Memorandum for the Record Boston Region Metropolitan Planning Organization Meeting

December 6, 2018 Meeting

10:00 AM–12:55 PM, State Transportation Building, Conference Rooms 2 and 3, 10 Park Plaza, Boston

Steve Woelfel, 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 minutes of the October 18, 2018, meeting
- Approve the work program for AFC 2.0 Equity Analysis

Meeting Agenda

1. Introductions

See attendance on page 17.

2. Public Comments

There were none.

3. Chair's Report-Steve Woelfel, MassDOT

There was none.

4. Committee Chairs' Reports—Bryan Pounds, MassDOT, Chair, Unified Planning Work Program (UPWP) Committee

B. Pounds reported that the UPWP Committee met prior to this MPO meeting to discuss fourth quarter spending and hear an update on the creation of a UPWP study recommendation tracking database. B. Pounds encouraged MPO members to reach out to Sandy Johnston, MPO staff, with any feedback.

5. Regional Transportation Advisory Council Report—AnaCristina

Fragoso, Vice-Chair, Regional Transportation Advisory Council

A. Fragoso reported that the Advisory Council would meet on Wednesday, December 12, 2018, at 3:00 PM, and hear updates from MPO staff regarding the Long-Range Transportation Plan (LRTP), Transportation Improvement Program (TIP), and UPWP.

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

K. Quackenbush announced that he would be retiring from his position as Executive Director of the MPO staff in the spring of 2019. K. Quackenbush expressed that his time in this position has been fulfilling and thanked the board for their support K. Quackenbush also acknowledged the many kindnesses reflected in board members' email responses to his recent email announcing his retirement.

7. Approval of October 18, 2018, MPO Meeting Minutes—Róisín Foley, MPO Staff

A motion to approve the minutes of the meeting of October 18, 2018, was made by the MBTA Advisory Board (Paul Regan) and seconded by the Inner Core Committee (City of Somerville) (Tom Bent). The North Shore Task Force (City of Beverly) (Denise Deschamps), the Advisory Council (A. Fragoso), and the North Suburban Planning Council (City of Woburn) (Tina Cassidy) abstained. The motion carried.

8. Work Program for AFC 2.0 Equity Analysis—Steven Andrews, MPO Staff

This work program is funded by a contract with the Massachusetts Bay Transportation Authority (MBTA) and is estimated to take five months to complete and cost \$76,972.

The MBTA is developing a new automated fare collection (AFC) system, known as AFC 2.0, planned to be available for use in May 2020. Some of the expected benefits of the new fare payment system include the ability for customers to

- board and pay at any door on light rail vehicles and buses, which should decrease dwell times for all riders;
- board and pay on all modes using a unified fare payment system;
- pay with a contactless fare card or by tapping a contactless credit card or smartphone; and
- check the available balance, reload value, and replace lost cards via a website or phone.

These changes may present challenges to some riders. Once AFC 2.0 has been implemented, cash will no longer be accepted on board MBTA vehicles. The MBTA will be vastly increasing its retail network and installing fare vending machines at bus stops. Unlike the MBTA's current system, passengers may need to purchase some types of fare media for a small fee. Accompanied by this change is the ability for passengers to 'go negative' in stored value to complete a single, complete one-way trip using that fare media. The new system will also give the MBTA the opportunity to implement fare

structure changes, such as allowing discounted transfers between modes that are not currently offered; changing the existing periods of validity for pass products; and eliminating the differential between fares paid using CharlieCards and fares paid using cash or CharlieTickets.

MPO staff will analyze the equity of the impacts of these changes, including the distribution of fare vending machines and other fare media sales locations, the equity impacts of charging for a fare card, and a package of various fare structure changes that may be implemented with AFC 2.0.

Discussion

Jim Gillooly (City of Boston) (Boston Transportation Department) asked whether the MBTA already has a plan for the distribution of fare media sales locations. S. Andrews responded that the MBTA has preliminary plans for the distribution of sales locations.

