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

January 6, 2011 Meeting
10:00 AM – 12:45 PM, State Transportation Building, Conference Rooms 2 & 3, 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 voted to take the following actions:

- approve the following changes to the Transportation Improvement Program (TIP) scoring key:
    - double the scoring points for the Maintenance, Modernization, and Efficiency category (from 18 to 36 points)
    - increase the scoring of a criterion in the Mobility category that gives points for a project that improves transit reliability (from 4 to 7 points)
    - remove the criterion in the Environment and Climate Change category that gives points to a project that is in an ICLEI Local Governments for Sustainability (formerly known as the International Council for Local Environmental Initiatives) community
    - merge the flood and sea level rise items in the Safety and Security category into one item that reads, "Project addresses flooding or a potential/projected sea level rise problem and enables a facility to function in such a condition," (and give 2 points for that item)
    - change the scoring on the item in the Environmental Justice category that addresses whether a project creates a burden in an environmental justice area (from -1 to -10)
    - add points to every item in the Environment and Climate Change category (so that there would be 25 points in the category)
- approve the minutes of the meetings of December 16

Meeting Agenda

1. Public Comments
Steve Olanoff, Regional Transportation Advisory Board, commented on the state's proposal to run additional commuter rail service between Worcester and Boston on the Grand Junction tracks. He stated that he feels it is an insult to the MPO members that they learned about this proposal by reading about it in the newspaper rather than through the transportation planning process. He asked the chair to provide information as to why the project did not come to the MPO through the usual planning processes.

David Mohler, MassDOT, explained that the project was initiated at the behest of the Lieutenant Governor, who has the prerogative to take such action. The Commonwealth

has already purchased the right-of-way along the corridor from CSX. There is concern about railroad crossings in Cambridge. After the project was aired in the press, public meetings were held to help assess the viability of the idea, as is appropriate. The usual transportation planning process is now occurring, including a scope of work to determine if there is a market for the service.

Paul Regan, MBTA Advisory Board, also remarked that because the project idea was first aired in the press rather than in public transportation planning discussions there is a perception that the state is trying to circumvent the normal planning process to advance the project.

2. Chair's Report – *David Mohler, MassDOT*
D. Mohler turned members' attention to two letters from the Federal Highway and Federal Transit Administrations (FHWA and FTA) to MassDOT concerning the approval of the State Transportation Improvement Program (STIP) and the Air Quality Conformity Determination for the Massachusetts Transportation Improvement Programs (TIPs) for FFYs 2011-2014. (See attached.)

In the STIP letter, the federal agencies call on MassDOT to amend the STIP to remove $40 million by March. This amount is an estimate of the federal redistribution of funds that Massachusetts would have received for FFY 2011, as it normally receives. However, this year the agencies have notified MassDOT that the state is not eligible to receive the redistribution. In response to members' questions, D. Mohler explained that this is because certain MassDOT divisions did not meet estimated spending levels (for non-stimulus funds) that the state had to declare as a requirement for receiving American Recovery and Reinvestment Act (ARRA) funds. While the Highway Division more than met the spending level and the MBTA met its spending level, the level was not met by the Aeronautics Division or on spending on the State Implementation Plan (SIP) projects (partly due to delays in resolving some project-related issues). As a penalty for under-spending in those areas, the federal government will withhold redistribution of highway funds for one year. MassDOT has expressed its disagreement with this decision to the federal agencies; the government is penalizing divisions that were in compliance. The $40 million will come out of unobligated monies programmed in the STIP. The impact this action will have on MPOs' TIPs has not yet been determined but could affect target funds.

Also in an attachment to the STIP letter, the federal agencies require MPOs to develop new Memorandums of Understanding (MOUs) by March 31. Laura Wiener, Advisory Council, noted that the MPO has not yet received the letter that FHWA and FTA were to send after the recertification review which took place last summer, and that the letter should inform the revisions to the MOU. D. Mohler reported that the federal agencies have prepared a draft letter but have not yet released it pending a meeting with the Metropolitan Area Planning Council (MAPC). That meeting will take place next week.

D. Mohler then recognized Karl Quackenbush as the Acting Director of Central Transportation Planning Staff (CTPS) and welcomed him in this new capacity.

D. Mohler also remarked on a recent *Boston Globe* article that discussed the MBTA's deficit, which is between $127-132 million. He stated that the MBTA has a plan to address this deficit that will not involve a fare increase or significant service cuts. As one source of additional funds, the MBTA is considering the possibility of selling future revenue from MBTA parking lots.

3. Subcommittee Chairs' Reports
E. Bourassa reported that there will be a question and answer session at 2 PM today in the MPO Conference Room for applicants requesting funds from the MPO's Clean Air and Mobility Program.

4. Regional Transportation Advisory Council – *Laura Wiener, Regional Transportation Advisory Council*
The Advisory Council will meet next on January 12. The agenda includes presentations on the Transportation Enhancements Program and on the MPO's TIP project evaluation criteria.

The Advisory Council is proposing changes to its Freight Committee that will direct its focus to providing input on the MPO's work. The Committee is currently developing a comment regarding freight needs for input to the MPO's long-range transportation plan (LRTP).

5. Director's Report – *Karl Quackenbush, Acting Director, Central Transportation Planning Staff*
K. Quackenbush stated that it was his honor to serve as the Acting Director of the staff to the MPO, and that he is very interested in having high-quality communications with the MPO members. He told them that he looks forward to hearing from them about any issues they may have regarding how the MPO staff relates to the MPO's planning process. He also stated that he may well be in contact with them.

He then discussed several items of business:

The MPO staff has posted the draft text of the North Corridor Needs Assessment on the MPO members' web page. One MPO member made a comment which staff is addressing. He asked that members submit any other comments by tomorrow so that staff may stay on schedule for producing the Needs Assessment chapters.

In February, the MPO will hold TIP Building workshops, LRTP Needs Assessment workshops, and an open house (which includes both the TIP and RTP topics).

A Transportation Planning and Programming Committee meeting is tentatively scheduled for January 27. The LRTP would be the topic on the agenda.

At members' request, MPO staff has tracked the number of hits on the audio recording file of the December 16 Committee meeting, which was posted on the MPO's website.

There were 122 hits in December and 23 in January. The latter statistic made it the fifth highest in hits of all the files on the site in January. Staff will continue to monitor the number of hits on the audio files.

6. Transportation Improvement Program (TIP) Criteria Update – *Hayes Morrison, TIP Manager MPO Staff*

Members were provided with three documents: a revised letter to TIP contacts regarding the TIP development process; a proposed scoring key for the TIP criteria; and a TIP criteria matrix. (See attached.)

H. Morrison described a change that was made to the scoring key since members last reviewed the document at the meeting of December 16. At the request of members, staff incorporated a criterion to measure whether a project addresses identified environmental impacts. She also noted that the criteria are organized into six categories that coincide with the MPO's approved visions and policies for the LRTP. Thirty-six criteria were developed; the scoring system does not involve weighting of criteria.

Members then discussed the proposed scoring for TIP projects and raised issues.

Mary Pratt, Town of Hopkinton, noted the importance of containing storm water discharge and pollutants that comes from vehicle exhaust.

David Koses, City of Newton, stated that the MPO should give greater emphasis in the scoring to the Maintenance, Modernization, and Efficiency category. He also noted that a criterion in the Mobility category, that gives projects points for improving transit reliability, seems unbalanced given that equal credit would be given to a project that provides a dedicated bus lane and one that provides a simple bus bump out.

Richard Reed, Town of Bedford, remarked about redundancy in some of the categories, such as in the Livability and Environmental Justice categories where projects would get credit for having a design consistent with Complete Streets policies. H. Morrison noted that the MPO's TIP criteria have always included some redundant criteria. Pam Wolfe, Manager of Certification Activities, MPO Staff, added that the MPO's outreach to environmental justice communities identified traffic calming and other measures consistent with Complete Streets policies as important to those communities.

