Draft Memorandum for the Record
Boston Region Metropolitan Planning Organization Meeting

November 8, 2018 Meeting
10:00 AM–12:40 PM, Braintree Town Hall, Cahill Auditorium, 1 John F. Kennedy Memorial Drive, Braintree

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 minutes of the September 20, 2018, meeting
- Approve the work program for *New and Emerging Metrics for Roadway Usage*
- Approve the work program for *Reverse Commute Area Analysis*
- Approve Regional Transit Authority (RTA) representation on the MPO Board
- Approve a set of federally required performance targets for National Highway System (NHS) bridge and pavement condition

Meeting Agenda

1. Introductions
See attendance on page 16.

2. Host Remarks—Melissa Santucci Rozzi, South Shore Coalition, Town of Braintree
M. Santucci Rozzi welcomed the MPO board on behalf of Braintree Mayor Joseph Sullivan. Mayor Sullivan’s statement, read by M. Santucci Rozzi, stated the importance of investing in transportation and housing to support economic growth. Later in the meeting, Mayor Sullivan was able to join the board in person. Mayor Sullivan reiterated his welcome, thanked the board for its work, and stressed the importance of mobilizing to define creative new revenue streams for investing in transportation. Mayor Sullivan also highlighted the importance of education about bicyclists and bike safety for motorists.

3. Public Comments
Eva Willens (Deputy Administrator, MetroWest Regional Transit Authority [MWRTA]) read the following statement on behalf of MWRTA Administrator Edward Carr: “Administrator Carr sends his regrets for not being here himself, but he is attending the
RTA task force meeting as the Governor’s appointee to the task force. For the past several years the MWRTA has sought a seat on the MPO board. The interest began with our first federal triennial audit in 2011 in which the auditor and the Region One Federal Transit Administration (FTA) representative made it very clear that the MWRTA should have its own voice on the MPO board. This has come up in the two subsequent federal audits and will continue to. Following discussion with the Administrator, our understanding of an MPO is that it’s inclusive and not exclusive. However, we feel we are being excluded. If we look at the other 12 statewide MPOs, they all have public transportation representation on their boards. Metro west is in the middle of Boston and Worcester, the two largest cities in New England, and is in the second largest employer, second only to Boston. To not have a seat on this board as metro west’s public transportation provider, is difficult to comprehend as we are experienced and knowledgeable advocates for advancing the use of efficient shared ride modes of transportation in an area that requires and deserves more of it. We request your favorable consideration when voting today. Thank you.”

James Kupfer (Planner, Town of Bellingham) provided an update on Transportation Improvement Program (TIP) project #608887 (Reconstruction of South Main Street [Route 126] - Douglas Drive to Mechanic Street [Route 140] in Bellingham). This project is currently programmed with MPO regional target funds in federal fiscal year (FFY) 2022. J. Kupfer reported that the town expects to complete the design for this project by early 2020 and encouraged the MPO to move the project into an earlier year of the TIP should the opportunity arise.

Charlie Ticotsky (Policy Director, Transportation for Massachusetts [T4MA]) commented in support of agenda item #9, the work program for New and Emerging Metrics for Roadway Usage. C. Ticotsky encouraged the MPO board to approve the work program and continuing pursuing new ways to measure congestion and roadway usage. C. Ticotsky added that T4MA are available to assist in this effort.

4. Chair’s Report—David Mohler, MassDOT
There was none.

5. Committee Chairs’ Reports
There were none.

6. Regional Transportation Advisory Council Report—Tegin Teich, Chair, Regional Transportation Advisory Council
T. Teich reported that the Advisory Council would meet on Wednesday, November 14, 2018, at 3:00 PM at Boston City Hall.
7. Executive Director’s Report—Karl Quackenbush, Executive Director, Central Transportation Planning Staff

There was none.

8. Approval of September 20, 2018, MPO Meeting Minutes—Róisín Foley, MPO Staff

A motion to approve the minutes of the meeting of September 20, 2018, was made by the Metropolitan Area Planning Council (MAPC) (Eric Bourassa) and seconded by the Regional Transportation Advisory Council (T. Teich). The motion carried.