Jay Monty (At-Large City) (City of Everett) expressed hope that the analysis would contextualize the benefits of AFC 2.0 to equity populations, alongside potential drawbacks.

Daniel Amstutz (At-Large Town) (Town of Arlington) asked whether the MBTA has a subsidy program for low-income riders. S. Andrews replied that there is a YouthPass program with means testing for low-income youth, but no general subsidy program.

P. Regan asked when MPO staff will receive the necessary data to complete the equity analysis. S. Andrews replied that some data is readily available, but the full distribution plan for fare sales locations is forthcoming from the MBTA. P. Regan asked whether the analysis of fare structure changes could serve as an analysis of a possible fare increase. S. Andrews replied that these would likely be two different analyses.

Eric Bourassa (Metropolitan Area Planning Council) asked how the analysis of the distribution plan will be conducted. S. Andrews responded that staff will analyze whether the planned sales locations are distributed equitably in communities protected by Title VI and Environmental Justice regulations versus non-protected communities. Staff may consider variables such as extra walking time to sales locations or the number of sales locations per square mile. Some aspects of the methodology will depend on the eventual design of the distribution plan.

Jim Fitzgerald (City of Boston) (Boston Planning & Development Agency) asked whether this analysis will factor in budget considerations, such as the possibility for private entities to fund fare machines. S. Andrews replied that budget considerations are agreed upon by the MBTA and its vendor and are beyond the scope of this work.

Vote

A motion to approve the work program for AFC 2.0 Equity Analysis was made by the MBTA Advisory Board (Paul Regan) and seconded by the MassDOT Highway Division (John Romano). The motion carried.

9. Community Transportation (CT) Funding Program—Sandy Johnston, MPO Staff

Documents posted to the MPO meeting calendar

- 1. <u>Community Transportation Program: Project Evaluation Criteria Survey</u>
- 2. Survey Results: Scores and Comments from Respondents
- 3. <u>Community Transportation Program Project Evaluation Criteria</u>
- 4. Community Transportation Program Decision Tree

The CT program was recommended for implementation in the current LRTP, *Charting Progress to 2040.* A total of \$4 million is currently programmed in the TIP for the CT program; \$2 million in FFY 2021 and \$2 million in 2023. The MPO has administered similar programs in the past, but found that many operating projects were discontinued when MPO funding was no longer available. To devise a sustainable program, the MPO funded a CT program development study in the FFY 2018 UPWP.

Generated from the initial categories laid out in *Charting Progress to 2040* and the types of projects funded by other MPOs, the proposed eligible project types for CT funding are as follows:

- Transit Operations and Improvements
- Parking Management
- Bicycle and Pedestrian Improvements
- Education and Wayfinding

Staff proposes to treat the first funding round for this program, currently programmed in FFY 2021, as a preliminary learning experience to see what works for the program. Staff has begun identifying possible candidate projects through outreach for the new LRTP, *Destination 2040*, recommendations from MPO studies and technical assistance, and discussions with stakeholders.

At the MPO meeting on October 18, 2018, S. Johnston presented the results of staff research on the structure of similar programs at other MPOs, as well as a proposed concept for project evaluation. Following that presentation, board members were asked to respond to a survey in order to rank possible evaluation criteria. Staff considered this feedback when developing the proposed evaluation framework.

The proposed project evaluation structure consists of an initial two-step fatal flaw analysis. The first would determine whether the proposed project would benefit air quality. Because the CT program would be funded with Congestion Mitigation and Air Quality funds, projects must improve air quality. The second part of the fatal flaw analysis would assess whether the project proponent is able to carry out the project in the suggested timeframe. If the project passes this analysis, it would be scored under the general criteria. If the project meets the (as yet undetermined) threshold set for the general criteria, it would be scored under criteria specific to the type of project. The two general types are capital and operating projects. Once it is scored, the overall evaluation would be brought to the MPO.

The proposed evaluation criteria reflect a 50/50 balance in weighting between the general and type-specific criteria. In a few circumstances, the proposed evaluation points do not exactly parallel the relative importance that survey results assigned to them. Staff felt that some adjustments were necessary to align the framework with the goals and objectives of the LRTP and the CT program.

