

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

February 24, 2011 Meeting

10:00 AM – 1:00 PM, State Transportation Building, MPO Conference Room, Suite 2150, 10 Park Plaza, Boston

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

Decisions

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

- approve the demographics, including recent adjustments to employment figures, that will be used for the MPO's Long Range Transportation Plan (LRTP)
- approve the minutes of the meeting of February 10

Meeting Agenda

1. Public Comments

There were none.

2. Chair's Report – David Mohler, MassDOT

There was none.

3. Subcommittee Chairs' Report – Eric Bourassa, Metropolitan Area Planning Council (MAPC)

The Clean Air and Mobility Program Subcommittee will meet on March 3 at 1PM for Proponent Input Day.

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

The Advisory Council provided a letter to the MPO regarding the draft Needs Assessment for the Long Range Transportation Plan. (See attached.)

5. Director's Report – Karl Quackenbush, Acting Director, Central Transportation Planning Staff (CTPS)

There was none.

6. Demographics for the Long Range Transportation Plan – Eric Bourassa, MAPC, and Anne McGahan, Plan Manager, MPO Staff

E. Bourassa provided an update on the development of the socio-economic projections that will be used for the Long Range Transportation Plan (LRTP).

At the meeting of February 10, the City of Boston and the Massachusetts Port Authority requested adjustments to employment figures for the Longwood Medical Area and the Logan Airport area. Since that time, MAPC has had conversations with the City of Boston, and its Boston Redevelopment Authority, and the Massachusetts Port Authority about this issue.

As a result, an additional 5,000 service jobs have been identified in the Longwood Medical Area (LMA). Those jobs will be added to the 2010 employment figures for traffic analysis zones in the LMA. This action will not change the total employment figures for the City of Boston. Additionally, job growth in the Logan Airport area will be increased by 190.

A motion to approve the demographics including the aforementioned adjustments to employment figures for the socio-economic projections that will be used for the LRTP was made by E. Bourassa, and seconded by Jim Gillooly, City of Boston. The motion passed unanimously.

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

A motion to approve the minutes of the meeting of February 10 was made by J. Gillooly, and seconded by J. Cosgrove. The motion passed unanimously.

8. Long Range Transportation Plan – *Anne McGahan, Plan Manager, MPO Staff, and Michael Callahan, MPO Staff*

Staff distributed a memorandum and table summarizing the feedback received from members of the public at several recent outreach events that focused on the MPO's draft Needs Assessment for the LRTP. (See attached.) Michael Callahan, MPO staff, reported that staff held two workshops, two open houses, and a transportation equity forum. More than 80 people attended. Staff was also invited by the Friends of the Bruce Freeman Rail Trail to present at a televised meeting in Concord which was attended by approximately 70 people.

Several themes emerged in the public comments including interest in having the MPO prioritize needs, study the total cost of addressing identified needs, measure the cost effectiveness of projects, identify transportation investments that would support economic development, provide non-motorized transportation connections, and address freight traffic concerns. Members of the public have also submitted 21 comments through the MPO's website to date.

Staff also distributed several handouts on the Universe of Projects for the North, Northeast, and Northwest corridors. (See attached.) A. McGahan pointed out changes made to these tables, at members' request, to indicate whether projects were identified from public comments and to include cost estimates if available.

Staff also distributed a handout with discussion points for regionwide priorities broken down by MPO vision topic. (See attached.) A. McGahan summarized the issues outlined

in the attached memorandum. Then members discussed each topic. (Discussion topics are included below.)

System Preservation, Modernization, and Efficiency

Pavement Management

- *Discussion Point: Does the MPO want to fund pavement projects in addition to MassDOT programs and Chapter 90 or just projects that improve pavement condition through roadway reconstruction projects?*
- *Discussion Point: If the MPO funds pavement projects, what should be the percent allocation of roadways in each condition?*

Paul Regan, MBTA Advisory Board, expressed concern that if the MPO takes on resurfacing projects, state resources (including Chapter 90) for those projects would diminish. Tom Bent, City of Somerville, also expressed this concern and suggested getting a commitment from the state to not decrease funding.

Efi Pagitsas, Manager of Traffic Analysis Group, MPO Staff, noted that a reason for the MPO to have a pavement management process is to address roadway condition problems before they get to the point of requiring expensive, full reconstruction.

Staff estimates that the cost to maintain the region's federal-aid eligible roadways in excellent condition would be between \$170 million and \$324 million annually. J. Gillooly asked if staff had estimates of the cost to maintain the region's federal-aid eligible roadways in fair condition. K. Quackenbush replied that staff does not have those figures, but that staff would do that analysis if the MPO adopts a pavement management program. J. Gillooly suggested that this additional information would be helpful to determine if the MPO should have such a program.

Bridges

- *Discussion Point: Does the MPO want to consider a Bridge Program to supplement the MassDOT program?*

In response to a question from E. Bourassa about the state's progress on addressing bridges, D. Mohler noted that the number of structurally deficient bridges is being reduced through the state's Accelerated Bridge Program, but this program is not entirely solving the problem. David Anderson, MassDOT Highway Division, added that there are a number of bridges that were built in the 1950s and 1960s that are deteriorating, and that those bridges will cause an increase in the number of deficient bridges that will need to be fixed. E. Bourassa inquired about the impact of low-cost preventative maintenance to stem that trend. D. Anderson spoke to the value of preventative maintenance to extend the condition of those facilities.

Lourenço Dantas, Massachusetts Port Authority, requested a funding breakdown for the statewide bridge program showing expenditures in all MPO's.

Transit

- *Discussion Point: Does the MPO want to consider a Program for Transit State of Good Repair over that funded in the MBTA's Capital Investment Program?*

P. Regan noted that the state of good repair needs of the MBTA may be under-estimated by \$200 million per year (in the D'Allessandro report). He recommended that staff add three projects to the list of MBTA urgent needs (which are outlined in the attached memorandum): Positive Train Control, Red Line track replacements, and the replacement of the third rail on the Orange Line. Given these needs, he expressed that the MPO and others should give strong consideration to where funding is allocated, and he raised concerns about using funding on projects, such as trail projects, that may have limited air quality and mobility benefits.

Members discussed flexing highway funds to transit state of good repair projects, but did not reach a decision. Members noted that that while it would send a message about the seriousness of the funding crisis, it would take away funding for local needs. D. Mohler summarized that the answer to this question was likely to be no.

Mobility/Safety

Highway

- *Discussion Point: Does the MPO want to consider establishing programs such as: Intersection and Street Geometric Improvements, Traffic Signalization and Control, Removal of Bottlenecks, Arterial Access Management, HOV Lanes, Traffic Management, or Incident Management?*

P. Regan stated that the largest safety risk to people would result from a problem on the MBTA system. He stated that the MPO should be open to addressing specific safety problems that would affect a large number of people and avoid gridlock.

E. Bourassa expressed support for considering the items outlined above. L. Dantas also expressed support for such programs. He noted that these programs would be low-cost, quick to implement, and would address air quality, mobility, and safety. T. Bent also expressed support.

E. Pagitsas added that these types of programs help prevent the need for system expansion (widening of roads) and help extract extra capacity from the system. She also noted that SAFETEA-LU requires that MPO do this type of work.

D. Mohler noted that the answer to this question was likely to be yes.

Transit

- *Discussion Point: Does the MPO want to consider establishing programs such as: Park-and-Ride Expansion, Transit Signal Priority for Buses, or Advanced Transit Management and Operations?*

No members voiced support for a park-and-ride program.

P. Regan expressed support for a transit signal priority program for buses.

Joe Cosgrove, MBTA, suggested broadening the description to a Key Bus Routes Program that would include advanced transit management and operations.

Members said no for a Park-and-Ride Program and yes for the Transit Signal Priority for Buses and Advanced Transit Management and Operations.

Freight

- *Discussion Point: Does the MPO want to consider additional freight studies, an Industrial Rail Access Program, or programs to address freight bottlenecks, rest areas, or access to ports and airports?*

E. Bourassa asked questions about the Commonwealth's investment in freight infrastructure and priority areas for investment. He remarked upon the challenges to dealing with freight issues given that the MPO does not have control over investment decisions made by private entities. In response, D. Mohler reported that the Commonwealth is investing to add double-stack freight capacity to rail lines west of Worcester. M. Callahan, in answer to a question on possible investments the MPO might support, remarked that the weight restrictions on MBTA lines are reported by some as an obstacle that depressed demand for rail freight and that another large concern is the potentially higher volume of truck traffic going to the inner core from the rail terminal at the Worcester freight yard.

S. Olanoff recommended that more freight studies should be done to understand what needs to be done to address freight problems. Members noted that this is an issue for the Unified Planning Work Program.

D. Mohler noted that the state is expected to have an Industrial Rail Access Program in the next bond bill.

E. Pagitsas noted that congestion is a major freight issue and that freight concerns could be addressed with programs for mobility, including incident management.

Members did not support setting aside funding for these freight programs.

Bicycle and Pedestrian

- *Discussion Point: Does the MPO want to establish a bicycle and pedestrian program (if so, would it prioritize closing gaps in the system or expansion)?*

E. Bourassa noted that the MPO has dedicated \$2 million per year through its Clean Air and Mobility Program, which can be used to close gaps in the bicycle and pedestrian network. He also stated that the MPO should be mindful of opportunities to leverage

funds with the state's Enhancements Program. He stated that the MPO needs to better prioritize bicycle and pedestrian projects to make sure that they connect to activity centers.

P. Regan expressed opposition to creating a new bicycle and pedestrian program. He stated that the air quality impacts of bicycle and pedestrian projects cannot be measured on the MPO's model and that the MPO should not spend federal funds on projects that do not have a measurable environmental impact at the expense of projects that do have measurable air quality benefits. He suggested that such projects are coming to the MPO because environmental programs have been underfunded. M. Pratt expressed agreement with P. Regan's position.

Jim Gallagher, member of the public, advised against creating a unified bicycle and pedestrian program since the needs of the two sets of users are different. He noted that bicycle and pedestrian projects provide benefits beyond air quality, such as mobility. Remarking upon the high cost of bicycle projects, he stated that those projects are being over-designed and suggested that the project cost could be reduced while still meeting the needs of users.

Ginger Esty, Town of Framingham, noted that it is not healthy for users when bicycle routes are located on roadways (referring to the bicyclists breathing in of emissions). She said that the bicycle paths should be off-road.

S. Olanoff expressed support for continuing the Clean Air and Mobility Program, which he said produces measurable air quality results.

J. Gillooly did not express support for an additional program. He noted that bicycle and pedestrian accommodations are already being worked into project designs in the urban core through Complete Streets policies. P. Regan agreed that working these accommodations into the project design of projects funded in the TIP will produce the best impact.

T. Bent remarked upon the need for bicycle accommodation, particularly in the inner core where new transit stations (such as on the Green Line) will not have parking facilities.

Members agreed not to set-aside funding for a bicycle and pedestrian program.

Transportation Equity

- *Discussion Point: Does the MPO want to consider expanding its Transportation Equity Program to include a program funding low-cost improvements to address transportation equity needs?*

J. Cosgrove noted that the federal Job Access Reverse Commute Program addresses transportation equity needs and that the MBTA could work to better leverage funding.

