

Draft Memorandum for the Record

Boston Region Metropolitan Planning Organization Meeting

October 4, 2012 Meeting

10:00 AM – 1:00 PM, 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:

- approve the work program for the *MBTA Service Standards and Service Delivery Policy Update*
- approve the work program for the *SWAP Regional Public Transit Feasibility Study* as amended
- approve the minutes of the meeting of September 20

Meeting Agenda

1. Public Comments

Lynn Weissman spoke on behalf of the Friends of the Community Path, a group whose mission is to connect the Community Path to the Minuteman and Charles River paths. She spoke about the benefits of the Community Path for addressing climate change by noting that the path will help reduce vehicle emissions in densely settled areas by increasing access for walkers, bicyclists, and users of the Green and Red Lines. It would also support MassDOT's GreenDOT mode shift goals.

She called attention to a missing link in design of the Community Path. The design does not extend to the area over the Fitchburg rail line crossing. She asked that the Commonwealth commit to the design of the final link. Without that link, she said, the Community Path will come to a dead end just before reaching the path to Charles River.

She also expressed concern that the design features of the *Green Line Extension* project could infringe on that final link for the Community Path. In keeping with a MEPA certificate, she advised that the *Green Line Extension* design not preclude the Community Path. She also advised that the final section be built along with the construction of Phase 2 of the *Green Line Extension* project, which is programmed in FFYs 2013-16.

Lastly, she expressed her hope that the MPO's work program for the *Completion of Green Line Extension New Starts Analysis* would include analysis of the Community Path.

She submitted written comments, as well.

2. Chair's Report—David Mohler, MassDOT

MassDOT is holding a series of 15 public meetings across the Commonwealth through November 29 to discuss needs and visions for the transportation system. (A schedule of meetings was distributed.)

MassDOT has informed the Federal Highway and Transit Administrations (FHWA and FTA) of how it would like to spend earmarked dollars that may be repurposed under the federal "We Can't Wait Initiative." MassDOT would repurpose \$13.2 million worth of earmarked dollars to fund projects for Regional Transit Authorities (RTAs) across the Commonwealth.

The Commonwealth received approximately \$63 million of federal highway funds that were redistributed by FHWA. Those funds were spent by the end of FFY 2012 (September 30). They are funding 18 projects.

The lists of projects will be provided.

3. Committee Chairs' Reports

Paul Regan, MBTA Advisory Board, announced that a meeting of the MPO's Regional Transportation Advisory Council Review Committee will be held this afternoon at the Advisory Board's office. It will discuss the Regional Transportation Advisory Council's elections.

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

The Advisory Council will meet next on October 10 at 3PM. There will be a presentation on the Statewide Household Travel Survey. The Council is developing a comment letter to the MPO regarding the FRA High Speed Rail project.

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

The new federal fiscal year (FFY) began on October 1. At the next meeting, the MPO staff will be distributing a schedule for FFY 2013 certification activities. Staff has been finishing projects in the FFY 2012 Unified Planning Work Program (UPWP) and is

preparing to work on projects in the FFY 2013 UPWP. The UPWP Committee may wish to meet in the next couple of weeks.

6. Climate Change - Panel Presentations—*Scott Peterson, MPO Staff; Steve Woelfel, MassDOT; Tim Reardon, MAPC; and Anne McGahan, MPO Staff*

A panel of representatives from the MPO staff, MassDOT, and MAPC discussed the issue of climate change. Each panelist provided a perspective on the work their agencies are doing to address climate change and on relevant policy issues. They gave PowerPoint presentations.

Introduction to Climate Change

Scott Peterson, MPO Staff, opened the panel discussion by giving an overview of the science of climate change, the transportation sector's role in climate change, and the role of government in addressing the issue.

Carbon dioxide makes up about 85 percent of greenhouse gases (GHGs) that contribute to warming of the atmosphere. Passenger vehicle emissions account for approximately 95 percent of carbon dioxide emissions. The past decade has been the warmest on record. As climate change continues, more frequent and severe storms can be expected, and the climate in Massachusetts may be more like the climate in Virginia. As such, this region could experience worse storm surges along the coast and more days over 100 degrees.