E. Bourassa expressed that the proposed scoring method is simpler and more transparent than the previous method.

John Romano, MassDOT Highway Division, also recommended that greater weight be given to criteria in the Maintenance, Modernization, and Efficiency category. Lourenço Dantas, Massachusetts Port Authority, raised the possibility of using a multiplier to increase the weighting of this category. However, J. Romano advised simply increasing the scoring values in that category – rather than using a multiplier – so that the evaluation would be clear to project proponents.

M. Pratt expressed concern that TIP projects that have already been programmed for funding will be re-evaluated under this new scoring system. She stated that she thought it would be unfair to do this since those project proponents already spent money to prepare their projects without this scoring system as a guide. Richard Reed, Town of Bedford, suggested that the new scoring system be applied only to new projects. D. Mohler noted that staff has conducted a numerical evaluation of projects for years and that this new method would be more transparent. He advised that staff evaluate all projects using the new scoring system. The MPO could then explain that it is keeping the commitments it has made to fund projects that have been already been programmed.

A motion to double the scoring points for the Maintenance, Modernization, and Efficiency category (from 18 to 36 points) was made by M. Pratt, and seconded by P. Regan. The motion passed unanimously.

During a discussion of this motion, H. Morrison summarized how this action would affect the total scoring system: the highest weight would be given to the Maintenance, Modernization, and Efficiency, followed by Safety and Security, Livability, Environment and Climate Change, Mobility, and Environmental Justice.

E. Bourassa raised a question about a criterion in the Maintenance, Modernization, and Efficiency category, which gives points to a project that improves substandard pavement. He asked whether the MPO would be skewing funding decisions in favor of projects on roads that have not been well maintained by communities, if it is giving higher ratings in this category for projects on roads with poor pavement surface. Pavement management practices dictate that the focus should be on maintaining roads in “fair” and “good” pavement condition before considering reconstruction of roads in “poor” condition. H. Morrison and Efi Pagitsas, Manager Traffic Analysis Group, MPO staff, explained that there would not be a skew presently since the MPO does not have a policy on pavement management. M. Pratt then cautioned about disinvesting in roads with poor pavement condition. She noted that letting roads with poor pavement deteriorate would lead to higher costs in the long-run when total reconstruction would be required.

A motion to increase the scoring of a criterion in the Mobility category that gives points for a project that improves transit reliability (from 4 to 7 points) was made by D. Koses, and seconded by P. Regan. The motion passed unanimously.

This action gives two points for a project that implements queue jumping, prioritizes signals for transit vehicles, or provides a dedicated bus way, and one point for providing a bus bump out. The action also increases the weight of the Mobility category to make it equal in weight to the Environment and Climate Change category.

Members turned their attention to the Environment and Climate Change category. Joe Cosgrove, MBTA, and D. Mohler raised concerns about giving points to a project because it is in a municipality that is a member of ICLEI. Their concern was that the criterion, while recognizing the municipal proponent’s membership in ICLEI, does not give a sense of whether the project reduces greenhouse gas (GHG) emissions.

Anne McGahan, LRTP Manager, MPO staff, suggested changing the criterion to give credit to a project that reduces GHG emissions in an ICLEI community. L. Dantas added that the criterion could focus on whether the proponent municipality has met ICLEI milestones.

J. Cosgrove also suggested removing the criterion that gives a project points for being in a Green Community, as certified by the Executive Office of Energy and Environmental Affairs (EOEEA). E. Bourassa expressed support for keeping the criteria that indicate whether a community is taking steps to reduce emissions, including both emissions from transportation and from other sources. R. Reed also pointed out that the Green Community program is a Commonwealth program, unlike ICLEI. Christine Stickney, Town of Braintree, noted that since some municipalities do not have enough staff to do the work necessary to be designated as an ICLEI community, this criterion might not be fair to all municipalities.

A motion to remove the criterion in the Environment and Climate Change category that gives points to a project that is in an ICLEI community was made by C. Stickney, and seconded by J. Cosgrove. The motion passed, unanimously. The Massachusetts Port Authority abstained.

Members then turned their attention to the Safety and Security category.

R. Reed recommended merging two items under the criterion that gives a project points for having a design that affects the ability to respond to extreme conditions. The items are those that recognize a project that addresses a flooding problem or enables a facility to function in a flood, and that has a design that takes sea level rise into account. He also expressed concern about the wording of the sea level rise item, considering that a project that is not impacted by sea level rise could get a point in that area.

A motion to merge the flood and sea level rise items in the Safety and Security category into one item that reads, “Project addresses flooding or a potential/projected sea level rise problem and enables a facility to function in such a condition,” (and to give 2 points for that item) was made by R. Reed, and seconded by C. Stickney. The motion passed. The following voted no: MassDOT, MassDOT Highway, and MBTA. The City of Boston abstained.

During a discussion of that motion, Tom Kadzis, City of Boston, expressed concern about the revision given that if the sea level rises, affected facilities would probably not be able to function. D. Mohler added that few proponents are actually addressing sea level rise in their project designs, though they may be addressing storm surge threats. P. Wolfe stated that there are actions that coastal municipalities could take to address sea level rise, such as raising the elevation of roads that would be a risk for over wash, improving drainage, and improving the security and accessibility of alternate routes. D. Mohler noted that municipalities were not yet taking those actions.

Members then discussed the Environmental Justice category.

L. Wiener raised a question about whether the scoring for a project that creates a burden in an environmental justice area is sufficient and she suggested that such a project should lose more points.

A motion to change the scoring on the item in the Environmental Justice category that addresses whether a project creates a burden in an environmental justice area (from -1 to -10) was made by L. Wiener, and seconded by E. Bourassa. The motion passed unanimously.

Members turned their attention again to the Environment and Climate Change category.

L. Dantas noted that, following the above actions, the Environment and Climate Change category has been reduced in relative importance in the scoring system.

A motion to add points to every item in the Environment and Climate Change category to make it worth 25 points was made by L. Wiener, and seconded by C. Stickney.

During a discussion of this motion, A. McGahan suggested increasing the emphasis on carbon dioxide reduction in this category (since the criterion that referenced ICLEI was removed). L. Wiener declined to amend the motion.

The motion to add points to every item in the Environment and Climate Change category passed. The following members voted no: MassDOT, MBTA, Massachusetts Port Authority, City of Boston, and City of Newton.

A motion to approve all the changes to the TIP scoring key was made by T. Bent, and seconded by M. Pratt. 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 December 16 was made by M. Pratt, and seconded by C. Stickney. The motion passed unanimously.

8. MBTA Systemwide Passenger Survey – *Karl Quackenbush, Acting Director, CTPS, and Tom Humphrey, Chief Planner, Transit Service Planning Group, MPO Staff*
K. Quackenbush introduced this topic by noting that the MBTA Systemwide Passenger Survey work was begun with a grant from FTA. This work was consistent with FTA's goals for supporting technical improvements to the federal New Starts process and with the needs of the MBTA. The survey results will be used to validate the MPO's regional model set to contemporary transit patterns, such as to properly represent patterns for origin and destination, access, and transfers. The MPO approved the work program for the MBTA Systemwide Passenger Survey in the fall of 2007. Reports from this survey are now available on the MPO's website.

T. Humphrey, the project manager for this work program, then gave an overview of the survey and its results.

MPO staff distributed surveys on the transit system from April 2008 through June 2009 during the morning and early afternoon hours (until 3:30 PM). Surveys were available in paper format and online. The paper form was used in order to get an adequate number of responses across all modes, and because many of the survey questions pertained to specific transit trips. Approximately 20 percent of passengers who received paper forms responded, and less than one percent responded online.

The survey forms included questions about passengers' origin and destination, their means of access and egress to and from the transit system, their trip purpose, and ratings for service quality. The responses were collected in an electronic database. The survey results are posted on the MPO's website in PDF format, however, due to confidentiality requirements, the underlying database cannot be made available to the public.

T. Humphrey then gave a demonstration of the information available, by accessing the report on the Orange Line through the MPO's website. The reports on each rapid transit line include tables showing the following information:

- Trip purpose
- Reasons for using the MBTA
- Origin locations and activities
- Means of access to the transit system
- Time from trip origin to station by non-transit modes
- Transfers to transit system
- Exits from transit system
- Entries to transit system
- Means of egress from transit system
- Transfers from other modes
- Destinations
- Socioeconomic factors
- Ethnicity of riders (there is a federal requirement to collect this data)
- Usage rates of system (during weekdays and weekends)
- Fare types and pass usage rates
- Vehicle availability
- Service quality

Reports for bus, boat, and commuter rail provide similar information.