Staff plans to incorporate any feedback from this meeting and return with a full memorandum and Universe of Projects for possible funding at the meeting on December 20, 2018. After the first round of projects is scored in the spring of 2019, staff will evaluate the scoring structure and report back to the MPO.

Discussion

E. Bourassa (MAPC) expressed support for the rigor of the suggested criteria.

J. Fitzgerald noted that the suggested resiliency criteria for capital projects would assess whether a project would have a negative impact on an area of environmental concern and be resistant to damage from storms, floods, and other natural disasters. J. Fitzgerald suggested adding criteria that assess positive impacts on issues of resiliency. S. Johnston replied that staff would look into adding additional resiliency criteria.

Tom O'Rourke (Three Rivers Interlocal Council) (Town of Norwood/Neponset Valley Chamber of Commerce) asked what kind of projects would qualify as capital projects. S. Johnston replied that small-scale pedestrian and bicycle facility improvements, particularly those that provide safe routes to transit, would qualify.

Steve Olanoff (TRIC Alternate) noted that the proposed criteria place more emphasis on equity issues and mode shift than the results of the survey. S. Johnston replied that these are examples of staff suggesting criteria that align project evaluation more closely with the goals of the LRTP.

S. Woelfel stated that the general consensus seemed to be for staff to continue along this path and return with a Universe of Projects on December 20, 2018.

10.Safety and Operations at Selected Intersections—Seth Asante and Mark Abbott, MPO Staff

Documents posted to the MPO meeting calendar

1. <u>Technical Memorandum: Redesign of Hartford Avenue and Maple Street</u> Intersection

For the past 10 years, MPO staff has been conducting well-received safety and operations analyses at intersections throughout the region, focusing on congested areas, high crash locations, and locations in need of improvements to accommodate transit, freight vehicles, bicyclists, and pedestrians. These studies give communities and MassDOT the opportunity to look at the needs of a selected location before committing funds for design and engineering. For FFY 2018, MPO staff selected the Hartford Avenue (Route 126) and Maple Street intersection in Bellingham and a segment of Main Street (Route 1A) in Wenham.

Hartford Avenue (Route 126) and Maple Street in Bellingham

This intersection carries a high level of truck traffic and cannot accommodate large commercial vehicles safely and efficiently. The area along Maple Street is zoned for industrial use and trucks coming from Interstate 495 use the intersection to access Maple Street. The Town of Bellingham recognizes the need to upgrade the intersection in order to unlock the potential of the surrounding area, which is projected to grow. The primary issue at the location is the inability of trucks to safely perform turning movements. MPO staff, working with the Town of Bellingham and MassDOT, developed three possible alternatives for improvement. The preferred alternatives accommodate truck-turning movements by widening the approach on Maple Street, widening Hartford Avenue, and shifting the alignment of Hartford Avenue to the west. The driveway at the intersection would be aligned with Maple Street approach. It is estimated that the preferred alternative would cost about \$1.5–2 million. If implemented, these improvements would increase traffic safety, make traffic operations more efficient, and reduce congestion.

Main Street (Route 1A) in Wenham

Staff analyzed three intersections located along Route 1A in Wenham. In the study area, Route 1A carries about 15,000 to 22,000 vehicles per day. There are high turning volumes at all three intersections and all the stop controlled approaches endure extensive delays. The corridor has a high crash rate; most crashes occur as a result of

left-turning vehicles. Staff developed a series of short- and long-term improvements. The proposed short-term improvements mainly include pavement marking restriping, signage improvements, and adjustment of pedestrian crossing signal time. The preferred long-term alternative would allow both left and right turns from Monument Street and install signal coordination that includes an exclusive pedestrian phase. MassDOT has already started to examine the proposed short-term improvements and they are expected to be implemented soon. The Town of Wenham has hired a consultant and begun the project design process for improvements to the municipally owned right of way.

