

## Meeting Notes

**Date:** December 13, 2018  
 10:00 A.M. – Noon

**Place:** Transportation Board Room  
 10 Park Plaza, 2<sup>nd</sup> floor

**Notes Taken By:** Rail Vision Team

**Project Name:** MBTA Rail Vision  
 Advisory Committee – Meeting 4

### ATTENDANCE

#### Advisory Committee Members

Senator William Brownsberger  
 Representative Carolyn Dykema  
 Representative Daniel Ryan  
 Mayor Mike Cahill  
 Wade Blackman, Congresswoman Clark's Office  
 Lucas Santos, Representative Moulton's Office  
 Jim Aloisi, TriMount Consulting  
 Kathryn Carlson, A Better City  
 Stephanie Cronin, Middlesex 3  
 Ben Forman, MassInc  
 Helena Fruscio Altsman, EOHED  
 Paul Matthews, 495 Partnership  
 Chris Osgood, City of Boston  
 Joshua Ostroff, T4MA  
 Travis Pollack, MAPC  
 Susanne Rasmussen, City of Cambridge

#### Consultant Team

Theresa Carr, VHB  
 Kristine Wickham, VHB  
 Jack Benoit, VHB  
 Nancy Farrell, RVA  
 Amanda Poggenburg, RVA  
 Stefan Reul, Steer  
 Darrell Smith, Steer

#### MassDOT/MBTA

Scott Hamwey, MassDOT  
 Mike Muller, MBTA  
 Alexandra Markiewicz, MassDOT  
 Jody Ray, MBTA

#### Public

Joe Aiello  
 Dennis Baker  
 Paige Duncan  
 Ethan Finlan  
 Kevin Hart  
 D. Helsa  
 John Hixson  
 Elizabeth Hong  
 Beth Isler  
 Andrew Jennings  
 David Melly  
 Christopher Parker  
 Andrew Reker  
 Mark Sternman  
 Pete Stidman  
 Robert Walts  
 James Wensley  
 Beth Wierling

This document summarizes the discussion at the December 13, 2018, MassDOT/MBTA Rail Vision Advisory Committee meeting. All references to slides relate to the presentation which has been posted to the [project website](#).

## Meeting Notes

### WELCOME

Nancy Farrell, RVA, team member and meeting moderator, welcomed the members and introduced the new Advisory Committee member, Wade Blackman, representing Congresswoman Katherine Clark. N. Farrell outlined the meeting agenda, which consisted of: a review of the Tier 1 evaluation key takeaways, a presentation and discussion of potential Tier 2 service alternatives, and updates on fare policy and public outreach. The public was welcome to make comments or ask questions at the end of the meeting.

### TIER 1 EVALUATION KEY TAKEAWAYS

S. Hamway, MassDOT Project Manager, reviewed the evaluation process: ideas were developed, the team conducted a qualitative screening, a long list of concepts was generated, the team conducted the Tier 1 evaluation, up to eight service alternatives would be developed (current stage of the process). Following the discussion from this meeting, as well as conversations with the Fiscal Management and Control Board (FMCB), the team will conduct the Tier 2 evaluation, and the Vision will be developed. The team looked specifically at reducing travel times, increasing frequency, and improving service connectivity when defining service concepts in the evaluation process to date, as well as the six objectives outlined for the project: Match service with growing and changing needs of the system; enhance economic vitality in the Commonwealth; improve the passenger experience; provide an equitable and balanced suite of investments; help the Commonwealth achieve its climate change resiliency targets; and maximize return on investment.

### PRESENTATION AND DISCUSSION OF POTENTIAL TIER 2 SERVICE ALTERNATIVES

#### Team Presentation of Six Tier 2 Service Alternatives

S. Hamway reviewed the purpose of the discussion. The team is still considering alternatives that include line-by-line optimization based on the Tier 1 analysis. Feedback from the Advisory Committee and the FMCB (meeting on 12/17) will be incorporated into an updated set of alternatives, which will be presented at January's Advisory Committee and FMCB meetings. He explained that the proposed Tier 2 alternatives were informed by what the team learned from the Tier 1 analysis and from the Advisory Committee, specifically the priorities discussed at the last meeting.