There are two approaches to addressing climate change impacts: mitigation and adaptation. Mitigation involves actions such as reducing GHG emissions and sequestering carbon. In the transportation sector, reducing vehicle miles travelled (VMT) is a mitigation action. Adaptation involves actions to protect infrastructure, such as transportation infrastructure that is susceptible to storm surges.

Actions to address climate change are occurring at all levels of government. At the state level, Massachusetts has implemented the Global Warming Solutions Act (GWSA) and MassDOT is implementing GreenDOT. At the regional level, regional planning agencies (RPAs) can address the issue through land use planning. The Boston Region MPO has already incorporated climate change in its vision for the Long-Range Transportation Plan (LRTP). Policies at the federal level include changes to fuel economy standards (CAFE standards) and requirements in the new transportation legislation (MAP-21) for performance-based planning.

MassDOT's Role

Steve Woelfel, MassDOT, discussed MassDOT's role in addressing climate change. First, he noted that Massachusetts is a national leader in the area of energy efficiency and through the Commonwealth's work to implement the GWSA.

MassDOT is required, under the GWSA, to contribute through transportation policies to the emission reduction target set by the GWSA. MassDOT's GreenDOT policy is focused on reducing GHG emissions, providing healthy transportation options, and supporting smart growth. MassDOT has set 15 goals for sustainability. GreenDOT tenets have been embedded in each MassDOT division. MassDOT held a public review period and public meetings regarding the GreenDOT Implementation Plan. Hundreds of comments were received.

To provide healthy transportation options MassDOT is incorporating Complete Streets policies into project design. These policies accommodate all modes, promote walking and bicycling, and reduce VMT and GHG emissions. MassDOT is also coordinating with other state agencies to promote smart growth and sustainable development, including making investments in transit oriented development (TOD).

The Transportation/Land Use Connection

Tim Reardon, MAPC, discussed the connections between transportation and land use, and MAPC's MetroFuture plan.

He explained how land use plans relate to the effectiveness of transportation financing decisions. Investments in transportation infrastructure can spur new development that draws new trips and, as a result, degrades the goals a project was intended to achieve in terms of reducing congestion and increasing capacity. New transportation capacity may be consumed by new demand. Investments in transit expansion will be less effective without land use policies in place to support development and ensure ridership and job availability.

If VMT continues to rise (from 40 billion miles per year in Massachusetts) improvements to fuel efficiency alone will not be able to compensate for the GHG emissions generated.

Through its MetroFuture plan, MAPC is working with other agencies to build connections between transportation planning and land use planning. If current growth trends continue in the coming decades with dispersed growth resulting in more auto dependency, traffic congestion will worsen and VMT will increase. MetroFuture is a plan for concentrated land use that would focus two-thirds of new growth near existing transit facilities, slow the growth of VMT, and reduce the auto mode share.

MAPC is working with municipalities to identify opportunities for TOD and higher-density development and to create new tools for municipalities to use for land use planning, such as for developing build out scenarios. MAPC is also working with the Executive Office of Housing and Economic Development (EOHED) and Executive Office of Energy and Environmental Affairs (EOEEA) to identify local and regional Priority Development Areas.

MPO Role

Anne McGahan, MPO staff, discussed the MPO's role in addressing climate change. She read the vision and policies statement on climate change in the MPO's LRTP as well as the MPO's project evaluation criteria for the Transportation Improvement Program (TIP), which consider projects' and programs' ability to reduce GHGs, reduce VMT, increase the bicycle, pedestrian and transit modes, and adapt critical infrastructure to climate change. The MPO's visions and policies are also used in the development of the Unified Planning Work Plan (UPWP) to evaluate the work that the MPO staff will conduct each year.

