some of the signals included walk indication with audible rapidly repeating tones, pushbutton locator tone, and automatic volume adjustment in response to ambient sound. Over the next few years, the City intends to add additional APS devices with similar features at selected high-volume pedestrian intersections.

²² PROWAC is an acronym for the U.S. Access Board's Public Rights of Way Accessibility Committee's Guidelines.

²³ Section 4E.11 Accessible Pedestrian Signals and Detectors – Walk Indications.

²⁴ Section 4E.12 Accessible Pedestrian Signals and Detectors – Tactile Arrows and Locator Tones.



Proposed Transportation Reauthorization Principles for Major Metros

1. Provide sufficient resources to meet the nation's transportation infrastructure needs, including significant new resources focused on improving mobility in the nation's metropolitan regions. The federal program should incentivize states and regions to raise and spend funds locally through a wide menu of options, including the ability to toll existing facilities and through public-private partnerships.
2. Create a vision for a federal role in transportation that includes a national freight policy with dedicated funding and corridors of national significance.
3. Reduce the number of program categories and make funding programs mode-neutral in order to provide maximum flexibility in solving regional problems.
4. Streamline the project development and delivery processes by building on the MPO planning process and creating direct links to NEPA and project development.
5. In major metropolitan areas, transportation plans should be developed in the context of comprehensive regional plans that include land use, housing, economic development, natural resources, energy and climate change, and promote livable communities.
6. Create a Metropolitan Mobility Program with funds that are in addition to existing funding programs. MPOs should have programming authority for these funds that would be allocated to large metropolitan areas.
7. Large MPOs shall also develop plans and programs for the newly established Freight Improvement Program, and Projects of National Significance. These funds should also be in addition to existing funding programs.

June 1, 2010

Background on the Proposed Transportation Reauthorization Principles for Major Metros

The following text (in italics) provides background information on the major metro principles that the Boston Region has been invited support. Many of the ideas behind the principles are part of the proposed legislation circulated last year by Congressman and Chair of the Transportation and Infrastructure Committee, James Oberstar, called the Surface Transportation Authorization Act of 2009 (STAA). The principles focus attention on those proposals that would help the major metros address the special challenges we face.

1. Provide sufficient resources to meet the nation's transportation infrastructure needs, including significant new resources focused on improving mobility in the nation's metropolitan areas.

This statement is based on the common experience of the major metropolitan planning organizations – there is not enough money coming into all the major MPO regions to fund the necessary maintenance and expansion capital improvements for highway, transit and bicycle/pedestrian modes. All are suffering from underinvestment in the region's infrastructure. In addition, funds for systems operations improvements, connections (intra- and intermodal), access and accessibility upgrades, and expansion are needed to maintain and improve mobility.

The federal program should incentivize states and regions to raise and spend funds locally through a wide menu of options, including the ability to toll existing facilities and through public-private partnerships.

The national Highway Trust Fund is not adequately funded. Just last year Congress had to transfer monies to stabilize the Trust Fund so that it could continue to meet the FFY 2010 reimbursement requirement levels. This principle proposes that since the Highway Trust Fund seems unable to adequately fund transportation needs, the major MPOs should have other means, in particular, through their states' expanded authority to raise monies. This information has been proposed in the past and is being widely discussed now.

2. Create a vision for a federal role in transportation that includes a national freight policy with dedicated funding and corridors of national significance.

The major metros think that there should be a federal vision for transportation; one that picks up from the former vision of completing the national interstate system. The vision should include supporting interstate commerce and economic advancement.

Congestion has an economic impact that affects businesses that need to move materials and products. Information from various sources, including information used in the discussions around the STAA, notes these finance problems. The proposed legislation would provide states with varied financial resources (grants, loans, and other instruments) through a (new) National Infrastructure Bank to fund projects that are needed to support the flow of freight. This includes ports and corridors. These are projects that have “significant national economic benefits....” (STAA Executive Summary, page 7) Text of the STAA explains that the USDOT would select projects in a competitive process that would consider (among other factors) existing congestion/mobility problems in the corridor or project area and their economic and environmental impacts as well as the regional and national economic growth and benefit to the GDP. (STAA, Section 1206, page 255)

The USDOT currently manages the Transportation Infrastructure Finance and Innovation Act of 1998 program to provide credit (through loans and lines of credit, for example) for large projects of national or regional significance. The FHWA also currently operates a Projects of National and Regional Significance program. This funds expensive projects, including freight rail projects, which would use up most of a state’s Federal highway funds for a particular year. Economic benefits and congestion reduction are among the goals of this existing program.