Members did not have any questions following the presentation.

9. I-495 Land Use Work Program and Update – *Eric Bourassa, Transportation Manager, MAPC, and Karl Quackenbush, Acting Director, Central Transportation Planning Staff*

Members were presented with the work program for the *I-495 Corridor/MetroWest Development Compact: Land Use Study* and a map showing the study area. (See attached.) E. Bourassa explained that this study is a joint effort by MAPC and the Central Massachusetts Regional Planning Agency (CMRPA), and that it will be funded by the Executive Office of Housing and Economic Development (EOHED).

The study will identify priority areas for development and preservation in the study area. (There are 37 municipalities in the study area; 26 are in the Boston MPO area.) MAPC and CMRPA will work with municipalities in the study area to develop a smart growth scenario and then conduct a trends extended analysis to the year 2035 using the smart growth scenario and a no-build scenario. CTPS will conduct modeling to determine vehicle miles travelled, vehicle hours travelled, emissions, and transit trips for the two scenarios. A series of public meetings will be held. Transportation projects that could help make these smart growth areas successful will also be identified.

Regarding the modeling, K. Quackenbush added that CTPS's travel model support work will involve coordinating with CMRPA to make sure the two agencies are using common model inputs and performance measure reports.

Members then made comments and asked questions:

Ginger Esty, Town of Framingham, commented that the study area looks similar to the area that state Senator Karen Spilka was discussing as a new MPO area. She questioned whether the MPO should be expanding to do work beyond its boundaries more frequently. E. Bourassa replied that he thinks the MPO should expand it work beyond its boundaries when there are opportunities for these types of corridor studies. He added that this study supports EOHED Secretary Gregory Bialecki's interest in getting a better understanding of where priority investment in infrastructure should be in the MetroWest area. G. Esty remarked on the need to keep in mind the issue of providing water and sewer service to those municipalities, and that several municipalities in the area have failed sewer treatment systems.

M. Pratt remarked upon past state environmental studies that pointed to the need to conserve water, without which development will not be able to occur in the I-495 corridor. She stressed the importance of addressing storm water pollution.

D. Mohler asked if EOHED selected the communities for the study area. E. Bourassa replied yes.

D. Mohler asked if MAPC has a contract signed with EOHED and about how MAPC would subcontract with CTPS. E. Bourassa replied that a contract with EOHED is about to be signed. Since MAPC is the fiduciary agent for CTPS, MAPC could transfer funds to CTPS for its portion of the work.

D. Mohler asked if MAPC envisions that the study's smart growth scenario will have land use pattern changes beyond those identified in MetroFuture, and how those changes

would affect the MPO's LRTP. E. Bourassa stated that in-depth meetings will be held with municipalities and, in some cases, the priority areas for development and preservation might differ from MetroFuture. E. Bourassa indicated that he would get back to the MPO regarding the potential impact on the LRTP prior to the MPO's vote on this work program.

10. Members Items
There were none.

11. Adjourn
A motion to adjourn was made by J. Romano, and seconded by Ginger Esty, Town of Framingham. The motion passed unanimously.

Transportation Planning and Programming Committee Meeting Attendance
Thursday, January 6, 2011, 10:00 AM

Member Agencies	Representatives and Alternates
MassDOT	David Mohler
MassDOT Highway	John Romano
City of Boston	Tom Kadzis
City of Newton	David Koses
City of Somerville	Tom Bent
Massachusetts Port Authority	Lourenço Dantas
MAPC	Eric Bourassa
MBTA	Joe Cosgrove
MBTA Advisory Board	Paul Regan
Regional Transportation Advisory Council	Laura Wiener Steve Olanoff
Town of Bedford	Richard Reed
Town of Braintree	Christine Stickney
Town of Framingham	Ginger Esty
Town of Hopkinton	Mary Pratt

MPO Staff/CTPS
Mike Callahan
Bruce Kaplan
Maureen Kelly
Robin Mannion
Anne McGahan
Liz Moore
Hayes Morrison
Efi Pagitsas
Sean Pfalzer
Karl Quackenbush
Pam Wolfe

Other Attendees	
Joe Onorato	MassDOT Highway, District 4
Karen Pearson	MassDOT Office of Transportation Planning
Bryan Slack	MassDOT District 3

U.S. Department
of Transportation

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DEC 22 2010

Jeffrey B. Mullan
Secretary & CEO
Massachusetts Department of Transportation (MassDOT)
State Transportation Building
10 Park Plaza, Suite 3170
Boston, MA 02116

Dear Secretary Mullan:

Re: **Approval of Massachusetts FY 2011-2014 Statewide Transportation Improvement Program (STIP)**

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our joint review of the FY 2011 - 2014 Massachusetts STIP transmitted to us on September 28, 2010. The FHWA and FTA are making the following determinations:

- The projects in the STIP are based on a planning process that substantially meets the requirements of Title 23 U.S.C., the Federal Transit Act and Subparts A, B, and C of 23 CFR 450.

- The Transportation Improvement Programs (TIPs) are based on a continuing, comprehensive transportation planning process carried on cooperatively by the State, the ten MPOs, the three non-metropolitan regions, and the transit operators in accordance with the Federal Transit Act.

- Attached to this letter are several deficiencies identified in the planning process that requires the attention of MassDOT.

We have discussed eligibility requirements with your staff regarding the eligibility requirements for the redistribution of obligation authority for FY 2011, and our review of the certified Maintenance of Effort (MOE). The FHWA notified your office regarding the reporting requirement in the MOE provision in the American Recovery and Reinvestment Act of 2009 on March 17, 2010, as a follow-up to a letter that was sent to Governor Deval Patrick by U.S. Transportation Secretary Ray LaHood on February 9, 2010. The State did not maintain its certified level of expenditures, which was required to participate in the August 2011 redistribution of the limitation on obligations for

Federal-Aid Highway Programs. Therefore, MassDOT will need to submit a STIP amendment to the FHWA to remove $40 million, which was the estimate of the redistribution of Federal-Aid Highway programs for FY 2011. We will continue to monitor whether there are any changes in the eligibility requirements, but until such time MassDOT will need to advance an amendment in order to meet the financial constraint. Please transmit an amendment to account for the $40 million no later than March 31, 2011.

The State is commended on the significant investment in Massachusetts bridges through the Accelerated Bridge Program (ABP) that is projected to reduce the number of structurally deficient bridges in the state system. At this time, the FHWA would like to see an analysis of the Bridge Program that looks at the investments in bridges over the four years of the STIP, as well as the investments that will be made through the ABP. It would be informative to gauge the progress that is expected to be made over the next four years regarding the number of structurally deficient bridges and other bridge needs identified by the PONTIS model. This analysis is certainly needed and should inform metropolitan decision making in the development of the regional transportation plans.

The FHWA is commending the leadership of the Office of Transportation Planning in working with the Transportation Manager's Group to develop a strategy on the need to determine the cost of maintaining the Federal Aid System through the Pavement Management/Maintenance Subcommittee. Much like the effort on PONTIS, this should also provide input into the regional transportation plans.

We would like to work with you in developing performance management principles for several highway programs, including the IM and the NHS. These performance measures should reflect national and state goals, and we look forward to working together on performance management principles in the planning process.

We will work with you to expedite project delivery to ensure an uninterrupted program. The FY 2011- 2014 STIP is hereby approved, and should you have any questions, please let us know.

Sincerely,

Mary Beth Mello
Regional Administrator
Federal Transit Administration

Richard J. Marquis
Acting Division Administrator
Federal Highway Administration

cc: David J. Mohler, OTP Executive Director, MassDOT
Luisa Paiewonsky, Highway Division Administrator, MassDOT
Curtis Spalding, EPA Regional Administrator

Laurie Burt, Commissioner, Massachusetts DEP
Donald O. Cooke, Environmental Scientist, EPA
Massachusetts Regional Planning Agencies

Planning Findings for Approval of STIP FY2011 –FY 2014

Memorandum of Understanding

In light of the legislation that created MassDOT, the MPOs will need to develop a new Memorandum of Understanding (MOU) to outline the mutual roles and responsibilities and procedures governing the voting membership of the MPOs in accordance with 23 CFR §450.314. This relationship will have to be specified in an agreement between the State, the transit operator, planning commission and any other applicable entity. The new MPO agreements should be in place no later than March 31, 2011.