9. Work Program for New and Emerging Metrics for Roadway Usage—Ryan Hicks, MPO Staff

Traditionally, MPO staff conducts separate performance monitoring for different modes. For example, highway performance monitoring activities are separate from transit performance monitoring activities. Because of the varying characteristics of the network, multimodal performance measures (PMs) should be applied to measure congestion as it affects the mobility of motorists, transit riders, bicyclists, and pedestrians. Under this work program, staff will propose a method to measure multimodal travel as it relates to the mobility of motorists, transit riders, bicyclists, and pedestrians rather than vehicles. Once these metrics are determined, staff will recommend ways for them to be integrated into the activities of the Long-Range Transportation Plan (LRTP), the Congestion Management Process (CMP), and other MPO programs. This study was developed because of interest on the part of the Unified Planning Work Program (UPWP) Committee and helps the MPO work towards the Capacity Management and Mobility goal of the LRTP. Staff will conduct a literature review, create an inventory of available datasets, conduct outreach, test potential metrics on selected corridors, and create a final list of recommended PMs to be used in future MPO work. The budget for this study is $60,000 and it is estimated to take 11 months to complete.

Discussion

T. Teich expressed her support for this study and emphasized outreach as an important piece of this work.

E. Bourassa asked R. Hicks to clarify staff’s thinking concerning the selection of corridors for testing. R. Hicks replied that selected corridors will likely be arterials with transit service. E. Bourassa suggested that staff consider metrics for reliability, the lengthening of peak periods, commute length, and commute time caused by delay.
Jay Monty (At-Large City) (City of Everett) noted that using these metrics as a planning tool should focus on the potential that mode shift has to impact congestion. R. Hicks agreed.

David Kucharsky (At-Large Town) (Town of Lexington) asked whether staff will look at selected corridors to see what barriers to the use of certain modes might be in existence. R. Hicks replied that staff will consider this.

T. Teich asked if staff intend to select a corridor that has a TIP or other project scheduled in order to look at the impact on performance. R. Hicks replied that staff has not yet discussed this.

Jim Fitzgerald (City of Boston) (Boston Planning & Development Agency) echoed support for this project and encouraged staff to look at the quality of bicycle and pedestrian accommodations. R. Hicks stated that staff is likely to integrate aspects of previous work on pedestrian and bicycle level of service.

J. Monty suggested that these PMs could be used to measure the benefit of low-cost improvements like bus lanes.

M. Santucci Rozzi suggested selecting an older corridor to compare with a corridor that has received Complete Streets upgrades. R. Hicks agreed.

**Vote**
A motion to approve the work program for *New and Emerging Metrics for Roadway Usage* was made by MAPC (E. Bourassa) and seconded by the Regional Transportation Advisory Council (T. Teich). The motion carried.

**10. Work Program for Reverse Commute Area Analysis—Tom Humphrey, MPO Staff**
The term reverse commuting usually refers to work trips by residents of a major urban area, such as Boston, to and from work locations in its suburbs—the opposite direction from more traditional commuting. This study will examine the present magnitude of reverse commuting in the Boston region, the limitations on such travel imposed by the transportation system, and potential strategies for improving viability of reverse commuting. MPO staff hopes to gain a better understanding of the importance of reverse commuting as part of overall journey-to-work travel in the region and of the potential to match suburban employment opportunities with underemployed urban core residents. The study will identify barriers to commuting between the urban core and significant suburban employment and develop potential strategies for improving transportation options for such trips. Staff will review existing reverse commuting
volumes and mode shares and identify one or more reverse commuting areas for analysis as case studies. Staff will identify existing alternatives and potential improvements for each case study area.

**Discussion**

Paul Regan (Massachusetts Bay Transportation Authority [MBTA] Advisory Board) asked whether the data staff will analyze includes wage data. T. Humphrey replied that staff will analyze wage data.

Dennis Giombetti (MetroWest Regional Collaborative [MWRC]) (City of Framingham) stressed reverse commuting as a crucial issue for the business community in Framingham, stating that businesses are unable to attract millennial workers from the inner core due to the difficulty of reverse commuting.