3. Reduce the number of program categories and make funding programs mode-neutral in order to provide maximum flexibility in solving regional problems.

The major metros think that MPOs should have more flexibility to program based on their regions’ particular needs. Asking that the programs be mode-neutral, provides that MPOs have the flexibility to direct funds to projects and programs that meet needs in their regions. This includes the ability to direct monies to transit.

This principle is also related to the STAA’s objective to consolidate the many programs in transportation funding. The STAA Executive Summary notes that there are 75 programs that would be reorganized into four core formula categories: Critical Asset Investment, primarily for Interstate Maintenance and the National Highway System and Highway Bridge programs; Highway Safety Improvement; Surface Transportation, for new highway and transit capacity; and Congestion Mitigation and Air Quality Improvement, for addressing congestion and air quality and also include consideration of public health and livability. (STAA Executive Summary, Page 6)

4. Streamline the project development and delivery processes by building on the MPO planning process and creating direct links to NEPA and project development.

The intent of this principle is to allow some planning work done by MPOs as they develop their long-range transportation plans to be used in the National Environmental Protection Act process for environmental reviews. This allow for some efficiencies in some MPO regions. This principle is rooted in a proposal in the STAA that would eliminate, “duplication of documentation and procedures and expedite the development of projects through the environmental review process, design, and construction.” (STAA Executive Summary, page 9).

The STAA, in the text discussing the Office of Expedited Project Delivery, says that the office would expedite projects through a number of means including:

(vi) linking planning and the environmental review process under NEPA by focusing on the NEPA process in the early phases of project planning and then carrying through the work done in the planning stage to the NEPA process;
(vii) encouraging practices that result in good communication, coordination, and collaboration between relevant parties (including local communities, metropolitan planning offices, State departments of transportation, other State agencies, Federal-aid division offices, headquarters offices, the Office of the Secretary of Transportation, other Federal agencies, (STAA, Section 1202, page 186)

This principle reflects this provision; but it does not directly relate to the work of the Boston Region MPO, as the MPO is not responsible for project development. This proposal would not make it a requirement for every MPO, but would allow for this.

5. In major metropolitan areas, transportation plans should be developed in the context of comprehensive regional plans that include land use, housing, economic development, natural resources, energy and climate change, and promote livable communities

This reflects current federal guidance and MPO visions and policies.

6. Create a Metropolitan Mobility Program with funds that are in addition to existing funding programs. MPOs should have programming authority for these funds that would be allocated to large metropolitan areas.

This principle supporting the Metropolitan Mobility Program is based in the STAA’s proposal to create a Metropolitan Mobility and Access program. The STAA provides data to support providing a special program for metropolitan areas with populations over 1 million, including:

- *80 percent of people in the United States lives in metropolitan areas and 60 percent in areas of more than 1 million*
- *They generate 75 percent of the GDP while in 12 percent of the land area*

- 85 percent of the critical transportation infrastructure is in metropolitan areas
- The congestion in metropolitan areas costs more than \$78 billion in wasted fuel and time (STAA, Section 1205 (a) (1), page 228)

The program would, "...provide multi-modal transportation funding and financing authority directly to metropolitan planning organizations, thereby allowing MPOs broad, multi-modal flexibility in planning and implementing programs...in urbanized areas." (STAA, Section 1205 (b), page 230)

A qualified, large MPO's approved metropolitan mobility plan would be the source of congestion-reduction/mobility and livability improvement strategies for a UZA. Grants will be awarded considering criteria in numerous categories (such as population to benefit, seriousness of congestion-related problems, program/project benefits for the economy, fuel use reduction, safety, and mobility and accessibility improvements for passengers and freight) and recipients would be required to meet performance measures.

