

Memorandum for the Record

Boston Region Metropolitan Planning Organization Meeting

July 11, 2013 Meeting

10:00 AM – 11:30 AM, State Transportation Building, Conference Rooms 2&3, 10 Park Plaza, Boston

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

Decisions

The Boston Region Metropolitan Planning Organization agreed to the following:

- endorse the federal fiscal year (FFY) 2014 Unified Planning Work Program (UPWP), incorporating the changes discussed at this meeting

Meeting Agenda

1. Public Comments

There were none.

2. Chair's Report—*David Mohler, MassDOT*

There was none.

3. Committee Chairs' Reports

There were none.

4. Regional Transportation Advisory Council Report—*Steve Olanoff, Chair, Regional Transportation Advisory Council*

The Advisory Council met on July 10. Thomas McGlynn, Executive Director of the Massachusetts Port Authority, gave a presentation about the future of the Boston seaport and Logan Airport.

The Advisory Council has prepared a comment letter to the MPO regarding the proposed Amendment Two of the Long-Range Transportation Plan (LRTP) and the Revised Draft FFYs 2014-17 Transportation Improvement Program (TIP).

The Advisory Council previously sent a comment letter to the MPO regarding the Draft TIP and the Draft FFY 2014 UPWP. The preparation of this comment letter involved

significant input from Advisory Council members. The Advisory Council is interested in receiving a response to its comments from MassDOT.

5. Executive Director's Report—*Karl Quackenbush, Executive Director, Central Transportation Planning Staff*

Consistent with our practice the MPO staff will be hosting a public workshop on July 16 in Norwood to discuss the proposed Amendment Two of the LRPT and the Revised Draft FFYs 2014-17 TIP. A flyer has been distributed.

6. FFY 2014 Unified Planning Work Program—*Karl Quackenbush, Executive Director, Central Transportation Planning Staff; and Michelle Scott, MPO Staff*

K. Quackenbush introduced the discussion of the Draft FFY 2014 UPWP by noting that the UPWP is one of the three certification documents that the MPO is required to produce. It is the annual work program for the MPO staff and it contains descriptions of the planning activities for discrete studies and on-going activities. The UPWP is developed on an annual cycle.

The development of the Draft FFY 2014 UPWP began last fall when project ideas were generated internally and through public involvement. At their last meeting, the MPO's UPWP Committee recommended that the MPO release the document for public review. Today, the MPO will be asked to vote to endorse the document.

In closing, K. Quackenbush thanked the following participants for their contributions to the development of the document: the UPWP Committee; Callida Cenizal, MassDOT; Michelle Scott, MPO Staff; and members of the public who provided input.

M. Scott then provided an update on the UPWP, which was also detailed in a memorandum that was distributed. An updated version of the UPWP was posted to the MPO website on July 3 to support MPO action at this meeting.

The UPWP Committee met on June 20 to review public comments that were received during a 30-day public review period. At that time, the Committee voted to recommend that the MPO endorse the document.

Since that time, the MPO staff has prepared an updated document showing a summary of public comments received and proposed responses from the MPO to those comments. This document is included in Appendix B of the UPWP. Since the Committee reviewed the comments on June 20, the MPO has received two new public comments from the South West Advisory Planning Committee and the 495/MetroWest

Partnership. Both entities expressed support for particular projects in the UPWP and made suggestions for study locations.

Staff has also prepared a schedule and staff assignment tables for CTPS projects. These are included in Chapter 8 of the UPWP. The UPWP Committee reviewed these tables at their June 20 meeting.

In addition, clarifying updates were made to several project descriptions. These include updates to the descriptions for the *Congestion Management Process* and for the *Priority Corridors for LRTP Needs Assessment* project. Other changes include the addition of a map showing MAPC subregions, updates to reflect a FFY 2013 UPWP budget adjustment approved by the UPWP Committee in April, and the addition of a reference to the Ferry Compact planning initiative, as well as technical, grammatical, formatting, and clarifying corrections.

Staff may make additional changes to the UPWP prior to posting the final version of the document on the MPO website, but these changes will not change the project intent or financial content of the document.

Following the presentation, Tom Kadzis, City of Boston, asked for more details about the changes to the description for the *Congestion Management Process* project. M. Scott explained that the original project description stated that some of the funds in this program would be used to purchase electronic travel-time data, however when the operating budget was finalized, the funds for the purchase were moved under a different line item. The *Congestion Management Process* project will use this data in analysis efforts.