S. Hamway explained that all alternatives include elements involving: more frequent, bi-directional service; presumption that infrastructure necessary to support the alternative will already be in place; signal upgrades will support service plans (including Positive Train Control system-wide); and that they include West Station; Haverhill/Lowell Interlining; and Franklin/Fairmount Interlining. Other elements featured in various alternatives include: service focus (key stations, inner core); frequency (15, 30, 60 minutes) during the peak and off-peak periods; electrification (full, partial, none); rolling stock (electric, diesel, multiple units); terminal capacity (North-South Rail Link (NSRL), South Station Expansion (SSX), existing); system expansions (South Coast Rail (SCR) Phase 1, SCR Full Build), Grand Junction, Foxboro); additional interlining; and station accessibility.

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S. Hamwey showed a slide of the system as it is today and noted that members can use it for comparison.

### How the alternatives address station typologies

S. Hamwey explained the three different station typologies: inner core stations – locations served by Urban Rail; key stations – Gateway cities, TOD nodes, more urban areas, areas with reverse commute, and high auto access locations; and other stations – regional and local locations not addressed as inner core or key stations. He reviewed the six potential Tier 2 service alternatives. The numbered alternatives range from #1 likely to need the lowest up-front capital investment and #6 needing the highest investment:

1. Modernize existing system – focuses on utilizing existing infrastructure
2. Regional rail to key stations
3. DMU Urban Rail
4. EMU Urban Rail – with partial electrification
5. EMU Urban Rail + regional rail to key stations and full system electrification
6. Electrified/integrated – full system electrification

Comments from the Advisory Committee:

- J. Aloisi stated that the cost spectrum only looks at capital investment, not cost over time. He feels that moving to an all-electric system should consider cost over time, useful life, and cost of emissions. S. Hamwey replied that the Tier 2 evaluation will look at operating and maintenance costs as well as the up-front capital costs. The team will get information on those considerations as the analyses move along. J. Aloisi pointed out that people might look at the ranking and see, if you promote electrification, that you're for the most expensive option. S. Hamwey replied that the team is happy to take suggestions on how to describe the alternatives.

### How the alternatives address frequency

S. Hamwey explained that each alternative has a lot of moving pieces and parts. Each slide identifies a variable feature and members can see what changes across the six alternatives with that variable. The aim in Urban Core areas is for a high-level of frequency. He directed attention to three scenarios that prioritize key stations outside the bus network and where the potential for reverse commute is high. The alternatives also have lower capital cost and higher capital cost versions.

Comments from the Advisory Committee:

- L. Santos stated that it's confusing that infrastructure is being presented with scheduling changes. He asked if there is a way to separate infrastructure investments. S. Hamwey replied that the capital investments included in each alternative are those required to support the service frequencies. L. Santos said that if they are asking committee members to vote, bundling them together makes it harder for the members to know what value is added.
- H. Altsman asked if there is a reason the EMU and DMU aren't considered as one alternative (together) instead of two, stating that it would make it easier to compare the scenarios. S.

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Hamwey replied that the reason for this is to pinpoint differences in efficiency, cost, and traveler benefits associated with the electrification aspect of an EMU when compared to DMU.

- K. Carlson asked if there is going to be a next level that will look at what infrastructure investments are needed for different levels of train frequency, such as what it would take to run 30-minute headways everywhere. That would be a useful way to look at all these. She also asked if there will be an overall infrastructure analysis. S. Hamwey responded in the affirmative. K. Carlson then asked about investments required for electrification itself. S. Hamwey again replied in the affirmative.
- J. Aloisi asked how he would describe differences between Alternatives 1 and 2. S. Hamwey replied that Alternative 2 adds frequency to Key Stations in the outer core compared to Alternative 1. J. Aloisi asked if that means more express trains. S. Hamwey explained that it could, that the concept of express and zonal express is a part of all alternatives that serve Key Stations.

### How the alternatives address electrification

S. Hamwey stated that three scenarios do not include electrification and three include partial or full electrification.

### Comments from the Advisory Committee:

- P. Matthews stated that he appreciates what the team has done with prior analyses. He said that he thinks that, with the prior analyses, it's unclear how far the team has drilled down to estimate GHG emissions. It's important to put into context how the alternatives align with state GHG goals. He also stated that it's important to find out what's going to happen at these stations should these alternatives move forward. S. Hamwey reviewed the team's thoughts in generating the six alternatives, clarifying that the team needs to explore the benefits and costs of partial and full electrification compared to no electrification.
- L. Santos asked if they could hear more about that. S. Hamwey replied that they would explore both costs and benefits associated with electrification.
- S. Rasmussen said that there's also an issue of if better service is provided, more people will get out of cars. That mode shift also drives GHG emissions, not just electrification's impacts on train GHG emissions.