J. Gillooly expressed support for having a program to address neighborhood safety issues and to connect with environmental justice communities. M. Pratt noted that past MPO outreach identified needs in environmental justice areas that could be addressed by repairing sidewalks and improving safety. T. Bent also expressed support.

E. Bourassa suggested possibly merging a transportation equity program with the MPO's Clean Air and Mobility Program.

Members agreed to set-aside funds for expanding its Transportation Equity Program.

Land Use

- *Discussion Point: Does the MPO want to further study the impacts of future growth on the transit system?*
- *Discussion Point: Does the MPO want to identify investments needed to support economic benefits?*

Members did not recommend creating a set-aside under the land use category.

Other

J. Cosgrove reported that the MBTA has received comments from private bus carriers who are interested in seeing their routes subsidized.

9. Interstate 93 Fast 14 Presentation – John Romano, MassDOT Highway

J. Romano reported that MassDOT Highway will be starting the *Interstate 93 Fast 14* project to replace 14 bridges on I-93 in Medford. The project will run from June to September 2011. Construction will take place on the weekends (except holiday weekends). Christine Mizioch, Project Manager, MassDOT Highway, and Eliza Partington, Technical Coordinator, MassDOT, then gave a presentation on the project.

C. Mizioch provided an overview of the project which will involve replacing seven bridges each on the northbound and southbound sides of I-93. The deteriorated condition of these structures became apparent last year when a hole opened up on one of the bridges. The bridges have deteriorated to a point that there is concern about their structural integrity.

MassDOT Highway advertised the project last August and the project has a notice to proceed. A design/build contract is being employed to expedite the project. The entire project will be complete in one construction season (as opposed to four years if done in the conventional manner).

The new bridge deck panels are pre-cast concrete on steel beams, which are fabricated off-site and trucked to the work site, and installed using cranes. The new bridge decks are expected to have a 75 year life span and they come with a five year warranty.

The project is at 90% design. Repairs to the bridges' substructure will begin this spring. The replacement of the superstructures will take place during 10 weekends in the summer (except holiday weekends).

Among the goals MassDOT Highway's has for this project is to minimize traffic disruptions. There will be no lane closures during weekday rush hours, though lanes will be closed at night. Weekend lane closures on I-93 will begin at 8PM on Friday nights. (Local road closures will begin at 6PM on Fridays.) Jersey barriers will be used to create a crossover to re-route traffic around the worksites, reducing the capacity of I-93 near those locations by 50 percent. Lanes will reopen by 5AM on Monday mornings. The contractor will be fined if it does not meet the morning deadline.

Variable message signs and intelligent work zone systems will be employed to alert drivers of the construction and give them an opportunity to choose alternate routes and transit options. MassDOT Highway is working with emergency responders and local traffic working groups.

E. Partington then discussed the communication aspects of the project. MassDOT is using a number of tools to inform people of the construction and to provide information that helps people make the best decisions about how to get around while the project is underway. There will be an emphasis on sustainable transportation options.

Outreach tools include a website – 93Fast14.com – which will include information on detours, traffic updates, and construction alerts, and link to other trip planning tools (such as those offered by the MBTA and MassRIDES). MassDOT will also be working with municipalities in affected areas to provide messages via reverse 911, and it will be providing information via social media, changeable message signs, and the media. Tools will also be provided that businesses can use on their own websites. An animation video will also be available.

The presenters showed an animation of how the project will work.

Members asked questions and made comments:

P. Regan asked if any work is scheduled on Route 128 during the timeframe of this project. C. Mizioch explained that MassDOT has coordinated this work with other projects.

G. Esty advised MassDOT be aware of certain quality control issues. C. Mizioch noted that both MassDOT and the bridge deck fabricator have extensive quality control mechanisms in place.

R. Reed asked where the bridge sections would be coming from and the route the trucks will take to the work site. C. Mizioch stated that the sections will be coming from multiple locations. MassDOT Highway is working with the State Police on access routes.

M. Pratt advised MassDOT to make sure they put signs far enough in advance of highway interchanges to alert drivers of the need to detour.

T. Bent asked if MassDOT has informed the GPS providers about this. E. Partington stated that MassDOT will be talking with them.

T. Bent expressed concern about whether the pre-cast bridge panels will hold up in New England weather and he asked if there is any information about their long-term durability. C. Mizioch replied that these type of deck panels have not been used for a long time, but she noted that MassDOT has spent a lot of time developing the concrete mix for this project with a consultant that has the most nationwide experience on this subject.

T. Bent asked about the preventative maintenance program for the bridges. C. Mizioch stated that the contractor will be responsible for preventative maintenance during the five year warrantee period. The Commonwealth will be responsible thereafter.

Wig Zamore, Somerville Transportation Equity Partnership and Mystic View Task Force, expressed concern that the project's construction finance plan is not tied to its operations and maintenance plan. He noted that it would be unclear to what extent the state would have recourse if the structure begins to fail before the end of its expected lifespan.

T. Kadzis asked if the concrete bridge decks would be paved after installation. C. Mizioch replied that the decks will be paved over a waterproof membrane.

D. Anderson commented on the relative cost effectiveness of the construction method and noted that the Commonwealth has a number of bridges on interstates that are in poor condition.

10. MPO Memorandum of Understanding – David Mohler, MassDOT

Staff distributed an annotated version of the MPO's existing Memorandum of Understanding (MOU) that references comments and suggestions that members had made in regards to revising the document. P. Wolfe reported that from all the members' issues identified for discussion several main issues arose: MPO membership, voting, and the TIP and TIP processes. (The Federal Highway Administration and Federal Transit Administration have raised the issue of MPO membership.)

Members began their discussions about revising the MOU. They focused first on the issue of MPO membership, and discussed whether the local membership should be restricted to six members (as it is now), whether municipal membership should specify three cities and three towns, whether elections should provide for one city or town from each of the eight subregions in the MPO area, and whether the current restrictions on multiple municipal candidates from a subregion (except for the Inner Core) should remain. (The MPO's current election process sets a limit of no more than one MPO member per subregion, except for the Inner Core.)

Members expressed the following opinions:

D. Koses recommended that the MPO ease restrictions that currently prohibit certain municipalities from running based on whether the municipality is a city or town and due to restrictions on the number of municipalities that can run (and serve) from each subregion. He believes that any city or town in the MPO region should be allowed to run in any election.

Several other members, including E. Bourassa and T. Bent, advocated for eliminating the distinction between cities and towns in the election process as well. M. Pratt expressed, however, that there needs to be a balance between city and town membership, otherwise towns would not be well represented.

C. Stickney expressed that the MPO should have a representative from each of the subregions. She noted that it is beneficial for representatives to help educate other members about their subregions. D. Koses and G. Esty expressed concern, however, that having representatives from each subregion could lead to a situation in which those representatives would be focused on supporting the projects in their own subregions and lose the regional perspective.

J. Gillooly expressed concern that if the number of municipal representatives grows, the City of Boston would not be equitably represented on the MPO based on population. Boston would ask for additional votes on the MPO in that event. R. Reed noted that municipal representatives would likely be sympathetic to Boston's positions since they would be representing residents who travel to Boston for work and understand the need for mobility in the region.

L. Dantas pointed out that some MPOs determine membership based on the population of municipalities. If a municipality reaches a certain population threshold it is automatically a member.

Members also discussed the balance between state and local membership. R. Reed said that he would like to delay the decision on local membership until after discussion of state membership. M. Pratt stated that all of the MassDOT divisions should be represented on the MPO, including the part of the agency that now handles the Massachusetts Turnpike. D. Mohler explained that MassDOT is not supportive of adding non-MassDOT state agency representatives to the MPO. He said that the Commonwealth is speaking with one voice for transportation issues.

Members reached consensus that there should be no term limits on MPO membership.

A straw poll was held to gauge members' initial opinions. The chart below shows members' responses to the following questions:

- How many elected municipal members should be on the MPO?
- Should there be a distinction between cities and towns in the election?
- Should there be limits to the number of municipalities that can run for election from each subregion?

Member	Number of Local Seats	City/Town Distinction	Keep Subregional Limits
Regional Transportation Advisory Council	8	no	yes
MBTA Advisory Board	6	no	yes
Somerville	6	no	yes
MassDOT Highway	6	no	no opinion
Boston	6	no	yes
MAPC	6	no	yes
Hopkinton	6	yes	yes
Bedford	8	no	no
Newton	6	no	no
Braintree	6	no	yes
MBTA	6	yes	
MassPort	6	no	no
Framingham	6	yes	
MassDOT	6/8	no opinion yet	no

Members agreed to continue the discussion at the next meeting.

11. Members Items

There were none.

12. Adjourn

A motion to adjourn was made by E. Bourassa, and seconded by J. Romano. The motion passed unanimously.

Transportation Planning and Programming Committee Meeting Attendance
Thursday, February 24, 2011, 10:00 AM

Member Agencies

MassDOT
MassDOT Highway

City of Boston

City of Newton
City of Somerville
MAPC

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

Representatives and Alternates

David Mohler
David Anderson
John Romano
Jim Gillooly
Tom Kadzis
David Koses
Tom Bent
Eric Bourassa
Eric Halvorsen
Lourenço Dantas
Joe Cosgrove
Paul Regan
Steve Olanoff

Richard Reed
Christine Stickney
Ginger Esty
Mary Pratt

MPO Staff/CTPS

Michael Callahan
Maureen Kelly
Robin Mannion
Anne McGahan
Hayes Morrison
Efi Pagitsas
Sean Pfalzer
Karl Quackenbush
Alicia Wilson
Pam Wolfe

Other Attendees

Jim Gallagher
Timothy Kochan
Robert McGraw
Christine Mizioch
Joe Onorato
Eliza Partington
Karen Pearson

Ellin Reisner

Alfredo Roldan
Wig Zamore

MassDOT District 5
Edwards Angell
MassDOT
MassDOT Highway
MassDOT
MassDOT Office of
Transportation Planning
Somerville Transportation Equity
Partnership

Somerville Transportation Equity
Partnership / Mystic View Task
Force

REGIONAL TRANSPORTATION ADVISORY COUNCIL



February 24, 2011

David Mohler, Chair
Transportation Planning and Programming Committee
Boston Region Metropolitan Planning Organization
State Transportation Building
10 Park Plaza, Suite 4150
Boston, MA 02116

RE: Draft transportation needs assessment

Dear Mr. Mohler,

The Regional Transportation Advisory Council (Advisory Council) is an independent group of citizen and regional advocacy groups, municipal officials, and agencies charged by the Boston Region Metropolitan Planning Organization (MPO) with providing public input on transportation planning and programming.

The Advisory Council and its Plan Committee recently met to discuss the draft transportation needs assessment associated with the next Long-Range Transportation Plan, *Paths to a Sustainable Region*. The Advisory Council strongly supports the MPO's work to identify the transportation needs in the Boston region. We offer the following suggestions, listed below by topic, to improve the needs assessment. We also identify needs that we think should be a priority, and needs that we think are important, but were not included in the needs assessment.

