MEMORANDUM |

To:	Michael O'Dowd Project Manager	Date:	April 8, 2016
From:	Nick Gross Howard Stein Hudson	HSH Project No.:	2013061.14
Subject:	MassDOT Highway Division Allston I-90 Interchange Improvement Project Task Force Meeting 22 Meeting Notes of April 7, 2016		

Overview

On April 7, 2016 members of the Allston I-90 Interchange Improvement Project team and MassDOT staff associated with the job attended the 22nd task force meeting. The meeting took place at the Fiorentino Community Center located at 123 Antwerp Street, Allston. The task force is composed of local residents, business owners, transportation and green space advocates, as well as representatives of local, state, and federal governments.[1] The purpose of the task force is, through the application of its members' in-depth knowledge, to assist and advise MassDOT in determining a single preferred alternative to be selected by the Secretary of Transportation for documentation in a joint Environmental Assessment and Environmental Impact Report (EIR) document. All task force sessions are open to the public.

The purpose of the meeting summarized herein served to cover the preliminary shadow analysis and noise study produced by the project team. It was noted that as each of the three alternatives are refined, the shadow analysis and noise study will be updated to reflect those refinements. The intended bulk of the meeting served to review the revised evaluation criteria that is expected to be filed in association with the Draft Environmental Impact Report (DEIR) by the end of 2016. The shadow analysis and noise study were produced at the request of the task force dating back to the meeting of the group on February 11, 2016. Generally speaking, the key takeaways of the shadow analysis concluded that the A Better City (ABC) Alternative had the least amount of shadow impacted, followed by the Amateur Planner (AMP) alternative, and the MassDOT 3K-4 Alternative. The differential between the shadow impacts is estimated to be somewhere in the range of approximately 45 minutes to an hour between each of the alternatives noted above. It is also worth noting that some portion of the impacted area with regard to shadow is already in shadow each day due to the abutting high-rise Boston University dormitories near Agannis Way.

[1] A listing of task force membership can be found at: http://www.massdot.state.ma.us/highway/HighlightedProjects/AllstonI90InterchangeImprovementProject/TaskForceMembers.aspx

The noise study focused heavily on the Noise Impact Assessment and noise mitigation. It was noted that noise mitigation must be considered when noise levels exceed MassDOT's Noise Abatement Criteria (NAC). It was also noted that noise barriers must be feasible and reasonable as defined by constructability, cost effectiveness, acoustical effectiveness, and regarded as favorable by abutting property owners. As a summary of the noise study presentation, it was concluded that noise barriers had been identified adjacent to Lincoln Street stretching from Market Street to the Franklin Street Footbridge. Noise barriers were also identified to be reasonable and feasible adjacent to Pratt and Wadsworth Street. Although the project team concluded a noise analysis in Cambridge within Magazine Beach, concern was raised by Cambridge residents that the noise from the Turnpike impacts the residential neighborhood of Cambridgeport to the north. It was suggested that noise receptors be placed in the Cambridgeport neighborhood for further evaluation in order to determine if noise barriers would be reasonable and feasible.

It was outlined that the intent of reviewing the evaluation criteria matrix was to essentially walk the task force through the document in order to hear the task force priorities, what was missing, and what was perceived to be well represented. After reviewing section 1.0 Purpose and Need, the task force quickly advanced the discussion to identifying what was missing as part of the matrix. Task force members expressed their frustration that the goal of connecting the two halves of Allston was not included in the Purpose and Need. It was noted by the project team that this goal was later referenced in the matrix under section 4.2 Functional Connections and that the language regarding connecting two halves of a neighborhood would not typically be included in a Purpose and Need statement. Frustration was further expressed by the task force as they averred that many of the points included in the matrix were slanted to favor the MassDOT 3K-4 Alternative. It was however recognized by a small portion of the task force that the language included in the matrix needs to be written in a competitive manner in order to access Federal dollars through the Federal Highway Administration (FHWA).

It should be noted that FHWA Assistant Division Administrator Ken Miller, attending at the session, recognized MassDOT's intent to include the task force goals within the matrix but also agreed that the language was inconsistent throughout the matrix and suggested that it be amended where needed and appropriate. In addition to this recommendation, FHWA provided further guidance towards amending the evaluation criteria matrix including the idea of taking a systems approach in identifying the objectives by linking it to the criteria highlighted in the matrix. It was also recommended that the project team and MassDOT should not include any function requirements as part of the evaluation criteria.

Portions of the task force recognized and were in agreement that there was a lack of understanding of what needed to be included as language in a formal evaluation criteria matrix to be filed in the DEIR. It was suggested by members of the task force that a working group session be scheduled to walk through the evaluation criteria matrix with MassDOT as well as educate the task force in the requirements and language that need to be included in the filing of the matrix in the DEIR. It was further requested that a schedule be produced to highlight future meetings to address some of the open ended topics of the project such as the allocation of parkland along the Charles River.

Agenda

I. Shadow Analysis

II. Noise Study

III. Review of Revised Evaluation Criteria

IV. Question & Answer

Detailed Meeting Minutes[2]

C: Ed Ionata (EI): Good evening everyone. I am Ed Ionata from TetraTech. Our agenda tonight includes an update on the shading analysis, an update on the noise study, and a review of the design alternative matrix criteria. Tonight we are joined by Deneen Crosby from Crosby Schlessigner Smallridge (CSS) and Jason Ross from VHB who are going to walk us through the noise and shadow analysis. I want to also mention that Ken Miller from Federal Highway Administration (FHWA) is here with us tonight.

Q: Glen Berkowitz (GB): The task force system has been set up in a way where you present and then distribute a PDF of the presentation afterwards. At the last session there were a lot of images shown that were not in the presentation and that were not distributed after. Can you commit that you will distribute all of the presented material tonight to us after the conclusion of tonight's meeting?