The MPO has several tools for gathering information for use in its evaluations: the Needs Assessment for the LRTP; the Congestion Management Process (CMP), which monitors the performance of the system; and hazards mapping, which identifies areas susceptible to extreme weather and documents evacuation routes. After the MPO evaluates projects, it documents anticipated carbon dioxide emissions at the state and regional and project level. The travel demand model is used to document emissions of the collective projects in the LRTP. At the individual project level, a spreadsheet model that was developed by MassDOT is used to calculate assumed emissions. The net effect of projects in the FFY 2013-16 TIP amounts to a 4000 tons per year reduction in carbon dioxide emissions.

The MPO's projects and programs that address climate change include investments in alternative transportation modes (bicycle, pedestrian, and transit), the rehabilitation of weight restricted bridges, traffic flow improvements, Intelligent Transportation Systems (ITS), and alternative fuel sources, as well as hazards mapping.

Staff has prepared a white paper titled, "Carbon Dioxide, Climate Change, and the Boston Region MPO: 2012 Update."

Discussion

Members discussed the information presented.

What is the base year used for staff's projections of carbon dioxide emissions reductions? (Dennis Giombetti, MetroWest Regional Collaborative, Town of Framingham)

The state and regional level projections are based on a Build and No-Build scenario. (A. McGahan)

A graphic in the white paper indicates that Massachusetts produces more carbon dioxide from the transportation sector than from electric generation as compared to other states. What is the reason and the significance of this for Massachusetts? (S. Olanoff)

Massachusetts is less reliant on coal and uses cleaner power sources such as hydro power and natural gas. (A. McGahan and T. Reardon) Also this region has a cap on emissions from electric power sources due to the Regional Greenhouse Gas Initiative. (Christine Kirby, MassDEP)

What were the data sources and assumptions used in MAPC's presentation to determine the average daily VMT per household? (Richard Canale, At-Large Town of Lexington)

Seventeen million vehicle safety inspection records, provided by the Registry of Motor Vehicles, were accessed and compared to vehicle registration data. Annual mileage per vehicle was determined by comparing yearly odometer readings. That data was geocoded and census data was used to estimate vehicles per household. MAPC will also be determining vehicle fuel efficiency, fuel consumption, and cost per household. (T. Reardon)

Can Journey to Work census data be correlated to determine how much of the VMT can be attributed to commuting? (R. Canale)

Two data sources that could be used are census data showing tract to tract flows, and the Statewide Household Travel Survey (T. Reardon) The Statewide Household Travel Survey will be able to produce data on VMT by trip purpose by household. (K. Quackenbush)

Is the MetroFuture plan favoring municipalities with light rail or commuter rail for land use planning? (Dennis Crowley, South West Advisory Planning Committee, Town of Medway)

Not exclusively. There are places to grow “smart” in the region that are not near transit stations. Downtown Marlborough, for example, has potential for mixed-use, dense development. The plan recognizes the diversity of context around the region. (T. Reardon)

The MPO has eliminated funding for the Clean Air and Mobility Program in the TIP for the next few years. Does this have an impact on the MPO’s ability to reach its climate change goals? (S. Olanoff)

The MPO has not eliminated the Clean Air and Mobility Program. It still maintains the Congestion Mitigation and Air Quality Improvement Program (CMAQ), which funds projects that will reduce emissions. (A. McGahan)

The 2035 Build scenario in the LRTP does not reduce GHG emissions and shows no significant mode shift away from vehicles. A scorecard should be developed to document how well the MPO is implementing activities to address climate change. (Those activities are outlined in Table 2 of the white paper.) (Lourenço Dantas, Massachusetts Port Authority)

This topic will be discussed in the next set of presentations. (A. McGahan)

Are changes to CAFE standards accounted for in the regional model? (E. Bourassa)

The emission factors are generated using MOBILE air quality software. That software will be upgraded to MOVES, which includes inputs into the model that take changes in fuel efficiency standards into account. (S. Peterson)

Please provide more information about whether the model accounts for bicycle and pedestrian traffic and environmental justice factors. If bicycle paths are not included in the model, what will be coming up the pipeline to account for them? (Lynn Weissman, Friends of the Community Path)

