

Draft Memorandum for the Record

Boston Region Metropolitan Planning Organization Meeting

November 16, 2017 Meeting

10:00 AM – 12:18 PM, State Transportation Building, Conference Rooms 2&3, 10 Park Plaza, Boston

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

Decisions

The Boston Region Metropolitan Planning Organization (MPO) agreed to the following:

- Approve the federal fiscal years (FFYs) 2018–22 *Transportation Improvement Program (TIP) Amendment One*
- Approve the work program for *Bicycle Level-of-Service Metric*
- Approve the work program for *Safety and Operations Analysis at Selected Intersections*
- Approve the work program for *Review of and Guide to Regional Transit Signal Priority*

1. Introductions

See attendance on page 12.

2. Public Comments

Peter Furth (Northeastern University) commented regarding TIP Project #606226 (Reconstruction of Rutherford Avenue, Boston). (This project is MPO target funded and scheduled to be advertised in FFY 2020.) P. Furth stated that the initial alternatives analysis done by the City of Boston for Rutherford Avenue was flawed, and urged the MPO to ask the city to revisit this analysis. P. Furth stated that the analysis considered one design option that preserved several underpasses and one that did not (referred to as a “surface option”). P. Furth asserted that the surface option considered was not designed with enough traffic capacity, so the analysis naturally favored the underpass option. P. Furth stated that the underpass option consumes more space than a surface option and that both options include roadways with multiple lanes and long signal cycles, rather than the more walkable options that are possible.

Nathan Blanchet (Charlestown resident) stated that he has been involved in public meetings regarding this project since 2008. N. Blanchet objected to the city’s choice of the underpass option, believing that it undermined a previous consensus-building

process that many members of the public believed had resulted in a surface option in 2013. N. Blanchet urged the MPO to encourage the City of Boston to truly weigh design options against one another.

Martha Ondras (Mystic River Watershed Association) urged the MPO to look more closely at a surface option. The MRWA believes that a surface option would be better for connecting neighborhoods to the Mystic River and other public spaces.

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

There was none.

4. Committee Chairs' Reports

There were none.

5. Regional Transportation Advisory Council Report—*Tegin Teich, Chair, Regional Transportation Advisory Council*

T. Teich reported that the Advisory Council met on November 8, 2017. The meeting featured a discussion of regional approaches to development mitigation with MassDOT and MPO Staff, as well as a presentation about the MassDOT Freight Plan. The Advisory Council has a new voting member, the MBTA Rider Oversight Committee.

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

K. Quackenbush reminded the board that the next meeting will take place on Thursday, December 7, 2017, at the Courtyard Marriott hotel in Westwood.

7. Approval of Meeting Minutes—*Róisín Foley, MPO Staff*

The chair tabled this item until the next meeting.

8. Action Item: Draft FFYs 2018-22 TIP Amendment One—*Alexandra (Ali) Kleyman, MPO Staff*

Handouts posted to the MPO's meeting calendar:

- a) FFYs 2018–22 TIP Draft Amendment One—Public Comment Letters
- b) FFYs 2018–22 TIP Draft Amendment One—Revised Table
- c) FFYs 2018–22 TIP Draft Amendment One—Revised Summary Table

A. Kleyman presented public comment letters the MPO received regarding Draft FFY TIP Amendment One, which was released for public comment on October 19, 2017. The MPO received letters from the Natick Board of Selectmen, State Representative David P. Linsky (Fifth Middlesex District), 495/MetroWest Partnership, the Milton Board

of Selectmen, and State Senator Walter F. Timilty (Norfolk, Bristol, and Plymouth District). All of these letters expressed thanks and support for including local projects.

