

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

November 6, 2008 Meeting

10:00 AM – 1:00 PM, State Transportation Building, Conference Room 4, 10 Park Plaza, Boston

David Mohler, Chair, representing Bernard Cohen, Executive Office of Transportation & Public Works (EOTPW)

Decisions

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

- approve the work program for *HOV Monitoring on the Southeast Expressway*
- approve the minutes of the October 16th Transportation Planning and Programming Committee meeting
- reconsider the amendment to the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP at the meeting of November 6

Meeting Agenda

1. Public Comments

State Senator Pam Resor spoke of the need to keep bicycle trails programmed in the Regional Transportation Plan (Plan). Specifically, she voiced support for the Assabet River Rail Trail and Bruce Freeman Rail Trail projects. She stated that it would be a waste of resources to not continue to make progress on those projects.

Cameron Bain, Tri-Community Bike/Greenway, reminded the Committee that the Tri-Community Bikeway and Bruce Freeman Rail Trail projects are two of the oldest rail trail projects in the state having begun 20 and 22 years ago respectively.

Don Rising, Chairman of the Town of Stow's Rail Trail Committee and the town's representative on the Assabet River Rail Trail Inter-municipal Steering Committee, noted that the Assabet River Rail Trail project has been a federally recognized project for ten years and the project is half complete. The right-of-way for the project in Stow was in private hands, but the town has authorized \$250,000 for land acquisitions along a scenic 1.9-mile stretch of former railroad. There will also be \$130,000 in federal funds and \$20,000 in state funds available for that purpose. The right-of-way will be acquired within days. He noted that much has been invested in the project and he asked that the MPO keep the project listed for construction in the Plan.

Dick Williamson, Friends of the Bruce Freeman Rail Trail, expressed dismay that the Bruce Freeman Rail Trail project is not included in the Transportation Improvement Program (TIP) amendment. He referenced a letter sent by Tom Michelman, President of the Friends of the Bruce Freeman Rail Trail, to Chairman Mohler that described the local commitment to the project and that noted that nearly \$1 million in local money has gone

into the project. D. Williamson reminded members that ten years ago the MPO indicated that it would provide support if such local commitments were made. He also noted that the MPO received many other letters and 250 individually composed emails urging the MPO to restore funding for the project. As a longtime bicycle commuter, he pointed out that people are increasingly using bicycles for transportation (rather than just recreation) and that an appropriate fraction of transportation funds should be shifted toward that mode. He asked the MPO to change its decision in light of public comments and to restore the Bruce Freeman Rail Trail project to the TIP and Plan.

Judy LaRocca, Town of Concord's Bruce Freeman Advisory Committee, stated that the town has completed 25% designs for the Bruce Freeman Rail Trail project and has conducted extensive public outreach. She reported that there is overwhelming support for the project in Concord. She noted that the trail project could support the goals of other projects in the area – such as the Concord Rotary project (which would improve safety and alleviate congestion at the junction of Route 2A and Commonwealth Avenue) and the Fitchburg commuter rail line improvements project – by providing alternative transportation options to residents of Acton, Concord, and the surrounding communities. She stated that designing alternative transportation options aligns with national efforts to reduce energy consumption and to achieve energy independence. She requested that the MPO program the Acton, Carlisle, Concord, and Westford portion of the Bruce Freeman Rail Trail project in the TIP.

Ginger Esty, Town of Framingham, inquired as to whether the Town of Sudbury committed Community Preservation Act (CPA) funds for construction of the Bruce Freeman Rail Trail. D. Williamson replied that there are not CPA funds for construction but that CPA-funded activities are ongoing and the results will be used in developing the 25% design.

Bill Steelman, Essex National Heritage Commission, representing the eight communities working to develop the Border to Boston Rail Trail, underscored the sentiments expressed by the previous commenters on the importance of rail trails as transportation infrastructure for this alternative mode and asked the MPO for its continued support for rail trail projects.

Don DiMartino, Town of Bellingham's Department of Public Works, provided an update on the Bellingham – Pulaski Boulevard project. The Conservation Commission has issued an Order of Conditions. The 100% design plans will be ready for submission to MassHighway in December. Temporary construction easements are being obtained. By next May or June the project will be ready.

Dennis Harrington, Planning Director for the City of Quincy, requested that the MPO keep the Quincy Concourse (Phase 2) project in the FFY 2009 element of the FFYs 2007 – 2010 TIP amendment, as originally proposed, and to make no change to the TIP amendment as first circulated. He noted that the project has three phases; Phase 1 is already built and Phase 3 is a city project with \$2 million in Public Works Economic Development (PWED) funds committed. MassHighway has approved the 75% design

plans for Phase 2. He stated that Phase 2 was removed from the TIP due to a modeling error that resulted in the project appearing as though it did not meet the federal air quality requirements to which the MPO must adhere. The error appears to be a result of the project having been modeled as a two-lane roadway when in fact it is a four-lane urban boulevard. D. Harrington requested that the MPO direct CTPS to correct the modeling error and stated that there is no valid reason the project should be removed from the TIP and that the project should not be set back because of a modeling error. He emphasized that the project is central to the economic development and revitalization of downtown Quincy as part of the Mayor's Vision Plan and with the potential to bring \$1 billion in renovations to the downtown. The project was set to be advertised in April 2009. Land takings and building demolition have already occurred to make way for the project (costing the city approximately \$25 million). (See attached letter from Quincy Mayor Thomas Koch.)

Jack Gillon, Traffic Engineer for the City of Quincy, added that the Quincy Concourse project has been under development since before 1992 and that the redevelopment of downtown Quincy hinges on the project. The project will not increase traffic demand or volumes, rather it will result in less air pollution. He also noted that the city has purchased and will take down buildings and, as a result, the city will lose revenues from its garage and downtown commerce will lessen. It would be a hardship on the city if the project were delayed another year, he said, noting that the city is willing to work with the MPO and CTPS to address the modeling error.

Members discussed the Quincy issue. D. Mohler stated that since the MPO does not yet have an approved Plan amendment, no projects may be modeled at this time. He added, however, that the MPO hopes to have an approved Plan amendment by the first quarter of calendar year 2009, and that the new draft FFYs 2009 –2012 TIP will be released along with it. He assured the Quincy representatives that the Quincy Concourse project would be included in that TIP and that the TIP amendment being considered today would not delay the project. He stated that the MPO is committed to the project.

D. Harrington responded that the city would not find this acceptable. He reiterated the mayor's position that there should be no change to the initial draft amendment to the TIP, and he stated that the project does not impact air quality. He stated that the city has not made any mistake.

D. Mohler noted that the project was not included in the FFY 2007 – 2010 TIP, which is currently the MPO's valid TIP, and that the Federal Highway Administration (FHWA) cannot approve the FFY 2009 – 2012 TIP (which does include the project) until a new Plan amendment is released. Michael Chong, FHWA, added that FHWA cannot make an air quality conformity determination on the TIP (with an amended FFY 2009 element) at this time. He assured the Quincy representatives that their project would probably not be adversely affected.

Barbara Lucas, Metropolitan Area Planning Council (MAPC), suggested that the MPO consider doing a minor amendment to the Plan rather than wait for EOTPW to provide a

financial plan for the document. She noted that the delay to the Plan amendment is causing problems. M. Chong noted that the conformity determination must be made on the TIP.

Kristina Johnson, City of Quincy, pointed out that MassHighway's project information data has been showing the project in FFY 2009. She asked if the Chair believes that the city will not be unduly burdened by waiting for the FFY 2009 – 2012 TIP considering that the project advertising date is in April and considering the time required for public outreach for the Plan. D. Mohler noted the public review process for the Plan will take 30 days. [The project, therefore, could be advertised in April if the MPO releases the Plan for public review in March.]

D. Harrington recommended a minor amendment to the FFY 2007 – 2010 TIP to address the problem. He spoke of the Quincy Concourse project's benefits in terms of generating tax revenue, jobs, and other benefits for the Commonwealth. He stated that the problem should be solved today. J. Gillon also asked the MPO to do what it could to address the problem as soon as possible.

D. Mohler stated that the MPO needs to get a Plan amendment approved to address this problem, which is a result of a bureaucratic situation. B. Lucas noted that the MPO needs to amend the substitute State Implementation Plan (SIP) projects into the Plan, remodel, and address FHWA's concern about how the MPO addresses bicycle trails in the Plan. She again suggested that the MPO amend the Plan prior to receiving a financial plan from the EOTPW. D. Mohler voiced support for addressing those issues but noted that FHWA and the Federal Transit Administration (FTA) likely would not allow such an approach. He agreed that the MPO might seek approval from the federal agencies for such an action.

2. Chair's Report – David Mohler, EOTPW

There was none.

3. Subcommittee Chairs' Reports – Barbara Lucas, MAPC, and Stephen Woelfel, MassHighway

B. Lucas announced that the TIP Criteria Subcommittee will meet this afternoon. The Subcommittee will discuss the TIP development timeline, and review the TIP criteria and a CTPS work program regarding the application of safety criteria to TIP projects.

Mary Pratt, Town of Hopkinton, stated that communities should be informed of the MPO's recently released *Safety and Operational Improvements at Selected Intersections* study. She also stated that safety should be included in the TIP criteria.

S. Woelfel reported that the Unified Planning Work Program (UPWP) Subcommittee met this morning and voted unanimously to shift \$19,600 from the Bicycle and Pedestrian Support Activities to the Bicycle and Pedestrian Mobility in Urban Centers project. The Urban Centers work was delayed due to staff changes at CTPS. He also noted that there

will be a number of UPWP meetings scheduled after the first of the year to begin working on improvements in approach for developing the FFY 2010 UPWP.

4. Regional Transportation Advisory Council – *Malek Al-Khatib, Regional Transportation Advisory Council*

There was no report from the Advisory Council.

5. Amendment to the FFY 2009 and 2010 Elements of the FFYs 2007 – 2010 TIP – *David Mohler, EOTPW, and Hayes Morrison, MPO Staff*

Staff distributed the following materials: memoranda dated October 30 and November 6 detailing recommended changes to the draft amendment; a matrix summarizing public comments received; and revised TIP tables that include all changes noted in both memoranda. (See attached.)

D. Mohler noted that his office received hundreds of emails from supporters of the Bruce Freeman Rail Trail projects.

Members asked questions and provided comments:

Will the Hingham – Rockland Street Bridge be funded by federal or non-federal aid? (M. Pratt)

It will be funded by non-federal aid. The Wellesley – Rockland Street over CSX Bridge will also be funded with non-federal aid. The bridge in Marlborough has been reduced in cost to \$3.7 million. (H. Morrison)

Why is funding shifting from federal aid to non-federal aid for these projects? (B. Lucas)
MassHighway is moving as many bridges forward as it can. (H. Morrison)

Is MassHighway providing MPO staff the bridge list? (B. Lucas)
Yes. (H. Morrison)

B. Lucas expressed concern about the Accelerated Bridge Program and noted that the projects that come before the MPO should be consistent with MassHighway's *Project Development and Design Guide*, which requires consideration for bicycle and pedestrian accommodation. If those guidelines have not been applied to the bridge projects coming through the Accelerated Bridge Program, the MPO might have to evaluate the projects to ensure that they are consistent with the MPO's policies, she said. She advised staff to obtain bicycle and pedestrian improvement information on bridge projects from MassHighway so that the MPO will be aware of whether the projects include bicycle and pedestrian accommodation. M. Pratt added that consideration of bicycle and pedestrian facilities for bridges also has to account for the condition of the roads leading to bridges.

Is the Ipswich – Route 1A (High Street) over the MBTA bridge project now a non-federal aid bridge and still on the TIP? (M. Pratt)

Yes. (H. Morrison)

Is the intent to include the Boston – River Street Bridge project in the FFY 2010 element? (Jim Gillooly, City of Boston)

Yes, MassHighway has indicated it will be part of the FFY 2010 bridge element. However, the project is not listed in the FFY 2010 element of this amendment now because MPO staff has not received an updated FFY 2010 bridge list. (H. Morrison)

M. Al-Khatib requested that staff provide information regarding where federal bridge funds are going to ensure that, if there are changes to bridge projects in the MPO region, the MPO may know if those funds are remaining in the Boston Region. M. Pratt concurred.

The intent of the amendment was to enable the state to continue to advertise FFY 2009 projects, which is particularly important in this weak economy for generating construction jobs. Is it likely that some of the projects on the amendment would be able to go forward if the MPO votes on the amendment today? (J. Gillooly)

The Franklin – King Street Ramps and Milford – Upper Charles Trail (Phase 2) projects could potentially be advertised in the first quarter of 2009. There are likely some bridge projects that could be advertised. (H. Morrison)

M. Al-Khatib requested that the TIP materials that the MPO considers be provided in advance for the Advisory Council to consider prior to the MPO's vote.

There was no motion to approve the amendment. Discussion proceeded to other agenda items. (Members returned to the issue later in the meeting.)

6. Work Program: HOV Monitoring on the Southeast Expressway – Karl Quackenbush, Deputy Director, CTPS

Members received a briefing on the work program for *HOV Monitoring on the Southeast Expressway* at the meeting of October 16.

A motion to approve the work program for *HOV Monitoring on the Southeast Expressway* was made by Joe Cosgrove, MBTA, and seconded by S. Woelfel. The motion passed unanimously.

7. Meeting Minutes – Pam Wolfe, Manager of Certification Activities, MPO Staff

A motion to approve the minutes of the October 16th meeting was made by M. Pratt, and seconded by S. Woelfel. The motion passed unanimously.

8. JOURNEY TO 2030, Plan Amendment – David Mohler, EOTPW, and Anne McGahan, MPO Staff

Staff distributed the following: a memorandum (dated October 30); a list of projects included in the current recommended Plan and their cost and status if available; memoranda regarding SIP projects; volume-to-capacity ratio information at Plan highway project locations and on express highways and select arterials in the Boston Region MPO area; information sheets on the MBTA's Transit System State of Good Repair, the

MPO's Bicycle and Pedestrian Program, the Chapter 90 Program, and the Transportation Enhancement Program. (See attached.)

Jim Gallagher, MAPC, requested that staff provide volume-to-capacity information on the additional projects listed at the bottom of the list of current recommended Plan projects, and volume-to-capacity information for projects under the Build scenario. A. McGahan noted that the numbers could be provided from the old land use scenario, but that the new land use scenario has not yet been modeled for the 2030 Build scenario.

B. Lucas recommended taking a data-driven approach when considering projects for removal from the Plan. One set of data that could be used in making these determinations is weighted volume-to-capacity ratios (if projects have weighted volume-to-capacity ratios less than 0.9 indicating that the roadway is not at capacity). Another set of data is safety.

These recommendations could result in \$688 million in savings. MAPC provided a handout that showed volume-to-capacity ratios for projects on the Recommended Projects list. (See attached.)

M. Pratt inquired as to whether any of the aforementioned projects have safety problems. B. Lucas replied that the Beverly to Peabody – Route 128 corridor does have safety problems at the interchanges, which is why MAPC is suggesting that \$33 million go toward addressing interchanges on the corridor.

J. Gillooly asked staff to look into the reason why volume-to-capacity ratios for the eastbound and westbound lanes for Boston – Route 1A/Boardman Street differ in the AM and PM peak periods.

David Koses, City of Newton, inquired as to whether the volume-to-capacity is measured at a single point or at several points along a corridor. A. McGahan stated that a point on the roadway is chosen. K. Quackenbush added that analysts look for a representative location. D. Koses expressed concern that the results could be different at various locations along a corridor and he requested that staff provide data for several points along corridors. M. Al-Khatib agreed that one point might not be representative of volume-to-capacity along the corridor.

In response to a question from B. Lucas regarding the Bicycle and Pedestrian Program, M. Chong stated that FHWA would need to see in the Plan the total costs of projects and the timeframe for when construction funds would be needed. A. McGahan added that the Plan must be financially constrained.

Regarding the Chapter 90 Program, J. Gallagher asked if EOTPW or MPO staff could provide a projection of the amount of Chapter 90 monies that would be allocated to the region in 2030. D. Mohler indicated that Chapter 90 funds are used for non-federal aid roadways, not for the federal aid system with which the Plan is concerned. He stated that Chapter 90 funds will be part of EOTPW's financial plan.

Members then discussed FHWA's request that the MPO conduct an analysis to determine the amount of funds needed to maintain the region's transportation system in a state of good repair. FHWA suggested that the MPO look at the work the MPO in San Francisco, the San Francisco Bay Area Metropolitan Transportation Commission, is doing to estimate maintenance needs. Staff will distribute the link to that MPO's webpage.

9. Schedule for FFY 2009 Certification Activities – Pam Wolfe, Manager of Certification Activities, CTPS

Staff distributed a draft schedule of FFY 2009 certification activities. P. Wolfe noted that the schedule is similar to last year's schedule with a few changes: the Walkable Community Program includes more activities this year; there is a new item, "Planning the Development and Approach" under UPWP Development; there have been updates to the Suburban Mobility Program schedule; and a marker has been placed in the schedule for the adoption of the FFY 2009 – 2012 TIP. She noted that the schedule will be posted on-line to be available to the public and she asked members to let her know if any changes need to be made to the schedule.

J. Gallagher suggested adding a date for the approval of the Plan. Members agreed tentatively to March 5th, but that date is subject to further discussion based on other Plan milestones such as the provision of EOTPW's financial plan.

10. Amendment to the FFY 2009 and 2010 Elements of the FFYs 2007 – 2010 TIP – David Mohler, EOTPW, and Hayes Morrison, MPO Staff

Members returned to the discussion of the TIP amendment.

M. Al-Khatib suggested approving the amendment released in September with the stipulation that there will be additional amendments to follow. B. Lucas also recommended voting on the September amendment. She noted that some bookkeeping changes might have to be made, for example, to address cost changes (as noted in staff's November 6th memorandum) to the Ipswich – North Green Improvements (Design) project.

A motion to approve the amendment to the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP as presented today (incorporating the changes detailed in the staff memoranda dated October 30 and November 6) was made by Joe Cosgrove, MBTA, and seconded by M. Pratt.

Members discussed the implications of the vote and raised several questions and points:

How many projects would be affected if the MPO delayed its vote for two weeks. (M. Al-Khatib)

Postponing the vote would not significantly delay project implementation, only advertising dates. The issue at hand is about public process; waiting two weeks to take action on the amendment would allow the Advisory Council the opportunity to be briefed and weigh in on the revisions to the original amendment. (D. Mohler)

Is the Weymouth Multi-Modal Center a capacity adding project? (B. Lucas)

This project is not capacity adding. (H. Morrison, A. McGahan, M. Chong)

If members postpone the vote by two weeks, will there be more changes to the amendment? (Thomas Bent, City of Somerville)

No, there will be no more changes. The public comment period has closed. (D. Mohler)

D. Harrington made a strong statement urging the MPO to address the Quincy Concourse project. He stated that the removal of the project from the TIP was the result of a clerical error and that the City of Quincy should not suffer as a result. He stated that the city presented the Quincy Concourse project as a four-lane road to the MPO at three Municipal TIP Input Days and that MassHighway approved the 75% design plans based on the project being on a four-lane road. He reminded members of the investments already made to revitalize downtown Quincy including \$25 million in city funds, \$5 million in economic stimulus from the Commonwealth, and a \$2 million PWED grant. He urged members to speak to Richard Marquis, FHWA, to get the problem corrected.

What options would the MPO have if the body votes today on the amendment (excluding the Quincy Concourse project) and then finds that a clerical error was preventing the project from going forward? (J. Gillooly)

The MPO would have to do another amendment to add the project. (D. Mohler)

Would that amendment result in the need to remove other projects from the TIP? (J. Gillooly)

No, the Quincy Concourse project is fully funded by an earmark and a state match. (D. Mohler)

J. Gillooly raised the possibility of amending the transit portion of the amendment today to address the MBTA's needs. M. Pratt suggested voting on the amendment today (without the Quincy project), then after the air quality issues related to the Quincy project are resolved, the MPO could make an adjustment to the TIP to add the project back in. J. Gillooly later explored the possibility that an amendment with the Quincy Concourse included might be adopted subject to federal approval. Both M. Chong and D. Mohler expressed concerns that this approach would not be workable.

A motion to approve the amendment to the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP as presented today (incorporating the changes detailed in the staff memoranda dated October 30 and November 6) was made by Joe Cosgrove, MBTA, and seconded by M. Pratt. (This action would include the Weymouth Multi-Modal Center project in the amendment and exclude the Quincy Concourse project.) The motion failed. J. Cosgrove voted yes and all others voted no.

A motion to reconsider the amendment to the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP at the meeting of November 6 was made by M. Pratt, and seconded by S. Woelfel. The motion passed unanimously.

A motion to take up the question at the next Transportation Planning and Programming Committee meeting was made by S. Woelfel and seconded by J. Cosgrove. The motion passed unanimously.

Since the Committee did not vote to approve the amendment, today's MPO meeting was cancelled.

11. Members' Items

D. Mohler reported that EOTPW's planning units were reorganized as a result of state's 9C funding cuts. Tom Cahir, EOTPW, is assuming greater responsibilities with the Rail Program. Many of his responsibilities are shifting to EOTPW Office of Transportation Planning, which is now responsible for the following programs: Regional Transit Authorities (capital and operations), Intermodal Transit, Water Transportation, Freight, Transit Oriented Design, PWED, Small Town Road Assistance (STRAP), Mobility Assistance, and Job Access Reverse Commute (JARC)/New Freedom.

Effective November 5th, D. Mohler is acting as temporary EOTPW coordinator for the Accelerated Bridge Program. These responsibilities will consume approximately 75-95% of his time. He expects to continue chairing the Transportation Planning and Programming Committee and MPO meetings. Clinton Bench will be assuming many of D. Mohler's responsibilities at EOTPW's Office of Transportation Planning.

M. Pratt inquired about the grants for the JARC/New Freedom projects. D. Mohler stated that the approval letters are going out soon.

12. Adjourn

A motion to adjourn was made by S. Woelfel, and seconded by J. Gillooly. The motion passed unanimously.

**Transportation Planning and Programming Committee Meeting Attendance
Thursday, November 6, 2008, 10:00 AM**

Member Agencies

EOTPW
City of Boston

City of Newton
City of Salem
City of Somerville

Federal Highway
Administration
MAPC

MassHighway
MassPike
MBTA
Regional Transportation
Advisory Council
Town of Bedford
Town of Framingham
Town of Hopkinton

Representatives and Alternates

David Mohler
Jim Gillooly
Thomas Kadzis
David Koses
Carey Duques
Thomas Bent
Sergiu Luchian
Michael Chong

Barbara Lucas
Jim Gallagher
Stephen Woelfel
Shirin Karanfiloglu
Joe Cosgrove
Malek Al-Khatib
Sue McQuaid
Richard Reed
Ginger Esty
Mary Pratt

MPO Staff/CTPS

Annette Demchur
John Hersey
Maureen Kelly
Anne McGahan
Hayes Morrison
Sean Pfalzer
Karl Quackenbush
Arnie Soolman
Mary Ellen Sullivan
Pam Wolfe

Other Attendees

Cameron Bain
Don DiMartino

Jack Gillon
Dennis Harrington
Kristina Johnson
Judy LaRocca

Robert Markel
Duncan Power
Pam Resor
Don Rising
Bill Steelman
Dick Williamson

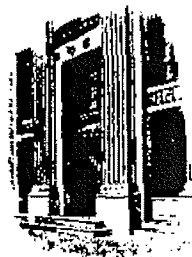
Tri-Community Bike/Greenway
Town of Bellingham, Department of
Public Works
City of Quincy
City of Quincy
City of Quincy
Town of Concord, Bruce Freeman
Advisory Committee
Town of Ipswich
Assabet River Rail Trail, Inc.
State Senator
Town of Stow Rail Trail Committee
Essex National Heritage Commission
Friends of the Bruce Freeman Rail Trail



City of Quincy, Massachusetts

City Hall

THOMAS P. KOCH
MAYOR



November 5, 2008

Lieutenant Governor Timothy P. Murray
Office of the Lt. Governor
Room 360
Boston, MA 02133

Dear Lt. Governor Murray:

As you know, the City of Quincy has been working cooperatively with our partners at the Boston Metropolitan Planning Organization (MPO) and the Massachusetts Highway Department (MassHighway) to move the Quincy Center Concourse Phase II project forward toward construction. Once completed, the Concourse will create a signature urban boulevard that will not only improve vehicular traffic flow and pedestrian access, but at the same time will open additional parcels of land for public and private development opportunities.

The City has been recently informed by the Boston MPO that our previously-programmed federal earmark for the Concourse project has been removed from the MPO's recently -proposed amendment to the FFY 2007-2010 Transportation Improvement Program (TIP). I was informed by my staff that the removal of the earmark is necessary in order for the Boston MPO to maintain consistency with current federal air quality requirement, and therefore, cannot be included in the 2009 element of this proposed amendment of FFY 2007-2010 TIP. Mr. David Mohler, Deputy Secretary for Planning and Transportation Secretary Bernard Cohen's representative on the Boston MPO's has not contacted the City of Quincy directly or provided my office with valid explanation for the removal of the Concourse project from the this proposed November 2008 TIP amendment.

MassHighway has recently assigned the Concourse project a new advertising date of April 4, 2009 with construction probably commencing during Summer 2009. Therefore, I believe that the removal of the Concourse project from the proposed 2007-2010 TIP amendment could compromise these project benchmarks and cause significant delays in commencing construction. Your efforts to continue to help this project move forward toward construction would be much appreciated.

Thank you again for your help on Quincy's behalf. Please feel free to contact me should you have any questions.