General

- The document is more than 500 pages long. A summary that prioritizes the needs will make the document more useful to the public. The summary should include references, including hyperlinks in the web version, back to relevant parts of the corridor chapters.
- All transportation needs should be listed, including those that may not be in the MPO's purview. Examples include the needs of private transportation providers such as bus companies and freight rail carriers.
- The economic development considerations of the region are missing. The assessment makes no connections between economic development needs and the projected needs of the transit and highway systems.

Project Selection

- The region's needs should be prioritized. Prioritization will make the needs assessment a more effective guide for decisions about which projects and programs to fund.

Providing transportation policy advice to the Boston Region Metropolitan Planning Organization

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- The needs should be organized by category in order to achieve a mix of projects. Projects should then be prioritized within their category.
- Funding should be distributed equitably across the various categories.

Highways

- The summary should identify specific interchanges and intersections most in need of improvements. Currently it includes just segments of freeways and arterial highways.

Transit

- The MBTA and other regional transit authorities have serious and urgent maintenance needs. Needs that are part of the MBTA's \$3 billion backlog of state of good repair maintenance projects should be identified.
- The needs assessment should identify opportunities for increasing interconnections between various modes within the overall system.
- Privately funded transit services are not well identified in the needs assessment. Private bus routes should be better identified because they can fill some of the gaps in the public transportation system.
- There is a need for regional transit authorities to better communicate their services to businesses and people who are willing to use transit in order to increase ridership.

Freight

- More comprehensive freight-related data is needed. An especially important need is information about how the predicted 70 percent increase in freight volume between now and 2030 will affect the region's transportation system.
- Freight leadership is needed within MassDOT to focus on improving the efficiency of the existing freight distribution system and plan for future expansion.
- Among the pressing existing needs of the freight distribution system are:
 - Freight rail needs to continue serving the region's core in order to alleviate highway congestion. The need for freight distribution facilities inside Route 128 should be identified in the needs assessment.
 - Deepening the Boston Harbor approach channels and connecting rail to the port are needs because the Panama Canal is being widened and larger container ships may visit Boston.
- Looking to the future, in order to develop a more sustainable freight distribution system, the following issues should be addressed:
 - Approximately 90 percent of freight in the Boston region is moved by truck, which is a less sustainable option than rail or ship.
 - Most of the transportation infrastructure in the Boston MPO region is government owned. Ongoing maintenance and reconstruction should in all cases address the potential as well as existing needs of freight transportation.
 - The industry standard for weight allowed on freight rail tracks exceeds the weight limit of 263,000 pounds on most state-owned rail lines. State-owned rail lines

should meet the national 286,000 pound rail car weight standard. This would increase the willingness of freight rail customers to locate or expand in eastern Massachusetts. The limit inhibits the fluid movement of rail cars.

- Land use rezonings are often favoring residential over industrial and commercial use. To maintain a viable freight rail system, local governments need to provide incentives to retain industrial zoned property, and maintain freight rail terminals and rights of way in the Boston Region MPO area, where truck congestion is a growing concern. The MPO should communicate this more global need to the local communities.

Alternative Modes

- The impediments to shifting person trips from automobiles to transit, walking, and biking should be listed. There is a need to increase the use of alternative modes because our continued dependence on automobile travel is causing climate change, consuming large amounts of energy and land, and polluting the air we breathe.

We are pleased to learn that the needs assessment will be updated on an annual basis. We look forward to working with the MPO to refine the document each year and help make it a foundation of transportation decision making in the Boston region.

Sincerely,



Laura Wiener, Advisory Council Chair



Schuyler Larrabee, Plan Committee Chair

MEMORANDUM

DATE February 24, 2011
TO Transportation Planning and Programming Committee
FROM Anne McGahan and Mike Callahan, MPO Staff
RE Public Outreach Feedback on Draft Needs Assessment

INTRODUCTION

The Boston Region MPO held a series of public meetings in February to gather feedback on the draft transportation needs assessment conducted as a component of the next Long-Range Transportation Plan, Paths to a Sustainable Region. Meetings were held on February 10 in Saugus, February 15 in Needham, and February 16 in Boston. Additionally, Friends of the Bruce Freeman Rail Trail invited staff to Concord on February 17 for a meeting and the MPO held a Transportation Equity Forum in Boston on February 23. (The feedback received at the Transportation Equity Forum will be presented in a final version of this memorandum.) Approximately 130 people have attended the Plan-related meetings through February 18.

SUMMARY OF FEEDBACK

Many diverse viewpoints were expressed at the meetings. Following is a summary of views that were expressed repeatedly. A more complete description of the comments made at the meetings can be found in the summaries that follow this section.

- A needs assessment is a good way to start the planning process.
- Economic development is a need for the Boston region. The transportation needs that support economic development projects should be identified.
- The MPO should prioritize the needs.
- The MPO should study the total cost of the needs so the magnitude of the financial shortfall is understood.
- The cost effectiveness of projects should be measured so the projects that best solve the region's needs are programmed.
- Trails provide non-motorized connections between activity centers and transit stations. They support public health and protect the environment.
- Trucks are a burden on our highways. There is a need to use the freight rail system to support efficient freight distribution.

MEETING SUMMARIES

Saugus Workshop

Meeting participants made the following comments:

- Route 1 is designed to 1930s standards and needs to be upgraded. However, the highway should not be expanded as this will shift congestion to other portions of the highway and have negative consequences for the communities along the highway.
- There is a lack of transit service to Lynn. Extending the Blue Line to Lynn will encourage good land use development.
- The North Shore Alliance for Economic Development listed their five transportation priorities for 2011. These projects are supported by the Alliance for their potential to create a more vibrant economic foundation for the North Shore:
 - Reconstruction and improvements on Route 128, Exit 19 at Brimbal, Sohier, and Dunham: This project would facilitate the development of 250 acres.
 - Route 1 Improvement Project, widening of Route 1 between Route 60 (Copeland Circle) and Route 99, and the Bell Circle upgrade: The proposed gaming facility at Suffolk Downs will make this project even more important.
 - Blue Line extension to Revere and Lynn: The goal for 2011 is to complete the Environmental Impact Report and for the project to be in the Long-Range Transportation Plan.
 - Parking Garage and Train Station Upgrades in Beverly and Salem
 - Route 128 Corridor Study: This study would determine improvements that can eliminate traffic slowdowns on Route 128 at the Lowell Street and Route 114 interchanges.

Needham Workshop

Meeting participants made the following comments:

- There is bad congestion in the Needham Street/Highland Avenue corridor connecting Newton and Needham. This area would benefit from an extension of the Green Line along the existing rail bed that runs along the corridor. It would stimulate economic development in area of the New England Business Center. It is an economically important area for the state because of the potential to create jobs in the area. The bottlenecks there discourage business activity.
- Economic development is not happening along the transit corridors in the West Corridor.
- It's not clearly laid out what transportation investments are needed to support economic growth and the many large economic development projects identified in the needs assessment. A connection needs to be made in the needs assessment between the region's economic needs and the transportation needs that can support them. The existing and proposed developments should be noted. For instance, the Westwood Station project depends on improving the I-93/I-95 interchange in Canton and development along Route 128 in Newton and Needham would be supported by a transit connection.
- The MPO should consider return on investment in its projects. Where can it get the biggest bang for its investments? Extending the Green Line to Needham would have large

economic benefits.

- Rail trails serve a need to connect activity centers and transit stations with non-motorized transportation options. There are many minor, unused branches off of rail lines that could provide more of these connections. They also can improve our health, although they are not simply for recreation. They could support commuting, too.
- MassDOT needs to spend more on the transportation enhancements program.
- The MPO is not funding or planning to fund many shared-use paths. There should be more funding allocated to them.
- The MPO needs to study how the projected 70 percent increase in freight volume will affect the transportation system in each of the corridors.
- The Bay Colony Rail Trail would help connect to activity centers and the Needham Line commuter rail and would give people other transportation options in this congested area.
- Freight rail routes are not mapped in the needs assessment. These should be mapped along with the class and speed restrictions of the lines. People should know where this infrastructure is, even if it's abandoned. These contiguous corridors are valuable.
- The MPO should identify the total cost of the region's maintenance needs. This number would be much larger than the funds available.
- The biggest need in the Boston region to support the President's high speed rail initiative is the proposed North-South Rail Link.

MPO Open House Sessions

Meeting participants made the following comments:

- More bicycle and pedestrian counts on the roadway network are needed.
- Data on crashes between bicyclists and pedestrians are needed. The Registry of Motor Vehicles only collects data when an automobile is involved in the accident.
- There is a severe funding shortfall. The needs should be presented in a way that makes the priorities clear to the public. Additional funding is a huge need.
- Freight is often ignored in regional transportation planning. The relocation of the freight rail terminal in Allston needs to be addressed in the needs assessment. Efficient freight distribution contributes to economic development.
- The MPO should use its big picture view of the region to consider how distribution of goods can be done more efficiently. This would give the municipalities an understanding of the value of industrial land. The distribution sites, and possible future distribution sites, should be mapped. MassEcon is a group that can help identify sites.
- The needs assessment is the right way to start the process. It's not perfect, but is a very good step forward.
- Transit mode share should be examined in the same way that walk and bike mode share were studied. The role of transit is undervalued when mode share is studied at the regional level, rather than studying the mode share of transit in areas where it's available.
- The MPO should study the total cost of the needs and compare it to the funds available. This could be a Unified Planning Work Program study.
- The MPO should study the cost effectiveness of projects. For instance, it could study the carbon dioxide emissions reduced per dollar spent on the project.

- The MPO should highlight projects that would be in the Plan if more funds were available.
- Commuter rail service is needed in parts of the Central Area. Service is spotty at Ruggles and Yawkey Stations.
- The Longwood Medical Area is dependent on cross-town buses. There is a need for better cross-town service.
- The Green Line needs capacity improvements.
- The Longwood Medical Area has 10,000 more employees in the base year than are identified in the demographics.

Bruce Freeman Rail Trail Meeting

Staff gave an overview of the Long-Range Transportation Plan development process and took questions and recorded comments. Approximately 70 people attended the meeting, which was broadcast on local cable television.

Meeting attendees made the following comments:

- The Bruce Freeman Rail Trail is the only rail trail project included in the current Long-Range Transportation Plan that does not have an earmark associated with it. There should be more trails in the Plan.
- The trail will have negative effects on White Pond and other sensitive areas. The trail is more of a want than a need.
- Freight transportation is an important issue and the closing of the Allston rail terminal is a concern. However, the former rail corridor that would be home to the Bruce Freeman Rail Trail was not an economically successful enterprise. Truck traffic is a problem in the nation, but there is not enough heavy industry to significantly divert freight from trucks to railroads. Meanwhile, bicycle and pedestrian transportation modes are becoming more important.
- Towns along the Bruce Freeman Rail Trail have shown their support for the project by spending Community Preservation Act funds to advance its design.
- The Bay Colony Rail Trail should be included in the Plan's Universe of Projects. The trail has broad support in Newton, Dover, and Medfield. However, Needham would prefer an extension of the Green Line along the corridor.
- Trails are needed because they allow residents to travel within and between towns without an automobile. Trails should be treated more equitably. There is more visibility of the importance of trails at the federal and state level.
- It was requested that the Bruce Freeman Rail Trail be included in the 2015 element of the Transportation Improvement Program.