A: Mike O'Dowd (MOD): Yes, everything will be sent out. I would also like to offer to invite anyone interested to come to my office at 10 Park Plaza and sit with me to review any presented material. I have a couple of concerns distributing the details of the construction staging drawings because we are still working through how the traffic will be processed.

C: GB: Thank you.

Shadow Analysis

C: Deneen Crosby (DC): Hi everyone, my name is Deneen Crosby. The goal of my presentation is to provide you with an update on the shadow analysis. I want to emphasize that this analysis primarily

[2] Herein "C" stands for comment, "Q" for question and "A" for answer. For a list of attendees, please see Appendix 1. For copies of meeting flipcharts, please see Appendix 2.

focuses along the Charles River's edge and the parkland adjacent to it. Everything you are going to see is based on a schematic level of detail for all schemes. I should also note that we do not have information included on noise barriers or snow fencing. This is simply based on roadway elevations within the throat section and where the parkland is impacted. Our study too place over 4 months during 4 times of the day. These times include 9 a.m., 12 p.m., 3 p.m., and 6 p.m.

The area we looked at is the existing edge between Soldiers Field Road (SFR) and the parkland adjacent to the Charles River. The alignment of SFR shifts for each alternative and for this reason we decided to use the existing parkland line. The first time period we looked at was March and we found that the largest impacts occurred in the late afternoon. The existing building shadow reaches the edge of the existing parkland around 2:00 P.M. The existing viaduct shadow reaches the edge of the existing parkland around 5:15 P.M.

For the MassDOT 3K-4 Alternative the shadow is represented in purple. Under this alternative, the viaduct show reaches the edge of the existing parkland around 4:40 P.M. The viaduct shadow for the Amateur Planner (AMP) Alternative reaches the edge of the existing parkland around 6:10 P.M. By the time the shadow from the rail viaduct hits, the parkland is already covered by the buildings shadows. The ABC Alternative is different. The roadway shadow reaches the edge of the existing parkland around 5:30 p.m.

The next time of the year we looked at was the summer. During June there are no additional shadow impacts to parkland in the throat area as compared to the existing condition for all alternatives. During September the impacts are comparable to March. The majority of the impacts occur during the late afternoon. In September, the existing building shadow reaches the edge of the existing parkland around 1:40 P.M. The existing viaduct shadow reaches the edge of the existing parkland around 5:00 P.M.

For the MassDOT 3K-4 Alternative the viaduct shadow reaches the edge of the existing parkland around 4:20 P.M. The takeaway is that there are 40 additional minutes of shadow in the late afternoon compared to the existing conditions. This is only relevant to the area that is not in the shadow cast from the buildings. For the AMP Alternative the viaduct shadow reaches the edge of the existing parkland around 5:40 P.M. For the ABC Alternative, the roadway shadow reaches the edge of the existing parkland around 4:40 P.M.

The next time of the year we looked at was December. The impacts in December are from the early afternoon on. The sun is lower in the sky during and therefore the shadows are longer. The existing conditions in December show the building shadow reaching the edge of the existing parkland around 9:40 A.M. The existing viaduct shadow reaches the edge of the existing parkland at 1:15 P.M.

The MassDOT 3K-4 Alternative hits the parkland areas between the buildings about an hour earlier at 12:15 P.M. The takeaway is that there is one more hour of shadow in the afternoon compared to the

existing condition. The AMP Alternative viaduct reaches the edge of the existing parkland around 2:40 P.M. which ends up being about 1 hour and 25 minutes less shadow compared to the existing condition. The ABC Alternative hits the edge of the existing parkland around 1:10 P.M. This ends up with 5 minutes less of a shadow impact compared to the existing conditions to the west and 3 hours less shadow impact to the east.

In summary, the MassDOT 3K-4 Alternative adds about 35 additional minutes of shadow impacts in the late afternoon. The AMP Alternative has approximately 55 minutes less of a shadow impact in the late afternoon and the ABC Alternative has 15 minutes less of a shadow impact in the late afternoon to the west. There are essentially no additional shadow impacts from any of the three concepts in June. September is very similar to March as previously discussed. In terms of the December shadow impacts, the AMP Alternative has less of a shadow by approximately 1 hour 25 minutes and the ABC has 5 minutes less of a shadow impact to the west and 3 hours less shadow impact to the east between the buildings. That is our overview of the shadow impacts, are there any questions?

Q: GB: If I was to summarize all of that my understanding is that if you compare all three alternatives, the MassDOT 3K-4 Alternative has a significantly larger shadow impact compared to the AMP and ABC Alternatives. Is that correct?

A: DC: It's difficult to simplify it like that. You are right in thinking that the MassDOT 3K-4 Alternative has more shadow than the other two alternatives. However it's closer to the range of 45 minutes to an hour.

C: GB: Thank you.

C: Harry Mattison (HM): I have a general question about the open request to improve and refine the alternatives. I'm curious why we are doing a detailed shadow analysis of the ABC and AMP Alternatives when they were proposed 10 months ago and haven't been updated.[3]

A: DC: The shadow analysis is really a ballpark estimate. The idea is that we have now established our base and as the alternatives are refined we can update the shadow study. This is our first look based on the information we have.

Q: HM: You said as the alternatives are refined?

A: EI: Yes. We are looking to refine all of the alternatives. This is the first run to test if there are significant differences between the alternatives in terms of their shadow impact. Even if we work on refining the ABC and AMP to lower elevations or change the location of the rail viaduct the shadow

[3] At the February 11, 2016 Task Force meeting Task Force Members requested that a 3D model be developed in order to produce a shadow analysis.

impacts are likely to be minimal. Part of the takeaway here is that you don't have the usual significant shadow impacts.