Daniel Amstutz (At-Large Town) (Town of Arlington) asked whether trip length and its impact on mode choice will be considered. T. Humphrey replied that staff will consider this.

Tom O’Rourke (Three Rivers Interlocal Council) (Town of Norwood/Neponset Valley Chamber of Commerce [NVCC]) echoed D. Giombetti’s comments and added that the hospitality and service industries also struggle to fill jobs in the suburbs. T. O’Rourke added that NVCC is conducting an employer survey and may have data to share.

Aaron Clausen (North Shore Task Force) (City of Beverly) echoed D. Giombetti’s and T. O’Rourke’s comments and noted that Beverly is working with MAPC on a shuttle pilot project and may also have data to share. MAPC conducted a first-mile/last-mile study on the North Shore several years ago.

David Koses (At-Large City) (City of Newton) noted the wide range of possibilities for case studies and asked how staff will narrow them down. T. Humphrey replied that this will most likely hinge on which areas have the most available data.

**Vote**

A motion to approve the work program for *Reverse Commute Area Analysis* was made by MWRC (City of Framingham) (D. Giombetti) and seconded by MAPC (E. Bourassa). The motion carried.

11. **Regional Transit Authority (RTA) Representation on the MPO Board**—Karl Quackenbush, Executive Director, MPO Staff

The MPO last underwent its quadrennial transportation planning certification review in 2014. One recommendation made by the US Department of Transportation (USDOT) in
its final report on that review, issued in May 2015, pertain to the MPO’s organizational structure. The reviewers noted that the Moving Ahead for Progress in the 21st Century Act (MAP-21) requires representatives of public transit providers to be represented on MPO boards, but that two small providers in the Boston region, MWRTA and Cape Ann Transit Authority (CATA), are not directly represented. Those RTAs are distinguished from others in the region in that they operate entirely within this region and are not represented on any MPO board. USDOT recommended that the MPO work to find a mutually satisfactory way of representing the RTAs on the MPO board that also satisfies MAP-21 requirements. (Subsequent federal legislation, the Fixing America’s Surface Transportation Act, continues this requirement and stipulates that a representative of a transit provider may also represent a local community on the MPO board.) The Boston Region MPO has substantively discussed the issue of RTA representation on the board twice, but no decisions have been made, and the matter remains unresolved.

MPO staff conducted research into how other MPOs nationwide handle RTA representation. Based on this research, staff presented five possible options for the Boston Region MPO board to consider:

1. Provide seats for MWRTA and CATA on the MPO board.
2. Empower the two subregional representatives—MetroWest Regional Collaborative and North Shore Task Force (NSTF)—whose subregions roughly correspond to the RTA service areas to represent the RTAs.
3. Form a transit committee composed of the two RTAs, and other members, and provide a seat on the board for a representative of the committee.
4. Charge the MBTA with representing the interests of the two RTAs.
5. Rededicate one of MassDOT’s seats to the MassDOT Rail and Transit Division and have that entity represent the interests of the two RTAs.

Ensuing discussion resulted in no consensus, but most members who spoke expressed interest in the first and third options. Staff was asked to conduct research about entities that might sit on a transit committee, what such a committee’s functions would be, and statistics about those providers that operate transit in the region. Possible members of a transit committee, in addition to MWRTA and CATA, could include the following:

- Four other RTAs that provide service in this region
- Transportation Management Associations (TMA)
- Municipal transit providers, such as those in Beverly and Dedham
- Intercity private bus operators
- MPO local representatives
- MassDOT and the MBTA
Advocates and other interested parties, including the Massachusetts Bus Association, MassCommute, Councils on Aging, Regional Coordination Councils, Amtrak, and the Northern New England Passenger Rail Authority

No decisions were made. Staff was asked to speak with potential members of a transit committee to gauge overall interest in the idea. As requested, staff canvassed potential members of a transit committee to gauge interest. RTAs that have partial operations in the Boston region, TMAs, and municipally operated transit providers were included in this outreach effort. Not all who were asked responded to our inquiries; of those who did, all expressed an interest in serving on a committee were one to be formed. There have been no more substantive discussions of this issue by the MPO board since June 2017, so the matter remains unresolved. In the meantime, the MPO has just undergone another transportation planning certification review.