The model is multi-modal, incorporating auto, transit, bicycle, and pedestrian modes. A regionally significant bicycle path could be accounted for in the model. The model can produce information about how projects would produce changes in travel times and costs for environmental justice populations. (S. Peterson) Spreadsheet models are also available to do individual analysis for bicycle projects. (A. McGahan)

Population and employment projections are higher in MetroFuture as compared to current trends. Is MetroFuture more beneficial from an economic perspective? (L. Dantas)

Under current trends the projections show an aging work force and a net outmigration from the state. If more labor was to come to Massachusetts from out of state, there would be an impact on GHG emissions because those workers would be traveling longer distances. MetroFuture assumes that policy decisions would be made to change the worker retention rate. MAPC made modest changes to the net migration figures to account for this. (T. Reardon)

An assumption has been made in MetroFuture that investments and policy decisions will be made in areas beyond the realm of transportation, such as the education system, to reverse some of the out migration from the state. Is that correct? (D. Mohler)

That is correct. Housing is another key area. MAPC recognized that the regions slow housing growth has had an influence on housing cost and out migration. MetroFuture makes assumptions that housing costs in the region will moderate, which is a key factor in retaining younger workers. (T. Reardon)

Given that municipalities rely on property taxes, the issue of how local governments are financed needs to be addressed. (Richard Reed, Minuteman Advisory Group on Interlocal Coordination, Town of Bedford)

The areas that will benefit under MetroFuture will be in those areas in which there is an agreement between the policy and the direction of local businesses and municipalities. (D. Giombetti)

MAPC acknowledges the tax issue. If it can be mitigated by, for example, modification to local aid formulas, regional and state plans could be brought into alignment. (T. Reardon)

How is MassDOT going to measure the progress toward achieving GHG reduction goals of the GWSA and GreenDOT, particularly as it relates to MPO project selection? (Rafael Mares, Conservation Law Foundation)

The MassDOT divisions are working on ways to measure that progress. MassDOT is participating on the Land Use and Transportation Subcommittee of the GWSA. (S. Woelfel)

Next Steps for MassDOT

S. Woelfel discussed the next steps MassDOT will be taking.

MassDOT will be hosting the Moving Together Conference, its annual bicycle and pedestrian conference, on October 17. The theme of the conference will focus on mode

shift. At last year's conference, MassDOT Secretary Richard Davey was challenged to develop a statewide mode shift goal. The agency will announce its vision for this next week.

The weMove Massachusetts multi-modal strategic plan will help MassDOT to determine how to prioritize its investments. MassDOT will also provide a performance management tool for division heads to report their progress on implementing the GreenDOT Implementation Plan.

Next Steps in Transportation and Land Use Planning

T. Reardon discussed the importance of measuring the GHG impact of transportation system investments before those decisions are made. Areas in which transportation investments can have an impact on GHG emissions include the following: operations and maintenance; congestion reduction; mode shift; opportunity costs (what is not being funded); and induced land use change (private development in response to public investments).

To understand opportunity costs, T. Reardon suggested that scenario planning and modeling should be part of the development of the LRTP so that alternative investment portfolios can be explored. To address the issue of induced land use change, he suggested that the TIP criteria be modified to tie together project evaluations and land use plans. He also discussed the use of an Integrated Transportation and Land Use Model, upon which MAPC and CTPS are collaborating, to better link population and employment projections to the travel demand model.

Next Steps for the MPO

A. McGahan discussed the next steps for the MPO. The MPO took its first step toward performance-based planning, as required by MAP-21, by developing the visions and policies of the LRTP. The MPO staff will be working with the MPO and coordinating with MassDOT to develop performance measures. They will be documented through the Needs Assessment for the LRTP.

The MPO will be developing its next LRTP in 2015. As part of that process, the MPO may wish to update its visions and policies, and project evaluation criteria. In the current LRTP, MetroFuture is the preferred land use scenario. For the next LRTP the MPO may wish to consider other land use scenarios in coordination with MassDOT and MAPC's planning work. (The MPO did scenario planning in the two previous LRTPs.)