Q: HM: Are the AMP and ABC Alternatives set in stone?

A: GB: No. We are actively looking at a set of refinements for the ABC Alternative. Given our limited time and bandwidth, I'm also wondering why the shadow analysis is happening now instead of figuring out elements like the existing right-of-way (ROW) or discussing the bigger fundamental issues. I don't understand how comparing the time of shadow fits into the decision making.

C: EI: We have been asked if shadows are a big deal when refining the alternatives. As you know we have limited time and limited budget to put these alternatives forward into the Draft Environmental Impact Report (DEIR) at a level playing field of analysis and detail. The point of this exercise was to determine if the shadow impacts were a big deal or not.

C: DC: The model had to be built anyway. It takes a while to build a 3D model. We will revise the model as we refine and update the alternatives. Ideally we would wait to be as far along as possible. We got started early on this because we could, we often don't have time.

C: Nathaniel Cabral-Curtis (NCC): For the record I want to mention that the shadow analysis was produced at the request of task force.[4]

C: Ari Ofsevit (AO): I think the shadow analysis is great to have. I agree that if the alternatives change a little bit it won't change the shadows significantly. There seems to be a 4 to 5 hour shadow difference between the alternatives. If one alternative is never going to melt snow or ice on the Esplanade or SFR, that's a big deal. It's really good to see this analysis and I think we have to note the dramatic differences between each alternative.

Q: GB: Could you confirm that the spot you picked is around the existing northerly curb of SFR westbound. If you knew under the MassDOT 3K-4 Alternative that the curb is going to shift south, why didn't you pick the new more southerly line which will show more shadow?

A: DC: We did this for two reasons. We wanted to show the impacts on existing parkland in order to show an apple, to apples, to apples comparison. We picked the same line of the existing parkland and held that line for all three alternatives. What you're seeing is how much shadow the viaduct is throwing and when. We felt it should be the same line for each scheme.

[4] The shadow analysis for all three alternatives was requested by Task Force members during the February 11, 2016 Task Force Meeting. A detailed dialogue of this request can be found on page 13 of the February 11, 2016 meeting minutes.

Noise Study

C: Jason Ross (JRS): Good evening. My name is Jason Ross. I would like to speak to you tonight with regards to the noise study. This is far less conclusive to present for the difference in alternatives. Similar to the shadow analysis we are still waiting for the designs to be further refined and developed. With that said we know a lot about the existing conditions. We have conducted noise measurements throughout the study area and have characterized and validated the existing rail and highway components. When we look at noise we look for the need for mitigation and future build out scenarios.

As 2035 traffic data is still developing, we don't know where the impacts will be. However we do know where we anticipate noise impacts to be. All noise impacts will be assessed for future 2035 conditions for areas with the Type I project area. Type 2 noise barriers are located beyond the project limits. When we look and study noise we don't look at all areas. Certain areas are more sensitive than others such as residential, schools, and Section 4(F) Parks. In order for noise mitigation to be considered, noise levels must exceed the Noise Abatement Criteria (NAC).

Noise barriers must be feasible and reasonable as defined by the following elements. Constructability must meet highway design specifications for safety, access, and maintenance. The cost effectiveness criterion which depends on barrier size and cost as well as the noise reduction it provides and the number of receptors it benefits. Acoustical effectiveness must provide a minimum of 5 dB noise reduction at the majority of impacted first row receptors. Finally, property owners must be in favor of the barrier. A public meeting would be held and a voting survey would be mailed to property owners and residents.

Let's move to the area adjacent to Market Street and Everett Street north of I-90. This project makes no changes to this area however we know there is a need for noise barriers here as previously identified through the Mass Turnpike Authority. We are showing the locations of the noise receptors. The red dots represent the nose receptors that exceed the NAC. Many of the buildings you see in this area are family dwelling units. The existing noise barrier is approximately 6' high and our proposed noise barrier would extend beyond that between the Turnpike and Lincoln Street. In this area, noise barriers can be feasible and reasonable based on constructability however we have not heard input from the residents yet. Let's move into the project area.

Q: Jessica Robertson (JR): Why did you skip the section around Mansfield Street?

A: JRS: That's next.

C: JR: Okay thanks.

C: JRS: In this section along Cambridge Street it is our understanding that noise barriers are unlikely because they are not feasible or reasonable. The Turnpike is far away and the major of noise is

contributed from Cambridge Street. For this reason we are not going to include this as part of the study area.

The next area we looked at was the area between Lincoln Street and Mansfield Street. The existing noise exceeds the NAC. The contribution of noise at this location is from Lincoln Street, the Turnpike, and Cambridge Street. We are analyzing the noise barrier at this location and we have the challenge of the pedestrian access to Cambridge Street. If we open the noise barrier for access it becomes difficult to ensure the acoustic effectiveness of the barrier.

Q: JR: Couldn't you add a noise barrier west of Cambridge Street to the pedestrian bridge independent of the noise barrier and pedestrian access issue?

A: JRS: We could although a reasonable amount of noise is still likely to come from Cambridge Street and Lincoln Street.

C: JR: Agreed but it would still be less. It would be great to look at this as an isolated section.

A: JRS: It's a good point and we will.

Q: David Loutzenheiser (DL): How much do trees impact and reduce noise?

A: JRS: That's another good question. With this amount of vegetation or lack thereof, we don't expect any noise reduction. In order to trees to be effective year round they also need to be non-deciduous. Let's move onto the Pratt and Wadsworth Street area. We have a strong understand of how this area relates to the project because of the close proximity of the homes to the rail yard. The noise in the area is primarily driven by the commuter line.