The concept of setting aside funding for projects from the major metro MPOs reflects the Congressional Transportation and Infrastructure Committee's thinking that major metro MPOs should have direct access to resources and flexibility to address their congestion, access, and mobility needs.

7. Large MPOs shall also develop plans and programs for the newly established Freight Improvement Program, and Projects of National Significance. These funds should also be in addition to existing funding programs.

The STAA proposes that the National Infrastructure Bank also fund Projects of National Significance with the same varied finance instruments proposed above. Projects of National Significance address freight mobility. Typically they are bigger in scope and cost than can be comfortably managed within an MPOs target, yet they are important for their potential to support trade and international competitiveness through improvements to freight movement.

Projects of National Significance are also part of an existing funding program through USDOT.

Draft FFYs 2011 - 14 TIP Target Funded Projects Cash Flows

			Prior to 2009	2009	2010	2011	2012	2013	2014	Total Programmed	Total in 2011 - 14 TIP	TFPC Estimate	Amount Remaining
Concord/Lincoln	602984	Route 2 (Crosby's Corner)				\$17,474,446	\$14,796,710	\$18,296,710	\$21,396,710	\$71,964,576	\$71,964,576	\$71,943,985	\$0
Danvers/Peabody	87612	Route 128 at Route 35 and Route 62		\$9,000,000	\$13,496,710	\$12,485,290				\$34,982,000	\$12,485,290	\$35,000,000	\$0
Weymouth*	601630	Route 18					\$17,282,039	\$8,820,000		\$26,102,039	\$26,102,039	\$26,100,000	\$0
Canton, Randolph & Westwood	87800	Route 128 Improvement Program Contract 3	\$22,260,000	\$11,959,389	\$7,000,000	\$6,000,000	\$6,000,000			\$53,219,389	\$12,000,000	\$53,219,389	\$0
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4		\$3,000,000	\$10,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$61,000,000	\$48,000,000	\$61,000,000	\$0
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5					\$12,000,000	\$15,000,000	\$15,000,000	\$42,000,000	\$42,000,000	\$72,000,000	\$30,000,000
									*Total	\$289,268,004	\$212,551,905	\$319,263,374	\$30,000,000
										*Total Target Funding Programmed	\$199,969,866		
										*Total Target Available FFY 2011 - 14	\$223,568,517		
										Difference	\$23,598,651		

*\$12,582,039 of this project is funded with a federal earmark

Projects in the FFYs 2010 - 13 TIP yet to be advertised

Arlington	Massachusetts Ave	\$3,548,404
Boston	South Bay Harbor Trail (construction)	\$3,850,000
Cambridge	Cambridge Common (Construction)	\$1,000,000
Ipswich	North Green Improvements (Construction)	\$1,076,235
Somerville	Somerville Community Path, Phase 1	\$3,487,611
Somerville	Beacon Street	\$1,319,690
Boston Region	Clean Air and Mobility	\$8,000,000
	Total	\$22,281,940
	Total Target Remaining	\$1,316,711

Projects staff would (or have previously) recommend for programming if funding was available

Acton and Maynard	Assabet River Rail Trail, Phase 2	\$9,000,000	
Belmont	Trapelo Road	\$11,587,810	
Beverly	Rantol St	\$16,057,360	
Boston	Tremont St	\$2,200,000	
Canton	Route 138	\$1,200,000	now programmed in 2010
Chelsea	Beacham and Williams St	\$6,000,000	
Hanover	Route 53 Reconstruction	\$986,520	
Hudson	Route 85	\$10,814,480	
Lynn	Intersection Improvements	\$1,098,110	now programmed in 2010
Marlborough	Farm Road	\$3,400,000	
Milford	Route 16 Intersection Improvements	\$3,500,000	
Natick	Route 27	\$10,129,579	
Winchester, et al	Tri Community Bikeway	\$5,075,585	
	Total	\$81,049,444	

Staff Recommendation FFYs 2011 - 2014 TIP

FFY 2011

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 Highway Program

FEDERAL-AID TARGET PROJECTS

Congestion Mitigation and Air Quality Improvement Program

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$8,000,000	\$2,000,000	\$10,000,000
Somerville	604331 Somerville Community Path, Phase 1	\$2,790,089	\$697,522	\$3,487,611
		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Boston Region	Clean Air and Mobility Program	\$1,600,000	\$400,000	\$2,000,000
Congestion Mitigation and Air Quality Improvement Program Total		\$12,390,089	\$3,097,522	\$15,487,611
		<i>Minimum CMAQ Regional Target</i>		\$0