Sincerely,

Thomas P. Koch
Mayor

Cc: Bernard Cohen, Secretary of Transportation
Senator Michael Morrissey
David J. Mohler, Deputy Secretary for Planning, Executive Office of Transportation and Public Works
Dennis E. Harrington, Planning Director
Lawrence Prendeville, Commissioner of Public Works
Jack Gillon, Traffic Engineer
Kristina Johnson, Principal Planner
Robert Stevens, Senior Planner

MEMORANDUM

TO: Transportation Planning and Programming Committee

DATE: October 30, 2008

FROM: Hayes Morrison, TIP Manager

RE: Changes to TIP Materials from 9/18/08

Since the September 18 meeting, there have been a few developments that have required changes for the Transportation Planning and Programming Committee's consideration for the Amendment One of the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP. As a result, staff is recommending making the changes itemized below to the previously distributed materials.

Recommended Changes to DRAFT Amendment One – FFY 2009 Element of the FFYs 2007 – 2010 TIP

Page 2 of 9 –

Move:

- 1) Ipswich – Route 1A over MBTA Bridge Replacement - 602543
Project was previously in the FFY 2008 element of this TIP and should be moved into the 2009 element
- 2) Wellesley – Rockland St Bridge over CSX – 600776
Project was previously listed in the Non Federal Aid portion of this amendment. The project will now be funded with Federal Aid
- 3) Marlborough – Robin Hill and Boundary St Bridges over the Assabet River – 603506
Project was previously listed in the Non Federal Aid portion of this amendment. The project will now be funded with Federal Aid

Page 3 of 9 –

Add:

- 1) Watertown Bike Path earmarks numbers 1400 and 1424
Earmarks previously included in this amendment in the FFY 2010 element. Match for these earmarks to be provided by the Department of Conservation and Recreation
- 2) Weymouth Multi-Modal Center earmark number 4276
Earmark to fund the construction of a multi-modal center in Weymouth

Remove:

- 1) Quincy – Quincy Center Concourse – 604664
Project is non-exempt for air quality and was not included as part of the FFY 2007 – 2010 TIP and Air Quality analysis. Project should be included in the FFY 2009

element of the proposed list of projects for the pending Draft FFYs 2009 – 2012 TIP

2) Waltham – Interstate 95 – 604710

Project moved to FFY 2010 element Interstate Maintenance program from the FFY 2009 element Interstate Maintenance program pending this action

Page 6 of 9 –

Add:

- 1) Section 115 Earmarks (earmarks not previously included)
 - Cambridge – Lechmere Station Relocation \$1,000,000
 - Beverly/Salem – Beverly/Salem Intermodal Center \$1,100,000
 - Revere – Wonderland Station Improvements \$300,000
 - Revere – Wonderland Station Improvements \$1,900,000

Page 7 of 9 –

Add:

- 1) Flex Funds Carryover (these funds were part of the FFY 2007 element of the TIP and will be used by the MBTA in this element)
 - Environmentally Friendly Locomotive Switchers, flexed from CMAQ \$312,500
 - Woburn – Anderson RTC, flexed from STP \$150,000

Page 7 of 9 –

Update:

- 1) Blue Line/North Shore – Feasibility Study for Blue Line Extension to Lynn
Project funds reduced to reflect available carryover funds from \$3,920,200 to \$2,450,000
- 2) Salem – Beverly/Salem Intermodal Center
Project funds reduced to reflect available carryover funds from \$1,216,714 to \$1,045,000
- 3) Beverly - Beverly/Salem Intermodal Center
Project funds reduced to reflect available carryover funds from \$1,216,714 to \$1,045,000
- 4) Quincy – Quincy Catamaran
Project zeroed out pending additional pending FY09 appropriation
- 5) Revere – Wonderland Station
Project funds reduced to reflect available carryover funds from \$1,095,043 to \$940,500
- 6) Boston – Commonwealth Ave/Green Line
Previous amount listed was incorrect; the total amount of the earmark is \$820,750 not \$656,600
- 7) Boston – Improvements at Harbor Islands Park
Project funds increased to reflect available carryover funds from \$271,700 to 338,925
- 8) Hingham – Hingham Intermodal Center

Project funds reduced to increased available carryover funds from \$4,695,215 to \$4,702,500

9) Commuter Rail – Rockport Station

Project funds reduced to reflect available carryover funds from \$1,672,982 to \$1,436,875

10) Commuter Rail – Fitchburg Line Improvements

Project funds reduced to reflect available carryover funds from \$7,840,200 to \$7,350,000

11) Medford – Downtown Parking Improvements

Project funds reduced to reflect available carryover funds from \$1,216,714 to \$1,045,000

12) Melrose Commuter Rail Improvement

Previous amount listed was incorrect; the total amount of the earmark is \$857,500, not \$686,000

13) Ferry – Ferry System Improvements

Project funds reduced to reflect available carryover funds from \$7,475,000 to \$5,128,750

14) Woburn – Woburn Park and Ride Facility

Project funds reduced to reflect available carryover funds from \$1,095,043 to \$940,500

MEMORANDUM

TO: Transportation Planning and Programming Committee

DATE: November 6, 2008

FROM: Hayes Morrison, TIP Manager

RE: Changes to TIP Materials from 10/30/08

Since the October 30 mailing, there have been a few developments that have required additional changes for the Transportation Planning and Programming Committee's consideration for the Amendment One of the FFY 2009 and 2010 elements of the FFYs 2007 – 2010 TIP. As a result, staff is recommending including the minor changes itemized below to the previously distributed materials.

Additional Recommended Changes to DRAFT Amendment One – FFY 2009 Element of the FFYs 2007 – 2010 TIP

Page 2 of 9 –

Changed:

- 1) Ipswich – North Green Improvement
Project cost changed from \$91,000 to \$91,800
- 2) Framingham – Fountain St over MBTA/CSX – 604013
Project cost changed from \$4,100,000 to \$3,900,000
- 3) Marlborough – Robin Hill and Boundary St Bridges over the Assabet River - 603506
Project cost changed from \$4,257,930 to \$3,702,710

Move:

- 1) Ipswich – Route 1A over MBTA Bridge Replacement - 602543
Project was previously in the FFY 2008 element of this TIP and should be moved into the 2009 element and is now moving to **page 4**, Non Federal Aid
- 2) Wellesley – Rockland St Bridge over CSX – 600776
Project will move back to **page 4**, Non Federal Aid

Page 3 of 9 –

Add:

- 1) Franklin – Route 140 (design) – 604988
Project is fully funded by an earmark, design funding previously listed in FFY 2008 element but was not obligated

Page 4 of 9 –

Add:

- 1) Ipswich – Route 1A over MBTA Bridge Replacement - 602543

Project was previously in the FFY 2008 element of this TIP and should be moved into the 2009 element and is now moving to **page 4**, Non Federal Aid

2) Wellesley – Rockland St Bridge over CSX – 600776

Project will move back to **page 4**, Non Federal Aid

3) Minuteman National Park (Concord) – Pavement Management Project

Project was not previously included, Eastern Federal Lands Highway Division project to address pavement management on federal lands

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
9/10/2008	Senator Pamela P. Resor Middlesex and Worcester District Commonwealth of Massachusetts	Wrote in strong support of the Assabet River Rail Trail and asked for its inclusion in the Boston MPO's Regional Transportation Plan as well as the inclusion of the approximately \$1.5M federal earmark associated with the project in the TIP. She states that the project has tremendous community and regional support and that the steering committee meets regularly. The Assabet River Rail Trail communities have also invested large amounts of their own money towards the project.
9/15/2008	Rep. Geoffrey D. Hall 2nd Middlesex District Commonwealth of Massachusetts	Wrote to bring attention to an urgent matter - in order for the Assabet River Rail Trail and Bruce Freeman Rail Trail visions to be fulfilled, a budget line item must be included and assured in the Metropolitan Planning Organization's (MPO) Regional Transportation Plan. He states that it is important, both economically and environmentally, that progress continue on the projects.
9/16/2008	John Curran Town Administrator Maynard	Wrote to urge as strongly as possible to include the Assabet River Rail Trail as its own line-item project in the Regional Transportation Plan when it is revised in the near future. He reiterated Maynard and the other Assabet River Rail Trail town's financial commitment to the project as well as the community support.
9/18/2008	Paul E. Cohen Town Manager Chelmsford	Wrote on behalf of the Town of Chelmsford to request that the Bruce Freeman Rail Trail, Phases 2 and 3 be included in the Boston MPO's Regional Transportation Plan. He stated that Phase 1 is under construction and the remaining phases would extend the corridor through multiple jurisdictions for 25 miles and connect to the Mass Central Rail Trail. He stated that the continued construction of the rail trail will contribute to the economic development of the host communities as well as provide transportation and recreation.
9/22/2008	Lauren Rosenzweig Chairman Acton Board of Selectman	Wrote to express the Acton Board of Selectman's continued strong support of the Assabet River Rail Trail. The Assabet River Rail Trail is a valuable and exciting alternative transportation project that will link residents, businesses, recreational opportunities and public transportation in the five communities. She also stated that there needs to be reliability and predictability in federal, state and local plans and programs. Feasible transportation projects with over a decade of clearly positive political and strong financial commitment should remain on the books.
9/22/2008	Linda M. Ghiloni Director of Recreation Hudson	Wrote to request funding for the Assabet River Rail Trail. She stated that the Assabet River Rail Trail has proved to be an extremely beneficial transportation route. Hudson's section alone sees numerous individuals traveling to work at many local businesses, as well as retail locations in Hudson's downtown and commercial district. She stated that it is inconceivable that a project of this nature in its current stages of design and construction in the three neighboring towns, would not receive funding or at least be listed as a future project.
9/23/2008	Greg Niemyski Chairman Acton Planning Board	Wrote that the Acton Planning Board has been a proponent of the Assabet River Rail Trail project ever since its inception. Over the past 10 years Action has invested over \$200,000 of their general fund as well as staff and volunteer time on the Assabet River Rail Trail. They ask that the MPO not let all this time, effort, energy and money go to waste. They would like to finish the project and hope the Boston MPO will agree that the Assabet River Rail Trail is an extremely valuable regional transportation project and will consider restoring funding for the project.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
9/24/2008	Jennifer Burke Planning Director Town of Hudson	Wrote to ask for your support for funding the Assabet River Rail Trail in the next TIP and in support of listing the Assabet River Rail Trail in the MPO's Regional Transportation Plan as a specific line item. The project is complete in only two of the five communities and all five communities have appropriated thousands of municipal dollars and obtained several grants and well as multiple donations from individuals and local businesses. She stated that the completed Hudson section is an extremely successful transportation and recreation facility and is used as a means to commute by numerous individuals. It is distressing to hear that the future of this important transportation facility is in jeopardy.
9/25/2008	Ken Sghia-Hughes Chairman Acton Community Preservation Committee	Wrote to reaffirm his committees commitment to the Assabet River Rail Trail and ask that the MPO support the continuous "green" transportation, open space and recreation opportunities between the 5 communities. He states that to not see this project through to its full completion would be a disservice to the people whom the MPO serves.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
9/26/2008	Senator Pamela P. Resor Middlesex and Worcester District Commonwealth of Massachusetts	Wrote in strong support of the Assabet River Rail Trail (Assabet River Rail Trail) and asked for its inclusion in the Boston MPO's Regional Transportation Plan as well as the inclusion of the approximately \$1.5M federal earmark associated with the project in the proposed amendment to the FFYs 2007 - 2010 TIP. She states that the project has tremendous community and regional support and that the steering committee meets regularly. The Assabet River Rail Trail communities have also invested large amounts of their own money towards the project. She stated that the Bruce Freeman and Assabet River Rail Trail each connect to the MBTA commuter rail stations on the Fitchburg Rail Line and states that the use do these trails will help alleviate serious traffic congestion, parking problems, as well as mitigate air quality, global warming and other environmental concerns.
9/29/2008	Rep. William N. Brownsberger 24th Middlesex District Commonwealth of Massachusetts	Wrote that he appreciated the inclusion of funding for the Belmont Cambridge Somerville bikepath in the Draft Amendment One to the FFYs 2009 and 2010 elements of the FFYs 2007 - 2010 TIP and urges the MPO to affirm this amendment.
9/29/2008	Peter Grover Chairman Acton Historical Commission	Wrote to urge the MPO to recommend continued funding support for the Assabet River Rail Trail in the next cycle of the TIP. Additionally, the commission would strongly encourage the MPO to list the Assabet River Rail Trail as a specific line item in the Boston Region MPO's Regional Transportation Plan. He states that the project has been underway for quite some time and that to not complete the trail would lead to a trail to nowhere, which would be quite odd. He stressed the link between the trail and the South Acton rail station and the village itself. Stated that the Assabet River Rail Trail brings access to some very important historical and archeological resources, which, if completed, would further to highlight these assets to children and adults alike. It is the committee's feeling that rail trails are extremely important.
9/29/2008	Board of Selectmen Stow	Wrote in support of continuing funding for the Assabet River Rail Trail. They stated that all of the former railroad land in Stow is privately owned, but the town purchased a trail easement on a portion of the roadbed in 2005 with \$130,00 of Federal Enhancement funds and \$12,000 of local funds. The 2008 town meeting voted strongly in favor of purchasing an easement on the remainder of the 1.9 mile parcel. Once that purchase is completed the town will have spend \$195,00 of its on monies on the Assabet River Rail Trail, plus \$54,000 donated from the Stow Conservation Trust and a \$19,500 grant from EOEEA. They state that the project cannot be competed without state and federal funding.
10/3/2008	Mayor Nancy Stevens City of Marlborough	Wrote in strong support of the continued planning and construction of the Assabet River Rail Trail project and asked for support in including this project in the Regional Transportation Plan. Marlborough states that the approximately \$1.5M Federal earmark for design and construction of this project is depended on it being in the Regional Transportation Plan. Their greatest fear is that over 15 years of hard work; millions of dollars already spend; land already acquired; strong commitment from volunteer residents and the Assabet River Rail Trail Inc friends group; endless meetings of the steering committee; the construction of half of the trail; and the completion of initial design plans for the Acton/Maynard section of the trail will be stalled half way through its completion.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/6/2008	Ingrid Miles Chair Ipswich Board of Selectmen	Wrote on behalf of the Board of Selectmen to thank the Transportation Planning and Programming Committee for including the design component of the Ipswich North Green Project in the Draft Amendment. It is an important project to the Town of Ipswich. She also wrote to respectfully ask the committee to continue its support of the project by keeping it within the final version of the FFY 2009 element when that is adopted.
10/8/2008	Malek Al-Khatib Chair Regional Transportation Advisory Council	Wrote in support of the Draft Amendment, but requests that attention to Funding Constraints - specifically the recommendations to from the Transportation Finance Commission and continued commitment to the proposed list of projects as determined by the Planning and Programming Committee on its June 19 meeting will be advanced; that future projects cost estimates continue to be monitored; significant increases to the MassHighway Bridge Program and Transit Projects continue to be given the utmost importance.
10/9/2008	Jamie Fosburgh Chair Winchester Greenway Committee	Wrote on behalf of the Winchester Greenway Committee to urge reinstatement of the Tri-Community Bikeway on the TIP. Stated that the importance of alternative transportation networks that promote healthful exercise, save expensive gas, alleviate roadway congestion and reduce carbon dioxide emissions cannot be overstated. The timeliness of this project, as well as the Bruce Freeman and Assabet River Rail Trail are self evident.
10/10/2008	Cameron Bain Technical Advisory Tri-Community Bike/Greenway	Requests that the MPO reinstate the Tri-Community Bikeway/Greenway project. The project is one of the oldest projects in the state (started in 1988). Proponents envision the six-mile trail as like a mini-Rose Kennedy Greenway that will evolve in time to include gardens, mini parks, recreation areas, and outdoor classrooms featuring health and nature parks. The Safe Routes to School Program will use the bikeway. The bikeway will connect schools, libraries, parks, playgrounds, and transportation facilities.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Chris Miller, Chelmsford	Bruce Freeman Rail Trail would add valuable connections and would reduce car use.
10/20/2008	Nancy & Dan Coughlin, Concord	Support for Bruce Freeman Rail Trail.
10/20/2008	Cedric Harring	Support for Bruce Freeman Rail Trail.
10/20/2008	Carla Lele	Support for Bruce Freeman Rail Trail.
10/20/2008	John Baker, Chelmsford	Looking forward to Chelmsford and Acton extensions.
10/20/2008	Julie Pennell, Acton	Support for Bruce Freeman Rail Trail.
10/20/2008	Eric Lind, Sudbury	Support for Bruce Freeman Rail Trail. Avid cyclist.
10/20/2008	Ann Shubert, Acton	Heavy traffic in Acton and Concord and narrow lanes in North Acton. Driving is the only safe way to access local business on Rte. 2A. Bruce Freeman Rail Trail would provide non-car access to local business and would provide better access to recreational areas.
10/20/2008	Ron Gagnon	Support for Bruce Freeman Rail Trail.
10/20/2008	John Neale, Acton	Support for Bruce Freeman Rail Trail. Great opportunity for family.
10/20/2008	Murray Nicholson, Concord	Support for Bruce Freeman Rail Trail. Existing trail is an asset for area residents, especially children.
10/20/2008	Morgan Smith, Concord	Support for Bruce Freeman Rail Trail.
10/20/2008	Peggy Wargelin, Concord	Bruce Freeman Rail Trail would be one of few places for kids to safely learn to ride bikes. Further delays will only increase construction costs.
10/20/2008	David Brown, Acton	The East Acton Village Plan and local businesses rely on Bruce Freeman Rail Trail. Alternative transportation projects will be more important as gas prices rise. Include Bruce Freeman Rail Trail in TIP and Plan.
10/20/2008	Stephen Quinn	Bruce Freeman Rail Trail would serve recreational and utilitarian purposes, like commuting and moving in power wheelchairs that should avoid busy sidewalks and traffic.
10/20/2008	Tom Sandock, Boxborough	Support for Bruce Freeman Rail Trail.
10/20/2008	Dennis Harrington Planning Director Quincy	Removal of federal earmark for Quincy Concourse Phase II project from FFY 2009 compromises project benchmarks and delays construction. Quincy has worked cooperatively with MassHighway and with the MPO to ensure timely advertisement (expected on 1/24/09) and construction (expected to begin Spring 2009). Please keep the earmark programmed for FFY 2009.
10/20/2008	Ron Schlegel, Karen Jarsky, & Frank Calore Acton Recreation Commission	Town of Acton has spent millions of dollars for design of AART. AART would connect four towns to South Acton station. Tremendous value in walking, biking and skating. Reconsider Assabet River Rail Trail for TIP and Plan.
10/20/2008	Cathy Lifschultz	Support for Bruce Freeman Rail Trail in Sudbury.
10/20/2008	Karu Ratnam	Support for Bruce Freeman Rail Trail.
10/20/2008	Larry Yarkin, Framingham	Support for Bruce Freeman Rail Trail. Residents deserve walking and biking areas.
10/20/2008	Andrew Newman, Concord	Support for Bruce Freeman Rail Trail in Concord. Concord families should have nearby trails for family biking.
10/20/2008	Judy & Tom Vaughn, Concord	Heavy traffic, frequent curb cuts and poorly maintained sidewalks make biking in Concord difficult. Bruce Freeman Rail Trail would be a safe alternative.
10/20/2008	Ross Callon, Westwood	Connecting Phases 1 and 2A would create a valuable resource and would create jobs. Phase 2A should receive priority over Phase 2C.
10/20/2008	Tom Burns, Acton	Support for Bruce Freeman Rail Trail in TIP and Plan.
10/20/2008	Jean Kriedberg, Chelmsford	Support for Bruce Freeman Rail Trail.
10/20/2008	Gary Webster, Acton	Support for Bruce Freeman Rail Trail.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Mike Hruby, Boxborough	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Ellen Forte, Acton	Bruce Freeman Rail Trail would reduce car reliance, and carbon emissions. Healthy travel mode is essential to stimulating local economy while preserving the environment.
10/20/2008	Shannon Beauregard	Bruce Freeman Rail Trail is an important aspect of Westford and Concord.
10/20/2008	Unsigned Email	Bruce Freeman Rail Trail would preserve land and address rising fuel costs, health concerns and road safety for non-motorized travelers.
10/20/2008	Cindy Overgaag, Acton	The State should promote healthy, safe recreation and green, connected neighborhoods.
10/20/2008	Bill Freeman	Support for Bruce Freeman Rail Trail.
10/20/2008	Brian Ford	The State should promote healthy, safe recreation to combat health problems caused by inactivity.
10/20/2008	Mark & Jane Scera, Concord	Support for Bruce Freeman Rail Trail.
10/20/2008	Debbie Macrides	Support for Bruce Freeman Rail Trail.
10/20/2008	Neal Silverman, Acton	Support for Bruce Freeman Rail Trail. Construction of Bruce Freeman Rail Trail will enhance Acton.
10/20/2008	Tim & Marjorie Norman	Support for Bruce Freeman Rail Trail. Driving 15 to 30 minutes for a rail trail defeats the purpose.
10/20/2008	Karen Bircsac	Support for Bruce Freeman Rail Trail.
10/20/2008	Nick Noyes	Support for Bruce Freeman Rail Trail.
10/20/2008	Tatyana Hellman	Support for Bruce Freeman Rail Trail.
10/20/2008	Wolf Bartz, Chelmsford	Support for Bruce Freeman Rail Trail.
10/20/2008	Tim Rodgers, Concord	Support for Bruce Freeman Rail Trail. Bruce Freeman Rail Trail would be an asset and would provide a clean, healthy transportation alternative.
10/20/2008	Ken Miller	Support for Bruce Freeman Rail Trail. The State should not derail this project at this late date.
10/20/2008	Jim Terry, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail could connect to West Concord station and attract residents from Rte. 2 commutes.
10/20/2008	Deb Matthews, Acton	Support for Bruce Freeman Rail Trail. Bruce Freeman Rail Trail would support green commuting, recreational safety and healthy lifestyles.
10/20/2008	R. Bradley Potts & Diane Berner, Westford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail would support non-automotive commute to work and recreation without gasoline, pollution or risk of collision.
10/20/2008	John Bircsak	Support for Bruce Freeman Rail Trail.
10/20/2008	Bruce Freeman	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Sheila Flory, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Ann Marie Testamarta	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Karen Taylor, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Suburbs do not provide sufficient sidewalks or uninterrupted non-automotive corridors.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Carl Elkin	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. With increasing concern over greenhouse gases and energy issues, the State should enhance non-automotive infrastructure.
10/20/2008	Bernard Kosicki, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Ken Levine, Stow	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Michael Ho	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Anne Sullivan Soydan, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail would support exercise and reduce consumption of fossil fuels.
10/20/2008	Denise Dunne, Sudbury	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Karen Long, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Michael Milofsky, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Beverly Zambarano	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Driving to Ayer or Bedford is inconvenient and should not be necessary for a family to safely enjoy a bike ride.
10/20/2008	James Scholten, Sudbury	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Fred Roeber, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail both would preserve the right-of-way and would provide strong connections between two cities, four towns and the MBTA commuter rail system.
10/20/2008	George Hitz, Sudbury	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Joseph, Celeste & Benjamin Nelson, Westford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Kim Colson, Westford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Existing transportation conditions do not provide a safe venue for non-automotive traffic.
10/20/2008	Rabbi Shoshana Perry, Westford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. The State should pursue non-automotive projects, not cut back on them.
10/20/2008	Christine Corr, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Dick & Claire Greene, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Susan Flynn, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. It is unsafe for children to recreate on Acton streets, and Bruce Freeman Rail Trail would expand those opportunities.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Al Matthews, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Bath Palmerino, Sudbury	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Judy Perrin, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail would provide an equitable, dedicated path to the West Concord station.
10/20/2008	Ken Perrin, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail would enhance the quality of life for local residents.
10/20/2008	Doug Remington, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Sherry Palo, Chelmsford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Beth Cail, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Jill Appel, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Hannah Bloch	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Mark Demello, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	John Petersen, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Sara Laschever, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Ann Sgarzi, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	S. Rich Zhao, Salem, NH	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Doug Hardy	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	John Lozda	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Joan Wesolowski, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Robert Levers, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Leslie Mahoney, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Stefanie Cloutier, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Chris Barrett, Westford	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Excitement and need for Bruce Freeman Rail Trail has never been greater.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Chuck Matzker, Framingham	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bike trail enhance the quality of life for its users and its neighbors.
10/20/2008	Mark Burak, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Natalie Gekle, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Gerard Boyle, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Michelle Ellicks, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Carolyn Hardy, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	David Clarke, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Mark Wessel, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Susan & Tom Beck, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Michael Fisher	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Katy Frey, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Laurie Foster, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Miriam Friedman, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Kate & Scott Harmon, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Dale Freeman	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Jay Mason, Lowell	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Daphne Freeman	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. The project should be considered a high priority.
10/20/2008	Kris Kim, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Mark Taylor, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Barry Grigsby	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Emily & Tom Collins, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Claire Schlosser	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/20/2008	Sven & Janine Olson, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Irene Barrett Ludwick	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Melissa Grigsby, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	David Davidson, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Andrew Wilmot, Carlisle	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Sara Ballard, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Gari Palmer, Concord	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/20/2008	Bill Fowler & Bridget Nedzi, Acton	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Bruce Freeman Rail Trail would provide safe place for children to ride their bikes.
10/20/2008	Thomas Michelman President Friends of the Bruce Freeman Rail Trail	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan. Today there is significant momentum and support from local residents and State officials for Bruce Freeman Rail Trail. Acton, Concord, Carlisle, Sudbury and Westford have spent hundreds of thousands of dollars to advance Phase 2. Failure to further this project now will compromise the fiscal and technical investments already made to the project and only increase the cost of the project. The project has waited long enough for design and construction.
10/20/2008	Unsigned Email	Support for 75% and 100% design of Bruce Freeman Rail Trail Phases 2A and 2C and and for inclusion of Bruce Freeman Rail Trail in the Plan.
10/21/2008	Carole Wolfe	Supports the removal of the Bruce Freeman Rail Trail from the TIP, especially the West Concord and Sudbury section, as a prudent step toward fiscal and environmental responsibility. She raised a number of points: those sections serve a remote area; they are particularly expensive to construct; they would not be primary routes based on the Mass. Bicycle Transportation Plan; the section going through West Concord Center would be dangerous; and the facility will not result in air quality improvements (due to removal of vegetation and users driving to the trail). She suggested that funds might be better spent on mass transit or road and bridge projects, or if the trail was built along the route described in the Mass. Bicycle Transportation Plan to serve a larger population. The use of CMAQ funds for the project can not be justified.
10/21/2008	(unsigned email)	The MPO should prioritize mass transportation projects, fixing roads and bridges. Remove all unnecessary projects like \$1.5 million for bicycle/pedestrian infrastructure, and Regional Transportation Demand Management and Suburban Mobility Programs. Put bicycle path and pedestrian projects on the backburner. Fix what we have now.