Discussion

E. Bourassa noted that widening the turning radius at Hartford Avenue and Maple Street in Bellingham would benefit freight vehicles, but the improvement might be at the expense of pedestrian safety. He asked whether staff were able to ascertain how many schoolchildren cross at this intersection. Jim Kupfer (Town Planner, Town of Bellingham) replied that staff and the town worked with local schools throughout the process, finding that the nearest school only has four children who regularly walk to school. At this time, the drop-off traffic backs up onto Hartford Avenue, causing more congestion. E. Bourassa added that MAPC has a digital tool, <u>Massachusetts Safe</u> <u>Routes to School Parent Survey</u>, which allows schools to poll students to see who might choose to walk should the route be safe. S. Asante added that staff counted the number of school buses passing through the intersection.

David Koses (At-Large City) (City of Newton) noted that a classic dilemma is the choice between widening roads for more capacity and narrowing roads for safer pedestrian and bicycle access. S. Asante responded that the proposed improvements also include the addition of pedestrian and bicycle accommodations.

Christine Stickney (South Shore Coalition) (Town of Braintree) asked whether staff reviewed the specific kinds of trucks that are using the intersection. S. Asante responded that most of the trucks accessing this intersection are larger because they are accessing the town from I-495.

11.Addressing Safety, Mobility, and Access on Subregional Priority Roadways—Chen-Yuan Wang, MPO Staff

Documents posted to the MPO meeting calendar

1. Medford Square Priority Roadways Improvement Study

Since 2012, MPO staff has conducted *Addressing Safety, Mobility, and Access on Subregional Priority Roadways* studies at various locations throughout the region. The

most recent iteration funded in the FFY 2018 UPWP analyzed several priority roadways in the area of Medford Square. The location was strongly recommended for study by the City of Medford, MassDOT District 4, and MAPC to support the recently completed Medford Square Master Plan.

The selected priority roadways include Route 60 (Salem Street and High Street), Winthrop Street, Route 16 (Mystic Valley Parkway), Main Street, and roadways in the City Hall subarea. The area has several MBTA bus lines connecting Medford Square to Davis, Harvard, and Sullivan Squares, Wellington Station, Haymarket Station, and downtown Boston. The area is full of commercial and multi-unit residential developments and public facilities. There are gaps in the sidewalk network on Mystic Valley Parkway. Most of the roadways studied lack bicycle accommodations. The Mystic River Multi-Use Path runs through the area, but major gaps exist on both sides of the Mystic River. Six crash clusters in the area are in the top five percent of crash locations in the Boston region. Major concerns in the area include recurrent traffic congestion, high crash rates, a noticeable number of pedestrian and bicycle crashes, pedestrian safety concerns, the lack of bicycle accommodations, truck traffic on arterials and neighborhood streets, and bus delays.

The study focused on five key locations; Salem Street and the area around City Hall, the Main Street corridor, the High Street corridor, High Street at Winthrop Street, and Mystic Valley Parkway.

For the City Hall area, staff suggested a preferred alternative that maintains the existing traffic flow pattern. This alternative would modify the central intersection by adding an eastbound travel lane, curb extensions, and relocating adjacent on-street parking. Pedestrian signal phasing would be adjusted.

In the Main Street corridor, the lack of signals creates conditions that are not safe for pedestrians and severe traffic congestion on the Route 16 off-ramps and South Street. Staff developed four long-term alternatives and proposed implementing Alternative 1, which would signalize both intersections under one controller, while pursuing further study of Alternative 2. Alternative 2 would close the Route 16 westbound ramp to Main Street and to signalize both intersections. Staff further proposes adding a central lane for left turns, bicycle accommodations on both sides, and crosswalks.

In the High Street corridor, staff proposed a series of short- and long-term improvements including installing curb-cuts compliant with the American with Disabilities Act (ADA), signalizing the Governors Avenue intersection with exclusive pedestrian phases, and examining the feasibility of removing on-street parking on one side for bicycle accommodations. At High Street and Winthrop Street, the traffic circle is not up to today's modern roundabout standards. Staff proposed signalizing the intersection as a long-term improvement.