With future conditions we are looking at additional noise sources. There are likely to be locomotives idling for brief periods before they are plugged in or go into service on the line as well as the addition of the maintenance facilities such as the wheel truing station. We have a good understanding of the amount of noise that those facilities will produce and that will be included in our assessment. Noise barriers along this area will meet a lot of the required criteria. The requirement of noise barriers has already been recognized in the scope of the South Station Expansion Project.

Q: JR: In all these cases the barrier is a wall. Is it possible to evaluate a different type of barrier in the situation where you are in someone's backyard?

A: JRS: It is possible however the structure needs to be well clear of the trains by at least 10'. Keeping the noise barrier closer will be helpful in reducing noise.

Q: JR: Are there other options such as a small hill?

A: JRS: Berms or small hills can be effective but in this case we don't have enough space between the residential houses and the train.

Q: Wendy Landman (WL): I know that certain material and windows are used for homes and buildings near air ports. Have you looked into that for the homes close to the Beacon Park Yard (BPY)?

A: JRS: Sound installation inside a building or home is not typical. We will be looking at the frequency of noise for the outdoor areas with the goal to reduce the noise before it reaches homes.

C: WL: I'm not thinking of one or the other. I'm thinking of combining both sound installation inside and noise mitigation outside.

A: JRS: It's rare that interior noise reduction would be done as part of a highway project.

Q: Henrietta Davis (HD): I am concerned about the noise for Cambridge. I see that there are receptors in Cambridge but will there be any action for mitigating noise for Cambridge? I have one of those airport windows Wendy spoke of in my house because of the rail noise. I live in lower Cambridgeport. Ever since Boston University (BU) built those new towers it acts as a megaphone for highway noise. We can hear Commonwealth Avenue too. Is it true that there will be a noise analysis done for Cambridge?

A: JRS: Yes and I'll present on it soon.

C: HM: A berm with vegetation would be better for the neighbors than a sold wall. You said there isn't enough room but that's just the current plan. You could make more room if you wanted to. The BPY site is huge, there could be enough room. I think it's worth evaluating the idea of a vegetated earth berm between the residential homes and BPY.

A: JRS: Noise barriers are one thing but I don't believe it is within the policy for MassDOT to fund that. There is an expectation that tax dollars will be spent in a reasonable way.

Q: HM: How tall are the noise walls you are proposing?

A: JRS: We are still very much in design and an exact height is still yet to be determined. My answer is that we don't know but a typical Type 2 highway noise barrier is around 15' above grade. When we look at the area along Pratt Street the primary source of noise is from trains. In order to be effective we would likely be looking at a noise barrier 20' above the top of rail.

C: HM: You said the design of the noise barrier needs to be reasonable or typical. I don't think it's typical or reasonable to build a maintenance facility 10' from people's houses. This is worth thinking outside the box. I would also remind you that this area is often regarded as having an Environmental Justice

(EJ) status. If you're in the third floor of your house a noise wall isn't going to do anything. This needs to be thought of from people in their houses.

A: JRS: Understood. I have worked on a number of large projects and I understand the concern of where people are. I also can't rewrite the policy and regulations.

C: HM: Please don't rewrite the policy or regulations. Please be more sensitive to the neighbors. No other neighborhood would tolerate this type of maintenance facility. You need to broaden your thinking beyond a 20' wall.

C: Fred Salvucci (FS): I would argue and say that I do expect you to rewrite the rules and regulations. The Central Artery Project did a lot of noise wells. The level of intensity due to the activities in the BPY and the highway is going to increase. We don't typically do a cost-benefit analysis for this but we did on the Big Dig because we wanted to. There wasn't a requirement to do one. This is a big deal for the State. I strongly agree with Harry that residents aren't flipping out over the yard. I agree the MBTA needs the BPY.

C: JRS: For the record the regulations were updated in 2011.

C: FS: They might have been updated but who knows if they were updated in the right or wrong direction. We all agree this is an important transportation facility. I urge you not to worry about the rule book. You can change the rules.

C: JRS: Right now we are looking at existing conditions. Once we bring this into documentation then things may change for the project. Right now trains are going by and they are going to continue to do so. The contribution of noise from other sources may increase

C: FS: I respect the fact that things take time. Whether there are more or less trains compared to 10 years ago it still needs to be accommodated. There will be new mid-day activity. I wouldn't be strict on the rulebook. I find it unbelievable that no one is objecting to the new BPY facilities. It's a miracle.

C: JR: The reason people aren't objecting about the new BPY facilities is because they don't know about it. The South Station Expansion Project never had a meeting in Allston. There's no information on it either. That's why people aren't objecting.

Q: Carol Ridge Martinez (CRM): I agree not enough people know about the proposed BPY facilities. It would be very useful to provide us with some real life examples of what the noise barriers are going to look like that will be installed behind the houses on Pratt and Wadsworth Street. Those houses aren't in good shape. I'm concerned about noise but I'm also concerned about vibration. Where are some places that we could look to in order to gain a stronger understanding of what these structures are going to look like?

A: JRS: A good example is along the Old Colony Commuter Line. We can make other examples made available to you. In terms of vibration we are looking at it but it won't be addresses as part of the noise study.

C: CRM: It would be useful if you could have Nate send an email with a couple of sites we could look at.

Q: Marc Kadish (MK): Is there anything you can do to prevent or protect against graffiti? If and when graffiti occurs who maintains it?

A: JRS: Yes there are options to make it less desirable or inconvenient to graffiti. The aesthetics of the structure would be guided in a process from the adjacent home owners. Different textures can be less desirable or suitable. In terms of maintenance, the noise barriers will be maintained by MassDOT.

C: MK: Thank you.