For the development of the TIP, the Commonwealth has asked all MPOs in the state to evaluate the carbon dioxide impacts of all projects in the MPOs' TIP Universe of Projects. Staff will be doing this during the next TIP development. Any other new climate

change related work that the MPO staff is to undertake will be documented in the UPWP.

S. Peterson noted that staff is evaluating software for a land use allocation model that could be linked to the regional travel model. It could be used to determine the potential land use changes resulting from transit-oriented developments.

S. Peterson and A. McGahan have been participating on peer exchanges and TRB committees to share expertise and learn from other MPOs.

S. Peterson also noted that municipalities have been requesting support from the MPO as they develop climate action plans. Their data needs include VMT, which the travel model can provide. Better estimates of VMT and travel times are expected to be available after staff incorporates data into the travel model from a grant-funded research project underway by the City of Boston; the project will provide data from traffic controllers in the city. Another project at Boston University, which can benefit from MPO data, is developing a carbon footprint of Massachusetts by economic sector.

Discussion

Members discussed the information presented.

What is the timeframe required to allow the incorporation of alternative scenario plans in the development of the next LRTP? Does the new model platform provide quicker results and will it be easier to modify scenarios? (L. Dantas)

The MPO would need to begin developing the next LRTP in January of 2014. MPO staff will update the Needs Assessment and develop performance measures, and MAPC will develop land use options. The plan would be adopted in the summer of 2015. (A. McGahan) Staff is in the process of incorporating data from the Statewide Household Travel Survey into the model. That data will be available next summer. (S. Peterson) MAPC is developing new population and employment forecasts for 2040. That data will be available to the MPO next year. (T. Reardon) The new model platform will allow for a faster turn-around time when modeling scenarios. (K. Quackenbush)

In the mid-1990s, the MPO staff determined that it could not develop an Integrated Land Use Model. Is staff far enough into the process to be comfortable with spending funds and staff time on this project? (D. Mohler)

In the 1990s, there was only one land use allocation model available. Staff and MAPC worked with that one software developer to test the tool and determined that it would not add value to the MPO's transportation planning process. Since that time, a variety of

other tools have been developed and are being used by MPOs around country. These tools have track records. Staff feels comfortable that they will be able to implement a tool that will be helpful to the MPO's planning process. Staff will discuss its findings and costs with the MPO. (K. Quackenbush)

7. Work Programs—Karl Quackenbush, Executive Director, Central Transportation Planning Staff

Members took action on two work programs.

MBTA Service Standards and Service Delivery Policy Update

Members were presented with the work program for the *MBTA Service Standards and Service Delivery Policy Update* at the meeting of September 20.

A motion to approve the work program for the *MBTA Service Standards and Service Delivery Policy Update* was made by MAPC (E. Bourassa), and seconded by the MBTA Advisory Board (P. Regan). The motion carried.

SWAP Regional Public Transit Feasibility Study

K. Quackenbush introduced the work program for the *SWAP Regional Public Transit Feasibility Study*. The request for staff to conduct this work program came from the SWAP subregion via MAPC. The project is in the FFY 2013 UPWP.

The objective of the work program is to assist SWAP to determine the potential for improving transit services in that subregion. The study will evaluate ideas including the potential to establish connections between RTAs adjacent to the subregion and to re-establish commuter bus service.

A working group will be established that will include representatives from the SWAP subregion and the RTAs. The tasks will involve taking inventory of existing services and plans, assessing potential demand for transit services (by identifying activity generators and commuter patterns), and developing recommendations.

Members discussed the work program:

D. Mohler raised an issue about a task in the work program that poses potential recommendations including one that references the possibility of having express service on the Franklin commuter rail line. The text was added to the work program to be responsive to requests from SWAP. K. Quackenbush noted that the MPO staff does not have intentions to conduct modeling, or operational or cost analyses. If staff were to make a recommendation concerning rail service, it would be to discuss the requirements for going forward.

D. Crowley noted that SWAP's main interest is to coordinate the transit providers in the subregion.

E. Tarallo raised a question about the need to keep a reference to recommendations for potential express-bus service between the subregion, the Inner Core, Worcester, and Providence. D. Crowley expressed the need to examine whether changes could be made to the express bus service in the region in keeping with existing RTA funding.