At the intersection of Winthrop Street and Mystic Valley Parkway, staff proposed converting the westbound outside lane from right-turn only to a through/right-turn shared lane, adding a northbound left-turn bay, upgrading the entire signal system, and adding sidewalks and grass buffers on both sides of Route 16. At the Mystic River Path crosswalk on Route 16, staff proposed upgrading the traffic signal displays, providing pedestrian signals, and restoring pedestrian-actuated operation. Staff proposed further study of the feasibility of allowing trucks on Route 16 east of Winthrop Street, which would provide a more straightforward truck route and reduce truck traffic in the neighborhoods.

Staff analyzed all the proposed improvements and found that all intersections would operate at acceptable levels of service with the proposed improvements. The proposed short-term improvements would be relatively low-cost and could be implemented when Chapter 90 or roadway maintenance funding is available. In the long term, the key study locations can be combined or separated into roadway improvement projects depending on future available funding. The study provides a vision for the area's long-term development.

Discussion

J. Monty asked whether the size of the study area was able to capture the regional significance of congestion in Medford. C. Wang replied that the study advisory committee discussed this issue, but felt the issue was difficult to address in a corridor study. However, staff does recommend further study.

D. Amstutz asked whether staff made any recommendations to improve transit in the study area. C. Wang replied that staff's recommendations include several improvements to bus service.

T. Bent stressed that the traffic in this area is a regional issue, particularly when congestion on Interstate 93 spills into the area, and he advocated for more study.

12.Update on Demographic Projections and MetroCommon 2050—Sarah Philbrick, MAPC

Population and employment projections are essential inputs for transportation models and plans, including the MPO's next LRTP, *Destination 2040*. The process conducted

throughout 2018 created new projections for all regions, municipalities, and transportation analysis zones (TAZs) in Massachusetts in the following categories:

- Population (by age and labor force status)
- Households (by size, workers, and income)
- Employment (by sector)

This effort was coordinated by MassDOT, the University of Massachusetts Donahue Institute (UMDI), and MAPC, and involved a projections committee including representatives of all 13 Massachusetts MPOs. To create the projections, the committee relied on information about current birth and death rates, migration patterns, and household information. The allocation of projections to TAZs was informed by information about planned development across the state.

UMDI created population projections by age and sex and each regional planning agency (RPA) was responsible for allocating projections to municipalities and TAZs. MAPC allocated the regional household totals for the MAPC/Boston Region MPO area to TAZs, taking into consideration planned developments, transportation accessibility, and land-use capacity. Results were then summed to the municipal level. To obtain up-to-date information on completed and planned development, MAPC asked municipalities to enter information about local development completed since 2010 or planned before 2040 into the <u>MassBuilds online database</u>.

Key projections for the MAPC/Boston Region MPO area

- Population is projected to grow by 20 percent by 2040
- Households are expected to grow by 30 percent by 2040
- Employment is expected to grow by 14 percent by 2040
- Housing units built since 2010 or in the pipeline (in MassBuilds) only account for 65 percent of projected new households
- Commercial development built since 2010 or in the pipeline (in MassBuilds) is 2.5 times the amount needed for projected job growth
- Households with members over age 45, without children, and that make less than \$35,000 a year (in 2012 dollars) are projected to grow more than 90 percent
- Two-person households with members age 65 or older that make \$35,000-150,000 a year (in 2012 dollars) are projected to grow 88 percent
- Households with parents age 35 or younger that make less than \$75,000 a year (in 2012 dollars) are projected to grow 72 percent
- Families with children will comprise a declining share of total households
- Single person households will comprise a larger share of total households

- Households with the lowest incomes are projected to comprise a larger share of total households
- No municipalities in the region are projected to lose population, but some will grow faster than others

MAPC and MPO staff is still working to develop a fully integrated land-use transportation model. For current planning work, land-use inputs will generally be held constant for different transportation planning scenarios. This approach assumes there are no major changes in current trends, including migration patterns, headship rates, labor force participation, or income distribution. Additional demographic and land-use scenarios will be developed through MAPC's <u>MetroCommon x 2050</u> regional planning process, which is now underway.