A motion to endorse the FFY 2014 UPWP, incorporating the changes discussed at this meeting, was made by the MetroWest Regional Collaborative (Town of Framingham) (Dennis Giombetti), and seconded by the Inner Core Committee (City of Somerville) (Tom Bent). The motion carried.

7. MassDOT Bridge Prioritization System and Process for Selecting Bridges for MPO Programming—*Alexander Bardow, State Bridge Engineer, MassDOT*

A. Bardow gave a presentation about the system MassDOT Highway uses to prioritize bridges for repair and reconstruction.

He began by explaining that, until recently, there were no objective statewide criteria that could be used to prioritize bridges. In 2005-07 a ranking system was developed, but it was limited to prioritizing structurally deficient bridges and did not identify bridges that

should be prioritized for preservation. As of January 2008, MassDOT has been using AASHTO's PONTIS system to identify which bridges are deteriorating fastest. This system calculates a health index for bridges, predicts the change in the health index for each bridge (compared to the bridge in a new condition), and allows for a ranking of both structurally deficient and non-structurally deficient bridges.

The health index is a composite measure of the condition of all the core elements of a bridge. Each element of a bridge can be ranked for condition by an inspector on a scale of one to five. PONTIS can help predict how the elements will deteriorate over time (a 15 year period) and what the health index of the bridge would be at that future time.

MassDOT's Prioritization System Framework consists of three main criteria:

- condition loss (the current condition of the bridge compared to the bridge in perfect condition)
- health index change
- highway evaluation factor (the functionality of the bridge)

Numerical values (one to 100) are assigned for each criterion.

For bridges over waterways, consideration is given to whether bridges are "scour critical." For those bridges that could be damaged due to scouring, the health index ranking is magnified.

The highway evaluation factor takes into consideration average daily traffic, detour value, roadway functional class, load carrying restrictions of the bridge, and geometric deficiencies of the bridge deck.

The overall ranking for each bridge is derived from the condition loss value (30%), health index value (40%), and highway evaluation factor (30%).

MassDOT uses these bridge rankings when preparing the State Transportation Improvement Program (STIP). The statewide bridge list is sorted according to MassDOT Highway District and then bridges within each district are prioritized, with an emphasis on structurally deficient bridges.

Bridges are prioritized based on MassDOT's Bridge Program goals and available funding. The goals of the Bridge Program are to reduce the number of structurally deficient bridges, improve the overall condition of bridges to a satisfactory condition, and improve the overall health index rating for bridges to above 90%.

The MassDOT Office of Transportation Planning provides spending targets for the Bridge Program. MassDOT reports estimated federal participating costs for bridges to Federal Highway Administration (FHWA) each year. The cost estimates in “Item 96” of the report are derived based on bridge square footage, anticipated new geometry for bridge replacements, and comparable bids for currently advertised bridge projects.

For prioritizing bridges for funding, the focus is on structurally deficient bridges. However, since the Item 96 figure of all bridges to be funded must be within the spending targets, lower priority bridges may be selected if their costs fit within the targets.

Following the presentation members asked questions.

Could you explain the term “scour critical”? (S. Olanoff)

There is a potential for bridges over water to have their foundations damaged by water, and this damage can cause a bridge to collapse. FHWA mandates that states identify and prioritize “scour critical bridges” – bridges that could potentially be adversely affected by scouring – and develop plans of action for monitoring them and addressing them. (A. Bardow)

Have all federal aid eligible bridges, including those previously owned by the Department of Conservation and Recreation (DCR), been evaluated using the PONTIS system? (Eric Bourassa, MAPC)

Yes. MassDOT now has a complete bridge database and is inspecting all bridges owned by MassDOT and municipalities, and those previously owned other state agencies. (A. Bardow)

Does the PONTIS system take into account environmental factors, such as improvements to wildlife passages and restoration of riverbanks? Are those factors included in project cost estimates? (S. Olanoff)

The PONTIS evaluation only considers the bridge condition and deterioration. The environmental factors are considered when scoping for the project begins, and the project cost estimate gets further refined as the project design progresses to the 25% and 75% design stages. (A. Bardow and David Anderson, MassDOT)

Would you describe NBI and non-NBI bridges? (D. Anderson)

Bridges in the National Bridge Inventory (NBI) are those that fall under the federal definition of a bridge, which is a span of 20 feet or longer. These structures are eligible

for federal aid. Bridges less than 20 feet in length are not eligible for federal aid. (A. Bardow)

Does a consideration of geographic equity dictate how funds are distributed for bridge projects among the Districts? (Dennis Giombetti, MetroWest Regional Collaborative, Town of Framingham)