Comments to Draft Amendmet One to the FFYs 2009 and 2010 Elements of the FFYs 2007 - 2010 TIP

Date	Name/Affiliation	Comment
10/22/2008	(unsigned email)	It is crucial to make our failing infrastructure a priority for improvement and spending during a time of limited resources. It is critical to provide for better transportation on over-crowded roads. This will have a positive effect on the economy by speeding up commutes and transit times of commercial vehicles, and increase the likelihood of people starting new businesses in areas that are difficult to get to now.
10/21/2008	Senator Richard Tisei Senate Minority Leader Commonwealth of Massachusetts	Supports the reinstatement of the Tri-Community Bikeway/Greenway project. Local officials of Stoneham, Winchester, and Woburn have worked for many years on the project which will link the communities and provide recreational opportunities and environmental benefits. The project is a natural extension of two programs in Stoneham -- the Safe Routes to School Program and Blue Cross and Blue Shield's Jump Up and Go Program -- and it will provide a safe route to local schools, parks, playing fields, the Boys & Girls Club, and the Stoneham Public Library.

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

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

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>	<i>Former Funds</i>	<i>History</i>
Belmont, Cambridge & Somerville	600811	Bicycle Facility	\$4,160,000	\$1,040,000	\$5,200,000		Moved from FFY 2008, action 6/19/08
Boston		South Bay Harbor Trail			\$3,850,000		Moved to FFY 2010, action 6/19/08
Concord & Lincoln	602984	Route 2 (Crosby's Corner)			\$4,250,000		
Franklin	602962	King Street Ramps	\$3,800,000	\$950,000	\$4,750,000		New Project action 6/19/08
Milford	604530	Upper Charles Trail, Phase 2	\$3,280,000	\$820,000	\$4,100,000		Moved from FFY 2008
Stoneham, Winchester & Woburn		Tri-Community Bikeway (Construction)			\$4,400,000		Removed from TIP action 6/19/08
Watertown	602053	Intersection Improvements at Three Locations	\$700,000	\$175,000	\$875,000		Moved from FFY 2010
			<i>Federal Funds</i>	<i>State/Local Funds</i>	<i>Total Funds</i>		
Boston		Boston Traffic Management Center Operations	\$324,000	\$81,000	\$405,000		Added to TIP action 6/19/08
Boston Region		Improving the Region's Bike/Ped Infrastructure Program	\$520,000	\$130,000	\$650,000		Added to TIP action 6/19/09
Boston Region		Regional Transportation Demand Management Program	\$200,000	\$50,000	\$250,000	\$100,000	Changed during action 6/19/08
Boston Region		Suburban Mobility Improvement Program	\$520,000	\$130,000	\$650,000	\$250,000	Changed during action 6/19/08
Congestion Mitigation and Air Quality Improvement Program Total			\$13,504,000	\$3,376,000	\$16,880,000		
				<i>CMAQ Regional Target</i>	\$8,593,420		

National Highway System

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>		
Canton, Randolph & Westwood	87800	Route 128 Improvement Program Contract 3, Year Three of Six	\$9,567,511	\$2,391,878	\$11,959,389	\$11,600,000	Changed during action 6/19/08
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4, Year One of Six	\$2,400,000	\$600,000	\$3,000,000	\$8,100,000	Changed during action 6/19/08
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5, Year One			\$2,000,000		Moved to FFY 2010, action 6/19/08
National Highway System Total			\$11,967,511	\$2,991,878	\$14,959,389		

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

Surface Transportation Program

			Federal Funds	State Funds	Total Funds
Bedford, Billerica & Burlington	29492	Middlesex Turnpike (Mitre Extension), Phase Three			\$7,300,000
Bedford, Billerica & Burlington	29491	Middlesex Turnpike (Mitre Extension), Phase Two	\$4,996,004	\$1,249,001	\$6,245,005
Concord & Lincoln	602984	Route 2 (Crosby's Corner)			\$4,250,000
Danvers/Peabody	87612	Route 128 at Route 35 and Route 62	\$7,600,000	\$1,900,000	\$9,500,000
Foxborough, Norfolk, & Wrentham	602496	Route 115 (Pond/Pine St)	\$5,188,800	\$1,297,200	\$6,486,000
Salem	601017	Route 1A (Bridge Street)	\$5,491,200	\$1,372,800	\$6,864,000
Weymouth	601630	Route 18			\$14,000,000
Surface Transportation Program Total			\$23,276,004	\$5,819,001	\$29,095,005

Moved to FFY 2010, pending this action
 Moved from FFY 2008, action 6/19/08
 Moved to FFY 2010, pending this action
 New Project, action 6/19/08
 Moved from FFY 2008, action 6/19/08
 Moved from FFY 2008, action 6/19/08
 Moved to FFY 2010, pending this action

Highway Safety Improvement Program (HSIP) Project

			Federal Funds	State Funds	Total Funds
Bedford, Billerica & Burlington	29491	Middlesex Turnpike (Mitre Extension), Phase Two	\$3,437,368	\$859,342	\$4,296,710
Highway Safety Improvement Program Total			\$3,437,368	\$859,342	\$4,296,710
			<i>HSIP Regional Target</i>		<i>\$4,296,710</i>

New funding program

Surface Transportation Program/Enhancement

			Federal Funds	State Funds	Total Funds
Ipswich		North Green Improvements (Design)	\$72,800	\$18,200	\$91,000
Cambridge	605188	Cambridge Common (Design)	\$144,000	\$36,000	\$180,000
Surface Transportation Program/Enhancement Total			\$216,800	\$54,200	\$271,000

New Project, action 6/19/08
 New Project, action 6/19/08

Total Regional Target Programming **\$65,502,104**
Boston Region MPO Regional Target with State Match *\$65,225,104*

FEDERAL-AID BRIDGE PROJECTS

Bridge

			Federal Funds	State Funds	Total Funds
Boston	600944	American Legion HWY over Route 203	\$4,691,536	\$1,172,884	\$5,864,420
Framingham	604013	Fountain Street over MBTA and CSX	\$3,280,000	\$820,000	\$4,100,000
Hanover	605101	Route 53 over Route 3	\$8,840,000	\$2,210,000	\$11,050,000
Hingham	604086	Rockland St Bridge			\$550,000
Hudson	604006	Houghton Street over Assabet River	\$2,033,058	\$508,264	\$2,541,322
Ipswich	602543	Route 1A(High St) over the MBTA (replacement)	\$6,885,409	\$1,721,352	\$8,606,761
Wellesley	600776	Rockland St over CSX	\$1,363,835	\$340,959	\$1,704,794
Marlborough	603506	Robin Hill and Boundary Street Bridges over the Assabet	\$3,406,344	\$851,586	\$4,257,930
Bridge Total			\$30,500,182	\$7,625,045	\$38,125,227

New Project, action 6/19/08
 New Project, action 6/19/08
 New Project, action 6/19/08
 Removed from TIP action 6/19/08
 New Project, action 6/19/08
 Project moved from FFY 2008 element, pending this action
 New Project, action 6/19/08 action now needed to move from NFA
 New Project, action 6/19/08 action now needed to move from NFA

Advance Construction Bridge

			Federal Funds	State Funds	Total Funds
Boston	604517	Chelsea Street Bridge	\$8,800,000	\$2,200,000	\$11,000,000
Boston & Everett	603370	Route 99 (Alford Street) Bridge	\$4,800,000	\$1,200,000	\$6,000,000
Dedham, Needham & Westwood	603206	Route 128 Improvement Program Contract 4	\$800,000	\$200,000	\$1,000,000
Lynn & Saugus	026710	Route 107 (Fox Hill) Bridge	\$800,000	\$200,000	\$1,000,000
Needham & Wellesley	603711	Route 128 Improvement Program Contract 5			\$2,000,000
Advance Construction Bridge Total			\$15,200,000	\$3,800,000	\$19,000,000
Federal-Aid Bridge Total					\$57,125,227

\$17,500,000 Changed during action 6/19/08
 \$8,000,000 Changed during action 6/19/08
 \$12,000,000 Changed during action 6/19/08
 \$2,750,000 Changed during action 6/19/08
 Removed from TIP action 6/19/08

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

FEDERAL AID MAJOR INFRASTRUCTURE AND STATEWIDE CATEGORIES

Interstate Maintenance			Federal Funds	State Funds	Total Funds		
Marlborough, Hudson & Berlin	604877	Interstate 495	\$11,401,632	\$1,266,848	\$12,668,480	\$6,500,000	Changed during action 6/19/08
Stoneham, Winchester & Reading	604878	Interstate 93	\$13,176,000	\$1,464,000	\$14,640,000	\$7,200,000	Changed during action 6/19/08 to \$10,950,720 changed again pending this action
Waltham	604710	Interstate 95			\$22,008,800		Project moved to FFY 2010, pending this action
Wilmington & Woburn		Interstate 93			\$6,800,000		Removed from TIP action 6/19/08
Interstate Maintenance Total			\$21,846,784	\$5,461,696	\$27,308,480		
National Highway System Pavement Preservation			Federal Funds	State Funds	Total Funds		
Harvard/Littleton		Route 2	\$4,567,680	\$1,141,920	\$5,709,600		New funding program
Arlington/Belmont/Cambridge		Route 2	\$3,367,200	\$841,800	\$4,209,000		New funding program
National Highway System Pavement Preservation Total			\$7,934,880	\$1,983,720	\$9,918,600		

FEDERAL AID NON-TARGET PROJECTS

High-Priority Projects (TEA-21)			Federal Funds	State/Local Funds	Total Funds		
Bedford, Billerica & Burlington	29492	Middlesex Turnpike Improvement Project, Phase Two			\$800,000		This project is now called phase three and was moved to FFY 2010
Bedford, Billerica & Burlington	29491	Middlesex Turnpike (Mitre Extension), Phase Two (HPP 924)	\$1,922,102	\$480,526	\$2,402,628		Moved from FFY 2008, action 6/19/08
High-Priority Projects (SAFETEA-LU)			Federal Funds	State/Local Funds	Total Funds		
Acton and Maynard	604531	Assabet River Rail Trail (Design) (HPP 1761)	\$452,000	\$113,000	\$565,000		Moved from FFY 2008 pending this action
Bedford, Billerica & Burlington	29491	Middlesex Turnpike (Mitre Extension), Phase Two	\$718,000	\$179,500	\$897,500	\$800,000	Changed during action 6/19/08
Boston		Longwood Ave / Urban Ring Tunnel Study (HPP 856)	\$96,033	\$24,008	\$120,041	\$97,875	Changed during action 6/19/08
Boston	600636	Massachusetts Avenue Construction (HPP 270)	\$1,260,573	\$315,143	\$1,575,716	\$837,375	Changed during action 6/19/08
Boston	604997	Museum Way Improvements Construction (HPP 1960)	\$2,871,997	\$717,999	\$3,589,996		New Project, action 6/19/08
Boston		Sullivan Square, Phase 1 Design (HPP 3568)	\$897,498	\$224,375	\$1,121,873		New Project, action 6/19/08
Danvers to Peabody		Border to Boston Bikeway (HPP 843)	\$718,000	\$179,500	\$897,500	\$179,500	New Project, pending this action
Danvers & Peabody		Route 128 Improvements Construction (1477)	\$1,106,253	\$276,563	\$1,382,816		
Hudson & Stow		Assabet River Rail Trail Design (HPP 1761)	\$269,250	\$67,312	\$336,562		
Hull	604743	West Corner Culvert Construction (HPP 1681)	\$143,600	\$35,900	\$179,500		New Project, action 6/07
Quincy	604664	Quincy Center Concourse, Phase 2 (HPP 4272)			\$7,511,063		Project is air quality non-exempt, project will advance with DRAFT FFY 2009 TIP
Somerville		I-93 Mystic Avenue Interchange Study (HPP 792)	\$359,000	\$89,750	\$448,750		New Project, action 6/19/08
Somerville		Union Square Improvements Study (HPP 999)	\$73,961	\$18,490	\$92,451		Changed during action 6/19/08
Somerville		Assembly Square Multimodal Access Improvements (HPP 4281)	\$5,007,375	\$1,251,844	\$6,259,219		Changed during action 6/19/08
Somerville		Somerville Community Path, Phase 1			\$195,750		Project moved to FFY 2010 action 6/19/08
Watertown	601686	Pleasant Street and Howard Street Construction	\$341,449	\$85,362	\$426,811	\$348,000	Changed during action 6/19/08
Watertown*		Watertown Bike Path Construction (HPP 1400)	\$576,618	\$144,155	\$720,773		Project moved from FFY 2010 element, pending this action
Watertown*		Watertown Bike Path Construction (HPP 1424)	\$579,339	\$144,835	\$724,174		Project moved from FFY 2010 element, pending this action
Walpole	605187	Washington St Design (HPP 2431)	\$125,650	\$31,412	\$157,062		New Project, action 6/19/08
Weymouth		Weymouth Multi-Modal Center (HPP 4276)	\$8,011,800	\$2,002,950	\$10,014,750		Earmark new to this program, pending this action
High-Priority Projects Total			\$25,530,497	\$6,382,624	\$31,913,121		

*match to be provided by the Department of Conservation and Recreation

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

High-Priority Project (SAFETEA-LU) Other Match

			<i>Federal Funds</i>	<i>Other Funds</i>	<i>Total Funds</i>
Section 112					
Cambridge	604977	Kendall Square Streetscape			\$737,946
Medford	605122	Clippership Drive Streetscape	\$1,121,873		\$1,121,873
Section 117					
Cambridge	604993	Innovation Blvd Streetscape	\$990,000		\$990,000
Section 330					
Winthrop		Winthrop Ferry Improvements	\$496,750		\$496,750
High-Priority Project (SAFETEA-LU) Other Match					
Boston		National Park Traveler Information System & Visitor Center	\$1,218,000		\$1,218,000
2004 Ferry Boat Discretionary Commuter Ferry					
Winthrop		Winthrop Ferry Improvements	\$264,232	\$66,058	\$330,290
2005 Ferry Boat Discretionary Ferry Infrastructure					
Winthrop		Winthrop Ferry Improvements	\$208,167	\$52,042	\$260,209
Other Earmarks Total			\$4,299,022	\$118,100	\$4,417,122

Federal-Aid Non-Target Projects Total **\$36,330,243**
Total Federal-Aid Highway Program **\$232,514,896**

NON FEDERAL-AID TARGET PROJECTS

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
Non Federal Aid Bridge					
Ashland	606302	Route 135 (Union St) Bridge			\$818,700
Boston	603443	River Street Bridge		\$6,805,838	\$6,805,838
Non Federal Aid Bridge Total					\$6,805,838
Total Highway Program					\$239,320,734

removed at proponents request pending this action, moved in 6/07
New Project, action 6/19/08

New Project, action 6/19/08

Pending this action (previously in FFY 2008 element)

New Project, action 6/07

New Project, pending this action

New Project, pending this action

New Project, action 6/19/08

**DRAFT Amendment One - FFY 2009 Element
of the FFYs 2007 - 2010 TIP**

Central Artery/Tunnel Project

	<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
National Highway System (NHS)	\$70,000,000	\$17,500,000	\$87,500,000
State Transportation Program (STP)	\$56,845,000	\$14,211,250	\$71,056,250
Federal-Aid Subtotal	\$126,845,000		
Federal-Aid Matching Funds Subtotal		\$31,711,250	
Total Fiscal Year 2009 Central Artery/Tunnel Funds			\$158,556,250

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

REGIONAL TRANSIT PROGRAM

Section 3037

			<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>
Systemwide	Job Access		\$1,502,650	\$375,662	\$1,878,312
		Section 3037 MBTA Match Total	\$1,502,650	\$375,662	\$1,878,312

New Freedom

			<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>
Systemwide	New Freedom		\$1,292,406	\$323,101	\$1,615,507
		New Freedom MBTA Match Total	\$1,292,406	\$323,101	\$1,615,507

Section 5307

			<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Systemwide	Locomotive and Coach Procurement		\$25,600,000	\$6,400,000	\$32,000,000	New Project, pending this action
Bus	Arborway Maintenance Facility				\$20,000,000	Moved to FFY 2010, action 6/19/08
Bus	Zero Series Bus Replacement				\$31,954,737	Removed from TIP action 6/19/08
Green Line	MBTA Accessibility Program		\$21,600,000	\$5,400,000	\$27,000,000	New Project, action 6/19/08
Blue Line	Blue Line Vehicles		\$8,000,000	\$2,000,000	\$10,000,000	New Project, action 6/19/08
Systemwide	Station Management Program		\$2,800,000	\$700,000	\$3,500,000	\$13,500,000 New Project, pending this action
Bus	CNG Bus Overhaul Program		\$12,000,000	\$3,000,000	\$15,000,000	New Project, action 6/19/08
Bus	Everett Maintenance Facility		\$4,400,000	\$1,100,000	\$5,500,000	New Project, action 6/19/08
Systemwide	Redundant Operations Control Center		\$0	\$0	\$0	\$12,000,000 New Project, pending this action
Systemwide	Elevator Replacement/Rehabilitation		\$27,308,761	\$6,827,190	\$34,135,951	\$44,135,951 New Project, pending this action
Systemwide	Grant Anticipation Notes (GANs) Program		\$19,985,000	\$4,996,250	\$24,981,250	\$32,981,250 Changed during action 6/19/08
Systemwide	MBTA Enhancement Program		\$1,354,482	\$338,621	\$1,693,103	\$1,189,227 Changed during action 6/19/08
Systemwide	Preventative Maintenance		\$10,000,000	\$2,500,000	\$12,500,000	\$10,000,000 Changed during action 6/19/08
Systemwide	Bus and Train Arrival LCD Signage		\$2,400,000	\$600,000	\$3,000,000	New Project, action 6/19/08
		Section 5307 MBTA Match Total	\$109,848,243	\$27,462,061	\$169,310,304	

Cape Ann

			<i>Federal Funds</i>	<i>State Funds</i>	<i>Total Funds</i>
	Cape Ann Transportation Authority		\$344,568	\$86,142	\$430,710
		Section 5307 State Match Total	\$344,568	\$86,142	\$430,710

High-Priority Projects (SAFETEA-LU)

			<i>Federal Funds</i>	<i>Local Funds</i>	<i>Total Funds</i>
Bus	HPP Bus - Framingham Transit System		\$406,296	\$101,574	\$507,870
		SAFETEA-LU High-Priority Projects (HPP Bus) Total	\$406,296	\$101,574	\$507,870

Section 115 (Earmarks)

			<i>Federal Funds</i>	<i>Local Funds</i>	<i>Total Funds</i>	
Green Line	Lechmere Station Relocation		\$1,000,000		\$1,000,000	New Project, pending this action
Beverly/Salem	Beverly/Salem Intermodal Centers		\$1,100,000		\$1,100,000	New Project, pending this action
Revere	Wonderland Station Improvements		\$300,000		\$300,000	New Project, pending this action
Revere	Wonderland Station Improvements		\$1,900,000		\$1,900,000	New Project, pending this action
		Section 115 Total	\$4,300,000		\$4,300,000	

DRAFT Amendment One - FFY 2009 Element of the FFYs 2007 - 2010 TIP

Section 5309		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Blue Line	Blue Line Modernization	\$21,600,000	\$5,400,000	\$27,000,000	New Project, action 6/19/08
Red Line	Red Line Number 2 Car Overhaul	\$14,190,124	\$3,547,531	\$17,737,655	\$30,000,000 Changed during action 6/19/08, new change pending this action 25,737,655
Systemwide	Kawasaki Coaches	\$1,600,000	\$400,000	\$2,000,000	\$26,757,030 Changed during action 6/19/08
Systemwide	Locomotive and Coach Procurement	\$33,295,500	\$8,323,875	\$41,619,375	\$18,000,000 Changed during action 6/19/08, new change pending this action 28,619,375
<i>Section 5309 Infrastructure Program</i>					
Red Line	Columbia Junction	\$10,400,000	\$2,600,000	\$13,000,000	\$18,000,000 Changed during action 6/19/08
Systemwide	Power Improvements	\$7,080,000	\$1,770,000	\$8,850,000	\$13,850,000 New Project, pending this action
Systemwide	Bridge and Tunnel Program	\$4,800,000	\$1,200,000	\$6,000,000	\$9,600,000 Changed during action 6/19/08
Section 5309 MBTA Match Total		\$92,965,624	\$23,241,406	\$116,207,030	
Section 5307 (Carryover)		<i>Federal Funds</i>	<i>MBTA Funds</i>	<i>Total Funds</i>	
Bus	Everett Maintenance Facility	\$6,400,000	\$1,600,000	\$8,000,000	
Systemwide	Redundant Operations Control Center	\$8,652,319	\$2,163,080	\$10,815,399	
Section 5307 Carryover MBTA Match Total		\$15,052,319	\$3,763,080	\$18,815,399	
Section 5309 (Carryover Earmarked Funds)		<i>Federal Funds</i>	<i>MBTA/State/Local Funds</i>	<i>Total Funds</i>	
Beverly/Salem	Beverly/Salem Intermodal Center	\$245,000	\$61,250	\$306,250	New Project, action 6/19/08
Blue Line/North Shore	Feasibility Study for Blue Line Extension to Lynn	\$1,960,000	\$490,000	\$2,450,000	New Project, pending this action
Salem	Beverly/Salem Intermodal Center	\$836,000	\$209,000	\$1,045,000	New Project, pending this action
Beverly	Beverly/Salem Intermodal Center	\$836,000	\$209,000	\$1,045,000	New Project, pending this action
Quincy	Quincy Catamaran	\$0	\$0	\$0	New Project, pending this action
Revere	Wonderland Station	\$752,400	\$188,100	\$940,500	New Project, pending this action
Red Line	Red Line Number 2 Car Overhaul	\$2,678,793	\$669,698	\$3,348,491	New Project, pending this action
Systemwide	Power Improvements	\$4,000,000	\$1,000,000	\$5,000,000	New Project, pending this action
Systemwide	Bridge and Tunnel Program	\$11,924,000	\$2,981,000	\$14,905,000	New Project, pending this action
Boston	Commonwealth Ave/Green Line	\$656,600	\$164,150	\$820,750	New Project, pending this action
Boston	Improvements at Harbor Islands Park	\$271,700	\$67,925	\$339,625	New Project, pending this action
Hingham	Hingham Intermodal Center	\$3,762,000	\$940,500	\$4,702,500	New Project, action 6/19/08
Commuter Rail	Auburndale Station	\$392,000	\$98,000	\$490,000	New Project, pending this action
Commuter Rail	Rockport Improvements	\$1,149,500	\$287,375	\$1,436,875	New Project, pending this action
Commuter Rail	Fitchburg Line Improvements	\$5,880,000	\$1,470,000	\$7,350,000	New Project, pending this action
Medford	Medford Downtown Parking	\$836,000	\$209,000	\$1,045,000	New Project, pending this action
Melrose	Commuter Rail Station Improvement	\$686,000	\$171,500	\$857,500	Scribers error, correction from 686,000 total to 857,500
Ferry	Ferry System Improvements	\$4,103,000	\$1,025,750	\$5,128,750	New Project, pending this action
Woburn	Woburn Park & Ride Facility	\$752,400	\$188,100	\$940,500	New Project, pending this action
Section 5309 MBTA Various Match Total		\$41,721,393	\$10,430,348	\$52,151,741	
Previous Flex Funds (Carryover)		<i>Federal Funds</i>	<i>MBTA/State/Local Funds</i>	<i>Total Funds</i>	
Systemwide	FFY 2007 CMAQ Funds for Diesel Oxidation Catalysts	\$250,000	\$62,500	\$312,500	Projects listed for informational purposes. Money flexed from programs in FFY 2007
Woburn	FFY 2007 STP Funds for Anderson RTC	\$120,000	\$30,000	\$150,000	
Flex Funds Total				\$462,500	
Federal-Aid Subtotal		\$263,133,499			
Federal-Aid Various Matching Funds Subtotal			\$10,618,064		
Federal-Aid MBTA Matching Funds Subtotal				\$55,165,310	
Total FY 2009 Regional Transit Funds				\$365,679,373	

MEMORANDUM

To: Transportation Planning and Programming Committee
From: Anne McGahan
Date: October 30, 2008
Re: Transportation Plan Material for November 6th Meeting

At the October 16th Transportation Planning and Programming Committee meeting, written descriptions of Plan projects were requested. This information had been sent out in September as two separate packets:

1. Current Project Descriptions for the Recommended Highway Projects in JOURNEY TO 2030
2. Project descriptions from JOURNEY TO 2030 of projects included in other MPOs

If you cannot locate the packets, they can also be found in Chapter 13 of JOURNEY TO 2030 or on the MPO website at the following link:

http://www.bostonmpo.org/bostonmpo/3_programs/1_transportation_plan/2030plan_ch13.pdf

Please let me know if you cannot find or access this information and I can provide it to you.