Annual Listing of Obligated Projects

The Regional Planning Agencies have been publishing a list of highway projects advertised in the preceding program year. However in accordance with 23 CFR §450.332, the planning regulations specifically require that the list include all federally funded projects authorized or revised to increase obligations in the preceding year. This includes but is not limited to advance construction conversions, highway and transit projects. This list will need to be published or otherwise made available in accordance with the MPO's public participation criteria in the TIP.

Grouped Projects

As discussed with your staff, projects that are considered to be of an appropriate scale for individual identification in a given program should be specifically identified in the STIP from all of the statewide line items. The individual projects will need to be in the STIP prior to a request for authorization of those funds.

Project Programming

MassDOT is advancing several major projects in the environmental process, including I-93 Lowell Junction and the Methuen Rotary. The construction phase of these projects does fall within the timeframe of the FY 2011-2014 STIP, and these projects will need to be added to the STIP with an amendment prior the FHWA being able to take an action on the environmental documents.

State Implementation Plan

The demonstration of timely implementation of Transportation Control Measures (TCMs) in the State Implementation Plan (SIP) is required for a conformity determination. In accordance with the Environmental Protection Agency's (EPA) final rulemaking approving Massachusetts' Transit System Improvements SIP revision, before December 31, 2014, the Green Line Extension from Lechmere Station to Medford Hillside, and the Green Line Union Square branch of the Green Line Extension to Medford Hillside must be constructed and open to the public. The MassDOT has acknowledged that this project may no longer be completed or operational by its required schedule date as set forth by the SIP.

Interim Emission Offset Projects

MassDOT intends to submit a petition to delay the Green Line Extension project in January 2011, and interim emission offset projects or measures must be in place by the time of the project's operational date to achieve emission reductions, equal to or greater than the emissions' reductions that would have been achieved had the project not been delayed. The EPA recommends that the FHWA and FTA require MassDOT to submit reports that would identify individual project progress and report on measures being implemented to overcome delays and complete the projects as expeditiously as possible. Reaffirm the continued priority of funding to the SIP-approved TCM projects; report on the quantity of emissions offsets needed; and quantify the actual benefit of interim emission offset projects. The FHWA and FTA have acknowledged that MassDOT has been providing monthly updates on the TCMs at the Boston Region MPO's Transportation Planning and Programming Committee.

Revenue and Cost Estimates for the STIP

The revenue and cost estimates for the STIP must use an inflation rate to reflect "year of expenditure dollars" based on reasonable financial principles and information, developed cooperatively by the MPOs, State and public transportation operators (23 CFR §450.324). In their effort to meet this regulatory requirement, MassDOT has reduced the amount of funding available for the second through the fourth year of the STIP by 4% compounded annually for MPO target and statewide bridge funding amounts. However, this method has not been applied to other statewide funding such as Interstate Maintenance (IM), National Highway System (NHS) and the Highway Safety Improvement Programs. Please provide a schedule for meeting this regulatory requirement for all highway and transit projects in the STIP.

Lapsing Funds

There are several highway programs where the funds have the possibility of lapsing in FY 2011. The funding categories include the Railway-Highway Crossings, Recreational Trails and the Congestion Mitigation and Air Quality program. Please consider this potential lapse in your future programming.

Stormwater Runoff

The FHWA has discussed with your staff corrective measures to address the impacts of storm water runoff from highways, and looks forward to an amendment of the STIP for the clean-up of impaired waterways. Please include a figure for each year of the STIP, FY 2011-2014.

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of Transportation

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DEC 2 2 2010

Jeffrey B. Mullan
Secretary & CEO
Massachusetts Department of Transportation
State Transportation Building
10 Park Plaza, Suite 3170
Boston, MA 02116

Re: Massachusetts Air Quality Conformity Determinations
FY 2011-2014 Transportation Improvement Programs

Dear Secretary Mullan:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed the air quality conformity reviews of the Transportation Improvement Programs (TIPs) for the ten Metropolitan Planning Organizations (MPOs) and the three non-metropolitan planning regions in Massachusetts.

The review was conducted in accordance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU), and the Transportation Conformity Rule as amended dated March 10, 2006.

The demonstration of timely implementation of Transportation Control Measures (TCMs) in the State Implementation Plan (SIP) is required for a conformity determination. In accordance with the Environmental Protection Agency's (EPA) final rulemaking approving Massachusetts' Transit System Improvements SIP revision, before December 31, 2014, construct and open to the public the Green Line Extension from Lechmere Station to Medford Hillside, and the Green Line Union Square spur of the Green Line Extension to Medford Hillside. The Massachusetts Department of Transportation (MassDOT) has acknowledged that this project may no longer be completed or operational by its required schedule date as set forth by the SIP.

MassDOT intends to submit a petition to delay the Green Line Extension project in January 2011, and interim emission offset projects or measures must be in place by the time of the project's operational date to achieve emission reductions, equal to or greater than the emissions' reductions that would have been achieved had the project not been delayed. The FHWA and FTA, therefore, require MassDOT to report on measures being implemented to overcome delays and complete the project as expeditiously as possible; reaffirm the continued priority of funding to all the SIP-approved TCM projects; report on the quantity of emissions offsets needed; and quantify the actual benefit of interim emission's offset projects.

As the State and the MPOs prepare to develop the FY 2012-2015 STIP, the Interagency Consultation on Air Quality Conformity will need to be held prior to the release of the draft TIPs. Consistent with the Transportation Conformity Regulations at 40 CFR §93.105, this process was intended for the MPOs, MassDOT, the Massachusetts Department of Environmental Protection, the US Environmental Protection Agency (EPA), FTA and FHWA to consult on the specific processes. This includes evaluating and choosing a model and associated methods and assumptions to be used in regional emissions analyses, a determination of which transportation projects should be considered "regionally significant" for the purposes of regional emissions analysis for the TIP, and the establishing of a proactive public involvement process that provides an opportunity for public review and comment at the beginning of the public comment period on the conformity determination for all transportation plans and TIPs.

We have made our decision based on our joint evaluation of the air quality analyses of the TIPs, and the recommendations received from the EPA on November 16, 2010, and the concurrence received from the Massachusetts Department of Environmental Protection on November 23, 2010, and the independent determinations made by the MPOs and the three non-metropolitan planning regions. We have determined that the TIPs are in conformity with the Clean Air Act and the EPA conformity regulations (40 CFR part 51).

Future conformity will be based on routine monitoring, periodic reviews, and evaluation of the planning processes and timely implementation of the TCMs. The conformity determinations of the TIPs will remain, in effect, until such time as a new determination is required either by regulation or revisions to the respective documents.

Should you have any questions regarding the air quality conformity determinations, please let us know.

Sincerely,

Mary Beth Mello
Regional Administrator
Federal Transit Administration

Richard J. Marquis
Acting Division Administrator
Federal Highway Administration

cc: David J. Mohler, OTP Executive Director, MassDOT
Luisa Paiewonsky, Highway Division Administrator, MassDOT
Curtis Spalding, EPA Regional Administrator
Laurie Burt, Commissioner, Massachusetts DEP
Donald O. Cooke, Environmental Scientist, EPA
Massachusetts Regional Planning Agencies

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

November 15, 2010

Ms. Lucy Garliauskas, Division Administrator
U.S. Federal Highway Administration
55 Broadway, 10th Floor
Cambridge, MA 02142

RE: Massachusetts Air Quality Conformity;
8-Hour Ozone and Carbon Monoxide Determinations.