### How the alternatives address terminal capacity

S. Hamwey stated that the team knows there are capacity issues. At North and South Station two ideas that are not inexpensive have been studied: South Station Expansion (SSX) and North-South Rail Link (NSRL). The six alternatives either explore what can be done without expanding terminal capacity (Alternatives 1 and 2), what can be done with SSX (Alternatives 3, 4, and 5) and what can be done with NSRL (Alternative 6).

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### Comments from the Advisory Committee:

- J. Aloisi asked how the team is assuming the use of Grand Junction. He asked if the team can look at an alternative with neither NSRL or SSX, but still makes rail more efficient out of South Station, as an overlay. He also stated that he doesn't see how Alternative #5 can't look at NSRL, that if it makes sense with Alternative #6 then it makes sense with #5. S. Hamwey replied that the Grand Junction is included in three of the service alternatives, and that the big difference between Alternatives #5 and #6 is that #6 is trying to provide high frequency service across all stations. He also explained that putting NSRL in one alternative allows everyone to understand its effects compared to a similar alternative without it. J. Aloisi commented that including SSX in three alternatives and NSRL in one gives the appearance that SSX is the preferred option of the two.

### How the alternatives address system expansion

S. Hamwey explained that in non-electrified options, South Coast Rail (SCR) would be different than in electrified options. Alternatives 1, 2, and 3 – non-electrified Alternatives – include SCR Phase 1 extending down from the Middleborough Branch. Alternatives 4, 5, and 6 – electrified Alternatives – include SCR Full Build extending down from the Stoughton Line. SCR is a project unto itself and the service alternatives will not bear the cost of building it – rather it will be an assumption going into each service alternative. Grand Junction would extend to Kendall Square (Red Line connection) in Alternatives 4 and 5, and continue to North Station in Alternative 6.

### How the alternatives address interlining

S. Hamwey said there are ways to provide new connections that don't exist today by avoiding the capacity constraints in North and South Stations. There may be value in continuing to interline Haverhill trains to the Lowell Line, and increasing the number of trains that do this. Similarly, there is benefit in interlining some Franklin trains to the Fairmount Line. More complicated options are interlining Greenbush and Kingston with coordinated transfers through Braintree, which could address some capacity concerns between Braintree and South Station. Another possibility would be bypassing North Station by routing Newburyport service through the Fitchburg line.

### How the alternatives address station accessibility

S. Hamwey stated that station investments or accessibility will work to improve the boarding process. He explained that in service models to key stations, the team is assuming every key station would be upgraded to be fully accessible. For service models featuring Urban Rail, the team is assuming that every station within the Inner Core would be upgraded to be fully accessible. Alternative 6 assumes fully accessible stations system-wide.

### Explanation of service alternative maps

S. Hamwey reviewed the system maps generated for each of the alternatives:

- Alternative #1 Modernize Existing System: this alternative is taking advantage of things learned through the first tier (pulse service, zonal, bi-directional service). It is working largely with the

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same system as today. It will bring all services up to 30 min peak/60 off peak frequency, with no electrification, using diesel locomotives already in service. It will use the existing terminals and assumes South Coast Rail Phase 1. Interlining will be done with the Haverhill/Lowell and Franklin/Fairmount lines. Station accessibility will be what already exists or is programmed.

- Alternative #2 Regional Rail to Key Stations: this alternative is doing what Alternative #1 does in peak/off peak frequency for the inner core and other stations but increasing the frequency at key stations to every 15 minutes, with no electrification, using diesel locomotives already in service.
  - H. Altsman asked if parking is a consideration. S. Hamwey replied by explaining that the team wishes to model some of the service alternatives with unconstrained parking to understand how people wish to access each station. However which alternative and how many has not been decided and it could be a good discussion for the next meeting.
- Alternative #3 DMU Urban Rail: this alternative treats key stations and other stations the same as Alternative #1, but inner core service will be brought up to 15-minute headway all day. There is an additional capital expense for procuring and maintaining DMUs.
- Alternative #4 EMU Urban Rail: this alternative is similar to Alternative #3 but features partial electrification as the system invests in EMUs to provide urban rail. Alternative #4 also electrifies the Providence Line.
- Alternative #5 EMU Urban Rail + Regional Rail to Key Stations: this alternative includes a fully electrified network. Key stations and inner core would have a 15-minute headway all day, while other stations will have the 30-minute peak/60-minute off peak frequency.
- Alternative #6 Electrified/integrated: this alternative is a full system electrification with key stations and inner core having 15-minute headways all day and 15-minute peak/30-minute off peak headways for other stations. It does not specifically favor any part of the network and includes the North-South Rail Link.