In this memorandum, we are re-transmitting the following:

- The spreadsheet showing recommended highway projects from the original JOURNEY TO 2030 with costs, updated where available, along with their status. Included on that sheet at the bottom is a list of projects that were requested at Municipal and Agency TIP Days that would have to be included in the Plan before they can be funded in the TIP.

In addition, attached is new information:

- Memorandum listing transit projects delineating those that are SIP commitments and those that are not
- Memorandum providing volume to capacity information at select locations in the Boston Region MPO

At the October 16th meeting, FHWA provided guidance specifically stating that “the financial plan assess capital investment and other measures necessary to ensure the preservation of the existing transportation system, including requirements for operational improvements, resurfacing, restoration, and rehabilitation of existing and future major

roadways, as well as operations, maintenance, modernization, and rehabilitation of existing and future facilities. In addition, the transportation plan should conduct an analysis as to what level of maintenance and operation is appropriate to maintain the infrastructure in a state of good repair.”

Also at the October 16th meeting, a memorandum from Anne McGahan entitled *Resource Allocation for JOURNEY TO 2030* was also handed out. On the last page it included a list of Transit and Highway Maintenance and Management Programs that were discussed in JOURNEY TO 2030. That list is shown below:

Transit & Highway Maintenance and Management Programs

Physical Maintenance and Management Programs

Roadway Maintenance

- Chapter 90 Program
- Interstate Highway Maintenance
- Pavement Management

Bridge Maintenance and Rehabilitation

- Highway Bridges
- Transit Bridges
- Freight (clearance and weight-restrictions)

Transit System

- State of Good Repair
- Accessibility
- Vehicles
- Stations
- Tracks and Signals
- Communications
- Maintenance Facilities (Yards & Shops)
- Supporting Infrastructure

Improving Landside Access to Ports and Transfer Facilities

Bicycle and Pedestrian Program

Transportation Enhancement Projects

Scenic Byways

Operational Efficiency Management Programs

Intelligent Transportation Systems

Incident Management

MBTA Traffic Signal Priority

MBTA Automated Fare Collection

Intersection and Signal Improvements (including signal coordination)

Interchange Improvements

Access for Elderly, Disabled, and Low-Income Populations

- Demand Responsive Transit Services
- Coordinated Public Transit-Human Services Transportation Program

Transportation Demand Management

- Transportation Management Associations
- Mass*RIDES* and Ridesharing
- Suburban Transit Opportunities
- Safe Routes to Schools

In order to begin these discussions, staff has started to assemble information on the programs listed above. Included in this mailing are the first three of these information pieces:

- MBTA Transit System State of Good Repair: this information was prepared using the 2009-2013 Capital Investment Program.
- Boston Region MPO Bicycle and Pedestrian Program: attached to this is the Shared Use Path Priorities in the Regional Bicycle Plan that was handed out at a previous meeting.
- Chapter 90 Program: this information was prepared using information from the MassHighway website.

Ongoing No-Build Project	Current Cost	2007-2010	2011-2020	2021-2030	Total	Updated Cost	Status
Route 128 Additional Lanes (Randolph to Wellesley)	\$301,350,000	\$153,350,000	\$148,000,000		\$301,350,000	\$301,350,000	
Recommended Projects							
Middlesex Turnpike Improvements (Bedford, Burlington, and Billerica)	\$14,400,000	\$14,400,000			\$14,400,000	\$33,041,840	Only phase 2 of 3 in the 2009 element of TIP for \$13.8M, Phase 3 is \$19.2M and is not programmed
Route 128 Capacity Improvements (Beverly to Peabody)	\$145,000,000			\$293,743,000	\$293,743,000	\$293,743,000	From Lisco Memo - Potential Long-Range Plans for Improving Express Highways
East Boston Haul Road/Chelsea Truck Route (Boston)	\$14,000,000	\$5,401,600	\$11,767,500		\$17,169,100	\$17,169,100	\$5.6 million is an earmark, Massport - In planning looking for programming in outer TIP year
Route 1A/Boardman Street Grade Separation (Boston)	\$10,000,000		\$13,686,000		\$13,686,000	\$13,686,000	Route 1A Corridor Study - 1990
Rutherford Avenue/Sullivan Square (Boston)	\$79,300,000	\$21,252,500	\$79,443,000		\$100,695,500	\$100,695,500	Boston recommendation from Rutherford Ave Study (1999), Sullivan Square earmark of \$11.6 million, part is programmed in 2009
Consolidated Rental Car Facility (Logan Airport, Boston)[1]	\$453,000,000	\$49,000,000	\$404,000,000		\$453,000,000	\$453,000,000	needs to be listed in Plan for Massport, no MPO money
I-93/Route 3 Interchange - Braintree Split (Braintree)	\$33,300,000		\$45,573,000		\$45,573,000	\$45,573,000	Braintree Split study with recommendations (2005)
I-93/I-95 Interchange (Canton)	\$120,000,000		\$164,228,000		\$164,228,000	\$164,228,000	Project in environmental probably ready for 2016 - University Ave/I-95/I-93 Study (1999)
I-95 Northbound/Dedham Street Ramp and Bridge (Canton)[2]	\$3,500,000	\$3,500,000			\$3,500,000	\$3,500,000	Project to be paid for by developer
Concord Rotary/Route 2 (Concord)	\$40,000,000			\$81,033,000	\$81,033,000	\$81,033,000	Preparing 25% plans - in design phase (Route 2 Corridor Study)
Route 2/Crosby's Corner Grade Separation (Concord and Lincoln)	\$31,500,000	\$12,450,000	\$19,050,000		\$31,500,000	\$72,000,000	In TIP (\$39 million programmed in 2011 and 2012, remaining should be programmed in 2013 and 2014) - (Route 2 Corridor Study)
Route 1/Route 114 Corridor Improvements (Danvers and Peabody)	\$46,800,000			\$94,808,000	\$94,808,000	\$94,808,000	MassHighway
Telecom City Boulevard (Everett, Malden, and Medford)	\$15,200,000		\$20,802,000		\$20,802,000	\$20,802,000	Economic Development Plan, new bridge, now called River's Edge
Revere Beach Parkway (Everett, Medford, and Revere)	\$93,600,000			\$189,616,000	\$189,616,000	\$189,616,000	Signal coordination in Lower North Shore Improvement Study (Everett request widening)
Route 126/Route 135 Grade Separation (Framingham)	\$50,000,000			\$101,291,000	\$101,291,000	\$101,291,000	Framingham and MassHighway project
Route 85 Improvements (Hudson)	\$5,900,000		\$8,075,000		\$8,075,000	\$8,075,000	Part of the I-495/I290 Interchange, Separated on request from Hudson
Route 1 Improvements (Malden and Revere)	\$65,000,000			\$131,678,000	\$131,678,000	\$131,678,000	Lower North Shore Improvement Study, approved by PRC
I-495/I-290/Route 85 Connector Interchange (Marlborough and Hudson)	\$27,600,000		\$37,773,000		\$37,773,000	\$37,773,000	MassHighway project
Needham Street/Highland Avenue/Winchester Street (Newton and Needham)	\$7,700,000		\$10,538,000		\$10,538,000	\$10,538,000	Needham, Newton, MassHighway project
Quincy Center Concourse, Phase 2 (Quincy)	\$7,000,000		\$9,580,000		\$9,580,000	\$7,500,000	Quincy - 75% design plans received by MassHighway, programmed in 2009 element of TIP
I-93/I-95 Interchange (Reading and Woburn)	\$171,000,000		\$234,025,000		\$234,025,000	\$246,474,000	I-93/I-95 Interchange Transportation Study
Mahoney Circle Grade Separation (Revere)	\$15,000,000			\$30,387,000	\$30,387,000	\$30,387,000	MassHighway project, no PRC approval
Route 1/Route 16 Interchange (Revere)	\$4,600,000		\$6,295,000		\$6,295,000	\$6,295,000	Lower North Shore Improvement Study
Route 1A/Route 16 Connection (Revere)	\$46,300,000			\$93,795,000	\$93,795,000	\$93,795,000	Lower North Shore Improvement Study
Boston Street (Salem)	\$2,300,000		\$3,148,000		\$3,148,000	\$3,148,000	MassHighway in preliminary design phase
Bridge Street (Salem)	\$3,500,000		\$4,790,000		\$4,790,000	\$6,864,000	MassHighway 25% design plans received by MassHighway
I-93/Mystic Avenue Interchange (Somerville)	\$58,500,000			\$118,510,000	\$118,510,000	\$118,510,000	Mystic Avenue/Route 128/I-93 Interchange Improvement Study - 1994, earmark for study in the 2009 element of TIP
S. Weymouth Naval Air Station Access Improvements (Weymouth, Hingham, and Rockland)[3]	\$42,000,000		\$42,000,000		\$42,000,000	\$42,000,000	Naval Station Redevelopment
Route 18 Capacity Improvements (Weymouth)	\$24,000,000	\$24,000,000			\$24,000,000	\$24,000,000	In 2010 element of TIP
Route 3 South Additional Lanes (Weymouth to Duxbury)	\$210,600,000			\$426,637,000	\$426,637,000	\$426,637,000	Federal requirement - using shoulder in peak - required to build additional lane to accommodate. Should we relook to include Braintree Split.
I-93/Route 129 Interchange Improvement Project (Wilmington and Reading)	\$17,500,000		\$23,950,000		\$23,950,000	\$23,950,000	Phase from Woburn St to Rte 38 about 80% complete - reconstruction with sidewalks, heard they want to extend to I-93
New Boston Street Bridge (Woburn)	\$2,400,000			\$4,862,000	\$4,862,000	\$4,862,000	City of Woburn request, no PRC approval no design plans, Woburn asked for 2010 at Municipal TIP Day, MassHighway site -\$4.5M
Total	\$1,663,350,000	\$230,854,100	\$840,723,500	\$1,566,360,000	\$2,637,937,600	\$2,709,522,440	
				Difference		\$71,584,840	

[1] This project will be paid for by the Massachusetts Port Authority. Funding for this project will come from General Airport Revenue Bonds, taxable revenue bonds supported by revenue from the daily Customer Facility Charge and rent from car companies, and Transportation Infrastructure Finance and Innovation Act (TIFIA) funds

[2] This project will be paid for by the developer and is not included in the total.

[3] Total project is \$45 million; the \$23 million programmed here is the amount of federal and state funds currently earmarked for the project. The remaining \$22 million will be funded with non-MPO revenues (developer, local, etc.).

Marshfield – Route 139 Widening (in Universe of Projects list in Plan)	\$7,150,200	25% design plans approved May 2008
Milford – Veterans Memorial Drive (in Universe of Projects list in Plan)		
Chelsea – Spruce Street widening (possible)	\$2,700,000	
Woburn – Montvale Avenue	\$34,000,000	PRC Approval, no design plans
Multi-Modal Center (South Weymouth)	\$8,000,000	earmarked
T Under D	\$80,000,000	

MEMORANDUM

To: Transportation Planning and Programming Committee
From: Anne McGahan
Date: October 27, 2008
Re: Current State Implementation Plan Commitments

As requested at the October 16, 2008 Transportation Planning & Programming Committee meeting, the following is a revised list of transit expansion projects that delineates which are legal State Implementation Plan commitments and others that are included in the current Plan that are not SIP commitments.

Transit Projects

SIP Projects (EOTPW Responsibility)	
Fairmount Line improvement project	MI/Exp
1000 Additional Park & Ride Spaces	MI/Exp
Green Line to Medford Hillside, with spur to Union Square (Boston, Medford, and Somerville)	MI/Exp
Russia Wharf Ferry (wharf only, no service) (Boston)	Exp
MBTA Projects	
Silver Line, Phase III (Boston)	MI/Exp
100 Additional Buses to Improve Service on Existing Routes (Regionwide)	MI/Exp
Assembly Square Orange Line Station (Somerville)	MI/Exp
Additional EOTPW Projects	
Urban Ring, Phase II (compact communities)	MI/Exp
North Shore Transit Improvements (Revere to Lynn)	MI/Exp

* Design of the Red Line/Blue Line Connector is also included as a SIP commitment, however the construction of this project is not included as a commitment.

The Silver Line Phase III, 100 additional buses, and Assembly Square are included in the current Plan and are currently the responsibility of the MBTA. In the current Plan, EOTPW is responsible for the SIP commitment projects, Urban Ring, and the North Shore Transit Improvements.

MEMORANDUM

To: Transportation Planning and Programming Committee
From: Anne McGahan and Gregg Lantos
Date: October 30, 2008
Re: Volume to Capacity Ratio Information at Select Locations in the Boston Region MPO

As requested, staff has assembled volumes and volume to capacity ratio information at select locations around the Boston MPO region using 2006 traffic count data and the 2030 No-Build model run prepared for JOURNEY TO 2030. The following information is attached:

- The first set of tables includes information at locations associated with the current recommended projects in the JOURNEY TO 2030 Plan. Information is provided for the AM Peak Period and PM Peak Period. 2006 traffic count information and 2030 traffic volumes estimated from the 2030 No-Build model run is provided along with the percent change between 2006 and 2030 and the volume to capacity ratio at the specific location for 2030 under No-Build conditions.
- The second set of tables includes information on express highways and selected arterials in the Boston Region MPO. Information is also provided for the AM Peak Period and PM Peak Period. 2006 traffic count information and 2030 traffic volumes estimated from the 2030 No-Build model run is provided along with the percent change between 2006 and 2030 and the volume to capacity ratio at the specific location for 2030 under No-Build conditions.

Background

Several projects are not included in the capacity analysis, which do not lend themselves to specific analysis of the immediate project area. For example, the Boston Haul Road addresses sub-area truck traffic concerns rather than localized congestion. The New Boston Street Bridge in Woburn provides new connectivity, and thereby reduces vehicle miles of traffic by eliminating the need to take a more circuitous route, but does not reduce congestion on Boston Street itself.

The volume-to-capacity ratio (V/C) provides a measure of demand flow rate to capacity for a traffic facility. While the same measure can be applied to both intersections and highway segments, only the latter are provided in the present analysis, which is based upon the outputs of the traffic demand modeling forecasts. It is calculated as:

$$V/C = \text{peak hour volume} / (\text{number of lanes} * \text{capacity per lane})$$

It should be noted that V/C calculations taken from a regional traffic model provide an approximation of congested conditions but may not completely account for factors such as upstream queuing delays, intersection delay, merge problems, etc. Nevertheless, comparing the V/C ratios of

proposed project areas under the No-Build condition with those of expressway facilities shown in the second attachment can aid in evaluating the need for mitigation in project areas.

Modeled Volume to Capacity Information at Plan Project Locations

Twenty-five (25) project areas are presented in the analysis. With the caveat that a model-generated V/C is but one indicator of project need, a ratio that is 1.0 or greater would indicate a condition of full utilization of the facility's reasonable capacity and the degree to which the ratio exceeds this level strongly correlates with the amount of delay that can be anticipated in the future analysis year of 2030. Allowing for a 5% margin of error on the downside, 22 of the 25 locations (88%) are projected at .95 V/C or higher in at least one peak period (17 or 68% in the AM peak and 22 or 88% in the PM peak meet this threshold). Looking at the second attachment which presents V/C by corridors throughout the model area, 58 of 86 (67%) highway segments within the MPO area are at V/C of .95 or higher and 66 (77%) during the PM peak. Project areas, based upon this measure, have a somewhat higher propensity for congestion during the PM peak and about the same during the AM period. But they do not appear very dissimilar with the region as a whole, most of which is very congested during peak rush hours.

Several project areas stand out in particular. The I-93/I-95 interchange in Canton has two ramps in the PM period projected to operate at V/C near 2.0, with the southbound mainline close to that level. The projected escalating growth on the I-95 northbound ramp to I-93 north on the order of 130% will significantly exacerbate the congestion along that access point. Addressing interchange ramp queues is of vital importance as they present serious safety issues when backed up to through travel lanes.

The Concord Rotary is a location, which will experience high V/C in both time periods in the peak flow direction, with traffic growth in the area of 30% from base year volumes. Lengthy queues, which now persist on Route 2 will therefore worsen in the future analysis year, with V/C rising to the 1.65 to 1.75 range in the peak direction.

Extreme congestion levels on Needham Street/Highland Ave. are indicated by V/C exceeding 2.0 in both time periods. It may be that capacity in the model is somewhat underrepresented, as recent Congestion Management System monitoring indicates speeds around 15 mph (LOS E/F), and moderate growth of 25-30% in the future year would seem not sufficient to push V/C to such an extreme level. Nevertheless, the area is one to be avoided if possible, due to travel delay.

Other project areas, which appear to stand out in terms of congestion as measured by V/C are Route 18 in Weymouth, Boston Street in Salem, Route 1 Malden/Revere, Crosby's Corner, Route 126/136 in Framingham and Route 85 in Hudson.

Two projects in Revere provide examples where project need is not indicated by roadway segment V/C analysis. The Route 1/16 ramp additions do not address congestion so much as the necessity of exiting one highway in order to access another, a process which creates considerable delay in travel even in the absence of a capacity shortfall. The Route 1A/Route 16 Connection area is one that would be better evaluated through intersection capacity analysis rather than V/C of road segments.

2030 AM ESTIMATED VOLUMES AND VOLUME/CAPACITY RATIOS AT PLAN PROJECT LOCATIONS

2030 NO-BUILD

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>Estimated Volume</u>	<u>2006-'30 Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>MIDDLESEX TURNPIKE, BEDFORD, BURLINGTON, BILLERICA - widen 1 to 2 lanes per direction</u>					
NB South of Manning Rd, Billerica	Billerica	520	563	8%	0.21
SB		2240	2,998	34%	1.12
<u>ROUTE 128 CAPACITY IMPROVEMENTS, BEVERLY TO PEABODY</u>					
NB Beverly/Danvers line	Beverly	6600	6,982	6%	0.67
SB		8970	9,509	6%	0.91
<u>ROUTE 1A/BOARDMAN ST GRADE SEPARATION, BOSTON</u>					
EB Rte 1A south of Boardman St	Boston	3,625	3,008	-17%	0.43
WB		6,935	8,552	23%	1.23
<u>RUTHERFORD AVE BYPASS, BOSTON</u>					
NB Rutherford Ave n. of Austin St	Boston	2,090	2,529	21%	0.47
SB		7,265	7,197	-1%	1.35
<u>I-93/I-95 INTERCHANGE IMPROVEMENTS, CANTON</u>					
NB I-95/128 s. of on ramp from I-95		16,300	22,967	41%	1.47
SB I-95/128 n. of off-ramp to I-95 sb		13,650	16,155	18%	1.04
NB I-95 NB ramp to I-93 NB		5,200	6,467	24%	1.35
SB I-93 SB ramp to I-95 SB		4,650	4,725	2%	0.98
<u>I-95 NORTHBOUND RAMP, CANTON</u>					
NB University Ave, s. of Blue Hill Ave	Westwood	2,335	2,821	21%	1.11
SB		980	1,912	95%	0.75
<u>CONCORD ROTARY RECONSTRUCTION</u>					
EB Rotary	Concord	6,700	8,392	25%	1.66
WB		4,200	4,941	18%	0.98
<u>CROSBY'S CORNER GRADE SEPARATION, CONCORD & LINCOLN</u>					
EB Rte 2 east of Crosby's Corner	Lincoln	7,095	8,226	16%	1.62
WB		4,225	4,593	9%	0.91
<u>ROUTE 114/RTE 1 IMPROVEMENTS, DANVERS & PEABODY</u>					
EB Rte 114 west of Rte 1	Danvers	4,990	5,598	12%	1.05
WB		5,015	5,048	1%	0.95
<u>TELECOM CITY BLVD, EVERETT, MALDEN & MEDFORD</u>					
EB Rte 16 at Medford/Everett line		4,395	5,780	32%	0.72
WB		7,095	6,881	-3%	0.86
<u>REVERE BEACH PARKWAY IMPROVEMENTS, EVERETT & MEDFORD</u>					
EB Rte 16 east of I-93		1,700	1,862	10%	0.37
WB		1,300	1,220	-6%	0.24
<u>ROUTE 126/135 GRADE SEPARATION, FRAMINGHAM</u>					
NB Route 126 north of Rte 135	Framingham	3,170	2,415	-24%	0.75
SB		2,620	2,296	-12%	0.72
<u>ROUTE 85 IMPROVEMENTS, HUDSON</u>					
NB North of Rte 85/I-290 Connector	Hudson	2,090	2,409	15%	0.97
SB		2,655	3,157	19%	1.27
<u>ROUTE 1 IMPROVEMENTS, MALDEN & REVERE</u>					
NB at Malden/Revere line		6,705	7,989	19%	0.79
SB		11,970	14,558	22%	1.44

2030 AM ESTIMATED VOLUMES AND VOLUME/CAPACITY RATIOS AT PLAN PROJECT LOCATIONS

2030 NO-BUILD

Location	Town	2006 Count	Estimated Volume	2006-'30 Pct Change	Vol/Cap Ratio	
<u>I-495/I-290 INTERCHANGE, MARLBOROUGH & HUDSON</u>						
SB	I-495 ramp to I-290 westbound	3,600	4,261	18%	0.89	
NB	I-495 ramp to I-290 westbound	2,050	3,275	60%	0.68	
EB	I-290 ramp to I-495 northbound	4,300	5,745	34%	1.20	
<u>NEEDHAM ST/HIGHLAND AVE, NEEDHAM & NEWTON</u>						
EB	Highland Ave at Needham/Newton CL	2,605	3,362	29%	1.26	
WB		4,030	4,330	7%	1.62	
<u>I-93/I-95 INTERCHANGE, READING & WOBURN</u>						
EB	I-95 east of I-93	14,500	14,401	-1%	0.69	
WB		18,000	18,858	5%	1.21	
<u>MAHONEY CIRCLE GRADE SEPARATION, REVERE</u>						
NB	Rte 1A north of Circle	2,520	2,453	-3%	0.57	
SB		4,015	4,328	8%	1.01	
<u>ROUTE 1/ROUTE 16 INTERCHANGE IMPROVEMENTS, REVERE</u>						
SB	Route 1 north of interchange	9,200	9,112	-1%	0.63	
WB	Route 16 over Route 1	4,460	5,539	24%	0.41	
<u>ROUTE 16/ROUTE 1A CONNECTION, REVERE</u>						
EB	Revere Beach Pkwy w. of Green St.	2,450	3,913	60%	0.49	
WB		3,600	3,141	-13%	0.39	
<u>BOSTON ST SALEM - widen to 3-lane cross section</u>						
EB	West of Essex St	Salem	2,720	2,797	3%	1.31
WB			2,160	2,164	0%	1.01
<u>BRIDGE ST SALEM - widen from 1 to 2 lanes per direction</u>						
NB	North of Flint St	Salem	2,060	2,305	12%	1.08
SB			1,975	2,262	15%	1.06
<u>ROUTE 18 CAPACITY IMPROVEMENTS, WEYMOUTH</u>						
NB	North of Pond St	Weymouth	3,275	4,124	26%	1.55
SB			1,480	1,781	20%	0.67
<u>ROUTE 3 WIDENING, WEYMOUTH TO DUXBURY</u>						
NB	at Weymouth line	Hingham	17,210	19,623	14%	1.47
NB	between Exits 13 & 14	Norwell	11,885	14,554	22%	1.09
NB	at Norwell line	Marshfield	9,330	12,375	33%	0.93
SB	at Weymouth line	Hingham	6,925	7,295	5%	0.70
SB	between Exits 13 & 14	Norwell	5,900	6,586	12%	0.63
SB	at Norwell line	Marshfield	4,425	5,061	14%	0.49
<u>I-93/RTE 129 INTERCHANGE IMPROVEMENTS, WILMINGTON & READING</u>						
EB	Rte 129 east of I-93	Reading	1,950	2,213	13%	0.87
WB			1,485	1,590	7%	0.63