National Highway System

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
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

Surface Transportation Program

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$2,542,189	\$635,547	\$3,177,736
Danvers/Peabody	87612 Route 128 at Route 35 and Route 62	\$9,988,232	\$2,497,058	\$12,485,290
Surface Transportation Program Total		\$12,530,421	\$3,132,605	\$15,663,026

Staff Recommendation FFYs 2011 - 2014 TIP

FFY 2011

Highway Safety Improvement Program (HSIP) Project			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$3,867,039	\$429,671	\$4,296,710
Highway Safety Improvement Program Total			\$3,867,039	\$429,671	\$4,296,710
			<i>Minimum HSIP Regional Target</i>		\$4,296,710

Surface Transportation Program/Enhancement			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Ipswich		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 **\$54,523,582**
**Boston Region MPO Regional Target with State Match* \$54,562,295

FEDERAL AID NON-TARGET PROJECTS

High-Priority Projects (TEA-21)			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>	<i>Project Notes</i>
Boston		Huntington Ave/Symphony Area Streetscape Constriction (HPP 447)	\$2,140,232	\$535,058	\$2,675,290	moved in from the 2010 element
Boston		Huntington Ave/Symphony Area Streetscape Construction (HPP 1811)	\$820,080	\$205,020	\$1,025,100	moved in from the 2010 element
High-Priority Projects (SAFETEA-LU)			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>	
Boston		Warren St/Blue Hill Ave Construction (HPP 2129)	\$0	\$0	\$0	moved to 2012
Boston		Melnea Cass Blvd Construction (HPP 756)	\$0	\$0	\$0	moved to 2012
Boston		Melnea Cass Blvd Construction (HPP 4284)	\$0	\$0	\$0	moved to 2012
Boston		East Boston Haul Road Design (HPP 2032)	\$2,000,000	\$500,000	\$2,500,000	\$1,344,000
Franklin	604988	Route 140 Improvements Construction (HPP 4279)	\$0	\$0	\$0	moved to 2012
Malden	605173	Pleasant Ave Construction (HPP 589)	\$0	\$0	\$0	moved to 2012
Somerville	604331	Somerville Community Path, Phase 1 Construction (HPP 2782)	\$809,911	\$202,478	\$1,012,389	
Somerville	605219	Improvements to Broadway in Somerville Construction (HPP 431)*	\$1,987,798	\$496,950	\$2,484,748	moved in from the 2010 element
Section 112						
Cambridge	605684	Kendall Square/Broadway Streetscape Construction	\$750,000	\$0	\$750,000	
Section 117						
Malden	605173	Pleasant Ave Construction	\$0	\$0	\$0	moved to 2012
High-Priority Projects Total			\$8,508,022	\$1,939,505	\$10,447,527	

*Additional money to be provided from outside sources

Staff Recommendation FFYs 2011 - 2014 TIP

FFY 2012

Indicates a change in project cost

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Indicates a new funding category

Regional Highway Program

FEDERAL-AID TARGET PROJECTS

Congestion Mitigation and Air Quality Improvement Program

		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
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
				<i>Minimum CMAQ Regional Target</i>
				\$0

National Highway System

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Canton, Randolph & Westwood	087800 Route 128 Improvement Program Contract 3, Year Six of Six	\$4,800,000	\$1,200,000	\$6,000,000
Dedham, Needham & Westwood	603206 Route 128 Improvement Program Contract 4, Year Four of Six	\$9,600,000	\$2,400,000	\$12,000,000
Needham & Wellesley	603711 Route 128 Improvement Program Contract 5, Year One of Six	\$9,600,000	\$2,400,000	\$12,000,000
National Highway System Total		\$24,000,000	\$6,000,000	\$30,000,000