### Group Discussion of the Alternatives

- W. Brownsberger said that he is comfortable with all scenarios, that they're good to look at and cover the ideas mentioned previously. He asked what the first phase (Tier 1) did to get to these alternatives, as well as what isn't on the table any more for consideration. He asked what constraints helped shape this list, wanting to understand what the first phase told the team that's reflected in these alternatives. S. Hamwey replied that the Tier 1 analysis informed the development of the six service alternatives, by identifying some concepts that didn't generate sufficient benefits to include in an alternative (such as skip stop service) and by identified the physical constraints that will need to be addressed in order to deliver the service levels represented by these six alternatives. Brownsberger stated that it would be interesting to surface more clearly what the first phase did.
- S. Rasmussen stated that the lack of capacity at North Station seems like a black box, and she doesn't recall discussing it previously. She would like to know what the constraints are and what it would cost to fix them. There are expensive projects, such as SSX and NSRL, under

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consideration, and she would like to know more about North Station. The Grand Junction connection linked with NSRL is only in the most expensive option. North Station is very important, ridership there is very strong and modeled to be very strong in future. She would like to see further analysis of Grand Junction that continues to North Station. S. Rasmussen also asked about station consolidation and an Alewife connection on the Fitchburg Line – two concepts that had been raised in Tier 1 but were not part of today’s presentation. She asked if it’s possible to interline the Worcester line with a north side line using Grand Junction, stating that she’d like to see that looked at as well. She is also concerned that some overall issues, such as the climate change issue and equity evaluation, don’t seem to be carried through here. She would also like to see a timeframe and cost and ridership analyses. S. Hamwey replied that many of the items raised will be addressed in the Tier 2 analysis and there is opportunity to further explore items such as interlining and short turns. He added that the Alewife connection, and few other station specific concepts, were not essential to the overall understanding or performance of each alternative and the treatment thereof was not highlighted here in the interests of simplicity.

- K. Carlson said that she wanted to bring the discussion back to the Vision and what S. Rasmussen said about the timeframe. The first three alternatives seem to be what’s already being considered in the next 5 years. In her opinion, the only alternative that seems like it should be a 20-year vision is Alternative #6, while the others seem to already be in the 5-year capital plan. She said that it seems like a waste of resources to look at these alternatives, and they seem more like a service plan, not a good analysis for 20 years from now. S. Hamwey replied that different scale investments help the team understand not just costs and benefits, but *net* costs and benefits between the lower scale and higher scale investments. K. Carlson asked that a costs discussion consider the full environmental costs. S. Hamwey also noted that none of the six alternatives could be delivered given today’s level of programmed capital and operating funds so it was not accurate to consider any of them part of an already committed near term program.
- J. Aloisi stated that recent FRA rule changes on safety will enable the MBTA and other providers of service to purchase lighter, cheaper European style equipment and suggested that the project make sure it gets a clear picture of how those changes will affect cost.
- M. Cahill said that there’s a Focus40 set of recommendations and there are a lot of conversations going on and asked what’s going to result from all of this planning. He also asked if something is done along the lines of one of these less forward-thinking suggestions, is that it for the next 20 years. S. Hamwey replied that Focus40 was pretty consistent in deferring most long-term ideas for the commuter rail to this project. The Board will have to adopt a vision that comes out of this process. Some of these alternatives could possibly be implemented in 5-10 years in the next operator contract, but some of them might require a 20 to 25-year investment process that might outlive the contract. The end product will have to be one that the Board can support.

M. Cahill said that he knows resources aren’t identified yet, but to be talking about making

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investments 5 years from now, 10 years from now, and finding resources now is where we need to be. He stated that, for many, coming into North Station means they are only halfway to work, and if we're wanting to increase ridership, if we want this to be a real shift in how people move, it has to be effective. He thinks electrification should be part of all the alternatives. This is about how people move throughout the whole region 24/7. Maybe the end product isn't full electrification, but a robust, targeted electrification. M. Muller explained that the project team is required to look at a variety of alternatives, including some that do not include electrification. The end results need to show an analysis of electrification versus no electrification. There has to be evidence of a true comparison. J. Aloisi suggested there's a mental bias that electrification is a higher cost option. It may be higher on the capital investment side, but he challenged the team to look at all costs, over time. M. Muller said that the alternatives have no implicit bias that electrification will be too expensive. He also said that they will look at costs over time, and will be looking at phasing improvements. In this way it's good to understand if some changes that can be made earlier can be coupled with investments that would require more time to implement.