The cost of bridge projects can vary greatly with more needy bridges being more costly. MassDOT tries to distribute projects equitably across the Districts and then considers project costs and District priorities. (A. Bardow) There is a balancing act in terms of funding on-system and off-system bridges, providing geographic equity, and recognizing that funding large needy bridges may skew the distribution of funds. Historically MassDOT has advertised more on-system bridges; now there is less money available in that funding pool and more available for off-system bridges. (D. Anderson)

Are all the bridges in Massachusetts on the Districts' bridge lists? Where can a copy of the District's priorities be accessed? (Dennis Crowley, South West Advisory Planning Committee, Town of Medway)

MassDOT's prioritization process focuses on federal aid eligible bridges (those 20 feet and longer). The Districts' lists include MassDOT-owned and municipally-owned bridges. The Districts' priority lists are not available online, but in the past these lists have been made available for MPOs. (A. Bardow) MassDOT can provide the NBI inventory report for bridges in the Boston Region MPO area indicating if they are structurally deficient and providing the overall condition score. (D. Mohler)

Is the NBI inventory report distributed to municipal Departments of Public Works (DPWs)? (D. Crowley)

It is not distributed to DPWs, but it is sent to the Bridge Engineer of each MassDOT District office. Municipalities could request that information from the District Office. (A. Bardow)

Is every NBI bridge in the Commonwealth (whether state-owned or municipally-owned) inspected at least every two years and possibly more frequently depending on its condition? (D. Anderson)

That is correct. About 20 years ago, MassDOT began inspecting municipally-owned bridges to maintain consistency of inspections and to meet federal requirements. According to federal regulations, every federal aid eligible bridge must be inspected once every two years at a minimum. MassDOT inspects structurally deficient bridges

more frequently to ensure safety; the frequency depends on condition of the bridge. (A. Bardow)

Questions were then taken from members of the public.

Is the non-auto use of bridges considered among the evaluation factors? Should that be considered given MassDOT's mode shift goal (which encourages walking and biking and transit)? (Rafael Mares, Conservation Law Foundation)

MassDOT follows the federal regulations, which are geared toward the vehicle-uses of bridges. The focus is on condition and deterioration. When scoping projects, however, the non-auto uses of the bridges are taken into consideration. (A. Bardow)

Is climate adaptation considered? (R. Mares)

Yes, it is considered in the scour determination. MassDOT continuously screens for scour criticality of bridges. Changes in stream flows and water levels are factored in. (A. Bardow)

In the past the national bridge rating data was highly inaccurate. Is the federal bridge data for Massachusetts more consistently accurate now? (Wig Zamore, Mystic View Task Force and Somerville Transportation Equity Partnership)

That is correct. We have a better assurance that the evaluation and rating of bridges is more consistent. (A. Bardow)

W. Zamore suggested that MassDOT provide a table showing the federal bridge ratings as well as MassDOT's rating.

8. Early Morning Transit Service—Jonathan Belcher, MPO Staff

K. Quackenbush introduced a presentation on the results of the *Early Morning Transit Service* study. He remarked that this is an example of a modest investment on the MPO's part which has yielded recommendations for making concrete improvements to the transportation system. The decision to fund the study and the recommendations flowing from it are consistent with at least five of the MPO's policies. The recommendations, if implemented, will improve transit service for little or no additional cost, and will benefit a particular segment of the riding public.

J. Belcher then gave a presentation on the study and its results. First he gave an overview of the MBTA's early morning bus routes.

The MBTA operates a small network of eight “early bird” bus routes, which provide service between 4:30 AM and 5:00 AM. Four of those routes started in the 1960s and four were initiated in 1999 primarily to provide access to jobs at Logan Airport.

This study compared the demand for early morning bus service (between 5:00 AM and 5:30 AM) with the coverage of the existing “early bird” service and made recommendations for possible modifications to the existing service to better meet that demand. There would be no additional cost or minimal cost to implement the study recommendations.

J. Belcher showed and discussed several maps. The first was a map highlighting the “early bird” routes, which are MBTA bus routes #191, 192, 193, 194, 171, 117, 15, and 28. Another depicted early morning taxicab ridership in Boston; this origin and destination data was provided by the Massachusetts Institute of Technology. This data shows an emphasis on Logan Airport and Downtown Boston as destinations. Another map depicted early morning transit usage.