Discussion

P. Regan asked whether either RTA has expressed interest in representation on the MPO board, particularly CATA. K. Quackenbush replied that both RTAs have expressed interest.

Nelson Hoffman (Federal Highway Administration [FHWA]) emphasized that FHWA does not have an opinion on which particular alternative the MPO should choose, but that whichever option is chosen should be acceptable to MWRTA and CATA.

E. Bourassa asked MWRTA to elaborate on its desire for a board seat. E. Willens stated that MWRTA believes that it can represent the concerns of suburban transportation at a deeper level than MassDOT or the MBTA, and should have a vote on funding for transit and other transportation projects in the MetroWest subregion and the Boston region as a whole.

D. Koses asked how a transit committee would differ from the Advisory Council. T. Teich replied that while the Advisory Council has representation from some transit providers, it is not solely transit-focused.

D. Amstutz asked what the benefit of a transit committee would be, and how the committee would be represented on the MPO board. D. Mohler replied that a committee would be a place for MWRTA, CATA, MassDOT Rail and Transit, MBTA, and others to coordinate and discuss the TIP process and other MPO activities. The structure of the committee remains to be decided. The MPO’s Memorandum of Understanding (MOU) will need to be revised. D. Mohler stated that there are two main options for committee representation on the MPO. An MPO board member could attend the transit committee
and report to the board, or the MPO board could add a voting member specifically from the transit committee.

Tom Kadzis (City of Boston) (Boston Transportation Department) asked whether another option would be to expand the seats that the MBTA has. D. Mohler replied that MassDOT would oppose this, adding that MassDOT, the MBTA, and the RTAs do not feel the MBTA representative should also represent the interests of RTAs. The RTAs also do not feel MassDOT Rail and Transit should represent their interests. T. Kadzis asked whether MWRTA felt the representative from the MetroWest Regional Collaborative has so far represented its interests adequately. E. Willens replied that they believe MWRC, the City of Framingham, and D. Giombetti have represented them well. D. Giombetti added that RTAs do not exist in a vacuum and have a perspective on suburban transit needs that other representatives do not necessarily have and cannot fully represent. D. Giombetti added that he favors a seat for RTAs that rotates between MWRA and CATA, given that the creation of a new committee might be cumbersome.

T. Teich stated that a committee might be more work intensive at the outset but more flexible and inclusive in the long term, given the need to advance transit in the region.

P. Regan, M. Santucci Rozzi, and D. Koses expressed support for a transit committee with representation on the MPO board.

David Manugian (Minuteman Advisory Group on Interlocal Coordination) (Town of Bedford) stated that an additional vote on the board represents a slight shift in overall voting weight towards the interests of transit.

J. Monty asked whether the MBTA would participate in the transit committee. D. Mohler stated that the MBTA would likely participate but not be elected as the representative, so that the MBTA does not have an additional vote. D. Mohler stated his expectation that, at least initially, one of the two RTAs would represent the committee.

Samantha Silverberg (MBTA) stated that it makes sense for the MBTA to participate on the committee, but that the MBTA has no interest in additional votes.

E. Bourassa asked about the cost and staff time necessary to create and provide support to a transit committee. K. Quackenbush replied that there would be a resource cost should a transit committee be formed, likely in the tens of thousands of dollars.

D. Giombetti asked whether the MPO could create an interim RTA seat to be held by MWRTA for the first three years of the committee’s existence. D. Giombetti motioned to this effect, the details of which are below.
A. Clausen asked why the initial term for MWRTA should be three years. D. Giombetti replied that other MPO representatives serve three-year terms and this would allow time for participating entities to become familiar with the MPO process.

D. Kucharsky asked whether the MPO will be involved in determining membership of the transit committee. D. Mohler replied that MPO staff would likely present recommendations to the MPO board for approval.