MEETING ATTENDANCE

Saugus

Jane Ahern-DeFillippi of Melrose

Bill Luster, Executive Director of the North Shore Alliance for Economic Development

Jamie Marsh, community development director of the City of Lynn

Fred Moore, Association for Public Transportation

James Tozza, President of Bike to the Sea
John Walkey, Massachusetts field director for Transportation for America
Sheri Warrington, Senator McGee's office.

Needham

Devra Bailin, Needham Economic Development Director
Frank DeMasi, Wellesley representative to the Regional Transportation Advisory Council
Howard Erlichman
State Representative Denise Garlick
Michael Greis, Green Needham
Joel Lebow of Needham
Susan McGravey, Green Needham
Steve Olanoff, Westwood representative to the Regional Transportation Advisory Council
Arnold Pinsley of Natick
Betty Soderhold of Needham
Arnie Soolman of Needham
Tad Stanley, Needham Bikes and the Bay Colony Rail Trail
Heather Urwiller, Randolph Planning Department
Jerry Wasserman, Needham Selectman
Dick Williamson of Sudbury

Boston

Wayne Amico, VHB
Louise Baxter, MBTA Riders' Union
Joe Cosgrove, MBTA
Tom Broadrick, Duxbury Planning Department
Pat Brown of Sudbury
Debbie Burke, City of Malden
Paul Carter
Allan Chiocca, Rockland Town Administrator
Michelle Ciccolo, Town of Hudson
Frank DeMasi, Wellesley representative to the Regional Transportation Advisory Council
John Diaz, GPI
Trish Domigan, VHB
Jim Fitzgerald, World Tech Engineering
Marzie Galazka, City of Everett
Stephan Gavin, MBTA Riders' Union
Meaghan Hamill, Senator Thomas McGee's office
Sarah Hamilton, MASCO
George Howie, GPI
Kristina Johnson, Quincy Planning Department
Tom Kadzis, Boston Transportation Department
Erin Kinahan, MassDOT District 6
Larry Koff of Brookline

John Lucas of Rockland
Alan Moore, Friends of the Community Path
Eric Moskowitz, Boston Globe reporter
Rich Parr, A Better City
Stephanie Pollack, Dukakis Center, Northeastern University
Rich Reine, Town of Concord
Bill Renault, Town of Concord
Richard Schoenfield, Boston Society of Civil Engineers
Elizabeth Schoetz, Senator Katherine Clark's office
Bill Smith, Town of Brookline
Ed Tarallo, Woburn Planning Department
Joe Viola of Brookline
David Watson, MassBike
Lynn Weissman, Friends of the Community Path
Tom Yardley, MASCO
George Zambouras, Town of Reading

MPC/mpc

Encl.

Paths to a Sustainable Region Needs Assessment Feedback
February 24, 2011

NAME	AFFILIATION	FEEDBACK	DATE
Lydia Rogers		I'm sorry I was unable to attend the meeting February 17th in Concord, but I was visiting a sick relative. I had been looking forward to the presentation and hearing about the whole process. I also wanted to express my concern about the impacts the proposed rail trail will have on Concord. Building a paved one-lane road through some of the last wildlife habitat will change the area irreparably. This is an extraordinarily expensive project, not just for the initial costs, and at a time when communities like Concord are turning off street lights to save money. The costs of maintaining and patrolling the trail, toilet facilities and parking are added expenses for each town. There are also major safety issues that have not been solved at the railroad crossing in the downtown area of West Concord. The reality is that this is a recreational trail. It will not decrease automobile traffic or improve air quality, and users will be driving to the trail to use it. I would sincerely like to see better options for alternative transportation, something that our son is studying in his graduate program at Tufts. Making transportation options, including biking, safer and more convenient in the Boston area could truly make a difference.	2/21/2011
Steve Olanoff	Town of Westwood	The Needs Assessment of the LRTP does not cover the needs of economic development adequately. Large economic development areas and large projects are listed, but many locally designated economic development areas are not mentioned. While many transportation needs are outlined, there is no connection drawn between the economic development areas/projects and the transportation needs to support this economic development. The knowledgeable members of the MPO may be able to make these connections during the project selection process, but any reader of this document should be able to discern what specific public transit and highway needs fulfill specific desired economic development.	2/17/2011
Larry Koff	Larry Koff and Associates	<p>Following up on today's needs assessment workshop I have the following additional comments:</p> <p>As I suggested at the workshop today, the needs assessment should put the costs into a broader context so that citizens and policy makers can better assess the financial deficiencies and choices before the Commonwealth. It would seem that the MetroFuture plan provides such a context for weighing the alternatives.</p> <p>A. CURRENT TRENDS gives us one set of responses to the needs-it is the continual dispersal of resources so that everyone gets some funding but there is no clear path to the future.</p> <p>B. METROFUTURE requires that the funding be allocated to advance the vision identified in the plan. Important coalitions are formed, new funding sources identified, and a clearer set of land use, economic development, environmental and equity goals achieved.</p> <p>I think the Regionwide Needs Assessment should reflect these choices. How do we weigh the cost/benefits of bike paths and investment in the state rail plan? How do we get some creative thinking around leveraging existing infrastructure to pay for some of these costs? Now that we have a plan, we must begin to figure out what are the best investments and how to pay for it.</p> <p>I was pleased to read the State Rail Plan. There is much to consider there if we are to promote economic growth. The plan needs much more public discussion. I was disappointed that the State rail plan did not discuss the Allston Yards and development potential. Given limited resources, all development projects and infrastructure projects should all go through some form of cost/benefit analysis and be weighed against the plan and their ability to get funding.</p> <p>Downtown Crossing has the largest transit investment in the region yet the city is approving dormitories above transit stops and Filenes remains a hole in the ground. The continual dispersal of economic development is undermining existing infrastructure investment.</p>	2/17/2011

Paths to a Sustainable Region Needs Assessment Feedback
February 24, 2011

NAME	AFFILIATION	FEEDBACK	DATE
Jim Gallagher	Somerville resident	<p>Sorry I can't be there in person to make these comments. Those below are based on a reading on the Central Area Needs Analysis. I haven't had time to read all the others (400+ pages, really?) but I assume they all follow roughly the same principles and format so the generalized comments should apply to all. As I said in previous comments, while much of the background information is necessary to justify your conclusions, this level of detail is not appropriate in a document that the public is expected to read. In an Appendix/as link would be better. What should be included is the section Summary of Central Area Needs, and these comments all refer to that. For the first bullet (bridges), does the fact that 25% are functionally obsolete and 11% structurally deficient mean that these bridges "Need" to be repaired? I think so. The bullet should be reframed to state a need, and accompanied by a map showing the location of the bridges in need of repair. Identification of roadway bottlenecks in the second bullet is nice and specific. However, one of the three "methods" referred to is based on V/C ratios, a very crude and often misleading measure. With actual measures of actual congestion in the CMP there is no need to rely on V/C for existing conditions. And relying on V/C for future conditions limits solutions to those which increase C, roadway capacity and exclude many options which increase thruput (for example, signal improvements, ITS) but not roadway "Capacity". So, while the list of locations seems fine to me, I would remove any from the list that are based on V/C without independent verification. For crash locations, the need is presumably to make the five listed locations safer. Please say so. But all 5 are at interstate ramp locations. I know there is not comprehensive information to do a rate-based comparison for the entire region, but at least a similar "need" to fix the 5 worst non-interstate intersections should be identified. For transit, the first 8 bullets all identified needs explicitly. Excellent. But, starting with the Green Line Central Subway, problems are identified. If the "need" is to fix the "problem" then please say so. For Freight, again most of the bullets highlight problems but don't translate into needs. And it's not clear (here or in the Transit section) what the point of "Issues to Watch" is. Same problem versus need phrasing in Bicycle (should be Bicyclists) and Pedestrian section. Here, if it's not possible to identify specific facilities needed, the need statement can identify ways to judge the necessity of new facilities as they are proposed. For example, on all federal-aid-eligible facilities where pedestrians are allowed there need to be sidewalks on both sides and safe crossings every 1000 feet. And there need to be bicycle lanes on all roadways with posted speed limits of 35mph or higher, or comparable facilities within 1/4 mile. For Transportation Equity there are no "needs", just "issues to Watch"? Really? There must have been needs identified in the EJ meetings (the converse on most of the issues - which are mostly "problems"). You need to identify EJ needs, and then solutions, in any reasonable plan. Again, the Land Use section doesn't really identify needs. At a minimum, you need to invest in transportation infrastructure in a way that is consistent with the regional land use plan. And then identify specific locations (Assembly Square, North Point, South Boston) to fit, and specific projects that are needed. I commend you on the incredible amount on information collected on existing conditions and problems. I urge you to use this to identify and prioritize regional needs, and then use those needs to prioritize future projects, programs, and ideas. I know it will be hard now but it will make your future work much easier. Thanks for the opportunity to comment.</p>	2/16/2011
Peter Smith	Arlington resident	<p>As a resident of Arlington Center I would be a heavy user of such a subway system if it was extended to Arlington. I would use it for work commutes, as well as leisure trips to Cambridge, Boston and beyond. I believe there would be heavy use of this system reducing stresses on the local roads that are already clogged</p>	2/14/2011
Sam Milton	Arlington resident	<p>There is no mention of a proposed extension of the Red Line into Arlington/Lexington. Such an extension should be considered as a major component of a regional sustainable transportation needs assessment. Thank you!</p>	2/11/2011
James Marsh	City of Lynn	<p>The City of Lynn is plagued by a lack of direct flowing traffic. Somewhere along each entry point, motorists must pass through residential neighborhoods while navigating limited access roads with traffic signals and numerous stops. Unlike communities abutting major thoroughfares such as Routes 495, 128 and 1, the City of Lynn's commercial base and resulting economics are limited to smaller, local roads. In addition, the effect the lack of free flowing traffic has on commuter frustration and the resulting perception of Lynn cannot be understated. Add to this the possibilities of a Casino on Route 1A and the work we have accomplished moving power lines off our waterfront for development (mentioned in the needs assessment as the largest development planned in the Northeast and where the largest employment gains are projected), and it is more evident now than ever that the City of Lynn is in need of a thoughtful, carefully constructed plan for its transportation needs.</p> <p>Specifically, in addition to some of the equity needs outlined in table 2-19, it imperative to the City's long term viability to create solutions revolving around route 1A, route 107 and the Blue Line as these routes access our downtown, industrial zones and waterfront. Other initiatives include access into Lynn at Goodwin Circle / route 129 and pedestrian access to our developing waterfront.</p> <p>Thank you for the opportunity to comment.</p>	2/9/2011