C: JRS: Let's now look at the BU area. The noise levels around the Nickerson Field exceed the current NAC. The primary contribution of noise in this area comes from the trains and the traffic on the Turnpike. It's also important to understand use. When we look at residential we are looking at 24 hours. When we look at parks or athletic facilities such as this one, it's a different calculation. We have a lot of data from BU about their sporting schedules. We'll be considering all factors when making a decision about noise barriers in this area.

Next up is the throat. I think most people would understand and agree that the Paul Dudley White Path (PDWP) is currently exceeding the NAC with the primary contribution of noise coming from SFR. SFR is currently 8 dB louder than the Turnpike. Right now we are determining if a structure could be built due to the lack of constructible space. We also have a pretty strong understanding of the use and sound across the Charles River at Magazine Beach. It's challenging to find noise barriers that are cost effective for park use.

C: HD: I am a Cambridge resident and we aren't concerned about noise at Magazine Beach. We're concerned about residential noise. We can hear the noise from the Turnpike 4 streets back from Magazine Beach. I'm curious to know what is possible to reduce noise on the Boston side of the Charles River before it makes its way to Cambridge. It would make sense to stop the noise at its source.

A: JRS: Agreed and that's what we are evaluating. We need to determine the location of the noise barrier whether that be adjacent to SFR or adjacent to the Turnpike. I should mention that we are still trying to determine whether or not a noise barrier structure would be likely for the AMP elevated train viaduct.

C: HD: The maintenance facility is important but it's going to cause a lot of noise and rumbling. People talk about noise from train facilities all over the country. Those deep rumbles travel far. My biggest concern for noise in Cambridge is the rail maintenance facility. The entire Charles River Basin is going to be a noise cloud. The noise we hear from Magazine Beach isn't coming from SFR; it's coming from the Turnpike. It's the down shifts of trucks and motorcycles.

Q: MK: What is the design of the maintenance facility going to look like? We haven't seen any images or rendering.

A: JRS: The design of the maintenance facility and how it looks will be incorporated into our final noise evaluation. The maintenance facility will be a building. Things like wheel truing will take place within the building and help reduce the noise. I'm not arguing that it's not going to be loud.

Q: Tom Nally (TN): Is there any historical noise data or previous studies of noise impact associated with CSX and the rail use in the BPY?

A: JRS: There was a lot of activity in the BPY in the past. When we're now looking at the existing conditions it's a lot quieter. We don't have any previous noise data analysis.

Q: FS: Have you evaluated the differential of noise impacts between the viaduct option and the at-grade options? Breaking and the changing of gears for large trucks produces a lot of sound.

A: JRS: Yes we will take into account the difference in grades.

Q: JR: Do you take into account that a structure in the air produces noise from vibrations?

A: JRS: Yes, that will be part of the model as well. The elevated structure actually helps block noise from vehicles. Trains typically create more noise on the structure. The model takes all of this into account.

C: JR: You could also build a noise barrier to block the noise from vehicle wheels. Additional noise from the structure itself is an entirely different component.

A: JRS: Yes. Noise may be reduced from under the structure too.

C: JR: We're asking you to separate the two noise sources. We can deal with noise with an at-grade solution. It's a separate issue whether or not a viaduct is contributing to noise.

C: EI: Jason, it sounds like the viaduct issue could be a situation of good repair versus not good repair. A new and well maintained viaduct will be different.

A: JR: It sounds like you are jumping to conclusions of saying that you have an alternative that outweighs the others.

Q: DL: I'm looking at the FHWA website right now. It says that noise barriers in the form of an earth berm reduce noise by up to 3 dBs compared to a wall. How do berms versus structure walls difference in absorbing walls?

A: JRS: There is a negligible difference between a 10 to 20' berm compared to a wall.

C: DL: Structured walls are limited to 25'. If you compare berms to walls, one-for-one, berms seem to be more sound.

A: JRS: The issue we are facing is the lack of space between the houses and the rail line.

C: DL: I think you need to also be thinking about the Turnpike at-grade. Vegetated berms would be useful blocking the sound.

Q: EI: Jason, is the required height of a berm the same as a wall?

A: JRS: Yes, typically they are the same.

C: GB: At your second presentation earlier this fall, you said that an elevated viaduct is quieter than both the two at-grade alternatives. I've been thinking a lot about that statement and it doesn't make any sense to me. The other day I was in Cambridgeport and there was a southwest wind. I could hear the highway very clearly. I went back to thinking about that statement that an elevated highway is quieter than an at-grade highway. I want to quote something off of the FHWA website:

"A long, closely spaced continuous line of vehicles along a roadway becomes a line source and produces a 3 dB decrease in sound level for each doubling of distance." That's when it's a highway viaduct. "However, experimental evidence has shown that where sound from a highway propagates close to "soft" ground (e.g., plowed farmland, grass, crops, etc.), the most suitable drop-off rate to use is not 3 dB but rather 4.5 dB per distance doubling. This 4.5 dB drop-off rate is usually used in traffic noise analyses." That is more than 50% and implies that an at-grade road will diminish sound far greater than an elevated highway.

A: JRS: I am well aware of that statement. When sound propagates from a high location to the ground, the ground doesn't influence the propagation. When a noise source is at the ground, the ground influences how the noise propagates. Water, snow, or any hard surface influences that. The reason the at-grade alternatives produce more noise is because of the shielding by the source.

C: JR: That is assuming we don't build a wall for the at-grade alternatives. We would never do that. We never heard the comparison of with and without a noise wall for the at-grade alternatives.

C: HM: It could be a lot better.

A: JRS: When you assess noise you don't assess noise based on having a noise barrier.

C: JR: This is a very complicated project and we have a 20 page evaluation matrix. In this context I would argue that it needs to happen. If we decide we want to have an at-grade solution, we should know where the noise levels end up. Not theoretical potential future solutions where we don't do anything.

A: JRS: The reality for me is that I need to meet the guidelines. It's a big challenge to understand noise barriers in order to be constructive.