A. Kleyman recapped the substance of Amendment One using the summary table, which lists all the potentially impacted projects, the proposed changes, FFYs, funding source, overall changes in TIP funding, and where to find the changes in the official TIP tables. Draft Amendment One proposes changes and additions to highway programming in FFYs 2018–22 and transit programming in FFY 2018. The changes in highway programming are primarily associated with MassDOT’s bridge maintenance program. The additions to the transit program are primarily associated with new grants awarded by the MassDOT Rail and Transit Division under its annual competitive process, the Community Transit Grant Program.

Vote

A motion to approve FFYs 2018–22 TIP Amendment One was made by the Metropolitan Area Planning Council (Eric Bourassa) and seconded by the Inner Core Committee (City of Somerville) (Tom Bent). The motion carried.

**9. Action Item: Work Program for Bicycle Level-of-Service Metric—
*Casey-Marie Claude, MPO Staff***

C. Claude presented the work program for Bicycle Level-of-Service (LOS) Metric. In January 2017, C. Claude and Ryan Hicks presented the Pedestrian Report Card Assessment (PRCA) tool to the MPO board. The Bicycle LOS Metric is a companion study to the one that created the PRCA tool. MPO staff may develop a report card product similar to PRCA for bicycle travel through this study. The objectives of this project are to develop a method for calculating the bicycle LOS of roadways and intersections in the MPO area and to provide guidance for implementing the methodology. This project supports several of the MPO’s Long-Range Transportation Plan (LRTP) goals. The total cost of this project is estimated to be \$55,000.

Vote

A motion to approve the work program for Bicycle Level-of-Service Metric was made by the Three Rivers Interlocal Council (Town of Norwood/NVCC) (Steve Olanoff) and seconded by the Inner Core Committee (City of Somerville) (T. Bent). The motion carried.

10. Action Item: Work Program for Safety and Operations Analysis at Selected Intersections—*Mark Abbott, MPO Staff*

M. Abbott presented the work program for Safety and Operations Analysis at Selected Intersections. This is a semi-recurring study that staff is currently conducting every other year. The most recent iterations of this study were conducted in Chelsea and Peabody.

Municipalities in the region are receptive to this type of study, as it gives them potential low-cost solutions or a head start on conceptual designs for intersections that need safety improvements and congestion mitigation. For this study, as many as three high-crash or congested locations will be selected by reviewing the MPO's crash database, the Congestion Management Process's travel-time information, and a list of problem intersections submitted through the MPO's outreach process. The total cost of this project is estimated to be \$70,000.

Vote

A motion to approve the work program for Safety and Operations Analysis at Selected Intersections was made by the Regional Transportation Advisory Council (T. Teich) and seconded by the Metropolitan Area Planning Council (E. Bourassa). The motion carried.

11. Action Item: Work Program for Review of and Guide to Regional Transit Signal Priority—*Annette Demchur, MPO Staff*

A. Demchur presented the work program for Review of and Guide to Regional Transit Signal Priority (TSP). The goal of this study is to develop a guidebook for use in planning and evaluating potential TSP treatments in the Boston region. This guidebook will be an analytic tool that MPO staff can use to assist municipalities and transit operators who are considering implementing such treatments.

Municipalities and transit operators in the Boston region have expressed interest in investigating TSP. In addition, the MBTA has initiated a TSP pilot program at six intersections in four corridors in Boston, Brookline, and Cambridge, and plans to expand this program to 50 additional intersections in these corridors in the next calendar year. The MBTA has identified a strong municipal partnership as one of the key requirements for implementing a successful program.

The increased interest in TSP has created the need for guidance concerning the interagency coordination required between local transportation, traffic, and/or public works departments, and transit agencies during the planning, implementation, operation, and evaluation phases of a TSP system. Staff will develop a guidebook for evaluating the potential of TSP treatment projects in the Boston region. The guidebook will include procedures for coordinating with operators of the transit services that would

be affected by TSP implementation. Those affected may include the Massachusetts Bay Transportation Authority (MBTA), regional transit authorities (RTAs), locally sponsored transit networks, or operators of private-carrier buses. The guidebook will lay out a broad vision for a TSP implementation in the Boston region and a path to attain that vision through local actions, both related to implementation of technology and coordination among stakeholders. The total cost of this project is estimated to be \$65,000.