Surface Transportation Program

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>	<i>Project Notes</i>
Arlington	604687 Massachusetts Ave	\$2,838,723	\$709,681	\$3,548,404	\$2,650,000
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$8,400,000	\$2,100,000	\$10,500,000	
Weymouth	601630 Route 18	\$3,760,000	\$940,000	\$4,700,000	
Surface Transportation Program Total		\$8,400,000	\$2,100,000	\$18,748,404	

Staff Recommendation FFYs 2011 - 2014 TIP FFY 2012

Highway Safety Improvement Program (HSIP) Project		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$3,867,039	\$429,671	\$4,296,710
Highway Safety Improvement Program Total		\$3,867,039	\$429,671	\$4,296,710
		<i>Minimum HSIP Regional Target</i>		\$4,296,710

Total Regional Target Programming **\$55,045,114**
**Boston Region MPO Regional Target with State Match* \$55,044,658

*Boston Region MPO Target minus AC projects and ongoing programs is then actualized by 4% for 2011 and 2012

state target	\$55,388,323 less AC/programs	\$8,591,613
less AC/programs multiplied by 1.04 for 2012	\$8,935,278 difference	\$343,665
state target less difference (new target)	\$55,044,658	

FEDERAL AID NON-TARGET PROJECTS

High-Priority Projects (TEA-21)		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Weymouth	601630 Route 18 Construction (HPP 1236)	\$10,065,631	\$2,516,408	\$12,582,039

High-Priority Projects (SAFETEA-LU)				
Arlington	604687 Massachusetts Ave Construction (HPP 47)	\$1,157,597	\$289,399	\$1,446,996
Boston	East Boston Haul Road Design/Construction (HPP 2032)	\$2,499,370	\$624,843	\$3,124,213
Boston	Warren St/Blue Hill Ave Construction (HPP 2129)	\$2,153,997	\$538,499	\$2,692,496
Boston	Melnea Cass Blvd Construction (HPP 756)	\$1,938,598	\$484,650	\$2,423,248
Boston	Melnea Cass Blvd Construction (HPP 4284)	\$4,005,900	\$1,001,475	\$5,007,375
Franklin	604988 Route 140 Improvements Construction (HPP 4279)	\$4,607,375	\$1,151,844	\$5,759,219
Malden	605173 Pleasant Ave Construction (HPP 589)	\$1,367,848	\$341,962	\$1,709,810

Section 117				
Malden	605173 Pleasant Ave Construction	\$1,657,656	\$0	\$1,657,656

Section 129		<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
Arlington	604687 Massachusetts Ave Construction	\$750,000		\$750,000
High-Priority Projects Total		\$30,203,972	\$6,949,079	\$37,153,052

\$1,680,000
 moved from 2011
 moved from 2011
 moved from 2011
 moved from 2011
 moved from 2011
 moved from 2011

Staff Recommendation FFYs 2011 - 2014 TIP FFY 2013

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Indicates a new funding category

Regional Highway Program

FEDERAL-AID TARGET PROJECTS

Congestion Mitigation and Air Quality Improvement Program

		<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
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
			<i>Minimum CMAQ Regional Target</i>	\$8,593,420

National Highway System

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Dedham, Needham & Westwood	603206 Route 128 Improvement Program Contract 4, Year Five of Six	\$9,600,000	\$2,400,000	\$12,000,000
Needham & Wellesley	603711 Route 128 Improvement Program Contract 5, Year Two of Six	\$12,000,000	\$3,000,000	\$15,000,000
	National Highway System Total	\$21,600,000	\$5,400,000	\$27,000,000

Surface Transportation Program

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Somerville	601820 Beacon Street	\$1,055,752	\$263,938	\$1,319,690
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$11,200,000	\$2,800,000	\$14,000,000
Weymouth	601630 Route 18	\$7,056,000	\$1,764,000	\$8,820,000
	Surface Transportation Program Total	\$12,255,752	\$3,063,938	\$24,139,690

\$15,300,000 overall project cost is down \$900,000
\$6,000,000 -- project cost increase from \$23.3M to \$26.1M

Highway Safety Improvement Program (HSIP) Project

		<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984 Route 2 (Crosby's Corner)	\$3,867,039	\$429,671	\$4,296,710
	Highway Safety Improvement Program Total	\$3,867,039	\$429,671	\$4,296,710
			<i>Minimum HSIP Regional Target</i>	\$4,296,710