T. Kadzis asked who would be qualified for the committee and whether it would include private entities. D. Mohler stated that RTAs are recipients of federal transit grants and the original recommendation was to provide them representation. Beyond their membership, there is a wide range of entities that could possibly participate.

D. Koses stated that the MPO should not decide who the designee is in advance of establishing the committee.

T. Teich asked staff to remain in conversation with the Advisory Council as the transit committee is developed to foster future coordination between the two bodies.

Steve Olanoff (Three Rivers Interlocal Council [TRIC] Alternate) registered support for a transit committee and asked staff to provide model bylaws for the committee.

D. Amstutz asked that staff present a potential budget and outline of staff support for the transit committee to the MPO.

Vote
A motion to amend the MPO’s MOU to create an additional seat on the MPO board for a transit subcommittee, members to be determined, to be held by MWRTA for an initial three-year term, was made by the MWRC (City of Framingham) (D. Giombetti) and seconded by the TRIC (Town of Norwood/NVCC) (T. O’Rourke). The South Shore Coalition (Town of Braintree) (M. Santucci Rozzi) and At-Large City (City of Newton) (D. Koses) opposed. The motion carried.

12. Establishing Performance Measures and Targets for Bridge and Pavement Conditions—Jack Moran, MassDOT, and Michelle Scott, MPO Staff
Under federal rules, states must establish two- and four-year targets for the condition of NHS bridge and pavement assets. MassDOT set state targets for these measures on May 20, 2018. MPOs have until November 16, 2018, to endorse the state’s targets or set other targets. The federally required PMs are:
1. Percent of NHS bridges [by deck area] that are in good condition; percent of NHS bridges [by deck area] that are in poor condition
2. Percent of Interstate Highway System pavements that are in good condition; percent of Interstate Highway System pavements that are in poor condition
3. Percent of non-Interstate NHS pavements that are in good condition; percent of non-Interstate NHS pavements that are in poor condition

**Bridges**

The federal PM quantifies bridge condition based on area. Bridges on the NHS constitute 44 percent of Massachusetts National Bridge Inventory (NBI) structures, but 70 percent of all bridge area in the state. The majority of NHS bridges in Massachusetts are under MassDOT jurisdiction. To establish bridge condition under the federal measure, NBI data is used to rate the three major components of a bridge: deck, superstructure, and substructure. The lowest rating of the three components determines overall bridge condition. The percent of NHS bridges considered in good or poor condition is equal to the total deck area of NHS bridges in good or poor condition divided by total NHS bridge deck area.

To identify targets, MassDOT used historical data on the growth of NHS bridge deck area rated as poor (or structurally deficient, in previous MassDOT parlance). MassDOT’s forecasted targets (see table below) account for planned investment as well as deterioration. MassDOT estimated the annual growth of poor deck area to be 300,000 square feet per year. If growth of poor deck area is equivalent to (or less than) the 10-year historical average, the capital program will reduce the share of NHS bridges in poor condition.

<table>
<thead>
<tr>
<th>Federally Required Bridge Condition Performance Measure</th>
<th>2018 Measure Value (Baseline)</th>
<th>Two-Year Target (CY 2019)</th>
<th>Four-Year Target (CY 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of NHS Bridges (by deck area) that are in good condition</td>
<td>15.2%</td>
<td>15.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Percent of NHS Bridges (by deck area) that are in poor condition</td>
<td>12.4%</td>
<td>13.0%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

CY = Calendar Year. NHS = National Highway System.

Federal regulation has established 10 percent as a poor-condition threshold, above which states must obligate a minimum amount of National Highway Performance
Program (NHPP) funds to NHS on-system bridges. MassDOT exceeds the poor threshold and currently programs funds to NHS bridges in excess of the minimum amount.

**Pavement**

The NHS constitutes 16 percent of statewide-accepted roadway lane mileage. About 73.5 percent of this mileage is under MassDOT jurisdiction, including the entire Interstate System and approximately 62 percent of NHS non-interstate lane-miles. Municipalities are in charge of 24.4 percent of miles, and the remaining roadways are owned by Massport, the Massachusetts Department of Recreation, and the federal government. MassDOT manages capital investment for state-owned portions of the NHS and collects condition data on the entire system regardless of ownership. The Boston MPO region has 42.89 percent of municipally owned NHS mileage in the state, and the City of Boston has 10.3 percent.