Discussion

Paul Regan (MBTA Advisory Board) asked whether staff has coordinated with the MBTA. A. Demchur replied that the MBTA has been consulted and is pleased to have the support of MPO staff in this area.

Vote

A motion to approve the work program for Review of and Guide to Regional Transit Signal Priority was made by the MBTA Advisory Board (P. Regan) and seconded by the Metropolitan Area Planning Council (E. Bourassa). The motion carried.

12. Development of Population and Employment Forecasts for the Long-Range Transportation Plan (LRTP)—*Anne McGahan, MPO Staff, and Tim Reardon, Director of Data Services, MAPC*

A. McGahan introduced T. Reardon's presentation of initial demographic forecasts for the MPO's next LRTP, Destination 2040. MPO staff began working with a MassDOT-convened Projections Committee in the spring of 2017. This committee includes MassDOT, 13 Regional Planning Agencies (RPAs) and MPOs, and representatives from the Executive Offices of Energy and Environmental Affairs and Housing and Urban Development. The UMass Donahue Institute was hired as a technical consultant to develop population and employment forecasts at the RPA/MPO region level.

T. Reardon presented an overview of trends in the region since 2010, as well as some historical trends to set the stage for LRTP forecasts. Annual population growth rates show that from 2010 to 2015, Inner Core Community Type municipalities were the fastest growing in the region. Regional Urban Centers are growing at some of their fastest rates since 1970, with about five percent population growth across the region as a whole since 2010. According to US Census Bureau population estimates, the region is growing faster than the 2014 projections used in the previous LRTP. One of the biggest impacts on population change in the region is domestic outmigration, that is, individuals moving out of the region to other parts of the United States. International migration into the region provides a boost to the region's labor force.

On the housing front, new multifamily units are meeting only 64 percent of the estimated demand for housing in the region. Housing shortages can slow household growth because fewer young people can afford to buy homes and begin their own families. The location of new housing likely will have a large impact on population growth in the region. Trends show that many Developing and Maturing Suburbs have declining school enrollments and population overall, an indication of a lack of housing for younger families. Between 2009 and 2015, the region gained approximately 225,000 jobs, nearly one-third of which are in the Inner Core and Regional Urban Centers.

The Donahue Institute provided MAPC with preliminary projections on November 10, 2017. These projections suggest that the region may be even stronger than previously thought, with population growth as high as 17.5 percent by 2040. Overall, the region is aging, and demand on housing likely will be great as millennials age.

MAPC will refine these projections and create detailed profiles related to race, education, wages, household size, and other household-level demographics. MAPC uses several “household agent,” categories to stratify household data, including age, size, structure, and income. MAPC will input these into a land use allocation model, which allocates growth to traffic analysis zones (TAZs) using Cubeland modeling software. Accessibility to jobs and labor is an explicit factor in this model and assumes that real estate properties are occupied by the household or firm willing to pay the most, and that developers maximize profits when deciding what type of buildings to provide. This model is integrated with the MPO’s Travel Demand Model. Land use regulations and future land use projections are used to project travel demand and accessibility and congestion issues created by transportation projects; which are then used to project household and employer location preferences; which in turn are used to re-calculate future land use possibilities.

Other key inputs for the model include peak-period travel times, transit station proximity, neighborhood demographics, current rents and commercial lease prices, development capacity, and subsidies for certain households or firms. Another key input is Massbuilds, MAPC’s open source development inventory.