Discussion

E. Bourassa noted that MAPC will be holding events and listening sessions in each MAPC subregion as they develop MetroCommon x 2050.

David Manugian (Minuteman Advisory Group on Interlocal Coordination) (Town of Bedford) noted that there seems to be a divergence in fortunes between eastern and western Massachusetts, as parts of western Massachusetts are projected to lose population and employment. S. Woelfel stated that MassDOT is working with all the MPOs in the state to have a coordinated conversation about projections. Tim Reardon (MAPC) added that these projections were provided to the <u>Governor's Commission on the Future of Transportation</u>. The final recommendations of the Commission will consider the issue of regional equity and statewide growth.

Dennis Giombetti (MetroWest Regional Collaborative) (City of Framingham) asked whether municipal-level data is available on growth in specific age ranges. S. Philbrick replied that projections for transportation modeling are made for the school-age population at the TAZ level, but other projections at the municipal level may not be workable under the current process.

13.Comparing Large-Scale Transportation Mitigation Programs—*Bill Kuttner, MPO Staff*

Documents posted to the MPO meeting calendar

1. <u>Comparing Large-Scale Transportation Mitigation Programs</u>

B. Kuttner presented the *Core Capacity Constraints* report to the MPO board in 2017. This study examined the capacity of road and transit facilities in the Inner Core of the Boston region and included some discussion of transportation mitigation programs. The *Comparing Large-Scale Transportation Mitigation Programs* study was conducted to better inform a discussion of mitigation practices. This study presents an analytical framework to compare proposed developments and uses this framework to analyze a sample of 16 distinct developments and their mitigation programs.

Sample Developments

- 1. 115 Winthrop Square, Boston
- 2. South Station Air Rights, Boston
- 3. Kendall Square Urban Renewal Project, Cambridge
- 4. Boston Landing, Boston
- 5. Office, Research, and Residences at Assembly, Somerville
- 6. Assembly Square Mixed-Use (Assembly Row), Somerville
- 7. Woburn Landing, Woburn
- 8. 1265 Main Street (Polaroid site), Waltham
- 9. The Station at Riverside, Newton
- 10. Needham Street Redevelopment, Newton
- 11. Center 128, Needham
- 12. Legacy Place, Dedham
- 13. Westwood Station, Westwood
- 14. Apex Center, Marlborough
- 15. New Patriots Stadium (Patriot Place), Foxborough
- 16. Patriot Place West, Foxborough

B. Kuttner defined the local areas around each development and calculated a demographic profile of each local area. Using published development impacts from certificates issued by the Secretary of Energy and Environmental Affairs (EEA) under the Massachusetts Environmental Protection Act (MEPA), B. Kuttner related impacts to the demographic profiles and described mandated mitigation programs.

Aspects of Mitigation Programs

Accommodating and mitigating increased activity and vehicle traffic at or near new developments has long been an important objective in transportation planning. Improving the local road system to accommodate a new development is often referred to as traffic systems management (TSM). TSM measures have proved successful in reducing traffic impacts. Today, however, the underlying traffic and transportation challenges have increased to the point that TSM as practiced in the past is no longer considered sufficient and all large developments are expected to implement transportation demand management programs (TDM). TDM measures all share the goal of reducing auto traffic. Many TDM measures encourage the use of public transportation, but transit systems, in turn, may lack extra capacity at key locations.

Even if a large development's impacts have been fully accommodated within its immediate environs, activity generated by it still affects the region. Thus, mitigation practices and expectations for large developments have evolved. In addition, developer-funded improvements to local public transit infrastructure are becoming more common.