Though based on similar metrics, the federal PM differs from the Pavement Serviceability Index (PSI) used historically by MassDOT to monitor pavement condition. Roughly speaking, pavement that is considered “Good,” under the federal PM is “Excellent” based on PSI, and some of the pavements rated “Poor” based on PSI is rated “Fair” by the federal measures. The federal pavement PMs classify Interstate Highway System pavements as in good, fair, or poor condition based on the pavements’ International Roughness Index (IRI) value and one or more pavement distress metrics (cracking and/or rutting and faulting) depending on the pavement type (asphalt, jointed concrete, or continuous concrete). FHWA sets thresholds for each metric that determine whether the metric value is good, fair, or poor, along with thresholds that determine whether the pavement segment as a whole is considered to be in good, fair, or poor condition.

The setting of pavement condition targets for the first performance period is challenging given the lack of historical data for the new federal measures. MassDOT’s approach is to use past indicators for a trend, set conservative targets (see table below), and review these targets in 2020.
### Federally Required Pavement Condition Performance Measure

<table>
<thead>
<tr>
<th>Measure</th>
<th>2017 Measure Value (Baseline)</th>
<th>Two-Year Target (CY 2019)</th>
<th>Four-Year Target (CY 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Interstate Highway System pavements that are in good condition</td>
<td>74.2%</td>
<td>70.0%</td>
<td>70.0%</td>
</tr>
<tr>
<td>Percent of Interstate Highway System pavements that are in poor condition</td>
<td>0.1%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Percent of Non-Interstate NHS pavements that are in good condition</td>
<td>32.9%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Percent of Non-Interstate NHS pavements that are in poor condition</td>
<td>31.4%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

*CY = Calendar Year. NHS = National Highway System.*

### Vote

A motion to adopt targets for federally required bridge and pavement condition performance measures was made by the MWRC (City of Framingham) (D. Giombetti) and seconded by At-Large City (City of Everett) (J. Monty). The motion carried.

### 13. Safe Routes to School Infrastructure Program—*Cassandra Bligh, MassDOT*

The MassDOT Safe Routes to School (SRTS) program works with schools, communities, students, and families to increase active transportation among elementary and middle school students across Massachusetts regardless of ability, socioeconomic status, or race. SRTS is a federal program funded with Transportation Alternatives Program (TAP) funds. SRTS uses the six E’s to implement its program: Education, Encouragement, Enforcement, Evaluation, Engineering, and Equity. SRTS education activities include workshops on bike safety and resources for teachers and parents. SRTS holds school and community forums and sponsors state Walk and Bike to School Day activities. SRTS also partners with local police to encourage enforcement of traffic safety and provides training for crossing guards. To evaluate the walking and biking environment, SRTS creates surveys for parents and students and conducts walk audits and pick-up and drop-off observations to identify areas for improvement. SRTS also provides funding for changes to the built environment through engineering improvements.
SRTS has two funding programs. The first is the Signs and Lines pilot program, which provides funding for improvements costing $10,000 or less. The second is the Infrastructure Project Funding program. SRTS is about to open a new application period for this program, which funds projects costing approximately $100,000 to $1 million, including sidewalk improvements, traffic calming, and on- and off-street bicycle and pedestrian facilities. The application for this program is integrated into the Massachusetts Project Intake Tool (MaPIT). The application requires a municipal co-applicant to ensure coordination between schools and municipalities. The first application period will begin in November or early December. Selected projects will be advanced through the MassDOT project design process. To be eligible, public and charter K-8 schools must be SRTS partners for at least six months. Projects must be within two miles of the school. Recurring costs are not eligible for funding. Interested schools can review the Infrastructure Application Guidance Document on the SRTS website.

Discussion
D. Koses asked whether it is better for schools or cities to be project proponents. C. Bligh replied that schools are project proponents, with a municipal co-applicant.