Dear Ms. Garliauskas:

On September 28, 2010, EPA New England received the thirteen Federal Fiscal Years 2011-2014 Regional Transportation Improvement Program (TIP) with Air Quality Conformity Determinations, which evaluates transportation air quality conformity for Massachusetts Metropolitan Planning Organizations (MPOs) and Regional Planning Agencies (RPAs). EPA New England's Air Quality Planning Unit has conducted a review of the air quality conformity analyses in accordance with EPA's Transportation Conformity Rule as amended. Based on our review, the 2011-2014 TIPs and associated air quality conformity analyses support a positive conformity finding.

Massachusetts submitted 2008 and 2009 motor vehicle emissions budgets (MVEBs) to EPA on January 31, 2008, as part of the 8-hour ozone attainment demonstration and reasonable further progress plan for the Boston-Lawrence-Worcester (Eastern Massachusetts) and Springfield (Western Massachusetts) 8-hour ozone nonattainment areas. On March 7, 2008, EPA New England sent a letter to the Massachusetts Department of Environmental Protection (DEP) stating that the 2008 and 2009 MVEBs in the Eastern and Western Massachusetts 8-hour ozone nonattainment areas are adequate. EPA announced our adequacy determination and established an effective date of April 2, 2008 by publishing a notice in the Federal Register on March 18, 2008 (73 FR 14466). Since the time frame of the 2011 – 2014 TIP, and the years of analyses are past the year 2008, only the more restrictive 2009 MVEBs were used in evaluating conformity. The adequate 2008 and 2009 MVEBs for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for Eastern and Western Massachusetts in tons per summer day (tpsd) are as follows:

	Adequate Motor Vehicle Emissions Budgets			
	Boston-Lawrence-Worcester (Eastern Massachusetts) 8-hr Ozone Area		Springfield (Western Massachusetts) 8-hr Ozone Area	
	VOC (tpsd)	NOx (tpsd)	VOC (tpsd)	NOx (tpsd)
Year 2008	68.30	191.30	11.80	31.30
Year 2009	63.50	174.96	10.73	27.73

Using the latest planning assumptions, the Massachusetts Highway Department - Office of Transportation Planning modeled the emissions, for VOCs and NOx for the Eastern and Western Massachusetts 8-hour ozone nonattainment areas, using a combination of the statewide and selected regional travel demand models. The Boston MPO also modeled the carbon monoxide (CO) emissions for the Boston (Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere, and Somerville) carbon monoxide maintenance area. EPA New England believes that these air quality conformity analyses prepared for the 2011 – 2014 transportation improvement programs will support U.S. DOT making positive conformity determinations for the Eastern and Western Massachusetts 8-hour ozone nonattainment areas, and the Boston carbon monoxide maintenance areas. Specifically, the air quality conformity analyses demonstrate that:

- The eight MPOs and two RPAs in the Boston-Lawrence-Worcester (Eastern) Massachusetts 8-hour ozone nonattainment area [Boston MPO, Cape Cod MPO, Central Massachusetts MPO, Old Colony MPO, Merrimack Valley MPO, Montachusett MPO, Northern Middlesex MPO, Southeastern Massachusetts MPO, Martha's Vineyard Commission, and Nantucket Planning and Economic Development Commission], collectively demonstrate transportation conformity. The VOC and NOx emissions for future years are less that the Year 2009 MVEBs of 63.50 tpsd of VOC and 174.96 tpsd of NOx established by the State Implementation Plan (SIP) for the nonattainment area, as seen in the table below:

Boston-Lawrence-Worcester (Eastern) Massachusetts 8-Hour Ozone Nonattainment Area (Emissions in tons per summer day)				
Year	VOC Build Emissions	2009 VOC Motor Vehicle Emission Budget	NOx Build Emissions	2009 NOx Motor Vehicle Emission Budget
2017	41.389	63.50	66.418	174.96
2020	34.293	63.50	50.694	174.96
2030	32.157	63.50	34.259	174.96

- The two MPOs and one RPA in the Springfield (Western) Massachusetts 8-hour ozone nonattainment area [Berkshire County MPO, Pioneer Valley MPO, and Franklin MPO], collectively demonstrate transportation conformity. The VOC and NOx emissions for future years are less that the Year 2009 MVEBs of 10.73 tpsd of VOC and 27.73 tpsd of NOx established by the SIP for the nonattainment area, as seen in the table below:

Springfield (Western) Massachusetts 8-Hour Ozone Nonattainment Area (Emissions in tons per summer day)

Year	VOC Build Emissions	2009 VOC Motor Vehicle Emission Budget	NOx Build Emissions	2009 NOx Motor Vehicle Emission Budget
2017	6.512	10.73	10.440	27.73
2020	6.051	10.73	7.784	27.73
2030	5.532	10.73	5.011	27.73

- The Boston (Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere, and Somerville) carbon monoxide motor vehicle emissions for future years are consistent with the Year 2010 carbon monoxide MVEB of 228.33 tons of carbon monoxide per winter day established by the SIP for the maintenance area, as seen in the table below:

Boston Carbon Monoxide Maintenance Area (Emissions in tons per winter day)		
Year	CO Build Emissions	2010 CO Motor Vehicle Emission Budget
2017	122.79	228.33
2020	121.54	228.33
2030	120.17	228.33

- The respective MPOs demonstrate that the four carbon monoxide maintenance areas within their borders [Waltham (Boston MPO), Lowell (Northern Middlesex MPO), Worcester (Central Massachusetts MPO), and Springfield (Pioneer Valley MPO)] all individually demonstrate transportation conformity. On April 22, 2002, these four communities were re-designated attainment for carbon monoxide with EPA-approved limited maintenance plans. Emissions budgets in limited maintenance plan areas may be treated as essentially not constraining for the length of the initial maintenance period because it is unreasonable to expect that such areas will experience so much growth in that period that a violation of the carbon monoxide National Ambient Air Quality Standard would result. Therefore, in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule are considered to satisfy the "budget test." In the future, "hot-spot" carbon monoxide analysis will be performed to satisfy "project level" conformity determinations.

Another criterion of the Transportation Conformity Rule is the progress and timely implementation of transportation control measures (TCMs) in the SIP, 40 CFR 93.113. On July 31, 2008, EPA published a final rulemaking in the Federal Register approving Massachusetts' Transit System Improvements SIP revision. This Massachusetts SIP revision requires: (1) before December 31, 2011, complete final design of the Red Line/ Blue Line Connector, from the Blue

Line at Government Center to the Red Line at Charles Station; (2) before December 31, 2011, construct and open to the public the Fairmount Line Improvements/Stations Expansion Project; (3) before December 31, 2011, construct and open to the public 1,000 additional park and ride parking spaces serving commuter transit facilities in the Boston MPO region; and (4) before December 31, 2014, construct and open to the public the Green Line Extension from Lechmere Station to Medford Hillside, and the green Line Union Square spur of the Green Line Extension to Medford Hillside.

Massachusetts Department of Transportation (MassDOT) has acknowledged that a number of the SIP-approved TCMs may no longer be completed or operational by their required schedule date as set forth in Massachusetts Transit System Improvement regulation (310 CMR 7.36(2)) and the Massachusetts SIP. A "petition to delay the project(s)" is to be submitted by MassDOT in January 2011 initiating the "Project Delays and Implementation of Interim Emission Reduction Offset Projects and Measures," as set forth in 310 CMR 7.36(4) and the SIP. Interim emission offset projects or measures must be in place by the time of the project's operation date to achieve emission reductions of NMHC, CO and NOx equal to or greater than the emission reductions that would have been achieved had the project(s) not been delayed. In addition to the project delay and offset requirement established in the SIP-adopted Transit System Improvement regulation, the Transportation Conformity Regulations require that past obstacles to implementation of the SIP-approved TCMs be identified and overcome. EPA recommends that U.S. DOT (Federal Highway Administration and Federal Transit Administration) consider requiring MassDOT to hold quarterly status meetings (or submit reports) that would: identify individual project progress; report on measures being implemented to overcome delays and complete the projects as expeditiously as possible; reaffirm the continued priority of funding to the SIP-approved TCM projects; report on the quantity of emission offsets needed; and quantify the actual benefit of interim emission offset projects.

Finally, EPA points out that Massachusetts DEP has a unique role in transportation conformity, established in Massachusetts' 1982 SIP and the Massachusetts conformity regulations, which the Department of Environmental Protection must concur on Massachusetts Department of Transportation's / Massachusetts Highway Department's conformity analysis.