T. Reardon noted that previous methods of forecasting population could not take into account variables such as housing production and attendant school enrollments as comprehensively as newer methods, which resulted in some incorrect projections. This suggests that MAPC and MPO staff need land use and demographic models that are able to account for housing turnover and not just the traditional formula of births *minus* deaths *plus* migration. Previous allocations, like the one done in 2015, created municipal household totals and subsequently allocated them to TAZs. This time, totals

will be allocated to TAZs using various inputs with no predetermined municipal projections. This means that different model runs with different land use or travel model inputs may produce different municipal-level population and household estimates. This would allow projections to represent the region's dynamic demographic trends better, rather than being made to fit predetermined municipal population projections.

MAPC can modify assumptions regarding migration rates, heads of households and family formation, education levels and income, development, zoning capacity, public subsidies, and household location preferences to use in scenarios for LRTP modeling as well as MAPC's Regional Plan Update.

Discussion

David Koses (At-Large City) (City of Newton) noted how certain complicating factors (natural disasters that cause domestic migration, for example) are hard to quantify in projections. T. Reardon replied that there are some intriguing exploratory scenario planning models being used by RPAs around the country to try to plan for some of the more uncertain possibilities, such as immigration reform at the federal level.

Dennis Crowley (South West Advisory Planning Committee) (Town of Medway) asked whether it is possible to include undocumented individuals in these projections. T. Reardon responded that this would be difficult, as the nature of being undocumented means that most individuals do not show up in surveys. However, some anecdotal evidence suggests that undocumented individuals do respond to the census because it is anonymous.

Jim Gillooly (City of Boston) (Boston Transportation Department) noted that it is apparent that different types of households have different transportation behavior and asked if this is reflected in the regional Travel Demand Model. T. Reardon stated that MAPC's inputs, including factors that influence behavior, are fed iteratively into the MPO's Travel Demand Model and reflected therein.

13. Rutherford Avenue/Sullivan Square Design Project Update—*Bill Conroy, Boston Transportation Department, and Erik Maki, Tetra Tech*

E. Maki presented an update on the City of Boston's design process for Rutherford Avenue/Sullivan Square. A public meeting concerning this project was held in Charlestown on November 15, 2017. The project plans to reconstruct and improve Rutherford Avenue between City and Sullivan Squares in Charlestown. The project's goals include improving pedestrian and bicycle connections and safe access to transit, decreasing congestion, protecting Main Street from cut-through traffic, creating open

space, and providing opportunities for appropriate transit-oriented development. This project is an opportunity to transform the character of the corridor from a highway with excess capacity to a neighborhood boulevard. The design must accommodate several large developments that have been initiated since previous traffic studies were completed in the early- to mid-2000s, such as the Wynn Casino and Resort, Assembly Square, North Point, and Hood Industrial Park. The Wynn Casino and Resort has increased congestion projections for the corridor. E. Maki stated that 27,000 vehicles per day use the current underpass alone. This area is bounded by the Mystic River, I-93, and rail yards, which creates an island effect in the area, limiting options for creating new roadways to alleviate congestion.

One major aspect of the project's design is transit mobility. The MBTA has indicated that critical bus routes serving Sullivan Square Station likely will experience growth over the years, which would make increasing bus circulation and alleviating delay even more essential. Wynn Casino Group has worked with the MBTA to create a mobility plan for Sullivan Square Station that includes adding a third bus berth.

The public has indicated a need for more accessibility across the corridor, so the current design includes several new pedestrian crossings to create connections between neighborhoods and development sites. The design also specifies creating a grid network in Sullivan Square by removing the traffic circle, which would add more connections with the Boston Harbor Trail and Sullivan Square Station.

E. Maki stated that the consultant team and the City of Boston did not discount the surface option favored by community groups; but they believe that by modifying the current underpasses the design could create greater mobility across the board. In this design, the underpasses would be smaller and access to them would be signalized. In addition to the constrained nature of the road network in this area, different segments of the corridor have different widths of right of way, which limits the amount of parkland the design could provide. The middle section of the corridor is, however, wide enough to impose a significant road diet, and add left-turn pockets to access Bunker Hill Community College. The city's urban and landscape design consultants will be working with the community to build consensus for the design for separated bike and pedestrian pathways along the corridor. This design would add a dedicated bus lane along the corridor closer to City Square to match the bus lane on the North Washington Street Bridge.