Paths to a Sustainable Region Needs Assessment Feedback
February 24, 2011

NAME	AFFILIATION	FEEDBACK	DATE
Gail Costelas	Massachusetts Department of Environmental Protection	The MPO should reach out to commuters by using bus advertising and/or announcements on MBTA platforms. Also, the Department of Environmental Protection collects comments from area companies on how the transportation system should be improved. These comments are required as part of the Ride Share regulation. DEP can share these comments with MPO staff.	2/9/2011
Linda Olson Pehlke	Brookline Town Meeting Member, Climate Action Committee	Surface Green Line service improvements should include using signal priority to give trains priority right of way at some signalized intersections in Brookline. Service and capacity of the C line must be improved to handle current and future demand. Circumferential bus and transit routes need improvement. For instance, Route 66. The "bunching" problem and slow travel speeds could benefit from stop consolidation and signal priority for buses. Comfort and protection from the elements must be improved for bus riders. Bicycle and pedestrian crossing at Riverway and Route 9/Brookline Ave. must be improved. Pedestrian crossing of Chestnut Hill Avenue at Reservoir T Stop and pedestrian access in general to that T stop must be improved. What happened to the Urban Ring? Transit, Bike and Pedestrian Travel between Brookline and Cambridge must be a priority focus for all new project planning in the area.	2/6/2011
Martin Klingensmith		I would like to see the MBTA Red Line extended from Alewife to Bedford. There has been significant, renewed interest in Arlington for this to happen.	2/5/2011
	Arlington resident	I read the Northwest Corridor material, but I didn't see any plans to extend the red line. I live in Arlington, and would love to be able to take the T to Arlington Center and Lexington Center, and also to put my kids on the T to go to the high school. Plus so many people park on my street in East Arlington because the Alewife lot gets full (they say--maybe they're just saving \$\$), and I'd love to have people from drive less and be able to catch the T in Lexington or Concord or Acton... and just ride in from the west. Maybe I just didn't see the material on the subways, but please, since you're looking at regional long term planning, give us more of the red line! Thanks	2/5/2011
Chris Moore		I wonder if there has been consideration of extension of the Red Line into Arlington and (eventually) Lexington. I believe that there is great need for it and that there would be public support (though I understand that there hasn't been in the past). Can you tell me if it has been considered? Thanks	2/5/2011
Peter Hechenbleikner	Town Manager, Reading	The statistics on use of commuter parking lots cannot be real - You cannot find a parking space in Reading on most days. It would also be interesting to count the total number of parking spaces used by commuters, not just the off-street spaces. I would think that Reading depot would be considered intermodal. A number of years ago I asked the T to extend its bus line a few blocks and interconnect with the commuter rail service, which they were happy to do. Table 3-3 Reading is no longer an ICCLC member, but we have a very active Climate Protection Committee. Graph 3-7 could be clearer as to which community is represented by which dot. On page 53 in the recommendations, one deficiency which is not adequately highlighted (or maybe it just needs a better description) is the second bullet which talks about deficiencies in I-95 from Burlington to Wakefield - it should mention "including the lane drop east and west (or north and south) bound beginning at the intersection of I-93 and I-95." When you talk of transit you should also talk about bus shelters. Some of the bus lines (137) would benefit from smaller (and alternate fueled) vehicles, based on their ridership. Thanks for the opportunity to comment.	2/2/2011
Marc Johnson	Selectman, Hamilton	The NE corridor draft plan completely misses our real transportation needs. Our citizens need to get to concentrations of shopping and Dr/Medical areas. We can always benefit from improved commuter connections to downtown Boston, but that is not our highest transportation priority. The draft is geared toward roads & highways. We need scheduled local public transit, even if on an abbreviated schedule. We currently have no public transportation other than the MBTA commuter rail. Our MBTA is just the Newburyport section of the commuter rail - so it is already an abbreviated schedule shared with the Rockport line. We need (along with Ipswich & Wenham) better scheduled bus/Ride/mini bus connections to other transit areas such as north Beverly or to Beverly/Salem/Peabody/Danvers for our elderly and young citizens.	2/2/2011

Paths to a Sustainable Region Needs Assessment Feedback
February 24, 2011

NAME	AFFILIATION	FEEDBACK	DATE
Jim Gallagher	Somerville resident	The design of the Plan seems to be based on a paper document which is posted online. I think it should be an edocument which can be printed as needed. That means, at a minimum, there should be internal links to other sections referred to (for example, Appendix X), and other documents (the PMT, MAPC's MetroFuture). And this is way too long, and way, way too full of jargon to be useful to anyone but the most initiated and committed member of the public. Better a much shorter edocument, summarizing the needs, heavily graphic, with links to explanations and all the other details for anyone who wants to read all the rest.	2/2/2011
Jim Gallagher	Somerville resident	There is a reference made several times in the Introduction to a final chapter summarizing the needs for the entire region. I don't see anything listed that looks like a summary chapter. If it's to come, please list it as "under Development" or something comparable so I won't be wasting any more time looking for it. And "Boston Proper" is called out separately in Figures 1-2 and 1-3 and referred to in the document. Does that mean Boston Proper is not part of the Central Area? Is there some reason I should care about this distinction?	2/2/2011
Jim Gallagher	Somerville resident	There is no way to attach a document here. For a review of a long document, which will likely take place over a number of days/openings/saves it would be much easier to prepare one coherent document and submit it than to just submit random comments here as they occur to me. And since there is no email address showing for you I can't just decide on my own and send you my document.	2/2/2011
Jim Gallagher	Somerville resident	A few comments on making it easy to find the needs assessment: A direct link from the Needs Assessment announcement on the front page to the needs assessment write ups would be helpful. Otherwise I need to know I have to look under the Transportation Plan, and that the "plan" in question is "Paths to a Sustainable Future". And once I get to the correct place, if I only care about one corridor or a few communities an easier way to figure out where to look would be appreciated. Now I can scroll up to the maps, if I remember that they are there, guess on radial versus circumferential, open map and scroll back down. Are the circumferential and radial the same for a community/ And why are there different colors for communities in the same corridor? (I know the inside MPO v modeled area distinction, but why would most people?) A motivated member of the public can probably figure these things out eventually, but you should be striving to make this as easy as possible so people will not get frustrated and can focus on substantive comments. Substantive comments to follow.	2/2/2011
Stephanie Mercandetti	Town of Walpole	On Table 6-3 on Page 6-20 of the Draft Needs Assessment - Paths to a Sustainable Region, please note that Walpole has approved 43D Priority Development Sites (this item is not checked on the list) and we do not have an approved 40R District (this item is checked when it should not be). I think the "Maturing Suburb" box should also be checked. We may have additional comments upon further review. Thank you.	2/2/2011
Dick Williamson	Bruce Freeman, Assabet River and Mass. Central Rail Trails	The section on the West corridor appears to be a summary of what exists today. Major additions to the Bruce Freeman, Assabet River and Mass. Central Rail Trails are in various stages of planning and design. Where will this ongoing effort be included in "Paths to a Sustainable Region"? These shared-use paths (often referred to as bike paths despite the fact that a large fraction of the users are on foot) will be a major addition to the intermodal transportation mix and will cost much less than many of the mega-projects that are being considered. Perhaps a measure like return per dollar should be used to value these low-costs projects.	2/1/2011
Chris Anzuoni	Massachusetts Bus Association	Will the passenger transportation services provided within and beyond the MAPC communities by the network of intercity bus carriers be recognized in the development of this plan? There does not yet appear to be an acknowledgement of these options on the Radial Corridors Map, the Circumferential Corridors Map or the Ideas for Visions and Policies Chart.	1/27/2011

Universe of Projects and Needs Evaluation Sheets

Needs presented by corridor – highway and transit projects. Bicycle and pedestrian needs are included under the highway projects. A freight universe of projects will also be developed.

Highway Universe

L RTP:

1. Highway projects in the LRTP that are either currently programmed or under constructed or completed.
2. LRTP Universe of Roadway Projects
3. LRTP Universe of Bicycle and Pedestrian Projects

TIP

1. TIP projects currently programmed or under construction or completed
2. TIP Universe of Roadway Corridor Projects
3. TIP Universe of Intersection projects
4. TIP Universe of Bicycle and Pedestrian Projects

Projects from Public Comment

Categories:

Each project is then identified as

1. A project with a CTPS Study or recommendation
2. Project with PRC Approval
3. Project under MassDOT Environmental Review
4. Project in Environmental Review that is either pending, on-hold, or inactive
5. Project Programmed in the Current LRTP
6. If it has construction funds programmed in the current TIP
7. MassDOT CIP High Priority Bike Path
8. Finally is the project meets a need identified in the Needs Assessment

If a project does not have any checks it was identified through public comment.

Highway Needs Evaluation

Projects from the Universe list that met an identified need were further evaluated using criteria derived from the MPO's visions and policies:

- Maintenance, Modernization and Efficiency – project pavement poor, sub sign condition upgrade, improvement to signal operations, in CMP, improves transit, ITS

- Livability and Economic Benefit – complete street design, access to activity center, reduces auto dependence, is a targeted redevelopment site, identified in MetroFuture, improves Quality of Life
- Mobility – Used the rankings from the previous plan for mobility.
- Environment and Climate Change – Does it improve Air Quality, is there a CO2 reduction, is it in a Green Community, is there a VMT/VHT reduction, are there possible environmental impact?
- Transportation Equity – Is the project in an EJ community w/ at least 1 failing bus route in the corridor or intersection
- Safety and Security – Used the rankings from the previous plan for safety or in Needs Assessment as a high crash location

Transit Universe

This includes projects from the Program for Mass Transportation, the MBTA's Capital Investment Program and public comment.

Transit projects broken down into several categories:

- Accessibility Projects
- Communications and Technology
- Enhancement Projects
- Expansion Projects
- Maintenance Facilities
- Parking
- Stations
- Support Infrastructure
- Track and Signals
- Vehicles

Each project is then identified as

1. A PMT Transit Enhancement Project
2. A PMT Transit Expansion Project
3. A PMT State of Good Repair Project
4. In the MBTA's CIP as a state of Good Repair Project
5. In the MBTA's CIP as an enhancement project
6. In the MBTA's CIP as an Expansion Project
7. Transit project recommended from the MPO's CMP
8. Transit Project in the Current LRTP
9. Finally is the project meets a need identified in the Needs Assessment

If a project does not have a check, it is a project we have heard about through public comment.

Transit Needs Evaluation

Projects from the Universe list that met an identified need were further evaluated using criteria derived from the MPO's visions and policies:

- Maintenance, Modernization and Efficiency – maintenance or modernization of existing system, or improvements to make system more efficient
- Livability and Economic Benefit – improves access to system, provides access to activity center, reduces auto dependence, a target redevelopment site, does it improve Quality of Life
- Mobility – improves regionwide mobility
- Environment and Climate Change – Improves Air Quality, there is a CO2 reduction, VMT/VHT reduction, possible environmental impact
- Transportation Equity – Project is in an EJ community and improves service in that area
- Safety and Security – makes system safer or more secure

Systemwide Transit Universe

Systemwide transit needs that do not specifically fall into one of the corridors. This sheet was prepared the same as for the corridor specific transit projects.

How will we use this for project Selection?

Once approved by the MPO, staff will go ahead and do this for all of the corridors.

We can use this to look at all of the needs – maintenance, expansion, and operation needs.