Conclusions and Common Themes

1. All projects are different

Local real estate markets can strengthen or weaken unpredictably. The ability of a development to satisfy the requirements of lenders and investors varies significantly at different points in these cycles. Almost all large developments are characterized as mixed use, but the specific activity mixes vary. Different land uses will generate trips at different rates. The local areas of proposed developments vary significantly. Accessibility to transit at the sample developments ranges from robust to nonexistent. Practical opportunities to add transit services of any type also vary significantly. The sample developments all have some type of road access, but this access varies in capacity and condition. The range of available pedestrian and bicycle facilities is even greater. "Large" projects range widely in size. The sample developments were not the largest developments in the Boston region, but they were large enough to be of analytical interest.

2. Geographical Realms

Transportation mitigation measures can be thought of as being within the interior of a development, at the edge of a development, or some distance from a development. All developments are required to implement sustainability measures within the project itself. The critical concern of transportation mitigation is that nearby residents and business establishments retain an acceptable level of access. The largest developments can have attributable and measureable traffic impacts at intersections throughout their local area. Mitigation agreements can require specific improvements at particular intersections, payment to a town or agency for roadway improvements, or both. Most developments that are required to add transit infrastructure are large enough to fund area-wide roadway improvements as well. New transit infrastructure required as mitigation is usually adjacent the development.

3. Larger Developments Present More Diverse Mitigation Opportunities

Larger developments often have a capability of undertaking more extensive mitigation efforts than smaller developments. The mitigation flexibility inherent in larger developments is illustrated by looking at the six largest sample developments as measured by total square feet:

- Assembly Row, Somerville: The proponent committed \$15 million to the construction of a new Orange Line station. This was in addition to a number of on-site and offsite TSM improvements, parkland and pathway improvements, and TDM programs.
- **Polaroid Site, Waltham**: This project is proceeding in two phases. The first phase mitigation included a number of off-site roadway improvements.
- Westwood Station, Westwood: The off-site infrastructure improvements agreed to include the reconstruction of roadways, which will eventually connect to a rebuilt I-93/I-95 interchange. Ten off-site intersections in the town will be improved at the proponent's expense. Additionally, a total of \$2,675,000 will be made available to the town and the Department of Conservation and Recreation for roadway and parkland improvements.
- South Station Air Rights, Boston: The most important transportation infrastructure improvement that will result from this project is the expansion of the bus terminal by 50 percent.
- **Center 128, Needham**: This development is at an auto-dependent, suburban location, and the primary focus of mitigation is to implement TSM measures in the immediate vicinity of the project. However, the proponent has agreed to contribute \$4,255,000 for roadway improvements throughout the town.
- **Boston Landing, Boston**: The proponent will undertake improvements at more than two dozen offsite intersections in the vicinity of the development. In addition, the proponent has funded entirely the design and construction of a new commuter rail station on the Framingham/Worcester Line and will maintain this station for 10 years.
- 4. Transit Mitigation Builds upon Viable Opportunities

The costs and potential benefits of mitigation efforts to increase transit use vary depending on travel demand patterns and existing transit services and infrastructure. Regional mitigation practices recognize these constraints, and transit infrastructure has been mandated in situations where viable opportunities to expand transit use are present. Requirements to fully or partially fund construction of new transit stations were mitigation commitments of the Boston Landing and Assembly Row developments because the development sites were immediately adjacent to active transit lines.

Process Case Study: Westwood

Many of the aforementioned themes are illustrated by the Westwood project. A four million square-foot development was approved in 2007. The primary mitigation concern focused on alleviating the expected increase in traffic. Extensive mitigation was mandated and deemed adequate by EEA, despite strong opposition in neighboring

communities. During the recession, the original developers pulled out. New developers were approved for a two million square-foot development in 2013. The already approved mitigation package stayed in force. The new proposal included affordable housing, and several off-site road improvements in neighboring towns. Westwood Town Meeting overwhelmingly approved the plan, and neighboring communities are not actively opposing it.