The capacity of both underpasses would be reduced by 50 percent. The city and its consultants view the underpass as a measure that would allow the 27,000 daily vehicle trips (as well as MBTA bus maintenance traffic) to stay separate from neighborhood

surface traffic and pedestrians and cyclists. E. Maki stated that eliminating the underpasses would create many more right-turn conflicts with vehicles; which would necessitate longer pedestrian signal phasing; which in turn would create delay for transit. The project also would allow for raising Main Street in order to increase flood resiliency near the Schraffts' Center.

Discussion

Jay Monty (At-Large City) (City of Everett) asked E. Maki to clarify that buses exiting Sullivan Square to head north will now exit via Gardner Street. E. Maki agreed that this is the case, adding that this intersection will be signalized. The design also adds a dedicated bus lane coming south from Everett. J. Monty asked whether it was possible for the consultant team to quantify the current bus delay for buses traveling south from Everett as opposed to the projected delay under this new design. E. Maki replied that this is something they could do.

T. Teich asked about access for buses coming into Sullivan Square from Broadway. E. Maki replied that the Wynn Casino Group has worked out a dedicated bus lane there, and that the city's design adds a separated bike lane.

T. Bent asked about how E. Maki views traffic flowing down Washington Street to Cambridge Street at peak hours with this design. E. Maki replied that Cambridge Street is narrow, but that the new signal and left turn at Gardner would alleviate some of the current congestion.

J. Gillooly added that the traffic signals in this area are not currently connected to the city's traffic management center. This project will connect them and give the city the ability to impact signals on N. Washington Street and at the bridge into Everett. J. Gillooly added that he is puzzled by public criticism of the bike facilities given that they will connect to the wider network regardless of whether the design uses a surface or underpass option.

Marie Rose (MassDOT Highway Division) asked about unknowns in terms of alignments and rights-of-way, and expressed concern about meeting the advertisement schedule. M. Rose also asked what the environmental permitting status is. B. Conroy replied that he believes the project only requires an Environmental Notification Form (ENF).

J. Gillooly added that the city is equally concerned about meeting the advertising deadline (FFY 2020), particularly if they must return to the analysis stage. Right now, the plan is to have the next public meeting in January and submit 25 percent design

drawings to the state in June. J. Gillooly reiterated the importance of sticking to milestones.

Monica Lamboy (Resident of Charlestown) presented a petition containing 434 signatures in support of a surface option to the MPO. (Both the petition and the Rutherford Corridor Improvement Coalition's handout in support of a surface option are posted to the MPO's meeting calendar.) M. Lamboy acknowledged many of the positives in the current design, but reiterated that the city has been too quick to select its preferred alternative. M. Lamboy stated that there is another surface option, which she and other members of the public believe is feasible. M. Lamboy stated that members of the public will continue to raise this issue throughout the process until a satisfactory alternatives analysis is completed.

Wig Zamore (Somerville Resident, Somerville Transportation Equity Partnership) stated that he admires the public process at the MPO. W. Zamore stated that his comment is limited to the issue of environmental exposures to cyclists and pedestrians, expressing his concerns about primary pollutant exposures to cyclists and pedestrians. Studies show higher rates of mortality for cyclists who live and cycle in polluted areas. These rates exceed the rate of mortality due to crashes. W. Zamore asked how the city is dealing with this in context of its design for Rutherford Avenue. E. Maki replied that the underpass alternative does separate a significant amount of through traffic from pedestrians and cyclists, which could reduce exposure to primary pollutants.

D. Crowley asked whether a cost analysis has been done on surface options versus underpasses and stated his concern about impacts to the rest of the MPO's TIP target funding schedule should the design change at this juncture. J. Gillooly stated that the current cost estimate is for an underpass option. J. Gillooly reiterated the city's belief that the underpass option is best for accommodating growth and allowing for transit, pedestrian, and bicycle mobility.