Q: JR: Can we evaluate it?

A: JRS: Yes that's what we are going to do. We look at noise barriers and the criteria of being cost effective as well as how to build them.

C: JR: At this point in the projects process I think it is premature to say the viaduct is less noisy when we have all three alternatives on the table. We haven't evaluated all three equally and it's too soon to say one or the other.

A: EI: When we put forward the noise impact statement we would show it with and without noise mitigation. Screening will affect and reduce noise. You will see a comparison of a mitigated viaduct to a mitigated at-grade approach.

C: Ken Miller (KM): Hi my name is Ken Miller and I am with FHWA. Nothing precludes the State, even if something doesn't hit the criteria where mitigation should take place. Nothing will preclude you from building noise walls. There is no State or Federal preclusion. Is that correct?

C: JRS: It depends on if the federal government is funding this.

Q: KM: Funding from FHWA is unclear. For good reason we may participate in the project or we may not. With either case, why would it preclude the State?

A: JRS: That's not really fair for me to answer because I am not with the State. I do know the State has looked at a lot of areas where existing highway levels exceed the NAC.

C: KM: I understand noise barriers are very expensive. There is a difference between significant benefit and requests. It may or may not be worth it.

C: Karl Haglund (KH): I know that an artist sculptor was hired to assist in the development of the noise barriers for the park underneath the Zakim Bridge. If you've been under there you can hear the difference between trucks and cars. I am sure a viaduct will produce more noise than the at-grade alternatives.

A: JRS: There has been a lot of research that has gone into noise evaluations. There are measurements taken with and without viaducts. Viaducts can be a component of noise but they typically are a greater part of shielding noise.

C: KH: If a viaduct doesn't shield noise it reflects it.

C: FS: We're talking about impacts to the PDWP which is closest to SFR. Magazine Beach and Cambridge are further away but the noise is likely to be worse in those locations. There needs to be an impact of noise under the 3 different alternatives for Cambridge as well as the PDWP.

A: JRS: We are in the process of doing that and will present the finding to the task force. Noise barriers for the viaduct and the at-grade alternatives would be included.

Q: EI: Jason, in the noise model, you have receptors at Magazine Beach and in the residential neighborhood or just Magazine Beach?

A: JRS: Right now we have multiple receptors in Magazine Beach. The contribution of noise and the potential of impact degrades further away from Magazine Beach. We do not have noise receptors in the community.

C: HD: The noise from Memorial Drive gets filtered out. It's filtered out by the buildings adjacent to the road. You don't hear the highway noise when you're at Magazine Beach; you hear it when you're two blocks into the neighborhood. The reason people are concerned about noise isn't because it's loud at Magazine Beach, it's because of the residential noise from the Turnpike. The BU towers echo noise across the Charles River. I can hear Turnpike traffic from my second and third story floors even with my soundproof windows. I want to urge you to place receptors in the residential neighborhood.

A: JRS: It's important to understand noise and whether or not it generates annoyance or exceeds the NAC.

A: EI: It sounds like it wouldn't be a bad idea to drop some noise receptors in the neighborhood.

C: HD: I have a perfect location for you to place them. MIT has done a great job with noise mitigation with their new facilities. I want to see a noise buffer to the level of a European standard. It's hard to imagine that noise is worse 5 blocks back from Magazine Beach but it is.

C: JR: A train viaduct is going to be less noisy compared to a highway viaduct. A train viaduct isn't going to be constant.

C: NNG: Actually the trains are really loud at night through Cambridgeport moving from North to South Station.

C: JRS: How often, when it occurs, and duration are all included in the sound metric.

Review of Revised Evaluation Criteria

C: EI: Before we get into the review of the evaluation criteria I want to reiterate the intent of the document. As you have seen and as it was mentioned by Ken Miller, this is a very long document. The intent is to list the bullets of major headers. This is a draft but we intend to include the final version in the DEIR. At this point we know we are not going to reach a preferred alternative before the filing of the DEIR. I think the most effective use of our time will be to walk through the evaluation criteria matrix with an eye towards anything that is missing.

C: JR: I'd like to comment that the Purpose and Need section has a significant issue. I'm disappointed that we have been at this for 2.5 years and you're not listening to our primary goals.

a: EI: Please bear in mind that these are not weighted in order. The Purpose and Need has to meet the criteria from FHWA.

C: JR: At the very first public information meeting State Representative Kevin Honan made a comment that it is our priority to reconnect the two halves of the Allston neighborhood. We have been saying that since the very start of this project and I don't see it on here.

A: EI: To be honest, that is something that can be a goal but would not typically be classified as a transportation Purpose and Need.

C: JR: Well this is not a typical transportation project.

A: EI: I agree. Neighborhood connectivity is present in the evaluation matrix, it's just not under the Purpose and Need.

C: JR: There are a lot of people who are getting paid to be here and there are a lot of people who are not. Our understanding is that our influence based on what we say is incorporated into the project.

A: EI: It is and there has been a tremendous amount of content added to the project based on the task force.

C: JR: I don't see that.

C: HM: Some of the items listed in the evaluation matrix are actually the opposite of what the community has stated as their goals and what the City of Boston has set as their goals. Reduce congestion and improve traffic sounds like you are adding more cars and moving them through Allston faster. The City of Boston has adopted VisionZero and you are proposing bigger, wider roads. Fewer people are going to feel safe walking in this new district. I completely agree with Jess. You're missing what we've been talking about for 2 years in the evaluation matrix. My second comment is that the language is inconsistent and it feels like certain things are made up just to comply with the FHWA requirements.