If you have any further questions regarding our comments, please feel free to call Donald Cooke of my staff at (617) 918-1668.

Sincerely,

Bob McConnell, for

Anne E. Arnold, Manager
Air Quality Planning Unit

cc: Mary Beth Mello, Administrator, FTA - Region 1, Cambridge, MA
Peter Butler, FTA - Region 1, Cambridge, MA
William Gordon, FTA - Region 1, Cambridge, MA
Michael Chong, FHWA - Massachusetts Division, Cambridge, MA
Paul Maloney, FHWA - Massachusetts Division, Cambridge, MA
Damaris Santiago, FHWA - Massachusetts Division, Cambridge, MA
Bob Frey, Massachusetts Highway Dept. - BTP&D - Boston, MA
Christine. Kirby, MA DEP - Boston, MA

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Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Arnold J. Soolman
Director, MPO Staff

January 10, 2011

«First_Name»«Last_Name»
«Position»
«Organization»
«Address1»
«Address_City_Town», «State»«Zip_Code»

Re: FFYs 2012–15 Transportation Improvement Program Development

Dear «FIRST» «LAST»:

The Boston Region Metropolitan Planning Organization (MPO) is beginning the process of developing the federal fiscal years (FFYs) 2012–15 Transportation Improvement Program (TIP). This year the MPO is changing its approach to collecting information and to the development of the TIP in consideration of the fiscal picture regarding available federal funds for transportation. **The MPO will not be hosting Municipal TIP Input Days this year**. (bold)

This lack of available funds will limit the number of projects the MPO can reasonably expect to fund in a four-year period. In order to ~~insure~~ ensure that the projects and programs selected for funding are the most consistent with the MPO's visions and policies, the MPO will place emphasis on the Project Information Forms (PIFs) and their corresponding evaluations for project prioritization and selection.

These evaluations will be the basis for development of the FFYs 2012–15 TIP. Projects that evaluate highest and can be made ready for project advertisement in a given federal fiscal year will be developed into a staff recommendation for the FFYs 2012–15 TIP and presented to the MPO. Staff will also provide a first-tier list of projects (those projects that evaluate highly, but may not meet fiscal constraint or immediate readiness factors) for future consideration or to be programmed in the event that any project listed cannot be made ready. The staff recommendations and the list of first-tier projects will be presented and discussed in a public meeting. Municipalities will be notified in advance and will be welcome to participate.

In order to make sure the MPO is receiving accurate and timely information regarding your project(s) and to discuss any questions you may have, the MPO will host **TIP-Building Workshops on February 8, 15, and 22 and an MPO Open House on the 16th (note changes in date)**. We strongly encourage all municipalities to attend at least one of these workshops.

Please visit the MPO website at www.bostonmpo.org/??? for more information regarding these adjustments to the MPO's TIP development process.

If you have any questions, please contact Hayes Morrison at hayesm@bostonmpo.org or 617-973-7129.

Sincerely,

David J. Mohler, Chair
Transportation Planning and Programming Committee

MAINTENANCE, MODERNIZATION AND EFFICIENCY (18 TOTAL POINTS POSSIBLE)

Improves substandard pavement (up to 3 points)

+3 IRI rating greater than 320: Poor and pavement improvements are included in the project

+2 IRI rating between 320 and 191: Fair and pavement improvements are included in the project

0 IRI rating less than 190: Good or better

Improves signal equipment condition (up to 3 points)

+3 Poor condition and all equipment will be replaced

+2 Mediocre condition, replacement of majority of equipment will occur

+1 Fair condition, partial replacement will occur

0 All other values

Improves traffic signal operations (signal equipment upgrades, including for adaptive signal controls and coordination with adjacent signals (ITS) (up to 3 points)

+3 Meets or addresses criteria to a high degree

+2 Meets or addresses criteria to a medium degree

+1 Meets or address criteria to a low degree

0 Does not meet or address criteria

In a Congestion Management Process Identified Area (up to 3 points):

+3 CMP data indicates project area is in one of the most highly congested project areas monitored

+2 CMP data indicates project area is in one of the most congested project areas monitored

+1 CMP data indicates project area is in a congested project areas monitored

0 CMP data indicates project area is in the top 80 to 51 % of the most congested project areas monitored

Improves intermodal accommodations/connections to transit (up to 3 points)

+3 Meets or addresses criteria to a high degree

+2 Meets or addresses criteria to a medium degree

+1 Meets or address criteria to a low degree

0 Does not meet or address criteria

Implements ITS strategies other than traffic signal operations (improve traffic flow as identified by an identified ITS strategy for the municipality or state (e.g. variable message signs) (up to 3 points)

+3 Meets or addresses criteria to a high degree

+2 Meets or addresses criteria to a medium degree

+1 Meets or address criteria to a low degree

0 Does not meet or address criteria

LIVABILITY (28 TOTAL POINTS POSSIBLE)

Design is consistent with complete streets policies (up to 4 points)

- *+1 Project is a "complete street"*
- *+1 Project provides for transit service*
- *+1 Project provides for bicycle facilities*
- *+1 Project provides for pedestrian facilities*
- *0 Does not provide any complete streets components*

Provides multimodal access to an activity center (up to 3 points)

- *+1 Project provides transit access (within a quarter mile) to an activity center*
- *+1 Project provides bicycle access to an activity center*
- *+1 Project provides pedestrian access to an activity center*
- *0 Does not provide multimodal access*

Reduces auto dependency (up to 7 points)

- *+3 Project provides for a new transit service*
- *+1 Project completes a known gap in the bicycle or pedestrian network*
- *+1 Project provides for a new bicycle facility*
- *+1 Project provides for a new pedestrian facility*
- *+1 Project implements a transportation demand management strategy*
- *0 Does not provide for any of the above measures*

Provides for development consistent with the compact growth strategies of MetroFuture (up to 5 points)

- *+2 Plan for compact growth to serve community needs*
- *+1 Plan for good design and access*
- *+1 Encourage market response to district plans*
- *+1 Increases vitality of existing centers*
- *0 Does not provide for any of the above measures*

Project improves Quality of Life

- *+1 Reduces cut through within the project area*
- *+1 Introduces traffic calming measures*

Project serves a targeted redevelopment site (43D sites as documented by Mass Housing and Economic Development) (up to 6 points)

- *+2 Project provides new transit access to a 43D site*
- *+1 Project improves transit access to a 43D site*
- *+1 Project provides for bicycle access to a 43D site*
- *+1 Project provides for pedestrian access to a 43D site*
- *+1 Project provides for improved road access to a 43D site*

MOBILITY (22 TOTAL POINTS POSSIBLE)

Existing peak hour level of service (LOS) (up to 3 points)

+3 Source data indicates project area has an LOS value of F at peak travel times
+2 Source data indicates project area has an LOS value of E at peak travel times
+1 Source data indicates project area has an LOS value of D at peak travel times
0 All other values

Improves or completes an MPO or State identified freight movement issue (Identified in MPO or State published freight plan) (up to 3 points)

+3 Project implements a solution to an MPO or State identified freight movement issue
+2 Project supports significant improvements or removes barriers to an existing MPO or State identified freight movement issue
+1 Project supports improvements to an existing MPO or State identified freight movement issue
0 All other results

Address proponent identified primary mobility need (Project design will address the primary mobility need identified by the proponent in the question P7 and evaluated by staff) (up to 3 points)

+3 Meets or addresses criteria to a high degree
+2 Meets or addresses criteria to a medium degree
+1 Meets or address criteria to a low degree
1 Does not meet or address criteria

Address MPO identified primary mobility need (Project design will address the primary mobility need identified by MPO staff) (up to 3 points)

+3 Meets or addresses criteria to a high degree
+2 Meets or addresses criteria to a medium degree
+1 Meets or address criteria to a low degree
0 Does not meet or address criteria

Project reduces congestion (up to 6 points)

+6 Meets or addresses criteria to a high degree
+4 Meets or addresses criteria to a medium degree
+2 Meets or address criteria to a low degree
0 Does not meet or address criteria