2030 PM ESTIMATED VOLUMES AND VOLUME/CAPACITY RATIOS AT PLAN PROJECT LOCATIONS

2030 NO-BUILD

Location	Town	2006 Count	Estimated Volume	2006-'30 Pct Change	Vol/Cap Ratio
<u>MIDDLESEX TURNPIKE, BEDFORD, BURLINGTON, BILLERICA - widen 1 to 2 lanes per direction</u>					
NB South of Manning Rd, Billerica	Billerica	2,120	2,911	37%	1.09
SB South of Manning Rd, Billerica	Billerica	845	1,108	31%	0.42
<u>ROUTE 128 CAPACITY IMPROVEMENTS, BEVERLY TO PEABODY</u>					
NB Beverly/Danvers line	Beverly	8,515	9,458	11%	0.91
SB Beverly/Danvers line	Beverly	8,685	9,947	15%	0.96
<u>ROUTE 1A/BOARDMAN ST GRADE SEPARATION, BOSTON</u>					
EB Rte 1A south of Boardman St	Boston	6,335	6,646	5%	0.96
WB Rte 1A south of Boardman St	Boston	4,605	6,787	47%	0.98
<u>RUTHERFORD AVE BYPASS, BOSTON</u>					
NB Rutherford Ave n. of Austin St	Boston	4,540	5,151	13%	0.97
SB		6,020	6,249	4%	1.17
<u>I-93/I-95 INTERCHANGE IMPROVEMENTS, CANTON</u>					
NB I-95 NB ramp to I-93 NB		4,100	9,452	131%	1.97
SB I-95/128 n. of off-ramp to I-95 sb		20,900	27,914	34%	1.79
NB I-95/128 s. of on ramp from I-95		11,100	11,666	5%	0.75
SB I-93 SB ramp to I-95 SB		8,300	9,515	15%	1.98
<u>I-95 NORTHBOUND RAMP, CANTON</u>					
NB University Ave, s. of Blue Hill Ave	Westwood	1,030	2,346	128%	0.93
SB		2,200	2,776	26%	1.10
<u>CONCORD ROTARY RECONSTRUCTION</u>					
EB Rotary	Concord	4,400	5,693	29%	1.12
WB		6,600	8,811	33%	1.74
<u>CROSBY'S CORNER GRADE SEPARATION, CONCORD & LINCOLN</u>					
EB Rte 2 east of Crosby's Corner	Lincoln	4,410	5,339	21%	1.05
WB		5,970	7,365	23%	1.45
<u>ROUTE 114/RTE 1 IMPROVEMENTS, DANVERS & PEABODY</u>					
EB Rte 114 west of Rte 1	Danvers	5,570	6,090	9%	1.14
WB		5,290	5,849	11%	1.10
<u>TELECOM CITY BLVD, EVERETT, MALDEN & MEDFORD</u>					
EB Rte 16 at Medford/Everett line		6,680	7,693	15%	0.96
WB		5,930	6,309	6%	0.79
<u>REVERE BEACH PARKWAY IMPROVEMENTS, EVERETT & MEDFORD</u>					
EB Rte 16 east of I-93		4,600	4,395	-4%	0.87
WB		3,700	3,734	1%	0.74
<u>ROUTE 126/135 GRADE SEPARATION, FRAMINGHAM</u>					
NB Route 126 north of Rte 135	Framingham	3,065	3,241	6%	1.01
SB		4,410	4,815	9%	1.50
<u>ROUTE 85 IMPROVEMENTS, HUDSON</u>					
NB North of Rte 85/I-290 Connector	Hudson	3,595	4,193	17%	1.68
SB		3,135	3,817	22%	1.53
<u>ROUTE 1 IMPROVEMENTS, MALDEN & REVERE</u>					
NB at Malden/Revere line		11,425	14,611	28%	1.44
SB		7,830	11,224	43%	1.11

2030 PM ESTIMATED VOLUMES AND VOLUME/CAPACITY RATIOS AT PLAN PROJECT LOCATIONS

2030 NO-BUILD

Location	Town	2006 Count	Estimated Volume	2006-'30 Pct Change	Vol/Cap Ratio
<u>I-495/I-290 INTERCHANGE, MARLBOROUGH & HUDSON</u>					
SB	I-495 ramp to I-290 westbound	4,850	6,249	29%	1.30
NB	I-495 ramp to I-290 westbound	4,100	6,203	51%	1.29
EB	I-290 ramp to I-495 northbound	4,500	5,324	18%	1.11
<u>NEEDHAM ST/HIGHLAND AVE, NEEDHAM & NEWTON</u>					
EB	Highland Ave at Needham/Newton CL	3,090	3,781	22%	1.42
WB		5,000	5,869	17%	2.20
<u>I-93/I-95 INTERCHANGE, READING & WOBURN</u>					
EB	I-95 east of I-93	19,500	21,355	10%	1.03
WB		17,500	18,248	4%	1.17
<u>MAHONEY CIRCLE GRADE SEPARATION, REVERE</u>					
NB	Rte 1A north of Circle	4,665	4,347	-7%	1.02
SB		4,125	4,403	7%	1.03
<u>ROUTE 1/ROUTE 16 INTERCHANGE IMPROVEMENTS, REVERE</u>					
SB	Route 1 north of interchange	5,350	6,381	19%	0.44
WB	Route 16 over Route 1	4,150	4,771	15%	0.35
<u>ROUTE 16/ROUTE 1A CONNECTION, REVERE</u>					
EB	Revere Beach Pkwy w. of Green St.	4,800	6,644	38%	0.83
WB		4,400	6,425	46%	0.80
<u>BOSTON ST SALEM - widen to 3-lane cross section</u>					
EB	West of Essex St	2,650	2,885	9%	1.35
WB	West of Essex St	2,365	2,642	12%	1.24
<u>BRIDGE ST SALEM - widen from 1 to 2 lanes per direction</u>					
NB	North of Flint St	1,745	2,038	17%	0.96
SB	North of Flint St	2,430	2,655	9%	1.24
<u>ROUTE 18 CAPACITY IMPROVEMENTS, WEYMOUTH</u>					
NB	North of Pond St	2,285	2,849	25%	1.07
SB		2,775	3,864	39%	1.45
<u>ROUTE 3 WIDENING, WEYMOUTH TO DUXBURY</u>					
NB	at Weymouth line	10,045	11,587	15%	1.11
NB	between Exits 13 & 14	8,895	10,610	19%	1.02
NB	at Norwell line	6,415	8,194	28%	0.79
SB	at Weymouth line	15,140	18,512	22%	1.39
SB	between Exits 13 & 14	12,725	15,872	25%	1.19
SB	at Norwell line	10,805	14,659	36%	1.10
<u>I-93/RTE 129 INTERCHANGE IMPROVEMENTS, WILMINGTON & READING</u>					
EB	Rte 129 east of I-93	1,720	1,983	15%	0.78
WB		2,490	2,853	15%	1.13

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>INTERSTATE 90, MASSACHUSETTS TURNPIKE</u>					
<u>Eastbound</u>					
Exit 11 to 11a, ext station	Upton-Westbor.	12,635	17,884	42%	1.15
Exit 11a to 12, e. of I-495	Southborough	14,400	18,691	30%	1.20
Exit 12 to 13, e. of Route 9	Framingham	15,150	18,950	25%	1.21
Exit 13 to 14, e. of Route 30	Natick	15,900	19,040	20%	1.22
Exit 15 to 16, e. of Route 128	Newton	13,400	16,538	23%	1.06
Exit 16 to 17, e. of W. Newton	Newton	16,750	19,532	17%	1.25
Exit 17 to 18, e. Newton Cor.	Newton	17,250	19,998	16%	0.96
Exit 19-22, w. of Mass Ave	Boston	18,700	21,570	15%	1.06
Exit 23-24, e. of Arlington St	Boston	12,090	15,414	27%	1.01
Exit 25 to 26, TW Tunnel	Boston	6,250	11,954	91%	1.25
<u>Westbound</u>					
Exit 11 to 11a, ext station	Upton-Westbor.	4,860	7,962	64%	0.51
Exit 11a to 12, e. of I-495	Southborough	6,000	7,363	23%	0.47
Exit 12 to 13, e. of Route 9	Framingham	8,350	9,075	9%	0.58
Exit 13 to 14, e. of Route 30	Natick	11,400	11,827	4%	0.76
Exit 15 to 16, e. of Route 128	Newton	10,350	11,067	7%	0.71
Exit 16 to 17, e. of W. Newton	Newton	12,350	13,002	5%	0.83
Exit 17 to 18, e. Newton Cor.	Newton	11,500	11,668	1%	0.56
Exit 19-22, w. of Mass Ave	Boston	12,300	12,645	3%	0.62
Exit 23-24, e. of Arlington St	Boston	9,055	9,164	1%	0.60
Exit 25 to 26, TW Tunnel	Boston	5,065	4,695	-7%	0.49
<u>INTERSTATE 93 NORTH OF BOSTON</u>					
<u>Southbound</u>					
at NH Line, ext. station	Methuen	12,915	24,867	93%	1.59
at Andover line	Methuen	21,460	27,342	27%	1.75
north of I-495	Andover	18,285	21,727	19%	1.22
at Wilmington line	Andover	20,410	23,360	14%	1.50
north of Rte 129	Wilmington	24,395	27,927	14%	1.34
south of I-95/Rte 128	Woburn	20,565	23,543	14%	1.13
south of Exit 35	Stoneham	17,145	19,639	15%	0.94
north of Exit 30	Medford	20,825	23,555	13%	1.16
<u>Northbound</u>					
at NH Line, ext. station	Methuen	6,825	10,370	52%	0.66
at Andover line	Methuen	7,735	9,513	23%	0.61
north of I-495	Andover	9,730	11,063	14%	0.71
at Wilmington line	Andover	12,215	12,672	4%	0.81
north of Rte 129	Wilmington	12,925	13,607	5%	0.65
south of I-95/Rte 128	Woburn	15,435	16,298	6%	0.78
south of Exit 35	Stoneham	16,240	16,798	3%	0.81
north of Exit 30	Medford	12,940	14,447	12%	0.69
<u>INTERSTATE 93 SOUTH OF BOSTON</u>					
<u>Northbound</u>					
at Milton line	Canton	16,650	19,635	18%	0.94
between Rtes 24 & 28	Randolph	19,980	21,982	10%	1.06
north of Route 28	Quincy	20,610	22,143	7%	1.06
SE Expwy @ Braintree Split	Braintree	19,685	22,854	16%	1.16
SE Expwy n. of Exit 14	Boston	21,470	22,343	4%	1.10
SE Expwy n. of Exit 15	Boston	23,475	24,356	4%	1.20
SE Expwy n. of Exit 16	Boston	23,450	24,443	4%	1.21

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>Southbound</u>					
at Milton line	Canton	21,095	24,630	17%	1.18
between Rtes 24 & 28	Randolph	19,305	19,685	2%	0.95
north of Route 28	Quincy	19,405	19,308	0%	0.93
SE Expwy @ Braintree Split	Braintree	14,875	16,056	8%	0.81
SE Expwy n. of Exit 14	Boston	15,240	15,528	2%	1.02
SE Expwy n. of Exit 15	Boston	16,875	17,065	1%	0.84
SE Expwy n. of Exit 16	Boston	14,000	13,998	0%	0.69

INTERSTATE-95, I-90 TO NH LINE

<u>Southbound</u>					
at N.H. State Line-ext station	Salisbury	11,160	15,790	41%	1.01
at Amesbury line	Salisbury	7,015	10,117	44%	0.65
at Newburyport line	Amesbury	9,830	13,472	37%	0.86
south of Exit 56, Scotland Rd	Newbury	9,565	12,899	35%	0.62
north of Route 133	Georgetown	9,755	13,855	42%	0.67
north of Route 1	Topsfield	14,290	19,519	37%	0.94
north of Route 62	Danvers	12,320	16,910	37%	0.81
south of Peabody line	Lynnfield	14,140	16,208	15%	1.04
north of Route 129	Wakefield	16,105	16,805	4%	1.08
south of Route 38	Woburn	20,415	20,705	1%	1.00
north of Route 4	Lexington	20,880	22,061	6%	1.06
north of Winter St	Waltham	23,865	24,514	3%	1.18
south of Route 20	Weston	20,135	21,445	7%	1.03

<u>Northbound</u>					
at N.H. State Line-ext station	Salisbury	6,975	9,347	34%	0.60
at Amesbury line	Salisbury	3,330	4,745	42%	0.30
at Newburyport line	Amesbury	4,960	6,562	32%	0.42
south of Exit 56, Scotland Rd	Newbury	4,670	5,847	25%	0.28
north of Route 133	Georgetown	4,635	5,772	25%	0.28
north of Route 1	Topsfield	5,120	6,203	21%	0.30
north of Route 62	Danvers	5,020	6,047	20%	0.29
south of Peabody line	Lynnfield	12,435	12,783	3%	0.82
north of Route 129	Wakefield	13,505	13,721	2%	0.88
south of Route 38	Woburn	16,540	17,162	4%	0.83
north of Route 4	Lexington	17,320	18,420	6%	0.89
north of Winter St	Waltham	19,010	19,683	4%	0.95
south of Route 20	Weston	20,500	22,263	9%	1.07

INTERSTATE-95, I-90 TO R.I. LINE

<u>Northbound</u>					
at R.I. Line	Attleborough	10,080	17,188	71%	1.10
north of I-295	Attleborough	14,820	20,606	39%	1.32
north of I-495	Foxboro	13,875	17,650	27%	1.13
north of Route 1	Sharon	13,950	17,543	26%	1.12
south of I-93 interchange	Canton	14,435	18,744	30%	1.20
north of University Ave	Dedham	17,545	23,645	35%	1.14
at Needham line	Dedham	16,815	22,608	34%	1.09
south of Route 9	Needham	18,530	23,641	28%	1.14
south of I-90	Newton	13,605	15,739	16%	0.76

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>Southbound</u>					
at R.I. Line	Attleborough	8,160	11,868	45%	0.76
north of I-295	Attleborough	9,410	12,115	29%	0.78
north of I-495	Foxboro	7,125	8,998	26%	0.58
north of Route 1	Sharon	6,770	7,804	15%	0.50
south of I-93 interchange	Canton	7,635	8,339	9%	0.53
north of University Ave	Dedham	13,220	16,575	25%	0.80
at Needham line	Dedham	12,010	14,654	22%	0.70
south of Route 9	Needham	14,800	17,453	18%	0.84
south of I-90	Newton	19,620	21,869	11%	1.05

INTERSTATE 495, NORTH OF MASSACHUSETTS TURNPIKE

<u>Southbound</u>					
at Amesbury line	Salisbury	4,405	5,966	35%	0.57
at Merrimac line	Amesbury	7,010	8,970	28%	0.57
at Methuen line	Haverhill	15,290	16,973	11%	1.09
north of Route 114	Lawrence	14,225	16,896	19%	1.08
at Andover line	Lawrence	13,405	15,868	18%	1.02
north of I-93	Andover	13,800	15,837	15%	1.02
south of Route 133	Tewksbury	12,925	13,610	5%	0.87
north of Lowell Connector	Lowell	14,630	15,156	4%	0.97
north of Route 4	Chelmsford	12,125	13,120	8%	0.84
south of Route 119	Littleton	13,410	14,146	5%	0.91
south of Route 111	Boxborough	11,290	12,333	9%	0.79
at Hudson line	Bolton	12,500	13,235	6%	0.85
south of Route 20	Marlborough	14,110	15,890	13%	1.02
south of Route 9	Westborough	10,555	12,729	21%	0.82

<u>Northbound</u>					
at Amesbury line	Salisbury	3,050	4,230	39%	0.41
at Merrimac line	Amesbury	5,645	7,986	41%	0.51
at Methuen line	Haverhill	9,065	13,149	45%	0.84
north of Route 114	Lawrence	7,755	10,189	31%	0.65
at Andover line	Lawrence	8,335	10,753	29%	0.69
north of I-93	Andover	8,705	10,712	23%	0.69
south of Route 133	Tewksbury	12,155	14,666	21%	0.94
north of Lowell Connector	Lowell	14,790	18,211	23%	1.17
north of Route 4	Chelmsford	11,685	14,582	25%	0.93
south of Route 119	Littleton	12,170	15,130	24%	0.97
south of Route 111	Boxborough	9,315	11,564	24%	0.74
at Hudson line	Bolton	10,505	12,592	20%	0.81
south of Route 20	Marlborough	8,835	10,670	21%	0.68
south of Route 9	Westborough	13,025	14,937	15%	0.96

INTERSTATE 495, SOUTH OF MASSACHUSETTS TURNPIKE

<u>Northbound</u>					
east of Route 58	to Middleborough	5,295	12,834	142%	0.82
north of Route 105	Middleborough	7,065	10,594	50%	1.02
south of Route 24	Raynham	8,945	11,678	31%	1.12
south of Exit 9	Taunton	10,140	12,446	23%	0.80
south of I-95	Mansfield	12,105	13,347	10%	0.86
north of Route 1	Wrentham	9,345	10,405	11%	0.67
at Franklin line	Bellingham	10,700	12,894	21%	0.83
south of Route 85	Milford	12,330	13,608	10%	0.87
at Milford line	Hopkinton	12,770	13,984	10%	0.90
south of Mass Turnpike	Hopkinton	12,305	14,039	14%	0.90

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>Southbound</u>					
east of Route 58	to Middleborough	2,740	5,597	104%	0.36
north of Route 105	Middleborough	3,620	5,359	48%	0.52
south of Route 24	Raynham	4,575	6,474	42%	0.62
south of Exit 9	Taunton	7,355	8,562	16%	0.55
south of I-95	Mansfield	8,230	9,677	18%	0.62
north of Route 1	Wrentham	8,475	9,551	13%	0.61
at Franklin line	Bellingham	8,585	10,058	17%	0.64
south of Route 85	Milford	7,675	9,177	20%	0.59
at Milford line	Hopkinton	7,755	9,130	18%	0.59
south of Mass Turnpike	Hopkinton	7,370	8,590	17%	0.55

ROUTE 1, NORTH OF BOSTON

<u>Southbound</u>					
at NH Line, ext. station	Salisbury	790	926	17%	0.33
at Newburyport line	Salisbury	1,410	1,934	37%	0.69
south of Hanover St	Newbury	1,205	1,746	45%	0.60
at Ipswich line	Rowley	1,525	1,776	16%	0.61
south of Rte 62	Danvers	3,440	5,102	48%	0.49
north of Lowell St.	Peabody	3,055	4,237	39%	0.43
south of Lowell St.	Peabody	3,380	4,176	24%	0.75
north of Lynn Fells Pkwy	Saugus	13,885	17,608	27%	1.22
at Revere line	Malden	11,970	16,270	36%	1.07
Tobin Bridge	Boston	9,410	10,947	16%	0.80

<u>Northbound</u>					
at NH Line, ext. station	Salisbury	720	837	16%	0.30
at Newburyport line	Salisbury	720	807	12%	0.29
south of Hanover St	Newbury	825	966	17%	0.33
at Ipswich line	Rowley	1,020	1,170	15%	0.40
south of Rte 62	Danvers	2,515	2,628	4%	0.25
north of Lowell St.	Peabody	3,800	3,824	1%	0.39
south of Lowell St.	Peabody	3,820	4,090	7%	0.73
north of Lynn Fells Pkwy	Saugus	8,665	9,864	14%	0.69
at Revere line	Malden	6,705	8,146	21%	0.54
Tobin Bridge	Boston	5,690	8,223	45%	0.60

ROUTE 1A

<u>Southbound</u>					
at NH Line, ext. station	Salisbury	390	575	47%	0.27
at Newbury line	Newburyport	585	731	25%	0.34
at Rowley line	Newbury	400	508	27%	0.18
at Ipswich line	Rowley	1,545	2,080	35%	0.78
north of Railroad Ave	Hamilton	1,115	1,080	-3%	0.43
north of New Balch St	Beverly	1,240	1,484	20%	0.59
Essex Bridge, Salem line	Beverly	3,030	3,627	20%	0.85
Loring Ave, south of Jefferson Ave	Salem	2,855	3,101	9%	1.45
at Revere line	Lynn	6,260	7,330	17%	0.92
at Boston line	Revere	6,875	8,636	26%	1.25
Sumner Tunnel	Boston	5,065	5,631	11%	0.62

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

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<u>Northbound</u>					
at NH Line, ext. station	Salisbury	485	696	43%	0.33
at Newbury line	Newburyport	330	465	41%	0.22
at Rowley line	Newbury	215	293	36%	0.10
at Ipswich line	Rowley	1,045	1,042	0%	0.39
north of Railroad Ave	Hamilton	760	788	4%	0.31
north of New Balch St	Beverly	1,185	1,214	2%	0.48
Essex Bridge, Salem line	Beverly	2,280	2,635	16%	0.62
Loring Ave, south of Jefferson Ave	Salem	3,005	2,982	-1%	1.40
at Revere line	Lynn	2,850	3,127	10%	0.39
at Boston line	Revere	3,545	3,193	-10%	0.46
Callahan Tunnel	Boston	3,140	9,372	198%	1.03

ROUTE 2

<u>Eastbound</u>					
at Leominster TL - ext station	Lancaster	7,280	14,770	103%	1.42
at Littleton TL	Harvard	8,905	12,385	39%	1.19
east of Concord Rotary	Concord	6,755	7,883	17%	1.48
west of Sudbury Rd	Concord	6,275	7,368	17%	1.26
at Lexington TL	Lincoln	8,685	10,389	20%	1.08
east of I-95	Lexington	10,415	13,654	31%	0.88
at Cambridge CL	Belmont	9,380	10,478	12%	1.06
north of Vassal Ln	Cambridge	3,205	3,411	6%	0.67
Gerry's Landing, E. of Mt Auburn	Cambridge	5,700	6,051	6%	0.84

<u>Westbound</u>					
at Leominster TL - ext station	Lancaster	3,380	6,213	84%	0.60
at Littleton TL	Harvard	3,375	4,696	39%	0.45
east of Concord Rotary	Concord	4,230	4,694	11%	0.88
west of Sudbury Rd	Concord	3,930	4,103	4%	0.70
at Lexington TL	Lincoln	5,055	5,414	7%	0.56
east of I-95	Lexington	10,730	11,355	6%	0.73
at Cambridge CL	Belmont	5,390	5,622	4%	0.57
north of Vassal Ln	Cambridge	4,205	4,318	3%	0.85
Gerry's Landing, E. of Mt Auburn	Cambridge	4,100	4,388	7%	0.61

ROUTE 3, NORTH OF BOSTON

<u>Southbound</u>					
at N.H. State Line-ext station	Tyngsborough	12,450	21,440	72%	1.37
south of Exit 34	Tyngsborough	12,040	17,478	45%	1.12
north of I-495	Chelmsford	13,125	17,803	36%	0.68
south of Rte 129	Billerica	19,600	23,215	18%	1.12
south of Treble Cove Rd	Billerica	18,055	21,248	18%	1.36
north of Rte 62	Bedford	16,700	19,457	17%	1.25
north of Rte 128	Burlington	13,400	15,677	17%	1.00

<u>Northbound</u>					
at N.H. State Line-ext station	Tyngsborough	5,810	9,754	68%	0.63
south of Exit 34	Tyngsborough	6,415	8,950	40%	0.57
north of I-495	Chelmsford	7,920	8,870	12%	0.34
south of Rte 129	Billerica	8,480	9,130	8%	0.44
south of Treble Cove Rd	Billerica	7,810	7,887	1%	0.51
north of Rte 62	Bedford	7,750	7,831	1%	0.50
north of Rte 128	Burlington	8,500	9,077	7%	0.58

2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
ROUTE 3, SOUTH OF BOSTON					
<u>Northbound</u>					
at Bourne line, ext station	Plymouth	3,240	5,796	79%	0.56
between Exits 2 & 3	Plymouth	4,825	8,463	75%	0.81
between Exits 3 & 4	Plymouth	5,460	9,561	75%	0.92
south of Route 44	Plymouth	7,790	11,764	51%	1.13
between Exits 8 & 9	Kingston	8,685	12,437	43%	1.20
between Exits 13 & 14	Norwell	11,885	14,567	23%	1.09
at Weymouth line	Hingham	17,210	19,641	14%	1.47
at Braintree line	Weymouth	16,675	19,405	16%	1.24
<u>Southbound</u>					
at Bourne line, ext station	Plymouth	2,520	3,903	55%	0.38
between Exits 2 & 3	Plymouth	3,055	4,084	34%	0.39
between Exits 3 & 4	Plymouth	3,205	4,125	29%	0.40
south of Route 44	Plymouth	5,555	6,394	15%	0.61
between Exits 8 & 9	Kingston	6,305	6,604	5%	0.64
between Exits 13 & 14	Norwell	5,900	6,604	12%	0.63
at Weymouth line	Hingham	6,925	7,326	6%	0.47
at Braintree line	Weymouth	10,295	10,846	5%	0.70
ROUTE 3A, NORTH OF BOSTON					
<u>Southbound</u>					
at NH line - ext. station	Tyngsborough	985	1,967	100%	0.78
at Tyngsborough line	Chelmsford	505	1,426	182%	0.56
at Lowell line	Chelmsford	1,415	1,853	31%	0.73
south of Concord Rd	Billerica	2,060	2,387	16%	1.12
<u>Northbound</u>					
at NH line - ext. station	Tyngsborough	755	1,341	78%	0.53
at Tyngsborough line	Chelmsford	780	871	12%	0.34
at Lowell line	Chelmsford	380	379	0%	0.15
south of Concord Rd	Billerica	1,655	1,723	4%	0.81
ROUTE 3A, SOUTH OF BOSTON					
<u>Northbound</u>					
at Bourne line - ext. station	Plymouth	870	1,934	122%	0.76
south of Summer St	Plymouth	1,065	2,680	152%	1.26
at Duxbury line	Kingston	1,385	1,466	6%	0.58
south of Duck Hill Rd.	Duxbury	400	630	57%	0.25
south of Route 139	Marshfield	880	1,358	54%	0.54
south of Route 123	Scituate	1,310	1,698	30%	0.61
west of North St	Hingham	4,065	4,297	6%	2.69
north of Washington St	Quincy	5,740	6,250	9%	2.93
at Boston city line	Quincy	4,380	5,024	15%	0.70
<u>Southbound</u>					
at Bourne line - ext. station	Plymouth	610	1,003	64%	0.40
south of Summer St	Plymouth	865	934	8%	0.44
at Duxbury line	Kingston	1,340	2,213	65%	0.87
south of Duck Hill Rd.	Duxbury	490	492	0%	0.19
south of Route 139	Marshfield	545	435	-20%	0.17
south of Route 123	Scituate	785	689	-12%	0.25
west of North St	Hingham	1,130	1,101	-3%	0.69

**2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
north of Washington St	Quincy	1,770	1,876	6%	0.88
at Boston city line	Quincy	7,680	7,228	-6%	1.00

ROUTE 9

Eastbound

Shrewsbury line, ext station	Northborough	5,915	8,926	51%	1.52
Westborough line	Northborough	6,245	8,335	33%	1.42
east of Route 30	Westborough	7,695	9,142	19%	1.56
west of Woodland Rd	Southborough	6,495	7,330	13%	1.25
west of Route 30	Framingham	6,850	7,760	13%	1.46
west of Speen St	Natick	5,735	6,675	16%	1.19
west of Route 16	Wellesley	6,800	7,595	12%	1.29
east of Parker St.	Newton	5,795	6,427	11%	1.15
east of Hammond St.	Brookline	3,135	3,547	13%	0.67