Once we see these needs it will help us in the initial discussions that need to take place before we choose projects:

1. What will be the split between maintenance and expansion?
2. Do we want to add programs into this mix so we would have a split for maintenance, expansion and programs? We already have a Clean Air and Mobility Program. Some examples of other programs could be:
 - a. Transportation System Management/Operations Strategies
 - b. Travel Demand Management
 - c. Transit Strategies
 - d. Pedestrian/Bicycle Strategies
3. Do we want to flex transit to highway?
4. Do we want to include illustrative projects to indicate projects we would fund if the finances were to become available?

NORTH CORRIDOR HIGHWAY UNIVERSE

	CTPS Corridor Study and/or Recommendation	Highway Project with PRC Approval	Project Under MassDOT Environmental Review	Major Highway Project Pending, On Hold or Inactive	Project Programmed in the MPO's Current LRTP	Construction Funds in FFYs 2011-14 TIP	Public Comment	MassDOT CIP High Priority Path	Meets Plan Identified Need	Cost (in millions)
Long Range Transportation Plan Projects currently programmed and/or under construction										
Route 16/Revere Beach Parkway Bridges (Everett, Medford, and Revere)		x			x	x				\$41.3
Long Range Transportation Plan Universe Roadway Projects										
I-93/I-95 Interchange (Woburn, Reading, Stoneham, and		x	x		x		x	x		\$233.6
Route 1 Add-a-Lane (Malden, Saugus, and Revere)		x	x		x		x	x		\$76.0
Middlesex Turnpike Phase III (Bedford, Burlington, Billerica)		x	x		x		x	x		\$20.8
I-93/Route 129 Interchange Improvements (Wilmington and Reading)				x						\$20.5
Interstate 93 Capacity Improvements (Somerville to Woburn)	x							x		
Route 16/Revere Beach Parkway Roadway Improvements (Everett, Medford, and Revere)							x	x		\$93.6
I-93/Route 125/Ballardvale Road (Wilmington)		x		x						
Tri Town I-93/Lowell Junction Interchange (Andover, Tewksbury, and Wilmington)		x	x				x			
New Boston Street Bridge (Woburn)		x			x		x			\$4.9
Montvale Avenue (Woburn)		x			x		x			\$3.7
Telecom City Boulevard (Everett, Malden, and Revere)							x			\$17.8
Route 128 Capacity Improvements (Lynnfield to Reading)	x							x		
Route 128 HOV (Wellesley to Woburn)								x		
Route 16/I-93 Connection (Medford)							x			
Cambridge Street Improvements (Burlington, Woburn, Winchester)	x						x	x		\$4.3
Sullivan Square (Boston)		x			x		x	x		\$43.3
Rutherford Avenue (Boston)		x			x		x			\$49.2
Charlestown Haul Road (Boston)							x			
Route 60 Improvements (Malden, Medford)	x							x		
Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects										
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction										
Pleasant Street (Malden)		x				x	x			\$2.5
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)										
Air Force Road Rehab (Everett)							x			
Beacham Street Reconstruction (Everett)							x			
Lebanon Street (Melrose)		x					x			\$4.3
West Street (Reading)		x					x			\$7.9
Streetscape Improvements High and Haven Streets (Reading)							x			
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)										
Main Street Intersections at Emerson, Essex, Foster, and Grove Streets (Melrose)		x					x	x		\$1.9
Wildwood Intersections (Wilmington)		x					x			\$0.9
Signal Upgrade at 4 Intersections on Cambridge Street		x					x			\$2.5
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects										
Northern Strand (Everett, Malden)	x						x	x	x	
Improving Bicycle and Ped Access to transit stations (Malden)	x						x			
Tri-Community Bikeway (Stoneham, Winchester, Woburn)	x	x					x	x		\$5.1
Woburn Loop Bikeway (Woburn)							x			
Minuteman Bikeway Extension (Billerica)							x	x		

NORTH CORRIDOR HIGHWAY NEEDS EVALUATION

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Long Range Transportation Plan Projects currently programmed and/or under construction						
Long Range Transportation Plan Universe of Roadway Projects						
I-93/I-95 Interchange (Woburn, Reading, Stoneham, and	x		x			x
Route 1 Add-a-Lane (Malden, Saugus, and Revere)	x		x		x	x
Middlesex Turnpike Phase III (Bedford, Burlington, Billerica)	x		x			x
Interstate 93 Capacity Improvements (Somerville to Woburn)			x			x
Route 16/Revere Beach Parkway Roadway Improvements (Everett, Medford, and Revere)	x		x		x	x
Route 128 Capacity Improvements (Lynnfield to Reading)			x			x
Route 128 HOV (Wellesley to Woburn)			x	x		
Cambridge Street Improvements (Burlington, Woburn, Winchester)			x			
Sullivan Square (Boston)	x	x	x		x	
Route 60 Improvements (Malden, Medford)	x		x			
Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects						
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction						
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)						
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)						
Main Street Intersections at Emerson, Essex, Foster, and Grove	x			x		
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects						
Northern Strand (Everett, Malden)		x		x		
Tri-Community Bikeway (Stoneham, Winchester, Woburn)				x		
Minuteman Bikeway Extension (Billerica)		x		x		

The projects included in this table are those from this corridor's Highway Universe that meet a Plan identified need. An initial evaluation was performed using criteria derived from the MPO's visions and policies.

NORTH CORRIDOR TRANSIT UNIVERSE

	PMT Transit Enhancement Project	PMT Transit Expansion Project	PMT Transit SGR Project	In MBTA's Draft FY 2012-2016 CIP SGR List	In MBTA's Draft FY 2012-2016 CIP Enhancement Project List	In MBTA's Draft FY 2012-2016 CIP Expansion Project List	Transit Project Recommended from MPO's CMP	Transit Project in the Current LRTP	Public Comment	Meets Plan Identified Need	Cost (in millions)
Accessibility											
Station Elevator/Escalator Replacement and Modernization Program					x					x	\$118.4
Wedgemere Station access					x					x	\$1.3
Communications/Technology											
Automated Fair Collection, Phase II (CharlieCards on commuter rail)					x						\$10.0
Enhancements											
Haverhill Line Double Tracking	x									x	
Improved Bus Amenities and System Identity for Bus Routes	x									x	
Expansion											
Green Line Extension College Ave to Route 16		x				x		x		x	\$136.6
Lowell Commuter Rail Line Extension (Nashua/Manchester)		x								x	
New Orange Line Station at Assembly Square	x							x		x	\$53.0
Urban Ring, Phase 2		x						x*		x	\$2,920.3
Extend Blue Line from Bowdoin to West Medford									x		
Orange Line North Extension from Oak Grove to Reading/Route 128									x		
Maintenance Facilities											
Move Bradford Layover Facility on Haverhill Line with Plaistow		x								x	
Wellington Maintenance Facility Improvements				x						x	
Parking											
Stations											
Rapid transit station midlife rehab upgrades				x						x	\$12.1
Winchester Station Renovation				x						x	
Support Infrastructure											
Haverhill Line (Andover Station) - Bike Signage and Shelter								x			
Haverhill Line (Bradford Station) - Bike Signage								x			
Lowell Line (Lowell Station) - Bike Racks and Shelter								x			
Lowell Line (Winchester Center Station) - Bike Racks								x			
Merrimack River Bridge Rehab				x						x	\$8.6
Orange Line (Oak Grove Station) - Bike Shelter Improvements								x			
Orange Line Power Improvements					x					x	\$6.5
Rehab of Three Shawsheen River Bridges				x						x	\$13.1
Track and Signals											
Haverhill Line Double Tracking					x					x	\$9.7
Orange Line North Signal System Upgrade					x					x	
Vehicles											
Orange Line Car Procurement			x							x	

* Included as an Illustrative Project

NORTH CORRIDOR TRANSIT NEEDS EVALUATION

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Accessibility						
Station Elevator/Escalator Replacement and Modernization Program	x					x
Wedgemere Station access	x	x				x
Communications/Technology						
Enhancements						
Improved Bus Amenities and System Identity for Bus Routes	x	x			x	
Expansion						
Green Line Extension College Ave to Route 16		x	x	x	x	
Lowell Commuter Rail Line Extension (Nashua/Manchester)			x	x		
New Orange Line Station at Assembly Square		x	x	x	x	
Urban Ring, Phase 2		x	x	x	x	
Maintenance Facilities						
Move Bradford Layover Facility on Haverhill Line with Plaistow	x					
Wellington Maintenance Facility Improvements	x					
Parking						
Stations						
Rapid transit station midlife rehab upgrades	x					x
Winchester Station Renovation	x					
Support Infrastructure						
Merrimack River Bridge Rehab	x					x
Orange Line Power Improvements	x					
Rehab of Three Shawsheen River Bridges	x					x
Track and Signals						
Haverhill Line Double Tracking	x		x	x		
Orange Line North Signal System Upgrade	x					x
Vehicles						
Orange Line Car Procurement	x					x

The projects included in this table are those from this corridor's Transit Universe that meet a Plan identified need. An initial evaluation was performed using criteria derived from the MPO's visions and policies.

**NORTHWEST CORRIDOR HIGHWAY
UNIVERSE**

	CTPS Corridor Study and/or Recommendation	Highway Project with PRC Approval	Project Under MassDOT Environmental Review	Major Highway Project Pending, On Hold or Inactive	Project Programmed in the MPO's Current LRTP	Construction Funds in FFYs 2011-14 TIP	Public Comment	MassDOT CIP High Priority Path	Meets Plan Identified Need	Cost (in millions)
Former Long Range Transportation Plan Projects currently programmed and/or under construction										
Crosby's Corner (Concord and Lincoln)		x			x	x	x			\$73.0
Assembly Square Roadway Improvements (Somerville)		x			x	x	x			\$15.4
Former Long Range Transportation Plan Universe of Roadway Projects										
Middlesex Turnpike Phase III (Bedford, Billerica, Burlington)		x	x		x		x		x	\$20.8
Trapelo Road (Belmont)		x			x		x			\$11.5
McGrath Highway-Gilman Street Bridge (Somerville)	x						x			
Route 20 (Boston, Watertown, Waltham)	x								x	
Route 128 HOV (Wellesley to Woburn)	x								x	
Concord Rotary/Route 2 (Concord)	x	x		x			x		x	\$20.0
Route 2 Interchange (Littleton)							x		x	
Route 2/Route 16 Interchange (Arlington and Cambridge)	x						x		x	
Route 2 Capacity Improvements (Acton to Lexington)	x								x	
Wiggins Avenue Extension (Bedford)							x			
Depress I-93 (Somerville)							x			
I-93/Mystic Avenue Interchange (Somerville)	x								x	\$138.6
Longfellow Bridge (Boston, Cambridge)	x		x		x					\$310.0
Extend I-93 High-Occupancy Vehicle Lane into the City (Somerville)							x		x	
I-495 Capacity Improvements (Littleton to Wrentham)	x									
Former Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects										
Bruce Freeman Rail Trail					x		x	x	x	\$18.7
Assabet River Rail Trail					x		x		x	\$18.1
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction										
Cambridge Common (Cambridge)		x					x			\$3.5
Broadway (Kendall Square) (Cambridge)		x					x			\$1.1
Beacon Street (Somerville)		x					x			\$3.9
Temple Street (Somerville)							x			
Union Square Roadway and Streetscape Improvements (Somerville)							x			
Massachusetts Avenue (Arlington)		x					x			\$5.7
Broadway Improvements (Somerville)							x			\$3.1
Somerville Community Path	x						x	x	x	\$4.5
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)										
Rehabilitation of Mount Auburn Street (Route 16) (Watertown)							x			
Safety Improvements and Rehabilitation of Common Street (Watertown)							x			
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)										
Intersection Improvements at Three Location (Watertown)		x					x			
East Lexington Three Intersections (Lexington)							x			
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects										
Minuteman Bikeway Extension Reformatory Branch Trail (Bedford)							x	x	x	