Improves transit reliability (up to 4 points)

+1 Implements queue jumping ability for transit
+1 Project prioritizes signals for transit vehicles (ITS)
+1 Project provides for a bus bump out
+1 Project provides for a dedicated busway

ENVIRONMENT AND CLIMATE CHANGE (25 TOTAL POINTS POSSIBLE)

Air Quality (improves or degrades) (up to 3 points)

+3 *Project significant improves air quality*
+2 *Project includes major elements improving air quality*
+1 *Project includes minor elements improving air quality*
0 *Project has no significant air quality impacts*

CO2 reduction (up to 3 points)

+3 *Project will provide for significant movement towards the goals of the Global Warming Solutions act*
+2 *Project will provide for movement towards the goals of the Global Warming Solutions act*
+1 *Project will provide a minor air quality benefit*
0 *Project will no additional benefit to air quality*

Project is in an Executive Office of Energy and Environmental Affairs (EOEEA) certified "Green Community" (up to 3 points)

+3 *Project is in a "Green Community"*
0 *Project is not in a "Green Community"*

Project within a municipality that is (are) ICLEI members (and have completed the below milestones) (up to 5 points)

+5 *Municipality has completed milestone 5: Monitor and verify results*
+4 *Municipality has completed milestone 4: Implement policies and measures*
+3 *Municipality has completed milestone 3: Develop a Local Climate Action Plan*
+2 *Municipality has completed milestone 2: Adopt an emissions reduction target*
+1 *Municipality has completed milestone 1: Conduct a baseline emissions inventory and forecast*
0 *Municipality is not an ICLEI member*

Project reduces VMT/VHT (up to 6 points)

+2 *Project provides for a new transit service*
+1 *Project provides for improved transit access*
+1 *Project provides for a new bicycle facility*
+1 *Project provides for a new pedestrian facility*
+1 *Project implements a transportation demand management strategy*
0 *Does not provide for any of the above measures*

Addresses identified environmental impacts (Project design will address the environmental impacts identified by the proponent in the question P9 and/or identified by MPO staff) (up to 3 points)

+3 *Meets or addresses criteria to a high degree*
+2 *Meets or addresses criteria to a medium degree*
+1 *Meets or address criteria to a low degree*
0 *Does not meet or address criteria*

ENVIRONMENTAL JUSTICE (10 TOTAL POINTS POSSIBLE)

Improves transit for an EJ population (up to 3 points)

- *+3 Project located in an MPO environmental justice area or population zone and will provide new transit access*
- *+1 Project located in an MPO environmental justice area or population zone and will provide improved access*
- *0 Project provides no improvement in transit access or is not in an MPO environmental justice area or population zone*

Design is consistent with complete streets policies in an EJ area (up to 4 points)

- *+1 Project is located in an MPO environmental justice area or population zone and is a "complete street"*
- *+1 Project is located in an MPO environmental justice area or population zone and provides for transit service*
- *+1 Project is located in an MPO environmental justice area or population zone and provides for bicycle facilities*
- *+1 Project is located in an MPO environmental justice area or population zone and provides for pedestrian facilities*
- *0 Does not provide any complete streets components*

Addresses an MPO identified EJ transportation issue (up to 3 points)

- *+3 Project located in an MPO environmental justice area or population zone and the project will provide for substantial improvement to an MPO identified EJ transportation issue*
- *+2 Project located in an MPO environmental justice area or population zone and the project will provide for improvement to an MPO identified EJ transportation issue*
- *0 Project provides no additional benefit and/or is not in an MPO environmental justice area or population zone*
- *–1 Creates a burden in an EJ area*

SAFETY AND SECURITY (29 TOTAL POINTS POSSIBLE)

Improves emergency response (up to 2 points)

- *+1 Project improves an evacuation route, diversion route, or alternate diversion route*
- *+1 Project improves an access route to or in proximity to an emergency support location*

Design effect ability to respond to extreme conditions (up to 6 points)

- *+1 Project addresses flooding problem or enables facility to function in flood*
- *+1 Project addresses facility that serves as a route out of a hurricane zone*
- *+1 Project brings facility up to current seismic design standards*
- *+1 Project design takes sea level rise into account*
- *+1 Project improves access to an emergency support location*
- *+1 Project addresses critical transportation infrastructure*

EPDO/Injury Value Using the Commonwealth's listing for Estimated Property Damage Only (EPCO) or Injury Value information (up to 3 points)

- *+3 If the value is in the top 20% of most assessed value*
- *+2 If the value is in the top 49 to 21% of most assessed value*
- *+1 If the value is in the top 50 to 1% of the most assessed value*
- *0 If there is no loss*

Design addresses proponent identified primary safety need (Project design will address the primary safety need identified by the proponent in the question P4) (up to 3 points)

- *+3 Meets or addresses criteria to a high degree*
- *+2 Meets or addresses criteria to a medium degree*
- *+1 Meets or address criteria to a low degree*
- *1 Does not meet or address criteria*

Design addresses MPO identified primary safety need (Project design will address the primary MPO identified safety need) (up to 3 points)

- *+3 Meets or addresses criteria to a high degree*
- *+2 Meets or addresses criteria to a medium degree*
- *+1 Meets or address criteria to a low degree*
- *0 Does not meet or address criteria*

Improves freight related safety issue (Project design will be effective at improving freight related safety issues including truck crashes) (up to 3 points)

- *+3 Meets or addresses criteria to a high degree*
- *+2 Meets or addresses criteria to a medium degree*
- *+1 Meets or address criteria to a low degree*
- *0 Does not meet or address criteria*

Improves bicycle safety (Project design will be effective at improving bicycle related safety issues including crashes) (up to 3 points)

- *+3 Meets or addresses criteria to a high degree*
- *+2 Meets or addresses criteria to a medium degree*
- *+1 Meets or address criteria to a low degree*
- *0 Does not meet or address criteria*

Improves pedestrian safety (Project design will be effective at improving pedestrian related safety issues including crashes) (up to 3 points)

- *+3 Meets or addresses criteria to a high degree*
- *+2 Meets or addresses criteria to a medium degree*
- *+1 Meets or address criteria to a low degree*
- *0 Does not meet or address criteria*

Improves safety or removes an at grade railroad crossing (up to 3 points)

- *+3 Project removes an at grade railroad crossing*
- *+2 Project significantly improves safety at an at grade railroad crossing*
- *+1 Project improves safety at an at grade railroad crossing*
- *0 Project does not include a railroad crossing*

						ID	
						Municipality	
						Project Name	
						Community Priority	
						Subregional Priority	
						Transportation Plan	
36 total questions					Improves substandard pavement	Rating (18 Total Points Possible):	Maintenance, Modernization and Efficiency
					Improves substandard signal equipment condition		
					Improves traffic signal operations		
					In a Congestion Management Process identified area		
					Provides intermodal accommodations/connections to transit		
					Implements ITS strategies other than traffic signal operations		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 18)**		
					Design is consistent with complete streets policies	Rating (28 Total Points Possible):	Livability and Economic Benefit
					Provides multimodal access to an activity center		
					Reduces auto dependency		
					Project serves a targeted redevelopment site		
					Provides for development consistent with the goals of MetroFuture		
					Improves the Quality of Life		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 28)**		
					Existing peak hour Level of Service (LOS)	Rating (22 Total Points Possible):	Mobility
					Improves an MPO or State identified freight movement issue		
					Improves proponent identified primary mobility issue		
					Improves MPO identified mobility issue		
					Project reduces congestion		
					Improves transit reliability		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 22)**		
					Project serves a targeted redevelopment site	Rating (25 Total Points Possible):	Environment and Climate Change
					Air quality impacts		
					CO2 reduction		
					Project is in an EOEEA certified Green Community		
					Project within municipally(s) that are ICLEI members		
					Project reduces VMT/VHT		
					Improves identified environmental impact		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 25)**		
					Improves transit for an EJ population	Rating (10 Total Points Possible):	Environmental Justice
					Design is consistent with complete streets policies in an EJ area		
					Improves an MPO identified EJ transportation issue		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 10)**		
					Improves emergency response	Rating (29 Total Points Possible):	Safety and Security
					Improves ability to respond to extreme conditions		
					EPDO/Injury Value Using the Commonwealth's listing for EPDO or Injury Value information		
					Improves proponent identified primary safety need		
					Improves MPO identified primary safety issue		
					Improves freight related safety issue		
					Improves bicycle safety		
					Improves pedestrian safety		
					Improves safety or removes an at grade railroad crossing		
0	0	0	0	0	**TOTAL CATEGORY POINTS (up to 29)**		
0	0	0	0	0	**TOTAL POINTS (up to 134)**	**134 TOTAL POINTS POSSIBLE:**	