Westbound

Shrewsbury line, ext station	Northborough	3,550	5,141	45%	0.88
Westborough line	Northborough	3,480	4,371	26%	0.75
east of Route 30	Westborough	4,425	4,470	1%	0.76
west of Woodland Rd	Southborough	5,020	5,377	7%	0.92
west of Route 30	Framingham	4,340	4,426	2%	0.83
west of Speen St	Natick	3,700	3,681	-1%	0.66
west of Route 16	Wellesley	4,390	4,730	8%	0.81
east of Parker St.	Newton	4,745	4,705	-1%	0.84
east of Hammond St.	Brookline	3,460	3,550	3%	0.67

ROUTE 24

Northbound

north of Rte 139	Stoughton	15,750	19,171	22%	1.23
S. of Pond St.	Avon	14,290	17,058	19%	1.09
at West Bridgewater TL	Brockton	14,005	18,138	30%	1.16
at Bridgewater TL	W Bridgewater	13,950	18,868	35%	1.21
north of Route 140	Taunton	10,465	15,829	51%	1.52
S. of Route 140 - external station	Taunton	6,580	12,932	97%	0.83

Southbound

north of Rte 139	Stoughton	9,670	10,474	8%	0.67
S. of Pond St.	Avon	8,545	9,153	7%	0.59
at West Bridgewater TL	Brockton	6,575	8,154	24%	0.52
at Bridgewater TL	W Bridgewater	6,670	8,608	29%	0.55
north of Route 140	Taunton	4,755	6,439	35%	0.62
S. of Route 140 - external station	Taunton	3,055	4,842	59%	0.31

2030 AM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
ROUTE 38					
<u>Southbound</u>					
At NH state line	Dracut	1,370	2,010	47%	0.94
at Lowell line	Dracut	1,065	1,419	33%	0.67
north of VFW Parkway	Lowell	2,075	2,547	23%	1.19
south of I-495	Tewksbury	2,640	2,964	12%	1.17
south of Pleasant St	Tewksbury	1,660	2,028	22%	0.95
at Wilmington line	Tewksbury	2,160	2,684	24%	1.26
north of I-95	Woburn	3,255	3,460	6%	1.62
south of I-95	Woburn	1,465	1,912	30%	0.90
south of I-93 exit 30	Somerville	4,105	5,245	28%	1.04
<u>Northbound</u>					
At NH state line	Dracut	835	1,192	43%	0.56
at Lowell line	Dracut	720	815	13%	0.38
north of VFW Parkway	Lowell	1,030	1,075	4%	0.50
south of I-495	Tewksbury	2,005	2,969	48%	1.17
south of Pleasant St	Tewksbury	1,105	1,198	8%	0.56
at Wilmington line	Tewksbury	705	655	-7%	0.31
north of I-95	Woburn	2,370	2,657	12%	1.25
south of I-95	Woburn	1,690	1,744	3%	0.82
south of I-93 exit 30	Somerville	2,740	2,892	6%	0.57
STORROW DRIVE					
<u>Eastbound</u>					
West of North Harvard St	Boston	8,900	10,538		0.77
East of Boston University Bridge	Boston	9,250	9,785		1.08
Charlesgate to Clarendon St	Boston	10,000	10,876		0.80
Charles Cir. To Leverett Tunnel	Boston	7,650	8,643		0.64
<u>Westbound</u>					
West of North Harvard St	Boston	4,650	4,754		0.35
East of Boston University Bridge	Boston	5,600	6,275		0.69
Berkely St to Mass Ave off-ramp	Boston	9,900	10,691		0.79
Lev Cir Tunnel to Lev Cir on-ramp	Boston	9,900	9,833		0.72

**2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>INTERSTATE 90, MASSACHUSETTS TURNPIKE</u>					
<u>Eastbound</u>					
Exit 11 to 11a, ext station	Upton-Westbor.	8,750	15,983	83%	1.02
Exit 11a to 12, e. of I-495	Southborough	8,650	12,374	43%	0.79
Exit 12 to 13, e. of Route 9	Framingham	10,650	13,129	23%	0.84
Exit 13 to 14, e. of Route 30	Natick	13,000	14,900	15%	0.96
Exit 15 to 16, e. of Route 128	Newton	11,300	13,134	16%	0.84
Exit 16 to 17, e. of W. Newton	Newton	13,650	15,291	12%	0.98
Exit 17 to 18, e. Newton Cor.	Newton	13,250	14,259	8%	0.69
Exit 19-22, w. of Mass Ave	Boston	13,500	15,310	13%	0.76
Exit 23-24, e. of Arlington St	Boston	10,020	11,791	18%	0.78
Exit 25 to 26, TW Tunnel	Boston	9,610	13,729	43%	1.43

<u>Westbound</u>					
Exit 11 to 11a, ext station	Upton-Westbor.	14,095	22,465	59%	1.44
Exit 11a to 12, e. of I-495	Southborough	15,200	20,890	37%	1.34
Exit 12 to 13, e. of Route 9	Framingham	16,600	20,573	24%	1.32
Exit 13 to 14, e. of Route 30	Natick	17,750	21,020	18%	1.35
Exit 15 to 16, e. of Route 128	Newton	14,500	17,671	22%	1.13
Exit 16 to 17, e. of W. Newton	Newton	17,450	20,084	15%	1.29
Exit 17 to 18, e. Newton Cor.	Newton	17,150	18,835	10%	0.91
Exit 19-22, w. of Mass Ave	Boston	16,500	18,271	11%	0.90
Exit 23-24, e. of Arlington St	Boston	11,025	12,443	13%	0.82
Exit 25 to 26, TW Tunnel	Boston	7,940	9,528	20%	0.99

INTERSTATE 93 NORTH OF BOSTON

<u>Southbound</u>					
at NH Line, ext. station	Methuen	8,870	14,594	65%	0.94
at Andover line	Methuen	11,800	15,085	28%	0.97
north of I-495	Andover	12,835	15,387	20%	0.99
at Wilmington line	Andover	14,885	16,791	13%	1.08
north of Rte 129	Wilmington	16,655	19,186	15%	0.92
south of I-95/Rte 128	Woburn	21,080	23,690	12%	1.14
south of Exit 35	Stoneham	17,735	19,647	11%	0.94
north of Exit 30	Medford	14,865	17,411	17%	0.86

<u>Northbound</u>					
at NH Line, ext. station	Methuen	13,255	25,882	95%	1.66
at Andover line	Methuen	21,185	28,165	33%	1.58
north of I-495	Andover	20,208	24,856	23%	1.40
at Wilmington line	Andover	22,330	26,051	17%	1.47
north of Rte 129	Wilmington	23,980	27,956	17%	1.34
south of I-95/Rte 128	Woburn	21,065	24,403	16%	1.17
south of Exit 35	Stoneham	19,615	21,966	12%	1.06
north of Exit 30	Medford	20,490	23,682	16%	1.14

INTERSTATE 93 SOUTH OF BOSTON

<u>Northbound</u>					
at Milton line	Canton	19,335	23,990	24%	1.15
between Rtes 24 & 28	Randolph	19,570	21,579	10%	1.04
north of Route 28	Quincy	19,465	20,628	6%	0.99
SE Expwy @ Braintree Split	Braintree	16,105	18,689	16%	0.95
SE Expwy n. of Exit 14	Boston	15,175	16,408	8%	1.08
SE Expwy n. of Exit 15	Boston	17,080	18,718	10%	0.92
SE Expwy n. of Exit 16	Boston	16,450	17,946	9%	0.89

2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED ARTERIALS

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006</u> <u>Count</u>	<u>2030</u> <u>Estimated</u> <u>Volume</u>	<u>Pct</u> <u>Change</u>	<u>Vol/Cap</u> <u>Ratio</u>
<u>Southbound</u>					
at Milton line	Canton	17,215	19,454	13%	0.94
between Rtes 24 & 28	Randolph	20,120	22,918	14%	1.10
north of Route 28	Quincy	21,595	23,701	10%	1.14
SE Expwy @ Braintree Split	Braintree	21,925	26,589	21%	1.35
SE Expwy n. of Exit 14	Boston	22,050	24,532	11%	1.21
SE Expwy n. of Exit 15	Boston	21,395	23,323	9%	1.15
SE Expwy n. of Exit 16	Boston	18,000	19,460	8%	0.96

INTERSTATE-95, I-90 TO NH LINE

<u>Southbound</u>					
at N.H. State Line-ext station	Salisbury	9,300	15,510	67%	0.99
at Amesbury line	Salisbury	5,195	9,008	73%	0.58
at Newburyport line	Amesbury	6,410	10,753	68%	0.69
south of Exit 56, Scotland Rd	Newbury	6,420	10,215	59%	0.49
north of Route 133	Georgetown	5,885	9,409	60%	0.45
north of Route 1	Topsfield	7,610	11,286	48%	0.54
north of Route 62	Danvers	6,010	9,295	55%	0.45
south of Peabody line	Lynnfield	13,880	15,911	15%	1.02
north of Route 129	Wakefield	17,295	18,432	7%	1.18
south of Route 38	Woburn	17,910	19,270	8%	0.93
north of Route 4	Lexington	17,990	20,030	11%	0.96
north of Winter St	Waltham	21,155	22,646	7%	1.09
south of Route 20	Weston	19,005	21,664	14%	1.04

<u>Northbound</u>					
at N.H. State Line-ext station	Salisbury	12,555	20,678	65%	1.33
at Amesbury line	Salisbury	8,600	13,701	59%	0.88
at Newburyport line	Amesbury	10,675	16,203	52%	1.04
south of Exit 56, Scotland Rd	Newbury	9,940	15,523	56%	0.75
north of Route 133	Georgetown	9,895	15,773	59%	0.76
north of Route 1	Topsfield	13,995	19,890	42%	0.96
north of Route 62	Danvers	12,370	17,013	38%	0.82
south of Peabody line	Lynnfield	18,960	21,492	13%	1.38
north of Route 129	Wakefield	18,960	20,217	7%	1.30
south of Route 38	Woburn	20,800	22,494	8%	1.08
north of Route 4	Lexington	20,130	21,914	9%	1.05
north of Winter St	Waltham	22,920	24,224	6%	1.16
south of Route 20	Weston	17,895	20,168	13%	0.97

INTERSTATE-95, I-90 TO R.I. LINE

<u>Northbound</u>					
at R.I. Line	Attleborough	9,600	17,089	78%	1.10
north of I-295	Attleborough	11,525	16,437	43%	1.05
north of I-495	Foxboro	8,305	10,726	29%	0.69
north of Route 1	Sharon	8,335	11,119	33%	0.71
south of I-93 interchange	Canton	9,030	11,990	33%	0.77
north of University Ave	Dedham	13,950	19,384	39%	0.93
at Needham line	Dedham	13,315	17,721	33%	0.85
south of Route 9	Needham	16,225	20,400	26%	0.98
south of I-90	Newton	14,175	16,791	18%	0.81

2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED ARTERIALS

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>Southbound</u>					
at R.I. Line	Attleborough	10,560	21,156	100%	1.36
north of I-295	Attleborough	16,310	23,810	46%	1.53
north of I-495	Foxboro	13,975	19,342	38%	1.24
north of Route 1	Sharon	13,935	17,676	27%	1.13
south of I-93 interchange	Canton	13,250	16,437	24%	1.05
north of University Ave	Dedham	18,610	25,802	39%	1.24
at Needham line	Dedham	16,095	22,823	42%	1.10
south of Route 9	Needham	17,125	23,703	38%	1.14
south of I-90	Newton	20,215	24,186	20%	1.16

INTERSTATE 495, NORTH OF MASSACHUSETTS TURNPIKE

<u>Southbound</u>					
at Amesbury line	Salisbury	4,085	6,837	67%	0.66
at Merrimac line	Amesbury	7,090	10,357	46%	0.66
at Methuen line	Haverhill	11,540	16,317	41%	1.05
north of Route 114	Lawrence	10,020	13,218	32%	0.85
at Andover line	Lawrence	9,680	12,659	31%	0.81
north of I-93	Andover	10,765	13,593	26%	0.87
south of Route 133	Tewksbury	13,210	16,193	23%	1.04
north of Lowell Connector	Lowell	15,445	19,276	25%	1.24
north of Route 4	Chelmsford	12,515	16,255	30%	1.04
south of Route 119	Littleton	13,170	17,078	30%	1.09
south of Route 111	Boxborough	9,095	12,138	33%	0.78
at Hudson line	Bolton	11,470	14,438	26%	0.93
south of Route 20	Marlborough	11,110	13,632	23%	0.87
south of Route 9	Westborough	15,695	18,332	17%	1.18

<u>Northbound</u>					
at Amesbury line	Salisbury	4,955	7,831	58%	0.75
at Merrimac line	Amesbury	7,940	11,968	51%	0.77
at Methuen line	Haverhill	15,215	18,733	23%	1.20
north of Route 114	Lawrence	14,755	19,188	30%	1.23
at Andover line	Lawrence	13,750	17,746	29%	1.14
north of I-93	Andover	13,390	16,798	25%	1.08
south of Route 133	Tewksbury	13,530	16,006	18%	1.03
north of Lowell Connector	Lowell	15,095	17,097	13%	1.10
north of Route 4	Chelmsford	10,420	12,671	22%	0.81
south of Route 119	Littleton	13,330	15,330	15%	0.98
south of Route 111	Boxborough	10,300	12,446	21%	0.80
at Hudson line	Bolton	13,180	15,077	14%	0.97
south of Route 20	Marlborough	13,990	16,678	19%	1.07
south of Route 9	Westborough	11,295	14,051	24%	0.90

INTERSTATE 495, SOUTH OF MASSACHUSETTS TURNPIKE

<u>Northbound</u>					
east of Route 58	to Middleborough	4,595	7,768	69%	0.50
north of Route 105	Middleborough	6,135	8,123	32%	0.78
south of Route 24	Raynham	6,230	8,467	36%	0.81
south of Exit 9	Taunton	9,480	11,623	23%	0.75
south of I-95	Mansfield	9,960	11,417	15%	0.73
north of Route 1	Wrentham	9,960	11,813	19%	0.76
at Franklin line	Bellingham	9,790	12,114	24%	0.78
south of Route 85	Milford	9,595	11,903	24%	0.76
at Milford line	Hopkinton	10,055	12,120	21%	0.78
south of Mass Turnpike	Hopkinton	9,375	11,510	23%	0.74

**2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
<u>Southbound</u>					
east of Route 58	to Middleborough	6,130	12,845	110%	0.82
north of Route 105	Middleborough	8,090	12,042	49%	1.16
south of Route 24	Raynham	9,890	13,016	32%	1.25
south of Exit 9	Taunton	11,030	14,772	34%	0.95
south of I-95	Mansfield	12,805	14,911	16%	0.96
north of Route 1	Wrentham	11,730	14,130	20%	0.91
at Franklin line	Bellingham	12,950	15,942	23%	1.02
south of Route 85	Milford	14,390	16,732	16%	1.07
at Milford line	Hopkinton	14,055	16,336	16%	1.05
south of Mass Turnpike	Hopkinton	12,585	15,431	23%	0.99

ROUTE 1, NORTH OF BOSTON

<u>Southbound</u>					
at NH Line, ext. station	Salisbury	1,730	2,343	35%	0.84
at Newburyport line	Salisbury	2,050	2,449	19%	0.87
south of Hanover St	Newbury	1,290	1,818	41%	0.62
at Ipswich line	Rowley	1,620	2,144	32%	0.73
south of Rte 62	Danvers	4,185	5,153	23%	0.50
north of Lowell St.	Peabody	4,695	5,416	15%	0.55
south of Lowell St.	Peabody	4,935	5,388	9%	0.96
north of Lynn Fells Pkwy	Saugus	11,895	14,912	25%	1.04
at Revere line	Malden	7,830	9,837	26%	0.97
Tobin Bridge	Boston	4,635	5,762	24%	0.42
<u>Northbound</u>					
at NH Line, ext. station	Salisbury	1,655	2,409	46%	0.86
at Newburyport line	Salisbury	2,420	3,105	28%	1.11
south of Hanover St	Newbury	1,460	2,205	51%	0.75
at Ipswich line	Rowley	2,015	2,473	23%	0.84
south of Rte 62	Danvers	3,685	5,945	61%	0.57
north of Lowell St.	Peabody	5,340	7,239	36%	0.73
south of Lowell St.	Peabody	5,495	7,120	30%	1.27
north of Lynn Fells Pkwy	Saugus	14,400	17,169	19%	1.19
at Revere line	Malden	11,425	12,503	9%	1.23
Tobin Bridge	Boston	12,835	14,805	15%	1.09

ROUTE 1A

<u>Southbound</u>					
at NH Line, ext. station	Salisbury	1,020	1,890	85%	0.89
at Newbury line	Newburyport	775	970	25%	0.45
at Rowley line	Newbury	530	768	45%	0.27
at Ipswich line	Rowley	1,740	2,103	21%	0.79
north of Railroad Ave	Hamilton	1,820	2,020	11%	0.80
north of New Balch St	Beverly	1,740	1,955	12%	0.77
Essex Bridge, Salem line	Beverly	3,215	3,902	21%	0.91
Loring Ave, south of Jefferson Ave	Salem	3,680	3,916	6%	1.84
at Revere line	Lynn	3,955	4,580	16%	0.57
at Boston line	Revere	4,680	6,934	48%	1.00
Sumner Tunnel	Boston	4,220	5,173	23%	0.57

**2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006</u> <u>Count</u>	<u>2030</u> <u>Estimated</u> <u>Volume</u>	<u>Pct</u> <u>Change</u>	<u>Vol/Cap</u> <u>Ratio</u>
<u>Northbound</u>					
at NH Line, ext. station	Salisbury	920	1,903	107%	0.89
at Newbury line	Newburyport	925	1,048	13%	0.49
at Rowley line	Newbury	605	779	29%	0.28
at Ipswich line	Rowley	2,085	2,700	29%	1.01
north of Railroad Ave	Hamilton	1,910	1,850	-3%	0.73
north of New Balch St	Beverly	2,095	2,336	12%	0.92
Essex Bridge, Salem line	Beverly	3,555	4,246	19%	1.00
Loring Ave, south of Jefferson Ave	Salem	3,055	3,355	10%	1.57
at Revere line	Lynn	5,980	7,419	24%	0.93
at Boston line	Revere	6,650	6,977	5%	1.01
Callahan Tunnel	Boston	5,510	8,794	60%	0.97

ROUTE 2

<u>Eastbound</u>					
at Leominster TL - ext station	Lancaster	4,680	6,934	48%	0.67
at Littleton TL	Harvard	3,885	5,842	50%	0.56
east of Concord Rotary	Concord	4,440	5,239	18%	0.98
west of Sudbury Rd	Concord	4,120	4,777	16%	0.81
at Lexington TL	Lincoln	5,885	7,139	21%	0.74
east of I-95	Lexington	10,505	12,242	17%	0.78
at Cambridge CL	Belmont	6,735	7,515	12%	0.76
north of Vassal Ln	Cambridge	4,000	4,403	10%	0.87
Gerry's Landing, E. of Mt Auburn	Cambridge	4,600	5,185	13%	0.72

<u>Westbound</u>					
at Leominster TL - ext station	Lancaster	8,060	13,268	65%	1.28
at Littleton TL	Harvard	7,815	11,563	48%	1.11
east of Concord Rotary	Concord	6,670	7,771	17%	1.46
west of Sudbury Rd	Concord	6,200	7,404	19%	1.26
at Lexington TL	Lincoln	6,625	8,612	30%	0.90
east of I-95	Lexington	10,305	13,432	30%	0.86
at Cambridge CL	Belmont	5,925	7,095	20%	0.72
north of Vassal Ln	Cambridge	3,930	4,395	12%	0.87
Gerry's Landing, E. of Mt Auburn	Cambridge	6,450	7,365	14%	1.02

ROUTE 3, NORTH OF BOSTON

<u>Southbound</u>					
at N.H. State Line-ext station	Tyngsborough	7,055	10,793	53%	0.69
south of Exit 34	Tyngsborough	8,845	11,669	32%	0.75
north of I-495	Chelmsford	9,635	12,045	25%	0.46
south of Rte 129	Billerica	9,330	10,862	16%	0.52
south of Treble Cove Rd	Billerica	8,595	9,804	14%	0.63
north of Rte 62	Bedford	8,100	9,219	14%	0.59
north of Rte 128	Burlington	8,400	9,606	14%	0.62

<u>Northbound</u>					
at N.H. State Line-ext station	Tyngsborough	12,035	19,115	59%	1.23
south of Exit 34	Tyngsborough	12,920	17,597	36%	1.13
north of I-495	Chelmsford	12,840	17,319	35%	0.67
south of Rte 129	Billerica	17,845	21,726	22%	1.04
south of Treble Cove Rd	Billerica	16,440	19,615	19%	1.26
north of Rte 62	Bedford	15,100	17,830	18%	1.14
north of Rte 128	Burlington	11,800	13,759	17%	0.88

**2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006 Count</u>	<u>2030 Estimated Volume</u>	<u>Pct Change</u>	<u>Vol/Cap Ratio</u>
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ROUTE 3, SOUTH OF BOSTON

Northbound

at Bourne line, ext station	Plymouth	3,600	6,283	75%	0.60
between Exits 2 & 3	Plymouth	4,380	6,441	47%	0.62
between Exits 3 & 4	Plymouth	5,420	7,631	41%	0.73
south of Route 44	Plymouth	8,200	10,550	29%	1.01
between Exits 8 & 9	Kingston	8,280	9,775	18%	0.94
between Exits 13 & 14	Norwell	8,895	10,608	19%	1.02
at Weymouth line	Hingham	10,045	11,594	15%	1.11
at Braintree line	Weymouth	13,555	15,424	14%	0.99

Southbound

at Bourne line, ext station	Plymouth	3,600	7,382	105%	0.71
between Exits 2 & 3	Plymouth	5,350	9,822	84%	0.94
between Exits 3 & 4	Plymouth	6,670	10,861	63%	1.04
south of Route 44	Plymouth	10,165	15,012	48%	1.44
between Exits 8 & 9	Kingston	10,100	14,206	41%	1.37
between Exits 13 & 14	Norwell	12,725	15,857	25%	1.19
at Weymouth line	Hingham	15,140	18,514	22%	1.19
at Braintree line	Weymouth	18,670	22,671	21%	1.45

ROUTE 3A, NORTH OF BOSTON

Southbound

at NH line - ext. station	Tyngsborough	1,275	2,054	61%	0.81
at Tyngsborough line	Chelmsford	1,175	1,328	13%	0.52
at Lowell line	Chelmsford	650	693	7%	0.27
south of Concord Rd	Billerica	2,175	2,377	9%	1.11

Northbound

at NH line - ext. station	Tyngsborough	1,565	2,723	74%	1.07
at Tyngsborough line	Chelmsford	790	1,446	83%	0.57
at Lowell line	Chelmsford	1,430	1,746	22%	0.69
south of Concord Rd	Billerica	3,370	3,625	8%	1.70

ROUTE 3A, SOUTH OF BOSTON

Northbound

at Bourne line - ext. station	Plymouth	1,090	1,856	70%	0.73
south of Summer St	Plymouth	1,815	2,026	12%	0.95
at Duxbury line	Kingston	1,680	2,470	47%	0.98
south of Duck Hill Rd.	Duxbury	1,035	1,139	10%	0.45
south of Route 139	Marshfield	1,095	1,140	4%	0.45
south of Route 123	Scituate	1,125	1,265	12%	0.45
west of North St	Hingham	1,950	2,206	13%	1.38
north of Washington St	Quincy	3,005	3,365	12%	1.58
at Boston city line	Quincy	8,230	8,462	3%	1.18

Southbound

at Bourne line - ext. station	Plymouth	1,220	2,794	129%	1.10
south of Summer St	Plymouth	1,735	3,602	108%	1.69
at Duxbury line	Kingston	2,420	2,325	-4%	0.92
south of Duck Hill Rd.	Duxbury	1,005	1,484	48%	0.59
south of Route 139	Marshfield	1,085	1,825	68%	0.72
south of Route 123	Scituate	1,530	1,933	26%	0.69
west of North St	Hingham	3,210	3,600	12%	2.25

**2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS**

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006</u> <u>Count</u>	<u>2030</u> <u>Estimated</u> <u>Volume</u>	<u>Pct</u> <u>Change</u>	<u>Vol/Cap</u> <u>Ratio</u>
north of Washington St	Quincy	3,885	4,687	21%	2.20
at Boston city line	Quincy	6,445	7,977	24%	1.11

ROUTE 9

Eastbound

Shrewsbury line, ext station	Northborough	4,255	7,601	79%	1.30
Westborough line	Northborough	5,355	6,877	28%	1.17
east of Route 30	Westborough	5,645	6,003	6%	1.02
west of Woodland Rd	Southborough	5,220	5,612	8%	0.96
west of Route 30	Framingham	6,000	6,188	3%	1.16
west of Speen St	Natick	5,970	6,356	6%	1.13
west of Route 16	Wellesley	5,740	6,345	11%	1.08
east of Parker St.	Newton	6,030	6,208	3%	1.11
east of Hammond St.	Brookline	3,705	3,791	2%	0.71