- C. Dykema said that she would like to offer the suburban perspective. She requested that the team rename the "other" stations, possibly as "outer core." She commented that every scenario appears to provide benefits to the inner core, but there's already an MBTA (the rapid rail network) that addresses these areas. Looking primarily at the Worcester line, there seems to be a divide at Riverside. She asked if that means people would have to physically change trains at Riverside. She also asked if there would be an opportunity to look at part of a line, or at individual lines, for electrification. She stated that the alternatives seem to flesh out the initial starting point, but she doesn't want the project to be precluded from doing two fully electrified lines versus partial lines.

S. Hamwey replied that none of the alternatives envision forced transfer situations, other than perhaps some alternatives as they relate to the Old Colony Lines. The thinking with the outer portion of the network was that if the MBTA can elevate the level of service at key stations, there would be options within a relatively close distance for those who want to take advantage of the high frequency service all day. The team is not thinking about leaving any communities behind, but instead providing service to key nodes that support an area. C. Dykema said she is looking for assurance that service will increase and not decrease anywhere. S. Hamwey clarified that the team is not assuming there will be any degradation of service. To build off that concept, however aspirational the alternative, even Alternative #1 requires some capital investment over what exists today.

- T. Pollack said that, overall, the six alternatives are pretty good. He reminded the team that this is Rail Vision, and it may be good to have the delta between alternatives. He agreed with C. Dykema regarding the term "other" regarding the stations. He also requested that Alternative #1 change the word "modernize", possible to "upgraded." He provided an example of work in NC where there was a vision to lower a specific cross state trip 3 hours and 50 min by train to 2

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hours. Today the trip is 2 hours 45 min, which is not yet at the vision, but marks a substantial improvement. What are things that we can do to reach the ultimate vision? We really need to know what it takes to get there, what are little changes we can make along the way? Can the Advisory Committee get some info on metrics to measure these alternatives against objectives? How can we qualitatively measure as well?

- C. Osgood said that there's a difference between a vision and a roadmap. He stated that they should all hold full accessibility as a vision. As the team conducts this analysis, the AC should see if marginal investments move us from left to right. He expressed concern that they would spend a lot of money doing something that's not leading to a vision.
- B. Forman stated that the regional equity piece is really important. There are two alternatives that don't focus on the regional equity (1 and 2). He suggested that the team can model something else instead. S. Hamwey replied that the alternative are bringing service up everywhere with these alternatives, but at the same time the team thought it would be helpful to test out a regional rail as well as an urban rail to see the benefits of each. He doesn't want to assume the MBTA could deliver that service in every alternative.
- P. Matthews thanked the team for its work. He said that he appreciated elements that have been included. He also thanked H. Altsman for her point about parking, agreeing that parking is a daily constraint on the system that needs to be evaluated appropriately.
- J. Ostroff asked if the PATI program is being informed, stating that which stations get upgraded is a key issue. He has concerns about how the recommendations will affect the capital plan. He asked if the MBTA needs to invest substantially more in this project, how does this affect the CIP. He also asked if it would be beneficial for any member of the Advisory Committee to be at the Joint Board meeting. S. Hamwey replied that the team is not looking for more from the Board than input such as they have received from this meeting; there is no plan to seek a formal vote or approval.
- L. Santos said the only thing he would like to change is the "regional rail" name, as he thinks some people refer to something different with that name.
- S. Rasmussen wants to see an option that has Grand Junction terminating at North Station. S. Hamwey responded that this is included in one service alternative. They could explore whether service is extended along the Grand Junction to North Station in more than this one service alternative.
- S. Cronin said that they have talked about parking as not being a constraint, but it clearly is a constraint. She also stated that they need to put in the first mile, last mile piece. She said that when she looks at this, this is the foundation of improving the system as a region and she worries about getting bogged down. She asked if they are dealing with municipalities and areas that are going to be affected by that. She also stated that she doesn't mind waiting for electrification, they should be doing it right if it's the vision. S. Hamwey replied that some things left out were for simplicity for the purposes of this meeting. He also said that they can set up an optional workshop to further discuss these issues and that he will reach out to the committee about it before the next meeting.