In response to a comment from D. Koses, D. Crowley and K. Quackenbush noted that the study will have to involve some research into the market and demand for transportation services in the SWAP subregion.

A motion to approve the work program for the *SWAP Regional Public Transit Feasibility Study*, amended to remove the reference to express train service on the Franklin line, was made by MAPC (E. Bourassa), and seconded by the South West Advisory Planning Committee (Town of Medway) (D. Crowley).

During a discussion of this motion, L. Dantas recommended deleting all the text referencing potential recommendations from the study.

D. Crowley asked that staff present the final study report to municipal officials in the SWAP subregion.

A motion to amend the previous motion to remove text referencing potential recommendations from the work program for the *SWAP Regional Public Transit Feasibility Study* was made by MAPC (E. Bourassa), and seconded by the South West Advisory Planning Committee (Town of Medway) (D. Crowley). The motion carried.

8. Meeting Minutes—Maureen Kelly, MPO Staff

A motion to approve the minutes of the meeting of September 20 was made by the Inner Core Committee (City of Somerville) (T. Bent), and seconded by the MBTA (R. Morgan). The motion carried.

9. Members Items

E. Bourassa provided an update on the MPO elections process. The towns of Bedford and Braintree have been nominated and will be running unopposed. The Candidates' Forum, scheduled for October 10, has been canceled because the election is not contested. The two candidates will be responding in writing to questions about their views on regional transportation planning. Their responses will be posted on the MPO's website. The election will be held at MAPC's Fall Council meeting on October 24 at the Omni Parker House.

Tom Kadzis, City of Boston, alerted members that the city will be requesting that the MPO program an earmark for the design of the *Northern Avenue Bridge* project at an upcoming meeting. The city will provide the match.

10.Adjourn

Attendance

Members	Representatives and Alternates
At-Large City (City of Everett)	James Errickson
At-Large City (City of Newton)	David Koses
At-Large Town (Town of Arlington)	Laura Wiener
At-Large Town (Town of Lexington)	Richard Canale
City of Boston (Boston Redevelopment Authority)	Lara Mérida
City of Boston (Boston Transportation Department)	Jim Gillooly Tom Kadzis
Inner Core Committee (City of Somerville)	Tom Bent
Massachusetts Department of Transportation	David Mohler
MassDOT Highway Division	John Romano
Massachusetts Bay Transportation Authority (MBTA)	Ron Morgan
Massachusetts Port Authority	Lourenço Dantas
MBTA Advisory Board	Paul Regan
Metropolitan Area Planning Council	Eric Bourassa Eric Halvorsen
MetroWest Regional Collaborative (Town of Framingham)	Dennis Giombetti
Minuteman Advisory Group on Interlocal Coordination (Town of Bedford)	Richard Reed
North Suburban Planning Council (City of Woburn)	Ed Tarallo
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

Roy Avelland	MassDOT
Mary Ellen Blunt	Central Massachusetts Regional Planning Commission
Andrew Brennan	MBTA
Michael Buckley	Office of State Senator William Brownsberger
Catherine Cagle	MassDOT
Calli Cenizal	MassDOT
Meghna Dutta	MAPC
Ivna Glass Fried	Conservation Law Foundation
Christine Kirby	MassDEP
Tim Lasker	MBTA
Rafael Mares	Conservation Law Foundation
Tim Reardon	MAPC
Jennifer Rushlow	Conservation Law Foundation
Carl Spector	City of Boston
Monica Tibbits	128 Business Council
Trey Wadsworth	MassDOT
Lynn Weissman	Friends of the Community Path
Steve Woelfel	MassDOT

MPO Staff/Central Transportation Planning Staff

Karl Quackenbush, Executive Director
Daniel Amstutz
David Fargen
Jane Gillis
Maureen Kelly
Robin Mannion
Anne McGahan
Elizabeth Moore
Scott Peterson
Sean Pfalzer
Alicia Wilson
Pam Wolfe