Westbound

Shrewsbury line, ext station	Northborough	5,915	10,585	79%	1.80
Westborough line	Northborough	6,845	9,471	38%	1.61
east of Route 30	Westborough	7,520	8,375	11%	1.43
west of Woodland Rd	Southborough	7,045	8,170	16%	1.39
west of Route 30	Framingham	6,460	7,053	9%	1.32
west of Speen St	Natick	7,345	8,117	11%	1.45
west of Route 16	Wellesley	6,615	7,622	15%	1.30
east of Parker St.	Newton	6,350	7,243	14%	1.29
east of Hammond St.	Brookline	4,980	5,355	8%	1.00

ROUTE 24

Northbound

north of Rte 139	Stoughton	9,935	12,367	24%	0.79
S. of Pond St.	Avon	10,470	12,380	18%	0.79
at West Bridgewater TL	Brockton	8,760	11,060	26%	0.71
at Bridgewater TL	W Bridgewater	8,345	11,096	33%	0.71
north of Route 140	Taunton	6,165	8,474	37%	0.81
S. of Route 140 - external station	Taunton	4,230	6,351	50%	0.41

Southbound

north of Rte 139	Stoughton	16,650	21,775	31%	1.40
S. of Pond St.	Avon	15,915	19,340	22%	1.24
at West Bridgewater TL	Brockton	15,075	19,583	30%	1.26
at Bridgewater TL	W Bridgewater	14,115	19,364	37%	1.24
north of Route 140	Taunton	10,560	15,602	48%	1.50
S. of Route 140 - external station	Taunton	6,580	11,613	76%	0.74

2030 PM VOLUMES AND VOLUME/CAPACITY RATIOS ON EXPRESS HIGHWAYS AND SELECTED
ARTERIALS

9-30-08

<u>Location</u>	<u>Town</u>	<u>2006</u> <u>Count</u>	<u>2030</u> <u>Estimated</u> <u>Volume</u>	<u>Pct</u> <u>Change</u>	<u>Vol/Cap</u> <u>Ratio</u>
ROUTE 38					
<u>Southbound</u>					
At NH state line	Dracut	1,670	2,485	49%	1.16
at Lowell line	Dracut	1,580	1,763	12%	0.83
north of VFW Parkway	Lowell	1,500	1,838	23%	0.86
south of I-495	Tewksbury	3,105	3,977	28%	1.57
south of Pleasant St	Tewksbury	1,800	1,985	10%	0.93
at Wilmington line	Tewksbury	1,390	1,660	19%	0.78
north of I-95	Woburn	3,400	3,625	7%	1.70
south of I-95	Woburn	2,245	2,521	12%	1.18
south of I-93 exit 30	Somerville	3,045	3,686	21%	0.73
<u>Northbound</u>					
At NH state line	Dracut	2,050	3,064	49%	1.44
at Lowell line	Dracut	1,925	2,307	20%	1.08
north of VFW Parkway	Lowell	2,510	3,142	25%	1.47
south of I-495	Tewksbury	3,635	3,854	6%	1.52
south of Pleasant St	Tewksbury	1,850	2,243	21%	1.05
at Wilmington line	Tewksbury	2,215	2,537	15%	1.19
north of I-95	Woburn	3,590	3,904	9%	1.83
south of I-95	Woburn	2,210	2,566	16%	1.20
south of I-93 exit 30	Somerville	4,490	5,584	24%	1.10
STORROW DRIVE					
<u>Eastbound</u>					
West of North Harvard St	Boston	6,400	7,178	12%	0.53
East of Boston University Bridge	Boston	7,950	8,533	7%	0.94
Charlesgate to Clarendon St	Boston	9,700	10,598	9%	0.78
Charles Cir. To Leverett Tunnel	Boston	9,800	10,680	9%	0.79
<u>Westbound</u>					
West of North Harvard St	Boston	8,200	9,444	15%	0.69
East of Boston University Bridge	Boston	9,500	10,412	10%	1.15
Berkely St to Mass Ave off-ramp	Boston	12,000	13,029	9%	0.96
Lev Cir Tunnel to Lev Cir on-ramp	Boston	9,050	10,193	13%	0.75

MBTA TRANSIT SYSTEM STATE OF GOOD REPAIR

A priority of the MBTA is the pursuit of a “State of Good Repair” for its systems. To measure the need for capital expenditures devoted to maintaining and replacing existing infrastructure, transit systems often use the State of Good Repair (SGR) standard, whereby all capital assets are functioning at their ideal capacity within their design life. While few transit systems are likely to achieve this ideal, the standard does identify a level of ongoing capital needs that must be addressed over the long-term for the existing infrastructure to continue to provide reliable service. Based on an inventory of all existing MBTA capital assets, an SGR database allows the MBTA to track the capital investment needs for the MBTA’s existing infrastructure, and to develop a capital investment program to maintain the system in a state of good repair. The State of Good Repair is a criterion that measures the degree to which a proposed project improves the condition of the MBTA’s existing infrastructure.

The MBTA’s 2009-2013 Capital Investment Program (CIP) programs \$3.75 billion of which \$878.8 million represents non-MBTA funding (primarily statewide transportation improvement projects). The CIP is composed of 4 major areas:

- Reinvestment in the existing infrastructure
- Accessibility improvements
- Enhancements to existing services
- System expansion efforts

A breakdown of the funding in the CIP is below with text about each program following.

Program Area	FY 09-FY13 Dollars (millions)	Percentage of Total
Infrastructure		
Revenue Vehicles	\$1,003.41	26.8%
Non-Revenue Vehicles	\$16.66	0.4%
Track/Right-of-Way	\$113.35	3.0%
Signals	\$148.78	4.0%
Communications	\$9.61	0.3%
Power	\$121.21	3.2%
Maintenance Facilities	\$274.43	7.3%
Stations	\$352.53	9.4%
Facilities	\$31.28	0.8%
Bridges	\$65.52	1.7%
Fare Equipment	\$42.12	1.1%
Accessibility	\$172.31	4.6%
System Enhancement	\$255.76	6.8%
System Expansion	\$164.71	4.4%
Statewide Transportation Improvements	\$878.75	23.4%
Technology/Other	\$97.69	2.6
TOTAL	\$3,748.12	100%

Reinvestment in Existing Infrastructure

Vehicles

The revenue vehicle fleet is one of the most visible and important components of the MBTA service network. These are the trains, buses, and other vehicles that passengers board every day. The MBTA's revenue fleet is composed of approximately 2,500 vehicles. The MBTA adheres to a general standard life cycle of 35 years for rapid-transit and light-rail vehicles, 25 years for commuter rail locomotives, and 25 to 30 years for commuter rail coaches. They recently adopted the policy that the average age of buses going forward will not exceed seven years. Scheduled major overhauls, maintenance, and planned retirements help these fleets reach their useful life, and prevent the unwarranted consumption of resources to maintain their reliability.

\$1,003.4 million is currently programmed for the revenue vehicle program. This represents 26.8% of the MBTA's total 2009–2013 Capital Investment Program, the largest share of any programmatic area, and is composed primarily of reinvestment in the subway system and the bus fleet. In keeping with the MBTA's commitment to upgrade its bus service, the Authority is taking delivery of 155 ultra low sulfur diesel vehicles. Other efforts in this program include major component replacements on the Green, Orange, and Red Lines. The MBTA has purchased 95 new cars for the Green Line and is taking delivery of 94 new cars for the Blue Line. The Authority is planning for the procurement of Orange Line vehicles in the next decade. This will modernize and expand those subway fleets. Additional cars will be purchased for the Green Line including those needed for the extension. Activity within the commuter rail vehicle program includes major midlife overhauls for large portions of the locomotive and coach fleets. Commuter rail procurements include 28 locomotives and 75 bi-level coaches. It is anticipated that the commuter rail fleet needs will represent a more significant portion of the Capital Investment Program in the future.

To respond to emergencies, perform maintenance work, keep the system safe for passengers, and engage in major construction work, the MBTA operates a large fleet of vehicles and work equipment that is not used to transport passengers. Non-revenue vehicles and equipment support the entire range of MBTA operations. In total, the MBTA owns and operates a fleet of over 1000 non-revenue vehicles. The MBTA will invest \$16.6 million or 0.4% of the total program for non-revenue equipment in the 2009–2013 Capital Investment Program.

Track and Right-of-Way

The MBTA light and heavy rail transit operates on 191 miles of track with a wide variety of construction types, rail ties, and overhead catenary systems. The track network includes 131 miles of revenue track, and an additional 60 miles of non-revenue track within rail yards and other service areas. The right-of-way for heavy-rail subway track

often includes a highly electrified third, rail running along the tracks, through which subway cars receive traction power to move.

**TABLE 5-1
MBTA Subway Track**

Name	Length	Power
Red Line	45 miles	Third rail
Red Line	6 miles	Overhead Wire
Green Line (light rail)	46 miles	Overhead Catenary
Orange Line	22 miles	Third rail
Blue Line	12 miles	Third Rail/ Overhead Catenary
Total	131 miles	

Streetcar grade crossings have a useful life ranging from 12 to 15 years. There are 64 grade crossings along the Green Line, since portions of the Green Line are at street level and cross automobile traffic. There are additional grade crossings within MBTA Green Line maintenance facilities.

The commuter rail system operates on a vast network of 650+ miles of track, 1.5 million timber ties, and 295 grade crossings, stretching across eastern Massachusetts. Rail on the commuter rail system can be expected to last approximately 40 years. Railroad crossties usually have a life span of 25 to 30, years depending on a variety of mechanical and environmental factors. Grade crossings have a life expectancy of 12 years.

**TABLE 5-2
MBTA Commuter Rail Track**

Name	Length (miles)
North Lines	
Fitchburg Line	90
Lowell Line	51
Haverhill Line	55
Newburyport/Rockport Line	92
South Lines	
Worcester Line	89
Needham Line	13
Franklin Line	34
Attleboro/Stoughton Line	116
Fairmount Line	19
Middleborough/Lakeville Line	47
Plymouth/Kingston Line	32
Greenbush Line	17
Total	655

\$113.3 million is currently programmed for the track and right-of-way program. This represents 3.0% of the MBTA's total 2009–2013 Capital Investment Program.

Signals

The primary responsibility of the MBTA signal system is to control trains for efficient spacing and runtimes, making it an integral part of the transit system. The signal system's goal is maintaining train separation while attempting to minimize headways and runtimes. The signal system requires ongoing maintenance.

\$148.8 million is currently programmed for the signal program. This represents 4.0% of the MBTA's total 2009–2013 Capital Investment Program.

Communications

The MBTA Communications Department's responsibilities include maintaining an inventory of equipment and overseeing contract services for the wide-area network, two-way radio systems, microwave links, emergency intercoms, public address systems, light-emitting diode (LED) message signs, fire alarm systems, security systems, and the supervisory control and data acquisition system. The department manages the MBTA's Operations Control Center (OCC), which consists of technology that allows for real-time monitoring and supervisory control of the signal and communication systems for the rapid transit and bus systems.

\$9.61 million is currently programmed for the communications program. This represents 0.3% of the MBTA's total 2009–2013 Capital Investment Program.

Power

Using power supplied by an outside utility, the MBTA transforms and distributes electricity over its own system to power the entire network of subway, trackless trolley, and light rail lines. They have a large and complex power system with its own backup generation capabilities in a switching station in South Boston. The power program is also responsible for lighting its ferry facilities, the commuter rail network, power signal systems and the power needed for lights, escalators, and elevators at stations.

\$121.21 million is currently programmed for the power program. This represents 3.2% of the MBTA's total 2009–2013 Capital Investment Program.

Maintenance Facilities (Yards and Shops)

Maintenance facilities, or yards and shops, are the sites for regularly scheduled maintenance and emergency repairs on MBTA vehicles. The MBTA operates 4 rapid-transit yards and shops; 4 light rail and 3 commuter rail maintenance facilities; and 9 bus maintenance facilities, including one bus repair shop. There are also 17 smaller general maintenance facilities throughout the system. A new facility was constructed to maintain Silver Line vehicles and new compressed-natural-gas (CNG) buses. Each facility generally includes a basic building structure with a mechanical plant and shop equipment. The expected life cycle of each of these facilities is 50 years.

The arrival of large fleets of vehicles equipped with new technologies will place additional demands on the personnel and facilities that maintain, repair, refuel, and service the vehicles. Additional fueling and engine equipment designed for CNG buses, along with maintenance and support equipment for additional 60-foot articulated buses, will be needed. Low-floor technologies on the new Green Line subway cars and incoming bus fleets will also have special maintenance needs.

\$274.43 million is currently programmed for the maintenance facilities program. This represents 7.3% of the MBTA's total 2009–2013 Capital Investment Program.

Stations

MBTA stations are also one of the most visible components of the transit system. There are over 250 rapid transit, light-rail, commuter rail, Silver Line, and bus stations in the MBTA transit system. Stations are composed of the basic structure, roofs, platforms, lights, shelters, elevators and escalators. The majority of the funding for stations is devoted to the renovation of subway stations and systemwide replacement of escalators and elevators.

Extensive station renovation and modernization work is being completed on Red Line stations serving communities in Dorchester and Mattapan and on Blue Line stations serving East Boston and downtown to allow for six-car trains. Station improvement projects driven by accessibility concerns and the Key Station Plan, which may include other modernization work in addition to accessibility, are described in the Accessibility section. Work also includes new stations on the Silver Line, Greenbush commuter rail line construction, and improvements to North Station and several other stations.

\$352.53 million is currently programmed for the stations program. This represents 9.4% of the MBTA's total 2009–2013 Capital Investment Program.

Facilities

Facilities include administrative buildings, operators' lobbies, ferry terminals, vent buildings, storage buildings, noise walls, tunnels, culverts, retaining walls, parking

garages, parking lots, and bus shelters. Most facilities have a useful life of 50 years. Fencing, which prevents trespassers from gaining access to tracks and fast-moving trains, is also included in this category. Fencing has a considerable impact on maintenance costs, particularly on the commuter rail system.

Tunnels, walls, and culverts are located throughout the system. Tunnels are mainly on the core subway system and in several locations in the commuter rail network. The rapid-transit system operates within 14 miles of tunnels. The light-rail system operates within 5 miles of tunnels; the Transitway tunnel is approximately 1.5 miles long. Tunnels generally have a useful life of 100 years, but require periodic maintenance of interior surfaces. The MBTA also maintains an extensive network of culverts along the commuter rail and subway systems, and many retaining walls (all of which have a useful life of 50 years).

\$31.28 million is currently programmed for the facilities program. This represents 0.8% of the MBTA's total 2009–2013 Capital Investment Program.

Bridges

The MBTA owns and maintains 476 bridges systemwide, comprising 288 railroad, 58 transit, 86 highway, and 44 pedestrian bridges. The MBTA also owns several bridges used for freight services. Railroad and transit bridges typically have a useful life span of 70 years, in comparison to highway bridges, which have a useful life span of 50 years.

Many of the MBTA-maintained bridges throughout eastern Massachusetts are close to reaching, or have attained, their life expectancies. While many of these bridges are in good structural condition, others are anticipated to need repairs. Using structural integrity and deck ratings established under its bridge management program, the MBTA prioritizes bridge needs based not only on the useful life spans but also on a variety of other factors, including safety implications, service impacts, and the potential to disrupt service.

In an effort to upgrade and maintain their bridges, the MBTA has customized the PONTIS program. The PONTIS program enables the MBTA to maintain an up-to-date database of all the MBTA-owned bridges and is used to evaluate the condition of each bridge based on the results of inspection and live load rating analysis. The results of the analyses are then used to establish a priority list for the rehabilitation or reconstruction of the bridges.

The bridge inspection program is tailored to ensure that all the bridges receive adequate attention. The frequency and type of inspection for each bridge depends on the structural condition of the bridge.

Both railroad and transit bridges have the same maintenance schedule. Renewal of bridge deck replacement occurs after 50 years of use. Bridge deck waterproofing is replaced after 40 years, and steel is repainted after 30 years. Highway bridges, however, have a

different maintenance schedule. Bridge deck replacement occurs after 30 years of use and steel is repainted every 15 years.

\$65.52 million is currently programmed for the bridge program. This represents 1.7% of the MBTA's total 2009–2013 Capital Investment Program.

Fare Equipment

The Station Management Program has funded the procurement of the new fare vending machines, fare gates, fare validators, and fareboxes. As of November 2006 new AFC equipment has been deployed and functional at most stations throughout the system. The new equipment allows for the phasing out of tokens and the deployment of Customer Service agents (CSA) throughout the system. CSAs provide on-site aid and answers to MBTA-related questions. AFC allows for the introduction of new magnetic tickets and smart cards with more flexible fare structures and advanced customer service options.

The Automated Fare Collection Phase II project will continue the rollout of the CharlieCard system on commuter rail and ferry boat. In addition, it will support Green Line revenue by identifying technology that will allow for a proof of payment system.

\$42.12 million is currently programmed for the fare collection program. This represents 1.1% of the MBTA's total 2009–2013 Capital Investment Program.

Accessibility

In response to the Americans with Disabilities Act (ADA) of 1990, the MBTA developed an approved Key Station Plan as an initial step in making one of America's oldest public transit systems accessible to all. The ADA, Title II Public Services Act, prohibits public transportation systems from discriminating against persons with disabilities. The U.S. Department of Transportation has established specific requirements for developing systemwide program accessibility, including the need to work with the community of people who have disabilities to determine which stations should be designated as key stations.

Since 1990, the MBTA has been working toward achieving station accessibility. The MBTA has made 74 of its 80 key stations accessible, allocated the construction funds for the remaining 6, and has begun making dozens of non-key stations accessible as part of station modernization projects.

In addition, in 2006 the MBTA entered into an agreement with the Boston Center for Independent Living. The agreement called for increased funding for elevator improvements, accelerated purchases of low-floor buses and buses with lifts, management and training initiatives, and new public address systems.

The MBTA has programmed \$172.3 million in the 2009-2013 Capital Investment Program (CIP) or 4.6% of the total Capital Investment Program for accessibility. In addition to the improvements listed above, the majority of accessibility funding is devoted to the Light-Rail Accessibility Program for the Green Line to modernize stations, install elevators, and raise platforms, as well as the final phase of the renovations and accessibility improvement project at the Charles/MGH Red Line station.

System Enhancement

The system enhancement program includes projects that make investments in the existing system to enhance service for riders as well as attract more riders to the system. The most significant efforts under this program are the North Station Superstation project, the Fairmount Corridor Improvement project, and new parking initiatives of which the majority of these funds are used. Also the environmental programs enhance the safety and well-being of both customers and employees, and the new program for Transit Security protects passengers and improves safety on the transit system for all. This program also encompasses pilot programs and evaluation of new technologies and equipment that may lead to the application of new methodologies and infrastructure to enhance service in the future.

\$255.76 million is currently programmed for the system enhancement program. This represents 6.8% of the MBTA's total 2009–2013 Capital Investment Program.

Technology/Other

The Information Technology Directorate (ITD) develops, implements, and manages technical solutions to core transit business needs in partnership with departments throughout the MBTA. ITD provides technical support on multi-discipline project teams for the development and implementation of systems such as a new maintenance control reporting system, the automated fare collection, the Hub station management system, enhanced PeopleSoft HRIS system, PeopleSoft Financial System, and the development of an enhanced Authority Wide Area Network. ITD also provides on-going technical solutions to the Operations Control Center, and assists with the MBTA's ITS initiative, Customer Service Information System, and the web-based trip planning.

\$97.69 million is currently programmed for the technology program. This represents 2.6% of the MBTA's total 2009–2013 Capital Investment Program.

SYSTEM EXPANSION

Funding under this category includes commuter rail projects including the Greenbush Commuter Rail Line and closeout of three additional projects:

- Worcester Commuter Rail Extension

- Newburyport
- Old Colony

Funding of the Silver Line projects are also in the expansion program, including closeout costs for Silver Line II and planning and design of Silver Line III.

\$164.71 million is currently programmed for the system expansion program. This represents 4.4% of the MBTA's total 2009–2013 Capital Investment Program.

STATEWIDE TRANSPORTATION IMPROVEMENTS

The MBTA is primarily reliant on non-MBTA sources to fund expansion projects. This category includes projects that are State Implementation Plan projects, other statewide projects including increased Worcester service, improved Fitchburg service, commuter rail extension to New Bedford and Fall River, Urban Ring, and Blue Line to Lynn, all of which are in the planning stages. Projects with earmarks or dedicated funding would also be included in this category.

\$878.75 million is currently programmed for the statewide transportation improvement program. This represents 23.4% of the MBTA's total 2009–2013 Capital Investment Program.

Source: MBTA Capital Investment Program FY 2009–FY2013

BOSTON REGION MPO BICYCLE AND PEDESTRIAN PROGRAM

Bicycling and walking are primary modes of transportation for some residents of the MPO region. Many bicycle to reach transit, and almost everyone walks or uses a wheelchair for portions of all trips. According to the PMT, 84 percent of riders walk or bicycle to stations to access the rapid transit system. Facilities for pedestrians include sidewalks, multi-use paths, and street crossings. Bicycle facilities include both off-road paths as well as on-road improvements, such as designated bike lanes. Roller skaters and joggers also use the road system and multi-use paths. When planning is done at the regional level, pedestrian mobility is determined by the availability of sidewalks, their condition, and the safety and convenience of roadway crossings. Bicycle mobility is affected primarily by road conditions, such as pavement quality, shoulder width, and traffic speed and volume, with some off-road trails available in the region.

The MPO funds trails, bicycle racks, pedestrian amenities, and other bicycle and pedestrian projects. Improvements for bicyclists and pedestrians are a routine aspect of roadway reconstruction projects and are usually funded under roadway maintenance. MAPC developed a Regional Bicycle Plan, which was funded by the MPO. Attached is a list of shared use path priorities from that document.

Trails and Routes

There are 15 regional trails in the MPO region. There is one signed, long-distance bicycle route in the MPO region, which continues to Falmouth and Provincetown on Cape Cod. The 135-mile-long Claire Saltonstall Bikeway, also known as Bikeway Route 1, is primarily an on-road, signed route that includes trail segments. The MPO coordinates a statewide trail counting program to determine use of existing facilities and to help guide usage estimates for future facilities.

Sidewalks

Safe pedestrian use of our transportation network requires sidewalks, crosswalks, and other street crossing infrastructure, and the enforcement of laws to protect pedestrians. While sidewalks may not be absolutely necessary for some low-volume local streets, the presence or absence of sidewalks is a good indicator of whether roadways in a community have been designed to give pedestrians equal access to all adjacent uses served by autos. Local interest in walkable communities can be seen in the response to the MPO's Walkable Community Workshop program. Since its inception in 2004, the Boston MPO staff has conducted 24 workshops in the MPO region.

In the past, MassHighway guidance on project design required pedestrian and bicycle accommodations to be considered in all roadway projects. MassHighway's current *Project Development and Design Guide* requires pedestrian mobility to be given the same importance as all other users.

The MPO supports more detailed studies and technical support for municipalities through the study of bicycle and pedestrian improvements in both small-town and urban centers. MAPC is developing a regional Pedestrian Plan, which is funded by the MPO.

Road Travel

Chapter 90E, Section 2A, of the Massachusetts General Laws (Chapter 87, of the Acts of 1996) requires consideration of bicyclist and pedestrian needs regarding roadways whenever feasible. The intent of this law is to make travel as safe as practical for bicyclists and pedestrians. In some cases, restriping may be all that is necessary, but space for bicyclists can also be provided by eliminating or re-configuring parking, adding bicycle lanes or paved shoulders, or by striping wide outside travel lanes.

Access to Other Modes

Many people bicycle or walk to other modes. Those who bicycle to transit connections either park their bicycle or take it on board in accordance with the MBTA's Bikes on the T program. There are bicycle-parking facilities at most MBTA stations, and they are added as a matter of course during station reconstructions. The MBTA has also begun a systemwide expansion of bicycle parking facilities, including a bicycle cage at Alewife Station that was funded by the MPO. The MBTA has worked with the Massachusetts Bicycle Coalition (MassBike) and other constituencies to identify bicycle rack locations. MassHighway continues to address nonmotorized-access issues through trail construction and roadway reconstruction projects. To promote bicycling, the MPO is funding bicycle parking at municipal locations through a program administered by MAPC.