D. Amstutz asked how schools become SRTS partners, what the technical assistance capacity of the SRTS office is, and how to apply for the Signs and Lines pilot. C. Bligh replied that schools become partners by contacting SRTS and completing a form. C. Bligh added that SRTS has never turned down a request for a walk audit or other assessment, and the Signs and Lines pilot is currently available to interested municipalities.

Staff
The objective of the Bicycle Level-of-Service (LOS) project was to create a performance-monitoring tool to assess bicycle travel along route segments. Staff previously conducted the Pedestrian LOS project, creating the Pedestrian Report Card Assessment (PRCA) tool. Staff is currently creating an online dashboard for PRCA, and used PRCA as a model for creating a Bicycle Report Card (BRC) tool. Staff began by conducting a literature review of existing resources to establish important factors for measuring the bicycling environment. Similar to the PRCA tool, the grading categories in the BRC address four of the six MPO goals; safety, system preservation, capacity management and mobility, and economic vitality. The grading categories are broken down into factors found in the literature review and weighted as seen in the table below.
<table>
<thead>
<tr>
<th>Grading Category</th>
<th>Performance Measure</th>
<th>Weight</th>
<th>Percent of Grading Category Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Management and Mobility</td>
<td>Bicycle Facility Presence</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>Capacity Management and Mobility</td>
<td>Proximity to Bike Network</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Capacity Management and Mobility</td>
<td>Proximity to Transit</td>
<td>1</td>
<td>17%</td>
</tr>
<tr>
<td>Economic Vitality</td>
<td>Bike Rack Presence</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>Economic Vitality</td>
<td>Land Use</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>Safety</td>
<td>Bicycle Facility Presence</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Safety</td>
<td>Absence of Bicycle Crashes</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Safety</td>
<td>Bicyclist Operating Space</td>
<td>1</td>
<td>17%</td>
</tr>
<tr>
<td>Safety</td>
<td>Number of Travel Lanes</td>
<td>1</td>
<td>17%</td>
</tr>
<tr>
<td>System Preservation</td>
<td>Bicycle Facility Continuity</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>System Preservation</td>
<td>Bicycle Facility Condition</td>
<td>1</td>
<td>50%</td>
</tr>
</tbody>
</table>

To address the MPO’s transportation equity goal, the BRC analyzes five factors to determine if an area should be prioritized:

- Traffic analysis zones (TAZ) where income is equal to or less than $45,392, which is 60 percent of the Boston metropolitan region median income
- TAZs where the minority population is equal to or more than the Boston metropolitan region median of 28.2 percent of the population
- TAZs where the share of the population younger than 16 years of age is equal to or more than the Boston metropolitan region average of 18.2 percent
- TAZs where the amount of households that do not own a vehicle is equal to or more than the Boston metropolitan region average of 16.1 percent
- Locations within one-quarter mile of a school or college

Roadway segments and intersections are classified based on the number of transportation equity factors that apply to them. For example, a location with zero or one factor is classified with the lowest priority level; a location with two or three factors is a moderate priority; and a location with four or five factors has the greatest priority. The larger the presence of transportation equity factors at a location, the more important a high-quality bicycle environment is.

Staff conducted test runs of the BRC on two roadways, selected segments of Causeway Street and Boylston Street in Boston. Boylston Street received F grades for Capacity
Management and Mobility, Safety, and System Preservation, and an A grade for Economic Vitality. Causeway Street received A grades for Capacity Management and Mobility, Safety, and System Preservation, and an F for Economic Vitality. Both segments rated as a Moderate Priority for Transportation Equity.

MPO staff recommends that staff pursue a follow-up project to create a bicycle report card monitoring program and develop a dashboard to support planners, engineers, and the general public in using the tool.

**Discussion**
D. Amstutz asked whether there is a standard corridor length for applying the BRC tool. C. Claude replied that the BRC is best applied when assessing distances of a few blocks at most, and longer roadway segments should be broken into shorter distances for the most accurate results.