C: Jim Gillooly (JG): Maybe it's me but we may be too focused on missing words. We're talking about integrating the neighborhood and to me we are stitching the left and the right sides. I recognize the need to make this document competitive for funding. We need to make sure this document hits all of the right buttons in order to access Federal dollars. The Feds are looking to see buzz words. Once we get into the placemaking section then we can look for those words and descriptions you want to see. I want to give the team an opportunity to develop this before we pick it apart.

C: Paola Ferrer (PF): The issues I see are still relevant and the community is exhausted. For one reason or another the way we speak isn't getting through to the team. The community members here aren't experts; we're not hitting the technical levels of what we are saying. I raise money for work and I understand written language.

A: EI: This is how we need to say it in an environmental document.

C: PF: Wording is important and you're not hitting on a lot of the things we've talked about.

C: JR: The way we word the criteria is important for how we rate each alternative. This criteria is just teeing up the results that the project team wants to get. It's obvious that's your goal.

C: KM: I can see what you're saying about the language. I understand you don't want the State to miss anything. My take and the way I see this is that MassDOT has attempted to include what you've said. That's not how you make a decision. Having that said, it could easily say, replace existing viaduct as bullet one. I'm not trying to word smith but I can see how you're reading this. Language is important and it needs to be carefully thought out.

C: Tad Read (TR): I think the concern is that the window of time we have to comment on this is tight. The Boston Redevelopment Authority (BRA) is preparing to make our placemaking recommendations. These will influence how we will be evaluating each alternative. I think our recommendations could inform these evaluation criteria. There is a placemaking section of this matrix and our recommendations would fit into that. We are planning to present our recommendations in mid-May.

C: MOD: Thank you Tad. We are looking for your feedback on the evaluation criteria. The intent tonight is to begin the process of evaluating the matrix and to make revisions moving forward.

C: EI: The challenge for us is to make a decision. Before we can make a decision we have to boil down all of the components of the project and this matrix has been developed so we don't miss anything in the boiling process. The intent is to list items as bullets and provide a rating for each one. We want to recognize which bullets seem to be the largest differentiators. The intent of MassDOT is to put all 3 alternatives out on the table to be judged. We want to get a feedback from you on the evaluation criteria and hear what's the most important, what's missing, and what is good. This is the approach that Secretary Pollack has taken. We want to structure input for the DEIR. Our best effort now is to make sure all the criteria is here and that we haven't missed anything.

C: Bob Sloan (BS): I have a positive recommendation. Many of us would like to sit down with MassDOT and the project team staff and work out the wording of the criteria. There may be other things that are needed to be discussed. There is a lack of understanding from the task force and things we want to offer you to help reduce the delay.

C: MOD: I am happy to setup a workshop similar to what we did at the MassDOT library. I understand concern and the difference of opinion. Many of these criteria are reflective of what we've heard through the task force process and the hundreds of comments we received as part of the filing of the Environmental Notification Form (ENF). We haven't lost touch and we aren't intending to. The intent is to be responsive to the task force. We're trying to address specific comments.

Q: HM: Is MassDOT plan to submit the 3K-4 Alternative the way it currently exists in the DEIR. Are there plans to have a 3L or a 3M Concept developed and submitted in the DEIR.

A: EI: The concept MassDOT submits will likely be the 3K-4 Concept you've seen with a few tweaks and modifications.

A: MOD: I am not aware of a 3L or 3M Concept. If minor tweaks are needed we can certainly look at that. We're not going to disagree about narrowing streets. I don't think that level of detail is necessary to be reflected in the DEIR.

A: CC: If tweaks to the MassDOT 3K-4 Concept are needed, tweaks to both the AMP and ABC can happen as well.

Q: HM: I don't understand the feedback process from the BRA or how it fits into what MassDOT is trying to do. MassDOT spent a lot of money for the BRA and its consultants to be brought on board. The issue is right in front of us. It's been clearly written in our letters. We have concerns about the MassDOT 3K-4 Alternative that go beyond small tweaks. This issues and concerns deserve to be addressed before the next major process for this project.

A: MOD: I don't want to speculate what the BRA recommendations are but I would image that they will be integrating placemaking components into the alternatives. Unless something is extremely wrong with the 3K-4 Alternative I don't anticipate drastic measures to be taken. We are preserving future flexibility and easing the potential for development. We have provided enough flexibility for this district to be developed and created over several decades. The image the concept we submit in the DEIR will be something very similar to what you've seen.

C: TR: I have a slightly different understanding. The way I see the intent of the placemaking study is to take a close look at the MassDOT 3K-4 Alternative and the other alternatives to evaluate the extent to which the design could be modified or improved to support the good of the placemaking principles. I don't want to get into a conversation now about what those recommendations would be. It may come down to how we define minor changes. Our recommendations will make adjustments to the existing plans. I wouldn't call them tweaks.

C: JG: The placemaking effort is essential outlining the principles of where we want to get to. There may be significant changes and there may be minor adjustments. We're trying to plan for future infrastructure. We want to develop a plan that is not going to dictate a successful future outcome. The widths and crossing distances of the streets is something we want to focus on. Mike said we're not going to figure out every corner of every street. We want to set principles to have fewer lanes, not more. There are lots of ways to configure the street network. We could have one way or two-way streets. We want to make sure things aren't overbuilt. We want to focus on curb-to-curb.

Q: NNG: Is there a hierarchy of order in the evaluation matrix?

A: EI: No, there is no specific order.

C: NNG: I would suggest that you put it in order based on priority.

C: EI: That would depend on who you talk to.

C: JR: I like the idea of a small working group. I think the people who are getting paid to be here should take a first stab at revising the matrix. I would suggest Ed does personally since you have a decently high level of social intelligence. The wording of the matrix sounds like it is leaning towards the MassDOT 3K-4 Alternative.

C: EI: That's not the intent.