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- M. Cahill stated that he will walk away troubled, as half of the alternatives don't have investments in electrification. S. Hamwey replied that they will clarify with the Board that electrification is a priority of the Advisory Committee.
- H. Altsman stated that she would like to see how these alternatives affect the priorities of the group. She would also like to see how the first phase concepts flow into these alternatives. S. Hamwey replied that the next meeting will review what was heard from this meeting and at the FMCB meeting.
- W. Brownsberger stated that he doesn't feel that they understand the electrification concept enough, asking if they can spend some time on it. He also asked if there are any alternatives that use battery or fuel cells, stating that it's something to discuss further.

### UPDATES

#### Fare Policy Update and Public Outreach

S. Hamwey welcomed Laurel Paget-Seekins, MBTA Director of Fare Policy and Analytics.

Laurel gave a brief update on fare modeling as a part of AFC 2.0. The MBTA is using a new model to analyze ideas for revenue ridership projections for potential fare structure changes given the current service model. They are looking at modeling around zoning, off peak fares, and other fare structures. The team is focused on thinking through how existing ridership would react to different fare products and how those products would affect ridership.

Comments from the Advisory Committee:

- P. Matthews asked about the commuter rail fare study and how that affects AFC 2.0. Laurel replied that her department is working on some aspects of it already, but the deadline has changed to 2020.
- S. Cronin asked if and how the RTAs are integrated into this process and if the RTAs will be part of the system too. Laurel replied that the MBTA is coordinating with the RTAs to give them information so they can determine if they want to integrate into new system.
- B. Forman asked if the study is being conducted internally, or if the work involves the other fare study by consultants. Laurel replied that she is working on both projects, and there is consultant involvement in both.

### PUBLIC COMMENT

N. Farrell invited public comment.

- Ethan Finlan said, regarding the Grand Junction alternatives, that the team mentioned the reason for no service to North Station is due to capacity constraints. His comment related to interlining with other lines, and he asked if there was ever consideration of using Grand Junction for interlining. He said the tradeoff with rerouting some trains from North Station is a concern about worse access to downtown Boston and asked if there was consideration of interlining

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Fitchburg and Reading lines instead. That way, at least a portion of that line has rapid transit access.

- Paige Duncan said that she wanted to reiterate what her suburban colleagues are saying. With Foxboro station at Patriot Place in the Spring, the schedule is probably not going to work. The times of service in the pilot are difficult for office workers. She feels that this project is very urban oriented and that it's very hard to figure out how the suburbs can get into it. She asked how we talk to people who are riding the train. She said that it doesn't feel that those outside are really involved. She stated that Foxboro has a very viable economic future, that they are hopeful and anticipate that the service area will be economically viable to the state as well. She thanked the committee for their work, but asked them to remember that this is a commuter rail and not an urban rail.
- Pete Stidman asked what ridership will be analyzed in future scenarios and encouraged the team to look at that.
- Andrew Jennings said that at the last meeting he asked if there was missing criteria for Tier 1. He stated that he believes there are two missing criteria: the environment and revenue. He believed that these would also address some urban/suburban questions, stating that they don't want to lose a long-distance rider for an urban rider paying less. The key issue is a difference in costs and revenues generated. He also stated that he wants to see North Billerica as a key station. He thinks the team will hear a lot of that from cities and town, but North Billerica is the best connection to 495, isn't parking constrained, and the third largest station. He said a lot can be done in improving ridership if the first/last mile situation is improved. Things like connecting the Lowell line to the Green Line Extension produces a lot of interesting possibilities. He encouraged the team to look at connectivity with rapid transit and first/last mile.
- Joe Aiello said that he thinks, when it comes to the name Rail Vision, if Alternative #6 alternative isn't the vision, the system will be swallowed. He said that full electrification is what the team needs to focus on for the vision. He asked how much detail would be going into some alternatives with Grand Junction. He also said that there has been talk to double the track with a trolley to go from West Station to Kendall, and asked if that is part of this process and how much depth of detail can go into that.
- Bob Watson said that the main thing is that Rail Vision is one part of solving overall transportation challenge that will go on forever. We'll have to go back to this process to make sure our vision is lined up with solving problems. It really involves the whole network: buses, parking, cars. It's really two networks. He stated that his main interest is in the North South Rail Link, that it would solve a lot of problems, and other than alternative #6 NSRL wasn't considered.

### NEXT STEPS

S. Hamway stated that the team will be reaching out about the schedule for the next meeting and about an optional workshop as requested earlier. He said the team got good feedback today and once the team completes the Board meeting and finalizes the alternatives in January, the goal will be to move

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into a more public facing process to speak to folks outside the room. He thanked everyone for attending.