**15. Members Items**
There were none.

**16. Adjourn**
A motion to adjourn was made by the MBTA Advisory Board (P. Regan) and seconded by the Advisory Council (T. Teich). The motion carried.
## Attendance

<table>
<thead>
<tr>
<th>Members</th>
<th>Representatives and Alternates</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-Large City (City of Everett)</td>
<td>Jay Monty</td>
</tr>
<tr>
<td>At-Large City (City of Newton)</td>
<td>David Koses</td>
</tr>
<tr>
<td>At-Large Town (Town of Arlington)</td>
<td>David Amstutz</td>
</tr>
<tr>
<td>At-Large Town (Town of Arlington)</td>
<td>David Kucharsky</td>
</tr>
<tr>
<td>City of Boston (Boston Planning &amp; Development Agency)</td>
<td>Jim Fitzgerald</td>
</tr>
<tr>
<td>City of Boston (Boston Transportation Department)</td>
<td>Tom Kadzis</td>
</tr>
<tr>
<td>Federal Highway Administration</td>
<td>Nelson Hoffman</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td></td>
</tr>
<tr>
<td>Inner Core Committee (City of Somerville)</td>
<td></td>
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<tr>
<td>Massachusetts Department of Transportation (MassDOT)</td>
<td>David Mohler</td>
</tr>
<tr>
<td>MassDOT Highway Division</td>
<td></td>
</tr>
<tr>
<td>Massachusetts Bay Transportation Authority (MBTA)</td>
<td>Samantha Silverberg</td>
</tr>
<tr>
<td>Massachusetts Port Authority</td>
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<tr>
<td>MBTA Advisory Board</td>
<td>Paul Regan</td>
</tr>
<tr>
<td>Metropolitan Area Planning Council</td>
<td>Eric Bourassa</td>
</tr>
<tr>
<td>MetroWest Regional Collaborative (City of Framingham)</td>
<td>Dennis Giombetti</td>
</tr>
<tr>
<td>Minuteman Advisory Group on Interlocal Coordination (Town of Bedford)</td>
<td>David Manugian</td>
</tr>
<tr>
<td>North Shore Task Force (City of Beverly)</td>
<td>Aaron Clausen</td>
</tr>
<tr>
<td>North Suburban Planning Council (City of Woburn)</td>
<td>Tegin Teich</td>
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<tr>
<td>Regional Transportation Advisory Council</td>
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<tr>
<td>South Shore Coalition (Town of Braintree)</td>
<td>Melissa Santucci Rozzi</td>
</tr>
<tr>
<td>South West Advisory Planning Committee (Town of Medway)</td>
<td></td>
</tr>
<tr>
<td>Three Rivers Interlocal Council (Town of Norwood/Neponset Valley Chamber of Commerce)</td>
<td>Tom O’Rourke</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Other Attendees</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cassandra Bligh</td>
<td>MassDOT</td>
</tr>
<tr>
<td>Joy Glynn</td>
<td>MWRTA</td>
</tr>
<tr>
<td>Eva Willens</td>
<td>MWRTA</td>
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<tr>
<td>John Moran</td>
<td>MassDOT</td>
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<tr>
<td>James Kupfer</td>
<td>Town of Bellingham</td>
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<tr>
<td>David Alschuler</td>
<td>Town of Hingham</td>
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<tr>
<td>Charlie Ticotsky</td>
<td>T4MA</td>
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<tr>
<td>Steve Olanoff</td>
<td>TRIC</td>
</tr>
<tr>
<td>Frank Tramontozzi</td>
<td>City of Quincy</td>
</tr>
<tr>
<td>James Arsenault</td>
<td>Town of Braintree</td>
</tr>
</tbody>
</table>

**MPO Staff/Central Transportation Planning Staff**

Karl Quackenbush, Executive Director  
Robin Mannion  
Scott Peterson  
Annette Demchur  
Mark Abbot  
Casey-Marie Claude  
Róisín Foley  
Ryan Hicks  
Tom Humphrey  
Alexandra (Ali) Kleyman  
Anne McGahan  
Katie Pincus-Stetner  
Michelle Scott