**NORTHWEST CORRIDOR HIGHWAY NEEDS
EVALUATION**

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Former Long Range Transportation Plan Projects currently programmed and/or under construction						
Former Long Range Transportation Plan Universe of Roadway Projects						
Middlesex Turnpike Phase III (Bedford, Billerica, Burlington)	x	x	x			x
Route 20 (Boston, Watertown, Waltham)	x		x			x
Route 128 HOV (Wellesley to Woburn)			x	x		
Concord Rotary/Route 2 (Concord)	x		x			x
Route 2 Interchange (Littleton)			x			
Route 2/Route 16 Interchange (Arlington and Cambridge)	x		x			x
Route 2 Capacity Improvements (Acton to Lexington)			x			
I-93/Mystic Avenue Interchange (Somerville)	x	x	x		x	
Extend I-93 High-Occupancy Vehicle Lane into the City			x	x		
Former Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects						
Bruce Freeman Rail Trail		x		x		
Assabet River Rail Trail		x		x		
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction						
Somerville Community Path		x		x		
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)						
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)						
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects						
Minuteman Bikeway Extension Reformatory Branch Trail (Bedford)		x		x		

The projects included in this table are those from this corridor's Highway Universe that meet a Plan identified need. An initial evaluation was performed using criteria derived from the MPO's visions and policies.

**NORTHWEST CORRIDOR TRANSIT
UNIVERSE**

	PMT Transit Enhancement Project	PMT Transit Expansion Project	PMT Transit SGR Project	In MBTA's Draft FY 2012-2016 CIP SGR List	In MBTA's Draft FY 2012-2016 CIP Enhancement Project List	In MBTA's Draft FY 2012-2016 CIP Expansion Project List	Transit Project Recommended from MPO's CMP	Transit Project in the Current L RTP	Public Comment	Meets Plan Identified Need	Cost (in millions)
Accessibility											
Science Park Station Accessibility	x				x					x	\$10.5
Communications/Technology											
Enhancements											
Fitchburg Line Improvements	x				x						\$90.1
Expansion											
Green Line Extension to Medford Hillside/Union Square		x				x				x	\$949.8
Red Line Extension to Arlington/Lexington		x									
Fitchburg Line Extension to Gardner		x							x		
Build New Busways to Alewife Station (Cambridge)									x		
Connect Fitchburg Commuter Rail with Red Line at Alewife									x		
Extend Trackless Trolley #71 from Watertown to Newton Corner									x		
Maintenance Facilities											
Parking											
Alewife Garage Improvements	x				x					x	\$16.4
Lechmere Parking Improvements	x									x	
Parking Improvements at 11 Commuter Rail Stations	x									x	
Stations											
Support Infrastructure											
Red Line Traction Power Upgrade			x	x						x	\$16.4
Red Line DC Cable Upgrade Phase I, Andrew-Kendall			x	x						x	\$25.1
Trackless Trolley Overhead Replacement			x	x						x	\$35.4
Trackless Trolley Catenary Improvements			x	x						x	\$1.2
Fitchburg Line Main Street Bridge Repair in Concord			x	x						x	\$6.2
Fitchburg Line Red Bridge Replacement			x	x						x	\$10.0
Fitchburg Line Layover Facility Upgrades			x							x	
Track and Signals											
Red Line Signal Cable Replacement			x	x						x	\$12.4
Red Line Track and Switch Upgrades			x							x	
Green Line Lechmere Signals			x	x						x	\$3.7
Fitchburg Line Interlocking Project	x				x						\$2.3
Fitchburg Line Double Tracking		x			x					x	\$15.9
Red Line Floating Slab Work			x	x						x	\$27.5
Vehicles											
Red Line No. 1 Car Reinvestment			x	x						x	\$6.9
Red Line No. 2 Car Overhaul			x	x						x	\$10.6
New Red Line Car Design and Engineering			x	x						x	\$13.7
New Red Line Car Procurement			x							x	

**NORTHWEST CORRIDOR TRANSIT
UNIVERSE**

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Accessibility						
Science Park Station Accessibility	x				x	
Communications/Technology						
Enhancements						
Expansion						
Green Line Extension to Medford Hillside/Union Square		x	x	x	x	
Maintenance Facilities						
Parking						
Alewife Garage Improvements	x					
Lechmere Parking Improvements	x					
Parking Improvements at 11 Commuter Rail Stations	x					
Stations						
Support Infrastructure						
Red Line Traction Power Upgrade	x					
Red Line DC Cable Upgrade Phase I, Andrew-Kendall	x					
Trackless Trolley Overhead Replacement	x					x
Trackless Trolley Catenary Improvements	x					x
Fitchburg Line Main Street Bridge Repair in Concord	x					x
Fitchburg Line Red Bridge Replacement	x					x
Fitchburg Line Layover Facility Upgrades	x					
Track and Signals						
Red Line Signal Cable Replacement	x					
Red Line Track and Switch Upgrades	x					x
Green Line Lechmere Signals	x					
Fitchburg Line Double Tracking	x		x	x		
Red Line Floating Slab Work	x					
Vehicles						
Red Line No. 1 Car Reinvestment	x					
Red Line No. 2 Car Overhaul	x					
New Red Line Car Design and Engineering	x					
New Red Line Car Procurement	x					

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**NORTHEAST CORRIDOR HIGHWAY
UNIVERSE**

	CTPS Corridor Study and/or Recommendation	Highway Project with PRC Approval	Project Under MassDOT Environmental Review	Major Highway Project Pending, On Hold or Inactive	Project Programmed in the MPO's Current LRTP	Construction Funds in FFYs 2011-14 TIP	Public Comment	MassDOT CIP High Priority Path	Meets Plan Identified Need	Cost (in millions)
Long Range Transportation Plan Projects currently programmed and/or under construction										
Route 128/Route 35 and Route 62 (Danvers)		x			x	x				\$27.1
Wonderland Parking Garage (Revere)		x			x					\$52.0
Consolidated Rental Car Facility Logan Airport (Boston)		x			x					\$337.0
Long Range Transportation Plan Universe of Roadway Projects										
Route 1 add-a-lane (Malden, Revere, Saugus)		x	x		x		x		x	\$70.3
Route 1 Capacity Improvements (Lynnfield, Peabody, Saugus)	x								x	
Route 1/Route 114 Corridor (Danvers, Peabody)							x			\$110.9
Route 1/Route 16 Interchange (Revere)	x								x	\$7.4
Route 1A/Route 16 (Revere)	x								x	\$109.7
Route 1A/Chelsea Street Bridge Connection (Boston)	x								x	
Route 1A/Boardman Street Grade Separation (Boston)	x			x					x	\$16.0
Gloucester Rotary (Gloucester)							x			
Route 128 Capacity Improvements (Beverly to Peabody)	x								x	
Route 16/Revere Beach Parkway Roadway Improvements (Everett, Medford, and Revere)							x		x	\$109.5
Mahoney Circle Grade Separation (Revere)				x					x	\$35.6
East Boston Haul Road (Boston)	x			x	x				x	\$19.5
Commercial St./Tremont St. (Salem)							x			\$0.8
Essex St. Conversion (Salem, Beverly)							x			\$2.3
Route 128/Brimbal Ave. Interchange (Beverly)		x		x			x			\$26.0
Route 114/I-95 Improvements (Danvers)				x					x	\$68.2
Bridge Street (Salem)	x	x			x					\$10.8
Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects										
Northern Strand (Revere, Saugus, Lynn)	x							x	x	
Border to Boston Trail (Newburyport to Boston)	x							x	x	
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction										
Intersection Improvements at Route 129 and Millard, Den Quarry Road (Lynn)		x								\$0.0
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)										
Boston Street (Salem)		x					x			\$3.5
Route 1A (Rantoul Street) (Beverly)		x					x		x	\$16.0
Route 1A (Cabot Street) (Beverly)		x					x		x	\$6.2
Route 127 Reconstruction (Beverly)							x			
Washington Avenue (Chelsea)		x					x			\$5.2
Williams and Beecham Streets (Chelsea)							x			
Liberty Street (Danvers)		x					x			\$7.0
Collins Street (Danvers)		x					x			\$6.4
Washington Street (Gloucester)		x					x			\$2.4
Canal Street (Salem)		x					x			\$6.6
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)										
Routes 1A/133-South Main and Central Streets (Ipswich)		x					x			\$1.0
Route 129 (Boston Street/Washington Street) (Lynn)		x					x		x	\$0.1
Route 1 (Copeland Circle Spur-Fox Hill Bridge) (Lynn)							x		x	
Route 1 South (Jughandle Lights - Goodwin Circle/Lynnfield St.) (Lynn)							x		x	
Route 1A Lynnway at Blossom Street (Lynn)							x		x	
Route 1A Lynnway Intersection at Market Street (Lynn)							x		x	
Route 1A/the Lynnway (GE Bridge and Nahant Rotary) (Lynn)							x		x	
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects										
Bicycle and Pedestrian Improvements in and around Lynnfield Common (Lynnfield)	x									
Bicycle and Pedestrian Improvements in Downtown (Essex)	x									
Bicycle and Pedestrian Improvements in Downtown (Chelsea)	x									
Canal Street Bike Path Extension the Salem Marblehead Branch Trail, Phase II (Salem)							x	x	x	

**NORTHEAST CORRIDOR HIGHWAY NEEDS
EVALUATION**

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Long Range Transportation Plan Projects currently programmed and/or under construction						
Long Range Transportation Plan Universe of Roadway Projects						
Route 1 Add-a-Lane (Malden, Saugus, and Revere)	x	x	x		x	x
Route 1 Capacity Improvements (Lynnfield, Peabody, Saugus)			x			
Route 1/Route 114 Corridor (Danvers, Peabody)	x		x		x	x
Route 1/Route 16 Interchange (Revere)	x		x		x	
Route 1A/Route 16 (Revere)	x		x		x	
Route 1A/Chelsea Street Bridge Connection (Boston)	x		x			
Route 1A/Boardman Street Grade Separation (Boston)	x		x			
Route 128 Capacity Improvements (Beverly to Peabody)			x			
Route 16/Revere Beach Parkway Roadway Improvements (Everett, Medford, and Revere)	x		x		x	x
Mahoney Circle Grade Separation (Revere)	x		x		x	x
East Boston Haul Road	x	x	x		x	
Route 114/I-95 (128) Improvements (Peabody)						
Long Range Transportation Plan Universe of Bicycle and Pedestrian Projects						
Northern Strand (Everett, Malden)			x		x	
Border to Boston Trail (Newburyport to Boston)			x		x	
Transportation Improvement Program (TIP) Projects currently programmed and/or under construction						
Transportation Improvement Program (TIP) Universe Roadway Projects (Corridor)						
Route 1A (Rantoul Street) (Beverly)	x					
Route 1A (Cabot Street) (Beverly)	x					
Transportation Improvement Program (TIP) Universe Roadway Projects (Intersection)						
Route 129 (Boston Street/Washington Street) (Lynn)	x	x			x	
Route 1 (Copeland Circle Spur-Fox Hill Bridge) (Lynn)	x	x	x		x	
Route 1 South (Jughandle Lights - Goodwin Circle/Lynnfield St.) (Lynn)	x		x		x	
Route 1A Lynnway at Blossom Street (Lynn)	x	x	x		x	
Route 1A Lynnway Intersection at Market Street (Lynn)	x	x	x		x	
Route 1A/the Lynnway (GE Bridge and Nahant Rotary) (Lynn)	x	x	x		x	
Transportation Improvement Program (TIP) Universe Bicycle and Pedestrian Projects						
Canal Street Bike Path Extension the Salem Marblehead Branch		x		x		

The projects included in this table are those from this corridor's Highway Universe that meet a Plan identified need. An initial evaluation was performed using criteria derived from the MPO's visions and policies.