Source: JOURNEY TO 2030

List of Shared Use Path Priorities, Regional Bicycle Plan

Shared Use Path Priorities in the Regional Bicycle Plan

HIGH PRIORITY PROJECTS

Amelia Earheart Dam	Everett, Somerville		DCR		Planned	0.1	0	
Assabet - Acton section		Pre-TIP		#	Planned	1.0	1,500,000	MAPC (H), SVY
Assabet - Maynard section		Pre-TIP		#	Planned	2.2	3,300,000	MAPC (H), SVY
Belmont/Cambridge/Somerville project	Belmont, Cambridge, Somerville	Programmed			Under design	0.8	5,200,000	MAPC (H), SVY
Bruce Freeman - Ph 2a	Westford, Carlisle, Acton	Pre-TIP			Planned	6.6	7,700,000	MAPC (H), CC, SVY
Bruce Freeman - Ph 2b	Concord, Sudbury					9.5	14,250,000	
Charles River Path improvements	Boston, Cambridge, Watertown		DCR		Conceptual	25.0	0	MAPC (H), SVY
Mass Central - Belmont section			DCR		Under design/conceptual	1.0	0	MAPC (H), CC, SVY
Minuteman Extension - Bedford section					Under design	2.2	3,300,000	MAPC (M), CC, SVY
Neponset River Trail Phase II	Boston, Milton		DCR		Under design	2.7	0	MAPC (L), CC, BPD, NRR, SVY
Riverway-Kenmore connector	Boston				Conceptual	0.5	750,000	
Somerville Community Path - Phase I	Somerville	Programmed		\$9.0M	Under design	1.0	4,500,000	MAPC (M), SVY
South Bay Harbor Trail	Boston	Programmed			Under design	2.7	3,850,000	MAPC (M), BPD
Tri-Community bikeway	Winchester, Woburn, Stoneham	Pre-TIP			Under design	6.6	5,075,585	MAPC (M), CC, SVY
Upper Charles - Milford Ph 2a and 2b		Programmed			Planned	3.2	4,100,000	MAPC (H), SVY
Watertown Branch (Charles/Minuteman connection)	Watertown	Programmed	DCR		Under design	1.5	1,190,635	MAPC (H), SVY
Total						66.6	\$54,716,220	

MEDIUM PRIORITY PROJECTS

Assabet - Hudson section				\$1.5M	Planned	0.5	750,000	MAPC (H), SVY
Assabet - Stow section				#	Planned	3.3	4,950,000	MAPC (H), SVY
Back River Trail extensions	Weymouth				Planned	1.5	2,250,000	
Border to Boston - Danvers section				\$.8M	Planned	3.0	4,500,000	MAPC (M), SVY
Border to Boston - Topsfield section				#	Planned	3.9	5,850,000	MAPC (M), SVY
Border to Boston - Wenham section				#	Planned	1.3	1,950,000	MAPC (M), SVY
Bruce Freeman - Ph 3	Sudbury, Framingham				complete	4.5	6,750,000	MAPC (H), CC, SVY
Cochituate Rail Trail	Framingham, Natick	Conceptual			Planned	3.7	5,550,000	MAPC (H), SVY
Driftway Trail	Scituate		?		Planned	3.2	4,800,000	
Linking the Corridors	Boston, Brookline				Planned	2.0	3,000,000	MAPC (M), BPD, AMP, SVY
Minuteman Extension - Concord section					Planned	3.2	4,800,000	MAPC (M), CC, SVY
to Boston)	Somerville, Arlington, Medford				Planned	3.5	5,250,000	MAPC (H), SVY
Northern Strand (aka Bike to the Sea)	Everett, Malden, Revere, Saugus, Lynn	Conceptual			Planned	9.5	14,250,000	MAPC (H), SVY
Riverside connector	Newton, Wellesley				Conceptual	1.0	1,500,000	MAPC (H), FI
Salem Path extensions	Salem				Planned	1.5	2,250,000	
Somerville Community Path - Phase II	Somerville				Feasibility study complete	1.0	1,500,000	MAPC (M), SVY
Swampscott Rail Trail	Swampscott				Planned	1.4	2,100,000	SVY
Upper Charles - Ashland section					Planned	4.6	6,900,000	MAPC (H), SVY
Upper Charles - Holliston section		Pre-TIP			Planned	6.7	1,815,000	MAPC (H), SVY
Upper Charles - Hopkinton section					Planned	5.7	8,550,000	MAPC (H), SVY
Upper Charles - Sherborn section					Planned	1.3	1,950,000	MAPC (H), SVY
Total						66.3	\$91,215,000	

LOW PRIORITY PROJECTS

Essex Railroad Rail Trail	Danvers, Middleton				Conceptual	8.1		
Mass Central - Hudson section					Conceptual	6.9		MAPC (H), CC, SVY
Mass Central - Sudbury section					Conceptual	4.6		MAPC (H), CC, SVY
Mass Central - Waltham section					Planned	4.4		MAPC (H), CC, SVY
Mass Central - Wayland section					Conceptual	3.0		MAPC (H), CC, SVY
Mass Central - Weston section					Conceptual	3.0		MAPC (H), CC, SVY
North Suburban - Lynnfield section					Planned	2.5		MAPC (M), SVY
North Suburban - Wakefield section					Planned	1.5		MAPC (M), SVY
North Suburban - Wilmington section					Planned	4.0		MAPC (M), SVY
Total						38.0		

CONCEPTUAL PROJECTS

ARRT to BFRT	Acton, Concord				Conceptual	3.0		SVY
BFRT to Cochituate rail trail	Framingham				Conceptual	2.0		
Burlington bikeway to North Suburban bike routes	Burlington, Wilmington				Conceptual	1.5		
Burlington bikeway to Tri-Community bikeway	Burlington, Woburn				Conceptual	1.0		
Cochituate Aqueduct Trail	Wellesley, Newton				Conceptual	7.6		MAPC (L)
Greenbush Line Rail-with-Trail	Weymouth, Hingham, Cohasset, Scituate				Conceptual	16.0		
Minuteman to BFRT	Concord				Conceptual	1.9		
North Suburban to Border to Boston	Peabody				Conceptual	2.6		
Sudbury Aqueduct Trail					Conceptual	17.2		MAPC (H)
Weston Aqueduct Trail					Conceptual	12.5		MAPC (L)
Total						65.3		

OTHER PROJECTS IN THE REGION

Battle Road to Minuteman Connection	Lexington							
Braintree Hills - North Stoughton Trail	Braintree, North Stoughton							
Chelsea River Paths	Chelsea							
Chelsea Urban Ring Paths	Chelsea							
Dedham Rail Trail	Dedham							
East Boston Greenway	Boston							
Emerald Necklace Gaps (Storrow Dr) Rt 9, Jamaicaaway	Boston, Brookline							
Grand Junction Path	Cambridge							
Hamilton-Essex Trail								
Hull/Nantasket Rail Trail	Hull							
Kenmore - Riverway connector	Boston							
Malden River Paths	Malden, Medford							
Needham Trails	Needham							
Newponset Riverwalk	Quincy							
Paul Dudley White Path Missing Links near North Station and Waltham	Boston, Waltham							
Rockland-Hanover	Rockland, Hanover							
Salem Rail Trail	Salem							
Westford Recreational Trail	Acton							
Wilmington Rail Trail	Wilmington							

\$ COST ESTIMATE BASED ON 1.5 MILLION/MILE

CHAPTER 90 PROGRAM

Chapter 90 is a 100% reimbursable program. Grants are made in accordance with Section 34 Chapter 90 MGL. These funds are to be used in compliance with all applicable statutes and regulations, including but not limited to, Chapter 30, Section 39M; Chapter 149, Section 44J; Chapter 149, Section 26-27F; as applicable for maintaining, repairing, improving and constructing town and county ways and bridges which qualify under the State Aid Highway Guidelines adopted by the Public Works Commission.

Funds must be allocated to roadway projects, such as resurfacing and related work (the minimum for resurfacing shall be 3/4" course with a continuous length of 500') and other work incidental to the above such as preliminary engineering including State Aid/Consultant Design Agreements, right-of-way acquisition, shoulders, side road approaches, landscaping and tree planting, roadside drainage, structures (including bridges), sidewalks, traffic control and service facilities, street lighting (excluding operating costs), and for such other purposes as the Department may specifically authorize.

Additional guidelines include the following:

- Highway construction, preservation, and improvement projects that create or extend the life of capital facilities including:
 - Resurfacing, Graveling, Microsurfacing, Pug Mill Mix (cold mix), Chip Stone Seal, Oil and Stone, Infrared Repairs (in connection with surface treatments), Recycled Aggregate Pavement, Rip Rap, Fabric, Crack Sealing, Drainage, Intersections, Shoulders, Guardrails, Sidewalks, Footbridges, Berms and Curbs, Traffic Controls and Related Facilities, Right of Way Acquisition, Street Lighting (excluding operating costs and decorative enhancements), Construction, Direction and Warning Signs (must comply with MUTCO), Bridges, and Tree Planting/Landscaping in association with a project.
- Projects and Uses:
 - Bikeways, Salt Sheds, Garages (construction and additions) for storage of road building equipment; Bikeways and Public use of off-street parking facilities related to mass transportation, a facility with bus or rail services, Engineering services and expenses related to highway and mass transportation purposes, Pavement management systems, development and maintenance.
- Road Building Machinery, equipment, and Tools:
 - Care, repair and storage must be project related and submitted on the same project request form; Purchase, replacement and long-term lease of road building machinery, equipment and tools that must remain the property of the municipality; Long-term lease will be reimbursed once annually for the construction season.
- Road Building Equipment
 - Air Compressor, Asphalt Hot Box, Back Hoe, Berm Machine, Catch Basin Cleaner, Chipper, Wood & Brush, Chain Saw, Clam or Dragline, Compactor, Concrete, Floor Trowel, Concrete Mixer, Crack Sealer, Crane, Excavator,

Generator, Grader, Gradall, Infrared Machine, Jackhammer, Lab Testing Equipment, Loader, Pavement Breaker, Paver, Pump, Roller, Spreader for Chip Seal Project, Striper, Survey Equipment, Sweeper, Tools, Tractor, Trailer, Trencher, Truck, Minimum 27,000 Pounds, Welder.

The following is a list of fiscal year 2009 apportionments for the Chapter 90 Program for each municipality in the Boston Region MPO. The Boston Region MPO will receive \$60,988,944 in 2009 out of a total of \$150,000,000 for the whole state or about 40% of the total Chapter 90 funding.

**FY2009 Chapter 90 Apportionment/Contract Package for
Municipalities in the Boston Region MPO**

Municipality	Mileage	Allotment
Acton	103.48	\$511,558
Arlington	100.99	\$592,857
Ashland	73.26	\$343,051
Bedford	67.89	\$445,580
Bellingham	83.30	\$383,320
Belmont	72.38	\$401,161
Beverly	124.80	\$780,847
Bolton	60.19	\$217,507
Boston	770.90	\$10,713,115
Boxborough	30.73	\$154,832
Braintree	103.15	\$757,549
Brookline	91.82	\$699,353
Burlington	76.52	\$715,580
Cambridge	120.84	\$1,914,388
Canton	87.25	\$592,420
Carlisle	55.44	\$199,024
Chelsea	44.24	\$437,837
Cohasset	32.90	\$160,080
Concord	104.32	\$525,144
Danvers	103.92	\$685,482
Dedham	81.99	\$509,766
Dover	58.55	\$212,917
Duxbury	102.56	\$409,077
Essex	23.76	\$100,616
Everett	56.65	\$483,390
Foxborough	73.91	\$403,665
Framingham	220.49	\$1,442,532
Franklin	131.75	\$702,463
Gloucester	78.81	\$493,448

Municipality	Mileage	Allotment
Hamilton	44.89	\$191,360
Hanover	69.27	\$344,114
Hingham	97.80	\$511,338
Holbrook	33.57	\$182,085
Holliston	84.67	\$375,816
Hopkinton	99.97	\$463,132
Hudson	83.22	\$442,401
Hull	50.16	\$219,639
Ipswich	73.24	\$327,214
Lexington	117.52	\$696,055
Lincoln	51.40	\$212,757
Littleton	61.57	\$275,193
Lynn	159.69	\$1,151,154
Lynnfield	55.89	\$282,434
Malden	92.84	\$708,463
Manchester	23.60	\$113,737
Marblehead	65.85	\$348,634
Marlborough	129.36	\$862,592
Marshfield	131.06	\$571,159
Maynard	35.37	\$209,479
Medfield	72.13	\$308,088
Medford	92.18	\$731,807
Medway	70.06	\$306,860
Melrose	71.49	\$411,258
Middleton	45.86	\$222,366
Milford	108.85	\$611,348
Millis	50.48	\$213,940
Milton	95.17	\$471,071
Nahant	16.36	\$72,286
Natick	116.93	\$741,509
Needham	118.86	\$695,922
Newton	276.23	\$1,710,253
Norfolk	66.54	\$281,331
North Reading	72.89	\$363,633
Norwell	69.35	\$340,448
Norwood	93.61	\$667,597
Peabody	159.45	\$962,539
Pembroke	85.89	\$404,427
Quincy	184.88	\$1,450,889
Randolph	93.49	\$514,636
Reading	88.81	\$445,122
Revere	85.60	\$584,426
Rockland	48.10	\$312,498

Municipality	Mileage	Allotment
Rockport	33.29	\$153,062
Salem	88.40	\$647,238
Saugus	75.07	\$460,949
Scituate	100.52	\$424,547
Sharon	105.99	\$443,040
Sherborn	55.52	\$195,219
Somerville	88.06	\$857,549
Southborough	68.89	\$319,060
Stoneham	65.15	\$383,039
Stoughton	108.45	\$593,710
Stow	51.57	\$208,934
Sudbury	127.57	\$548,568
Swampscott	42.54	\$233,901
Topsfield	50.13	\$204,212
Wakefield	85.21	\$522,183
Walpole	115.63	\$564,670
Waltham	114.63	\$1,172,076
Watertown	71.92	\$566,652
Wayland	87.47	\$361,454
Wellesley	109.22	\$630,620
Wenham	26.22	\$115,121
Weston	87.36	\$356,093
Westwood	80.16	\$405,154
Weymouth	138.88	\$868,230
Wilmington	94.50	\$579,190
Winchester	72.96	\$406,437
Winthrop	36.35	\$219,892
Woburn	120.04	\$928,792
Wrentham	67.46	\$317,783
Total Boston Region	9250.1	\$60,988,944.00

The Chapter 90 Formula

Factors	Source
Road Miles – 58.33% (city/town accepted road miles)	EOTPW
Population – 20.83 %	Mass DOR
Employment – 20.83% (within town borders)	Mass DET

Source: MassHighway website October 21, 2008

<http://www.mhd.state.ma.us/default.asp?pgid=content/stateaid01a&sid=about>

TRANSPORTATION ENHANCEMENT PROGRAM

The Transportation Enhancement Program provides opportunities to preserve, restore, and enhance components of the surface transportation system. Its purpose is to provide added features to standard transportation facilities and programs. The funds are a means of promoting projects and activities that relate to transportation but go beyond what is considered ordinary environmental mitigation to reduce project impacts.

Eligible projects include:

- Provision of facilities for bicycle and pedestrian facilities
- Provision of safety and educational activities for pedestrians and bicyclists
- Acquisition of scenic easements and scenic or historic sites
- Scenic or historic highway programs (including the provision of tourist and welcome center facilities)
- Landscaping and other scenic beautification
- Historic preservation
- Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals)
- Preservation of abandoned railway corridors (including conversion of use thereof for pedestrian or bicycle trails)
- Control and removal of outdoor advertising
- Archaeological documentation and research
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- Establishment of transportation museums

Applicants are required to submit applications for transportation enhancement funds to the regional planning agency for review based on eligibility and readiness implementation. The project is then forwarded to MassHighway and the State Transportation Enhancement Steering Committee. All projects recommended for funding in this category by the State Transportation Enhancement Steering Committee are subject to final approval by the Secretary of Transportation. Following the Secretary's approval, each project must meet certain conditions, including the programming of adequate funding by the MPO. The MPO must determine that the project is eligible for funding and programming in the TIP in accordance with all MassHighway and FHWA requirements.

There are two types of projects:

- Regional projects that fall within a single regional planning agency (RPA). There may be instances where a regional project could impact two or more municipalities, localities or RPAs. If this occurs then one agency must lead the project.
- Statewide projects must demonstrate statewide importance or significance. They must protect or enhance resources that are located in more than one region; and/or enhance a significant feature, landscape, or artifact of statewide importance in one or more than one region.

The state has set aside \$500,000 for statewide transportation enhancement projects in 2008. Although the Boston Region MPO does not set aside a specific funding amount for enhancements, it has programmed an average of \$1,690,250 over the last three years. The enhancement projects over the last three years include:

- Bedford – Depot Park Phase II (2006) \$343,800
- Milford – Upper Charles Trail design (2006) \$148,100
- Peabody – Bikeway, Phase I (2006) \$3,299,450
- Stoneham/Winchester/Woburn – Tri-Community Bike Path design (2007) \$480,000
- Newton – Commonwealth Avenue Streetscape Component (2008) \$799,400

Shared Use Path Priorities in the Regional Bicycle Plan

HIGH PRIORITY PROJECTS

Amelia Earheart Dam	Everett, Somerville		DCR		Planned	0.1	0	
Assabet - Acton section		Pre-TIP		#	Planned	1.0	1,500,000	MAPC (H), SVY
Assabet - Maynard section		Pre-TIP		#	Planned	2.2	3,300,000	MAPC (H), SVY
Belmont/Cambridge/Somerville project	Belmont, Cambridge, Somerville	Programmed			Under design	0.8	5,200,000	MAPC (H), SVY
Bruce Freeman - Ph 2a	Westford, Carlisle, Acton	Pre-TIP			Planned	6.6	7,700,000	MAPC (H), CC, SVY
Bruce Freeman - Ph 2b	Concord, Sudbury					9.5	14,250,000	
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Mass Central - Belmont section			DCR		Under design/conceptual	1.0	0	MAPC (H), CC, SVY
Minuteman Extension - Bedford section					Under design	2.2	3,300,000	MAPC (M), CC, SVY
Neponset River Trail Phase II	Boston, Milton		DCR		Under design	2.7	0	MAPC (L), CC, BPD, NRR, SVY
Riverway-Kenmore connector	Boston				Conceptual	0.5	750,000	
Somerville Community Path - Phase I	Somerville	Programmed		\$9.0M	Under design	1.0	4,500,000	MAPC (M), SVY
South Bay Harbor Trail	Boston	Programmed			Under design	2.7	3,850,000	MAPC (M), BPD
Tri-Community bikeway	Winchester, Woburn, Stoneham	Pre-TIP			Under design	6.6	5,075,585	MAPC (M), CC, SVY
Upper Charles - Milford Ph 2a and 2b		Programmed			Planned	3.2	4,100,000	MAPC (H), SVY
Watertown Branch (Charles/Minuteman connection)	Watertown	Programmed	DCR		Under design	1.5	1,190,635	MAPC (H), SVY
Total						66.6	\$54,716,220	

MEDIUM PRIORITY PROJECTS

Assabet - Hudson section				\$1.5M	Planned	0.5	750,000	MAPC (H), SVY
Assabet - Stow section				#	Planned	3.3	4,950,000	MAPC (H), SVY
Back River Trail extensions	Weymouth				Planned	1.5	2,250,000	
Border to Boston - Danvers section				\$.8M	Planned	3.0	4,500,000	MAPC (M), SVY
Border to Boston - Topsfield section				#	Planned	3.9	5,850,000	MAPC (M), SVY
Border to Boston - Wenham section				#	Planned	1.3	1,950,000	MAPC (M), SVY
Bruce Freeman - Ph 3	Sudbury, Framingham				complete	4.5	6,750,000	MAPC (H), CC, SVY
Cochituate Rail Trail	Framingham, Natick	Conceptual			Planned	3.7	5,550,000	MAPC (H), SVY
Driftway Trail	Scituate		?		Planned	3.2	4,800,000	
Linking the Corridors	Boston, Brookline				Planned	2.0	3,000,000	MAPC (M), BPD, AMP, SVY
Minuteman Extension - Concord section					Planned	3.2	4,800,000	MAPC (M), CC, SVY
to Boston)	Somerville, Arlington, Medford				Planned	3.5	5,250,000	MAPC (H), SVY
Northern Strand (aka Bike to the Sea)	Everett, Malden, Revere, Saugus, Lynn	Conceptual			Planned	9.5	14,250,000	MAPC (H), SVY
Riverside connector	Newton, Wellesley				Conceptual	1.0	1,500,000	MAPC (H), FI
Salem Path extensions	Salem				Planned	1.5	2,250,000	
Somerville Community Path - Phase II	Somerville				Feasibility study complete	1.0	1,500,000	MAPC (M), SVY
Swampscott Rail Trail	Swampscott				Planned	1.4	2,100,000	SVY
Upper Charles - Ashland section					Planned	4.6	6,900,000	MAPC (H), SVY
Upper Charles - Holliston section		Pre-TIP			Planned	6.7	1,815,000	MAPC (H), SVY
Upper Charles - Hopkinton section					Planned	5.7	8,550,000	MAPC (H), SVY
Upper Charles - Sherborn section					Planned	1.3	1,950,000	MAPC (H), SVY
Total						66.3	\$91,215,000	

LOW PRIORITY PROJECTS

Essex Railroad Rail Trail	Danvers, Middleton				Conceptual	8.1		
Mass Central - Hudson section					Conceptual	6.9		MAPC (H), CC, SVY
Mass Central - Sudbury section					Conceptual	4.6		MAPC (H), CC, SVY
Mass Central - Waltham section					Planned	4.4		MAPC (H), CC, SVY
Mass Central - Wayland section					Conceptual	3.0		MAPC (H), CC, SVY
Mass Central - Weston section					Conceptual	3.0		MAPC (H), CC, SVY
North Suburban - Lynnfield section					Planned	2.5		MAPC (M), SVY
North Suburban - Wakefield section					Planned	1.5		MAPC (M), SVY
North Suburban - Wilmington section					Planned	4.0		MAPC (M), SVY
Total						38.0		

CONCEPTUAL PROJECTS

ARRT to BFRT	Acton, Concord				Conceptual	3.0		SVY
BFRT to Cochituate rail trail	Framingham				Conceptual	2.0		
Burlington bikeway to North Suburban bike routes	Burlington, Wilmington				Conceptual	1.5		
Burlington bikeway to Tri-Community bikeway	Burlington, Woburn				Conceptual	1.0		
Cochituate Aqueduct Trail	Wellesley, Newton				Conceptual	7.6		MAPC (L)
Greenbush Line Rail-with-Trail	Weymouth, Hingham, Cohasset, Scituate				Conceptual	16.0		
Minuteman to BFRT	Concord				Conceptual	1.9		
North Suburban to Border to Boston	Peabody				Conceptual	2.6		
Sudbury Aqueduct Trail					Conceptual	17.2		MAPC (H)
Weston Aqueduct Trail					Conceptual	12.5		MAPC (L)
Total						65.3		

OTHER PROJECTS IN THE REGION

Battle Road to Minuteman Connection	Lexington							
Braintree Hills - North Stoughton Trail	Braintree, North Stoughton							
Chelsea River Paths	Chelsea							
Chelsea Urban Ring Paths	Chelsea							
Dedham Rail Trail	Dedham							
East Boston Greenway	Boston							
Emerald Necklace Gaps (Storrow Dr) Rt 9, Jamaicaaway	Boston, Brookline							
Grand Junction Path	Cambridge							
Hamilton-Essex Trail								
Hull/Nantasket Rail Trail	Hull							
Kenmore - Riverway connector	Boston							
Malden River Paths	Malden, Medford							
Needham Trails	Needham							
Newponset Riverwalk	Quincy							
Paul Dudley White Path Missing Links near North Station and Waltham	Boston, Waltham							
Rockland-Hanover	Rockland, Hanover							
Salem Rail Trail	Salem							
Westford Recreational Trail	Acton							
Wilmington Rail Trail	Wilmington							

\$ COST ESTIMATE BASED ON 1.5 MILLION/MILE

Ongoing No-Build Project	No-Build v/c (peak)	Total volume at v/c	Current Cost
Route 128 Additional Lanes (Randolph to Wellesley)			\$301,350,000
Recommended Projects			
Needham Street/Highland Avenue/Winchester Street (Newton and Needham)	1.70	17,342	\$7,700,000
I-93/I-95 Interchange (Canton)	1.47	108,861	\$120,000,000
Concord Rotary/Route 2 (Concord)	1.45	27,838	\$40,000,000
Route 85 Improvements (Hudson)	1.42	13,576	\$5,900,000
Route 2/Crosby's Corner Grade Separation (Concord and Lincoln)	1.32	25,523	\$31,500,000
Route 18 Capacity Improvements (Weymouth)	1.29	12,618	\$24,000,000
Route 1 Improvements (Malden and Revere)	1.26	48,382	\$65,000,000
Boston Street (Salem)	1.24	10,488	\$2,300,000
I-495/I-290/Route 85 Connector Interchange (Marlborough and Hudson)	1.13	31,057	\$27,600,000
Rutherford Avenue/Sullivan Square (Boston)	1.10	21,126	\$79,300,000
Route 3 South Additional Lanes (Weymouth to Duxbury)	1.10	144,928	\$210,600,000
Bridge Street (Salem)	1.09	9,260	\$3,500,000
Route 126/Route 135 Grade Separation (Framingham)	1.09	12,767	\$50,000,000
Route 1/Route 114 Corridor Improvements (Danvers and Peabody)	1.06	22,585	\$46,800,000
I-93/I-95 Interchange (Reading and Woburn)	1.04	72,862	\$171,000,000
Route 1A/Boardman Street Grade Separation (Boston)	0.99	24,993	\$10,000,000
I-95 Northbound/Dedham Street Ramp and Bridge (Canton)[2]	0.97	9,855	\$3,500,000
Mahoney Circle Grade Separation (Revere)	0.95	15,531	\$15,000,000
Middlesex Turnpike Improvements (Bedford, Burlington, and Billerica)	0.94	7,580	\$14,400,000
I-93/Route 129 Interchange Improvement Project (Wilmington and Reading)	0.89	8,639	\$17,500,000
Route 128 Capacity Improvements (Beverly to Peabody)	0.88	35,896	\$145,000,000
Telecom City Boulevard (Everett, Malden, and Medford)	0.84	26,663	\$15,200,000
Route 1A/Route 16 Connection (Revere)	0.69	20,123	\$46,300,000
Revere Beach Parkway (Everett, Medford, and Revere)	0.68	11,211	\$93,600,000
Route 1/Route 16 Interchange (Revere)	0.48	25,803	\$4,600,000
East Boston Haul Road/Chelsea Truck Route (Boston)			\$14,000,000
Consolidated Rental Car Facility (Logan Airport, Boston)[1]			\$453,000,000
I-93/Route 3 Interchange - Braintree Split (Braintree)			\$33,300,000
Quincy Center Concourse, Phase 2 (Quincy)			\$7,000,000
I-93/Mystic Avenue Interchange (Somerville)			\$58,500,000
S. Weymouth Naval Air Station Access Improvements (Weymouth, Hingham, and Rockland)[3]			\$42,000,000
New Boston Street Bridge (Woburn)			\$2,400,000
Total			\$2,076,950,000
			\$322,200,000