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Jeffrey B. Mullan
MassDOT Secretary and CEO
and MPO Chairman

Arnold J. Soolman
Director, MPO Staff

MEMORANDUM

DATE **January 20, 2011**

TO **Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization**

FROM **Arnold J. Soolman, CTPS Director**

RE **Work Program for: I-495 Corridor/MetroWest Development Compact: Land Use Study**

ACTION REQUIRED

Review and approval

PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of the Metropolitan Area Planning Council and the Executive Office of Housing and Economic Development, vote to approve the work program for I-495 Corridor/MetroWest Development Compact: Land Use Study in the form of the draft dated January 20, 2011.

PROJECT IDENTIFICATION

Unified Planning Work Program Classification
Planning Studies

CTPS Project Number
11703

Client
Metropolitan Area Planning Council
Project Supervisors: Mark Racicot and Eric Bourassa

CTPS Project Supervisors
Principal: Karl Quackenbush
Manager: Scott Peterson

Funding
EOHED funds

IMPACT ON MPO WORK

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

BACKGROUND

The Executive Office of Housing and Economic Development (EOHED) is partnering with the MetroWest Growth Management Committee (MWGMC), the 495/MetroWest Partnership, the Central Massachusetts Regional Planning Commission (CMRPC), and the Metropolitan Area Planning Council (MAPC) to develop a "Compact" under which an examination will be conducted of how different land use strategies affect the transportation system. This study will utilize the process adopted by the South Coast Rail Plan, which won an American Planning Association Award, to examine land use in the study area. The study area will consist of the following 37 communities: Acton, Ashland, Bellingham, Berlin, Bolton, Boxborough, Foxborough, Framingham, Franklin, Grafton, Harvard, Holliston, Hopedale, Hopkinton, Hudson, Littleton, Marlborough, Maynard, Medfield, Medway, Milford, Millis, Natick, Norfolk, Northborough, Plainville, Sherborn, Shrewsbury, Southborough, Stow, Sudbury, Upton, Wayland, Westborough, Westford, Worcester, and Wrentham. The study's goal is to create a shared framework for developing state, regional, and local strategies regarding the growth, development, and land preservation occurring in these 37 communities.

OBJECTIVES

The objective of this study is to support the study's analysis of an alternate land use strategy using the CMRPC and CTPS travel demand model sets. CMRPC will develop and apply its travel demand model set separately from the CTPS travel demand model set, but CTPS will coordinate and present the results of both model sets to the client. The utilization of the transportation system and the resulting mobile source emissions of the two land use scenarios will be compared and contrasted.

WORK DESCRIPTION

CTPS will work with the EOHED, MAPC, CMRPC, and MWGMC to develop travel demand forecasts that compare and contrast transportation impacts from two different land use scenarios being developed by MAPC and CMRPC.

Task 1 Develop Base-Year Model

The 2009 travel demand base-year model inputs and assumptions will be reviewed and refined, if needed, to reflect a sufficient level of detail and connectivity with the CMRPC model set in order to produce results that cover the study area.

Product of Task 1

A calibrated base-year model set

Task 2 Develop Inputs, Apply Model, and Analyze Results for Scenario 1

Both land use scenarios will have 2035 as their forecast year. Scenario 1 will utilize an extended-trends land use scenario for the communities within the study area, as well as the no-build transportation network consistent with the current Long-Range Transportation Plan. MAPC will need to provide Scenario 1 land use information by transportation analysis zone within two months of the project's start date in order for CTPS to complete the project by the scheduled completion date. CTPS will coordinate with CMRPC and its travel demand model set in order to develop consistent performance metrics for all communities in the study area. Scenario 1 will be modeled and analyzed with a focus on vehicle-miles of travel, vehicle-hours of travel, regional emissions, and linked and unlinked transit trips by mode.

Products of Task 2

- 2035 model set using Scenario 1 land use
- A summary of the travel model results by mode and community

Task 3 Develop Inputs, Apply Model, and Analyze Results for Scenario 2

Scenario 2 will utilize a revised land use scenario for the communities within the study area, as well as the no-build transportation network consistent with the current Long-Range Transportation Plan. The revised land use will take into account regional priorities for development and preservation. CTPS will coordinate with CMRPC and their travel demand model set in order to develop consistent performance metrics for all communities in the study area. MAPC will need to provide Scenario 2 land use information by transportation analysis zone within nine months of the project's start date in order for CTPS to complete the project by the scheduled completion date. This scenario will be modeled and analyzed with a focus on vehicle-miles of travel, vehicle-hours of travel, regional emissions, and linked and unlinked transit trips by mode.

Products of Task 2

- 2035 model set using Scenario 2 land use
- A summary of the travel model results by mode and community

Task 4 Prepare Technical Memorandum

A technical memorandum documenting all of CTPS's work and all model results will be provided to the client.

Products of Task 4

Technical memorandum documenting the study's methods and results

Task 5 Coordinate the Study with Stakeholders

CTPS will work with and coordinate this study with the EOHED, MAPC, CMRPC, and MWGMC within the budget life of the project. CTPS will incorporate the travel model results from CMRPC into the final technical memorandum. In order to merge the results, CTPS requests that CMRPC provide the base-year travel model results within three months of the project's start date, Scenario 1 travel model results within six months of the project's start date, and Scenario 2 travel model results within nine months of the project's start date.

Products of Task 10

Meetings, presentations, and phone conversations

ESTIMATED SCHEDULE

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

ESTIMATED COST

The total cost of this project is estimated to be $45,000. This includes the cost of 18.7 person-weeks of staff time and overhead at the rate of 90.69 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

SAP,KQ/sap

Exhibit 1
ESTIMATED SCHEDULE
I-495 Corridor/MetroWest Development Compact: Land Use Study

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Develop Base-year Model												
2. Develop Inputs, Apply Model, and Analyze Results for Scenario 1		A										
3. Develop Inputs, Apply Model, and Analyze Results for Scenario 2						C						
4. Prepare Technical Memorandum												F
5. Coordinate Study with Stakeholders				B			D			E		

Products/Milestones

A: Scenario 1 land use from MAPC
B: Base-year results from CMRPC
C: Scenario 2 land use from MAPC
D: Travel model results for Scenario 1 from CMRPC
E: Travel model results for Scenario 2 from CMRPC
F: Technical memorandum

Exhibit 2
ESTIMATED COST
I-495 Corridor/MetroWest Development Compact: Land Use Study

Direct Salary and Overhead	$44,950

Task	Person-Weeks M-1	P-5	P-4	P-3	Total	Direct Salary	Overhead (@ 90.69%)	Total Cost
1. Develop Base-year Model	0.0	0.5	3.0	3.0	6.5	$7,544	$6,842	$14,386
2. Develop Inputs, Apply Model, and Analyze Results for Scenario 1	0.5	0.0	3.0	0.0	3.5	$4,478	$4,061	$8,540
3. Develop Inputs, Apply Model, and Analyze Results for Scenario 2	0.8	0.0	5.4	0.0	6.2	$7,835	$7,105	$14,940
4. Prepare Technical Memorandum	0.8	0.2	0.5	0.0	1.5	$2,226	$2,019	$4,245
5. Coordinate Study with Stakeholders	0.5	0.1	0.4	0.0	1.0	$1,489	$1,350	$2,839
Total	2.6	0.8	12.3	3.0	18.7	$23,572	$21,378	$44,950

Other Direct Costs	$50
Travel	$50

TOTAL COST	$45,000

Funding
EOHED funds

495 Corridor/ MetroWest Development Compact Regional Study Area