**NORTHEAST CORRIDOR TRANSIT
UNIVERSE**

	PMT Transit Enhancement Project	PMT Transit Expansion Project	PMT Transit SGR Project	In MBTA's Draft FY 2012-2016 CIP SGR List	In MBTA's Draft FY 2012-2016 CIP Enhancement Project List	In MBTA's Draft FY 2012-2016 CIP Expansion Project List	Transit Project Recommended from MPO's CMP	Transit Project in the Current L RTP	Public Comment	Meets Plan Identified Need	Cost (in millions)
Accessibility											
Communications/Technology											
Enhancements											
Expansion											
Extend Blue Line to Lynn	x									x	\$782.5
Extend Blue Line from Lynn to Salem									x		
Commuter Rail Line from Salem to Danvers									x		
New Station at South Salem on Rockport/Newburyport Line									x		
Restore East Boston Ferry									x		
Wonderland Connector (Revere)									x		
Maintenance Facilities											
Newburyport Layover Facility Ventilation Fans			x							x	
Orient Heights Maintenance Facility Renovation Phase III				x						x	\$7.5
Parking											
Beverly Parking Garage Improvements	x				x						\$16.0
Parking Capacity Increases at 4 Commuter Rail Stations	x									x	
Parking Capacity Increases at 2 Blue Line Stations	x									x	
Salem Parking Garage Improvements	x				x						\$28.0
Wonderland TOD Parking Garage	x				x						\$17.7
Stations											
Blue Line Platform Rehabilitation				x						x	\$3.6
Blue Line Government Center Station Modernization					x						\$44.0
Blue Line Orient Heights Station Modernization					x						\$23.0
Blue Line Station Infrastructure Improvements					x						\$3.5
Rockport Station Improvements	x				x						\$0.5
Wonderland Transit Plaza					x					x	\$13.0
Support Infrastructure											
Beverly Draw Bridge Rehabilitation			x	x						x	\$6.6
Track and Signals											
Newburyport/Rockport Line Signal Upgrades			x								
Orient Heights Track Work			x	x						x	\$10.8
Vehicles											

**NORTHEAST CORRIDOR TRANSIT
NEEDS EVALUATION**

	Maintenance, Modernization and Efficiency	Livability and Economic Benefit	Mobility	Environment and Climate Change	Transportation Equity	Safety and Security
Accessibility						
Communications/Technology						
Enhancements						
Expansion						
Extend Blue Line to Lynn		x	x	x	x	
Maintenance Facilities						
Newburyport Layover Facility Ventilation Fans	x					
Orient Heights Maintenance Facility Renovation Phase III	x					
Parking						
Parking Capacity Increases at 4 Commuter Rail Stations		x	x	x		
Parking Capacity Increases at 2 Blue Line Stations		x	x	x	x	
Stations						
Blue Line Platform Rehabilitation	x					
Wonderland Transit Plaza		x			x	
Support Infrastructure						
Beverly Draw Bridge Rehabilitation	x		x			x
Track and Signals						
Orient Heights Track Work	x					x
Vehicles						

The projects included in this table are those from this corridor's Transit Universe that meet a Plan identified need. An initial evaluation was performed using criteria derived from the MPO's visions and policies.

DISCUSSION POINTS FOR REGIONWIDE PRIORITIES FOR THE BOSTON MPO

System Preservation, Modernization & Efficiency

Highway

Pavement Management

The MPO is in the process of developing a Pavement Management Program. Based on recent staff analysis, it is estimated that the conditions of the pavement in the MPO may be:

- 20% in excellent condition
- 29% in good condition
- 25% in fair condition
- 26% in poor condition

The cost of maintaining federal-aid eligible roads in the MPO to an excellent condition could be between \$170 and \$324 million annually.

Points to consider:

- Does the MPO want to fund pavement projects in addition to the MassDOT programs and Chapter 90 or just projects that improve pavement condition through roadway reconstruction projects?
- If the MPO funds pavement projects, what should be the percent allocation of roadways in each condition (This will be discussed in the Pavement Management Program)?

Bridges

Of the 2,152 bridges in the MPO:

- 506 (24%) are functionally obsolete (does not meet current traffic demands or highway standards)
- 156 (7%) are structurally deficient (deterioration has reduced the load-carrying capacity of the bridge)

Point to consider:

Does the MPO want to consider a Bridge Program to supplement the MassDOT program?

Transit

The most pressing need for the MBTA is to bring the system into a State of Good Repair. Once this is done, ongoing maintenance, replacement, and modernization of assets and infrastructure will be necessary to meet current and future demands for services. Some of the most urgent needs include:

- Signals in the Green Line central tunnel
- 34 bridges on the commuter rail system are rated as structurally deficient
- Red Line and Orange Line cars needs to be replaced
- New vehicles needed on the Mattapan High Speed Line
- 53 stations (27%) on the commuter rail system and 22 (26%) stations on the rapid transit system are not accessible

Points to consider:

Does the MPO want to consider a Program for Transit State of Good Repair over that funded in the MBTA's Capital Investment Program?

Mobility/Safety

Highway

Bottleneck Locations

Staff compiled information from various sources including the Congestion Management Program (CMP) and the travel demand model. Congestion can be caused by many factors including:

- High volumes
- Crashes
- Delay at Intersections
- Access from driveways and curb cuts
- Special Events

Points to consider:

Does the MPO want to consider establishing programs such as:

- Intersection and Street Geometric Improvements
- Traffic Signalization and Control
- Removal of Bottlenecks
- Arterial Access Management (driveways and curb cuts)
- HOV Lanes
- Traffic Management
- Incident Management

Transit

Important factors to improve transit mobility in the region are alleviating system constraints, filling gaps in the existing system, and expanding the system to meet growth in future demand.

Service Reliability

Reliability is a function of several factors including traffic congestion (for buses), the size of the fleet, and the condition of vehicles and infrastructure. Current service reliability needs improvement:

- With all bus trips calculated in October 2010 – 12% of routes passed schedule adherence
- Fairmount is the only commuter rail line that passed the schedule adherence standard
- Green Line consistently fell below the target level for mean miles between failures, as did the commuter rail system

Infrastructure Constraints

- Additional tracks are needed at South Station
- Haverhill, Fitchburg, Franklin, Stoughton, Needham Lines, and Old Colony Lines are constrained by sections of single track
- Many commuter rail trains that pass through Ruggles cannot stop because one of the three tracks does not have a platform
- Green Line Central Subway is currently operating at capacity, and the Orange Line is currently overcrowded during peak hours between Downtown Crossing and North Station
- Systemwide, 12% of rapid transit and 17% of commuter rail MBTA park-and-ride lots are utilized at 85% of their capacity

Gaps in Service – Although the system is extensive, some geographic areas could benefit from additional service in both radial and circumferential travel in the region.

Points to consider:

Does the MPO want to consider establishing programs such as:

- Park-and-Ride Expansion Program
- Transit Signal Priority for Buses
- Advanced Transit Management and Operations (vehicle tracking , more real-time and count-down displays for transit vehicles)

Freight

Freight is carried by a number of different modes – truck, rail, marine, and air. Although the MPO does not have control over many issues associated with freight, there are some areas where they can help in the improved mobility in freight operations.

Land Use Issues

- Residential and commercial development has crowded out some traditional areas devoted to industrial and freight-intensive uses (port areas and distribution facilities)
- Businesses along rail lines often need to build or upgrade rail sidings for access to freight rail service – construction is generally more expensive than highway connections. The State Rail Plan recommended an Industrial Rail Access Program (utilizes public, private, and railroad funds to facilitate rail use – construction or improvement of tracks and facilities to serve industrial or commercial sites where freight service is currently needed)

Truck Issues

- Freight Bottleneck Locations
- Bridge Vertical Clearance – 81% of highway bridges do not meet the desired vertical clearance of 16 feet and 6 inches for larger trucks expected in the future
- Short Supply of Truck Rest Areas on Interstate Highways
- Transport of Hazardous Material through Tunnels
- Lack of Overweight Truck Routes serving the Port

Marine Issues

- Dredging
- Truck and Rail Access to Ports

Rail Issues

- Vertical Clearance – 331 of 401 (83%) do not meet desired clearance for double-stack
- Freight Rail Bottleneck – freight moving from the Boston Line to the South Coast must cross the Northeast Corridor constraining freight movement

Air Issues

- Air Freight Growth
- Freight Access to Airports – landside connections restrict air freight

Points to consider:

Does the MPO want to consider:

- Additional freight studies
- An Industrial Rail Access Program
- Programs to address:
 - Freight Bottlenecks
 - Additional Rest Areas
 - Access to Ports/Airports

Bicycle and Pedestrian

- Gaps in the bicycle network limit users from safely connecting to destinations including transit stations, schools, recreation, and commercial areas
- Less than 2% of the region's non-interstate roadways provide bicycle accommodations
- Half of the region's non-interstate roadways do not have a sidewalk on at least one side
- Lack of bicycle accommodations to some transit stations
- Poor pedestrian access to some transit stations
- Few bicycle accommodations to facilitate circumferential travel

Points to consider:

- Does the MPO want to establish a bicycle and pedestrian program?
- If so, does the MPO want to give priority to closing gaps or to expanding new infrastructure?

Transportation Equity

The MPO currently has a Transportation Equity Program. The issues identified in the Needs Assessment were gathered through outreach as part of this program. They include:

- Traffic calming and "complete streets" strategies
- Better circumferential transit service
- Providing late evening and early morning transit service

Points to consider:

Does the MPO want to consider expanding its Transportation Equity Program to include a program funding low-cost improvements to address transportation equity needs?

Land Use

- Much of the growth in the future is projected along transit lines. Transit capacity may need to grow in order to handle demands
- The needs assessment outlines large developments being proposed in the MPO area

Points to consider:

Does the MPO want to:

- Further study the impacts of future growth on the transit system?
- Identify investments needed to support economic benefits?