C: JR: Well that's the way we're reading it. When you paraphrased the first bullet 10 minutes ago it was more acceptable.

A: EI: I'm happy to take another stab at it. There is sensitivity to the wording in the DEIR from a legal perspective.

C: JR: It would be great if you could take a look at it. Some sections use the term do not preclude, some sections use the term maximizes; it's inconsistent.

C: EI: I have a request back. I would ask that you all take the time to circle the items you think are problem areas. That will help us in advance of the next meeting.

A: JR: Sure.

C: EI: A working group session will be more productive and functional if we get some initial feedback. We would love to hear from Ken Miller ahead of time as well.

C: KM: I would suggest that the Purpose and Need section could be improved by taking a systems approach. This could be done by identifying the objective, identifying the evaluation criteria, and then coming up with the recommendations. That way you could associate the criteria with the objectives and better illustrate how an objective affects safety for example. There is certainly a relationship between criteria and objectives.

My second comment is that some of what you are showing in the evaluation criteria is more of a functional requirement than criteria. You need to be careful about making that distinction. My third comment is that the criteria is very inconsistent. You may end up deciding that you can tolerate more congestion if it increases safety but you have both displayed as separately. I recommend being careful about the verb phase. It makes sense to separate objectives and related criteria to particulate objectives. I wouldn't include functional requirements as part of the criteria either.

From an observation perspective of connecting the two Allston neighborhoods it's always more important to get the right answer than a quick answer. This is the type of work people like me do for a living. MassDOT and the team also need to be careful of bad decision making. It's the kind of thing where you get into a position, you advocate for it, and you defend it. That's not the way a group or team of advisors is going to get a conclusion that everyone likes. Everyone should keep an open mind.

Q: Pallavi Mandi (PM): What happened to the vulnerability assessment?

A: EI: I think we mentioned that in an earlier session but to reiterate, the Woods Hole Group is doing a site specific assessment. We have it and it will continue to look at it to identify vulnerable components.

A: Mark Fobert (MF): It's included in the evaluation criteria.

A: EI: We went through the maps at a previous task force meeting. We didn't relate the maps to the evaluation criteria.

A: MF: We still need to analyze the data and determine how it affects the project. We have the data from Woods Hole but we need to look at how it affects drainage.

A: EI: All of this will be included in the DEIR.

Q: PM: Will you share this list with the task force for before the DIER? If so, when?

A: EI: I don't think we have a sense of timeline for that.

Q: HM: It sounds like there are a lot of request that are floating. Is there any plan over the next 8 months before the design process that you can share with us tonight or schedule you can send to us via email?

A: MOD: The next immediate plan is to have a working group session. I'd like to do that by the end of the month; maybe the last week in April; if we could get some additional feedback on the evaluation matrix prior to that session that would be great. To answer the long term question, our schedule is to file the DEIR and Environmental Assessment (EA) by the end of the year. Mark Fobert and Ed Ionata will be authoring that document. They have a good understanding of how long that will take. It would be ideal if we could resolve the unknowns and uncertainties.

A: EI: In order to do that we need to know what the alternatives look like. We still need to look at air quality in terms of the street analysis. Those inputs need to be factored into the modeling for Jason Ross. We will need to finalize where the roadways are and if there are queues we'll need to calculate those in based on volume, noise, and speed.

C: HM: How about project plans to open ended questions. It was great that we talked about connections to Commonwealth Avenue last month. We haven't had a discussion of the Charles River's edge. Last we heard you were studying the parkland and configuration. It would be nice to address some of the open issues. It would be nice to reach some consensus with the task force. Right now we get no guidance beyond the when the next meeting will be. We're totally blind until we see the next agenda.

C: JR: It would be great if you could share that list of open ended issues with us.

Q: GB: It sounds like there is an assumption that you have a list. Do you and if so, when will you share it with us?

A: EI: There is no organized list however it sounds like it's the right time to frame one.

C: FS: I want to thank MassDOT and the team for putting all of this out on the table. Everyone in this room has an item that they don't like. I respect that you are putting it all out there and asking for public feedback. That's a good thing. It's very helpful that we can comment on it. Thank you.

C: MOD: Thank you Fred. Thank you all for joining us tonight.

Next Steps

The next task force meeting is scheduled for April 28, 2016 at 5:00 p.m. at the Fiorentino Community Center located at 123 Antwerp Street, Allston. All task force meetings are open to the public.

Appendix 1: Meeting Attendees

First Name	Last Name	Affiliation
Joseph	Beggan	Task Force Member
Glen	Berkowitz	ABC Consultant
Nathaniel	Cabral-Curtis	Howard Stein Hudson
Chris	Calnan	TetraTech
Darren	Conboy	Jacobs
Donny	Dailey	MassDOT
Stacey	Donahoe	MassDOT
Paola	Ferrer	Task Force Member
Mark	Fobert	TetraTech
Anabela	Gomes	Task Force Member
Anna	Greenfield	Skanska
Nick	Gross	Howard Stein Hudson
Ed	Ionata	TetraTech
Marc	Kadish	Task Force Member
Jim	Keller	TetraTech
Wendy	Landman	Task Force Member
Elizabeth	Leary	Task Force Member
Amy	Mahler	Task Force Member
Clancy	Main	Task Force Member
Pallavi	Mande	Task Force Member
Brooke	McKenna	City of Cambridge
Ken	Miller	FHWA
Tom	Nally	Task Force Member
Paul	Nelson	Task Force Member
Mike	O'Dowd	MassDOT
Ari	Ofsevit	Task Force Member
Alana	Olsen	Allston Resident
Tad	Read	Task Force Member
Jessica	Robertson	Task Force Member
Jason	Ross	VHB
Fred	Salvucci	Brighton Resident

Mark	Shamon	VHB
Steve	Silveria	Task Force Member