Staff Recommendation FFYs 2011 - 2014 TIP FFY 2013

Surface Transportation Program/Enhancement

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Cambridge	605188	Cambridge Common (Construction)	\$0	\$0	\$0
Surface Transportation Program/Enhancement Total			\$0	\$0	\$0

\$1,000,000 -- moved to 2014

Total Regional Target Programming **\$57,436,400**
**Boston Region MPO Regional Target with State Match* *\$57,303,412*

*Boston Region MPO Target minus AC projects and ongoing programs is then actualized by 4% for 2012, and 2013

state target	\$57,408,851 less AC/programs	\$1,292,141
less AC/programs multiplied by 1.04 for 2012 and 2013	\$1,397,580 difference	\$105,439
state target less difference (new target)	\$57,303,412	

FEDERAL AID NON-TARGET PROJECTS

High-Priority Projects (TEA-21)

			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Somerville	601820	Beacon Street Construction (HPP 248)	\$2,064,248	\$516,062	\$2,580,310

High-Priority Projects (SAFETEA-LU)

Boston		East Boston Haul Road Design (HPP 2032)	\$0	\$0	\$0
Cambridge	605188	Cambridge Common (Construction HPP 3536)	\$0	\$0	\$0
High-Priority Projects Total			\$2,064,248	\$516,062	\$2,580,310

\$1,680,000
moved to 2014

Staff Recommendation FFYs 2011 - 2014 TIP FFY 2014

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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

Congestion Mitigation and Air Quality Improvement Program

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>	
Boston	604761	South Bay Harbor Trail (construction)	\$3,080,000	\$770,000	\$3,850,000	moved from 2010
			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>	
Boston Region		Clean Air and Mobility Program	\$2,400,000	\$600,000	\$3,000,000	\$2,000,000
Congestion Mitigation and Air Quality Improvement Program Total			\$2,400,000	\$600,000	\$6,850,000	
			<i>Minimum CMAQ Regional Target</i>		\$8,593,420	

National Highway System

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4, Year Six of Six	\$9,600,000	\$2,400,000	\$12,000,000
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5, Year Three of Six	\$12,000,000	\$3,000,000	\$15,000,000
National Highway System Total			\$21,600,000	\$5,400,000	\$27,000,000

Surface Transportation Program

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$13,680,000	\$3,420,000	\$17,100,000
Surface Transportation Program Total			\$13,680,000	\$3,420,000	\$17,100,000

Highway Safety Improvement Program (HSIP) Project

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Concord & Lincoln	602984	Route 2 (Crosby's Corner)	\$3,867,039	\$429,671	\$4,296,710
Highway Safety Improvement Program Total			\$3,867,039	\$429,671	\$4,296,710
			<i>Minimum HSIP Regional Target</i>		\$4,296,710

Staff Recommendation FFYs 2011 - 2014 TIP

FFY 2014

Surface Transportation Program/Enhancement

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Cambridge	605188	Cambridge Common (Construction)	\$800,000	\$200,000	\$1,000,000
Surface Transportation Program/Enhancement Total			\$800,000	\$200,000	\$1,000,000

moved from 2013

Total Regional Target Programming **\$56,246,710**
**Boston Region MPO Regional Target with State Match* *\$56,658,151*

*Boston Region MPO Target minus AC projects and ongoing programs is then actualized by 4% for 2011, 2012, and 2013

	state target	\$57,408,851 less AC/programs	\$6,012,141
	less AC/programs multiplied by 1.04 for 2012, 2013 and 2014	\$6,762,841 difference	\$750,700
	state target less difference (new target)	\$56,658,151	

FEDERAL AID NON-TARGET PROJECTS

High-Priority Projects (TEA-21)

			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>
Somerville	601820	Beacon Street Construction (HPP 248)	\$2,064,248	\$516,062	\$2,580,310

High-Priority Projects (SAFETEA-LU)

Boston		East Boston Haul Road Design (HPP 2032)	\$1,344,000	\$336,000	\$1,680,000
Cambridge	605188	Cambridge Common (Construction HPP 3536)	\$899,899	\$224,975	\$1,124,874
High-Priority Projects Total			\$5,385,184		