As part of this study, staff contacted transportation management associations (TMAs) to inquire whether they had received requests indicating demand for early morning transit service to other destinations. The TMAs did not report that there was as strong interest among their members for service before 5:00 AM.

The recommendations from this study include the following:

- Relieve crowding on Route 117; this recommendation has been implemented by the MBTA, which is running another early morning bus on that route
- Consider adding an early morning trip from Everett and Malden
- Consider extending Route 117 to Lynn
- Consider rerouting Route 193 through Cambridge
- Publish a combined schedule of all early bird buses with a network map

Following the presentation, members asked questions and made comments:

Could the recommended changes be made while maintaining straight time? (P. Regan)

The study did not address that question. The MBTA’s Service Planning Department could determine that. The recommendations were developed with consideration that the changes could be implemented with the existing labor pool. (J. Belcher)

Did you get the impression in talking with the TMAs that more ridership could be generated with their active cooperation? (P. Regan)

Most TMAs that responded did not express that interest. (J. Belcher)

What is the next step in the process? (D. Crowley)

J. Belcher works closely with the MBTA's Service Planning Department. The MBTA staff will evaluate this study and consider the recommendations when conducting their service planning work. (K. Quackenbush) These ideas, from the MPO staff and other entities, always get a good hearing by the MBTA. (P. Regan)

Staff should report back to the MPO on the recommendations that were implemented. (D. Crowley)

Based on the data gathered for this study, the MBTA has already implemented the recommendation to relieve crowding on the Route 117 bus. (J. Belcher)

The data on ridership for the Route 117 bus shows all riders getting off at Haymarket Station and one rider traveling from Haymarket Station to Logan Airport. Does it make sense to keep running the Haymarket to Logan portion of the route? (D. Mohler)

That bus comes out of the Lynn garage, so much of its deadheading return trip would go on the route to Logan anyhow. (J. Belcher)

Is it known what percentage of riders on the early buses are MBTA employees? (Tom Kadzis, City of Boston)

This study did not document which riders were MBTA employees. (J. Belcher)

Where are the riders that get off at Haymarket Station going after? (D. Mohler)

Some get on buses to the Back Bay. A number walk to destinations in downtown Boston. (J. Belcher)

Commenting was then open to members of the public.

W. Zamore suggested mapping census data on carpooling and density of carless households. He also noted that many of the taxi trips to Logan Airport could be people taking flights and he suggested that those trips be sorted out from the trips taken to access jobs.

9. Members Items

The MPO's self-certification statement was distributed to members for their signature. This document signifies that the MPO's practices comply with all applicable federal regulations. The document will be included in the endorsed TIP and UPWP.

J. Romano announced that MassDOT will be holding a public meeting this evening at English High School in Jamaica Plain regarding the 75% design plans for the Casey Overpass project.

10. Adjourn

A motion to adjourn was made by the MBTA Advisory Board (P. Regan) and seconded by the Inner Core Committee (City of Somerville) (T. Bent). The motion carried.

Attendance

Members	Representatives and Alternates
At-Large City (City of Newton)	David Koses
At-Large Town (Town of Arlington)	Laura Wiener
At-Large Town (Town of Lexington)	Hank Manz
City of Boston (Boston Redevelopment Authority)	Lara Mérida
City of Boston (Boston Transportation Department)	Tom Kadzis
Inner Core Committee (City of Somerville)	Tom Bent
Massachusetts Department of Transportation	David Mohler
	David Anderson
MassDOT Highway Division	John Romano
Massachusetts Bay Transportation Authority (MBTA)	Ron Morgan
MBTA Advisory Board	Paul Regan
Metropolitan Area Planning Council	Eric Bourassa
MetroWest Regional Collaborative (Town of Framingham)	Dennis Giombetti
North Shore Task Force (City of Beverly)	Denise DesChamps
Regional Transportation Advisory Council	Steve Olanoff
South West Advisory Planning Committee (Town of Medway)	Dennis Crowley
Three Rivers Interlocal Council (Town of Norwood/NVCC)	Tom O'Rourke

Other Attendees	Affiliation
Diane Madden	MassDOT Highway Division
Rafael Mares	Conservation Law Foundation
Daniel Morrissey	MassDOT Planning
Joe Onorato	MassDOT District 4
Wig Zamore	Mystic View Task Force / Somerville Transportation Equity Partnership

MPO Staff/Central Transportation Planning Staff

Karl Quackenbush, Executive Director

Kathy Jacob

Anne McGahan

Elizabeth Moore

Scott Peterson

Sean Pfalzer

Michelle Scott

Pam Wolfe