Implications for Transportation Mitigation and Investment

Economic growth increases transportation demand, and accommodating new demand is increasingly difficult. Even the most expansive mitigation programs are small when compared with regional investment needs. Government responses to the gradual increase in regional traffic and the emergence of severe transit system bottlenecks has been funded primarily through user charges such as federal and state gasoline taxes, roadway tolls, and transit fares, supplemented by broad-based taxes, notably a dedicated portion of the state sales tax. Investment programs funded through these sources have not kept pace with the gradual growth in regional travel demand. The question naturally arises as to whether mitigation programs that are effective in addressing the local area impacts of developments might be augmented and redirected to help address stresses on transportation systems on a regional basis.

Significantly expanding mitigation expectations to address regional transportation issues would require legislation, as well as a fundamental reconsideration of how transportation is paid for. The availability and adequacy of user fees and broad-based taxes will in all likelihood determine the pace at which regional infrastructure can be rebuilt or expanded.

Discussion

Note: At this point in the meeting, E. Bourassa assumed the chair's seat.

E. Bourassa asked whether the MEPA mitigation requirements for each development are enumerated in the report.B. Kuttner replied that he summarized the requirements.E. Bourassa asked whether B. Kuttner specified roadway versus transit improvements in the memo.B. Kuttner responded that he did not separate them out in this way.

B. Rawson noted that the mitigation process often feels opaque from the stakeholder perspective, and he urged municipalities and agencies to promote formula-based mitigation that helps municipalities recoup the public benefits of development, such as the per square foot dollar value, affordable housing subsidies, and funds for workforce development and stormwater mitigation, which Somerville currently does.

J. Fitzgerald clarified that B. Kuttner's review of mitigation was limited to MEPA filings.B. Kuttner acknowledged that he used MEPA filings in order to have one unifying baseline for mitigation, and he did not research all the local mitigation deals that may have been worked out between developers and municipalities.

E. Bourassa stated that he hoped this work could lay the foundation for future regional and state discussions about a clearer path for mitigation.

14.Members Items

There were none.

15.Adjourn

A motion to adjourn was made by the At-Large City (City of Everett) (J. Monty) and seconded by the At-Large Town (Town of Arlington) (D. Amstutz). 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)	Daniel Amstutz
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	Steve Woelfel
MassDOT Highway Division	John Romano
Massachusetts Bay Transportation Authority (MBTA)	Eric Waaramaa
MBTA Advisory Board	Paul Regan
Metropolitan Area Planning Council	Fric Bourassa
MetroWest Regional Collaborative (City of Framingham)	Dennis Giombetti
Minuteman Advisory Group on Interlocal Coordination (Town of	Deninis Glombelli Dovid Manugian
Bedford)	David Manugian
North Shore Task Force (City of Beverly)	Denise
North Suburban Dianning Council (City of Waburn)	Tipe Cossidy
Regional Transportation Advisory Council	AnoCripting
Regional Transponation Advisory Council	Fragoso
	Tegin Teich
South Shore Coalition (Town of Braintree)	Christine Stickney
South West Advisory Planning Committee (Town of Medway)	
Three Rivers Interlocal Council (Town of Norwood/Neponset Valley Chamber of Commerce)	Tom O'Rourke

Other Attendees	Affiliation
Lenard Diggins	MBTA Rider Oversight Committee
Bryan Pounds	MassDOT Office of Transportation Planning
Steve Olanoff	TRIC Alternate
Ken Kuttner	Williams College
Jon Seward	Move Mass
Tom Kadzis	Boston Transportation Department
Rich Benevento	WorldTech Engineering
Karen Dumaine	Neponset Valley Transportation Management Association
Frank Tramontozzi	City of Quincy
Sarah Philbrick	MAPC
Jessica Strunkin	495/MetroWest Partnership
Victoria Mier	MassDOT
Imaikalani Aiu	Town of Weston

MPO Staff/Central Transportation Planning Staff

Karl Quackenbush, Executive Director Robin Mannion Mark Abbott Steven Andrews Annette Demchur Ben Erban Róisín Foley Anne McGahan Sandy Johnston Alexandra (Ali) Kleyman Bill Kuttner Scott Peterson Jen Rowe Michelle Scott Katie Pincus Stetner