14. Members Items

D. Mohler stated that MassDOT will file the Draft Environmental Impact Report for the Allston Interchange Project on November 30, 2017. On November 20, 2017, there will be a public meeting regarding the Notice of Projection Change for the Green Line Extension Project (Phase 2) at Tufts. MassDOT will open design/build bids for the Green Line Extension Project (Phase 1) on November 17, 2017.

D. Crowley asked whether MPO staff could provide members with a list of scored TIP projects. K. Quackenbush replied that this is possible and may already be available on the MPO website. D. Crowley also stated that smaller towns view the process of getting

a project in the TIP as confusing and asked whether some of the smaller towns could speak with MassDOT about this issue.

D. Mohler responded that it is important to determine whether the issue is that smaller communities are daunted by paperwork, or whether they feel that their projects would never score well under the MPO's process and thus do not participate. D. Mohler asked which communities in particular are having an issue. D. Crowley responded that they are Medway and Wrentham. D. Mohler suggested that D. Crowley work with MAPC's subregional group on this issue.

E. Bourassa reiterated that the state and federal project initiation process is the same regardless of the size of a municipality, and this likely would not change. Cities and towns need to calculate and weigh their options given the limited amount of TIP funds available.

15. Adjourn

A motion to adjourn was made by the Metropolitan Area Planning Council (E. Bourassa) 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 Everett)	Jay Monty
At-Large City (City of Newton)	David Koses
At-Large Town (Town of Arlington)	Laura Wiener
At-Large Town (Town of Lexington)	
City of Boston (Boston Planning & Development Agency)	Jim Fitzgerald
City of Boston (Boston Transportation Department)	Jim Gillooly
Federal Highway Administration	
Federal Transit Administration	
Inner Core Committee (City of Somerville)	Tom Bent
Massachusetts Department of Transportation	David Mohler
MassDOT Highway Division	John Romano
	Marie Rose
Massachusetts Bay Transportation Authority (MBTA)	Eric Waaramaa
Massachusetts Port Authority	Laura Gilmore
MBTA Advisory Board	Paul Regan
Metropolitan Area Planning Council	Eric Bourassa
MetroWest Regional Collaborative (Town of Framingham)	
Minuteman Advisory Group on Interlocal Coordination (Town of Bedford)	David Manugian
North Shore Task Force (City of Beverly)	Aaron Clausen
North Suburban Planning Council (City of Woburn)	Tina Cassidy
Regional Transportation Advisory Council	Tegin Teich
South Shore Coalition (Town of Braintree)	Christine
	Stickney
South West Advisory Planning Committee (Town of Medway)	Dennis Crowley
Three Rivers Interlocal Council (Town of Norwood/NVCC)	Steve Olanoff

Other Attendees	Affiliation
Amanda Shepard	City Resident/Framingham
Peter Furth	Northeastern University
Marc Ebuña	Transit Matters
Sky Rose	
Martha Ondras	Mystic River Watershed Association
Nathan Blanchet	Charlestown Resident
Bryan Pounds	MassDOT OTP
Frank A. Tramontozzi	City of Quincy
Edward Sanderson	WSP
Joel Anders	WSP
Wig Zamore	STEP
Conor Kenny	Rep. Driscoll's Office
Tom Kadzis	BTD
Bill Conroy	BTD
Hans Nagrath	Sen. Timilty's Office
Walter Timilty	Massachusetts State Senate
Monica Lamboy	Charlestown Resident

MPO Staff/Central Transportation Planning Staff

Karl Quackenbush, Executive Director
Mark Abbott
Seth Asante
Casey-Marie Claude
Lourenço Dantas
Annette Demchur
Róisín Foley
Alexandra Kleyman
Anne McGahan
