MEMORANDUM |

To:	Michael O'Dowd Project Manager	Date:	March 3, 2016
From:	Nick Gross Howard Stein Hudson	HSH Project No.:	2013061.14
Subject:	MassDOT Highway Division Allston I-90 Interchange Improvement Project Task Force Workshop – Part 2 Meeting Notes of February 24, 2016		

Overview

On March 10, 2016 members of the Allston I-90 Interchange Improvement Project team and MassDOT staff associated with the job attended the 21st 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 meeting summarized herein was made up of a series of three presentations. The first, presented by Eric Mackey, addressed the impacts of a taskforce-proposed vehicular connector to Commonwealth Avenue along Malvern Street, either for all vehicles or only buses. The concept would fit into all three alternatives. The taskforce suggested connecting with the Commonwealth Avenue reconstruction project phase 3 and 4, since this could reconstruct Packard's Corner and therefore change the traffic patterns that the CTPS models have been based on. The second presentation was of the Concept 3K construction staging, and roll plans for 3K-4, presented by Jim Kelleher. The presentation detailed the five stages of construction, and was generally well received. Jim noted the complicated nature of stage 5, which includes the construction of all the street connectors between the Turnpike and Cambridge Street. The third and final presentation was given by Meredith Avery of VHB and Mark Fobert of TetraTech, to explain the Section 4(f) process in greater detail. There was significant discussion over the quality of parkland being untouched or created under 3K versus the two at grade alternatives, as compared to the raw square footage of parkland disturbed versus created. The team stated that a more qualitative assessment would be forthcoming.

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

Agenda

I. Welcome & Introductions

II. Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue

III. Urban Interchange Concept 3K-4 Construction Staging

IV. Concept 3K-4 Construction Staging Roll Plans

V. Section 4(f) Discussion

Detailed Meeting Minutes[2]

C: Ed Ionata (EI): Going to start out tonight. I'm Ed Ionata from Tetra Tech. There are copies of the agenda on the table back there. Tonight is largely an information download session. We've got the connections from 3K to Commonwealth Ave, which lots of people have asked about – the potential for that, the way it would work - and the construction staging for 3k. We'll continue with the 4(f) discussion that we began at the last workshop meeting, with a lot more clarifying information to be provided first. Mike O'Dowd will be here in a few minutes, but he asked to get started without him, so let's begin with Eric Mackey and connections to Commonwealth Avenue

Discussion of Vehicular Connections via Malvern Street

C: Eric Mackey (EM): Thanks Ed. I'm going to talk about 3K-4C, which designates that we're connecting it down to Commonwealth Avenue. That is represented by the little length that we've been talking about, the Malvern Street Connector. Everything else is the same. What I'm going to go over are two alternatives. One is our full vehicular access using that connection from the Station through Malvern Street down to Commonwealth Avenue. The second alternative is a bus only connection. Some of the assumptions that CTPS included in their model are: that it's a new two-way North-South connection between Commonwealth Avenue and West Station; it includes bicycle and pedestrian connections; there are no turn restrictions at Packard's Corner, so you can make left turns up Malvern, left turns out of Malvern (which you can't currently do today); and no new restrictions on some of the streets in that area for Ashford, Babcock, and Gardner Streets.

[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.

The transit assumptions are really the same that we've had in play for West Station itself – commuter rail service, bus service from the North includes MBTA 64 and 66 bus, as well as two shuttle services, one to Harvard Square, and one to Central Square at five minute headways. Really the only thing that applies mostly to this scenario is to the south: shuttle service to the south, to the LMA area, would be on 10 minute headways. That's it for what's been included in the CTPS model.

So first I'll go over the two-way alternative for the full vehicular access. What we saw in the model, we asked them to do a select link analysis. The very wide area here is actually at the station area, that's the Connector so the select link analysis shows the attractions and existing vehicles using that link. So, I know this is difficult to read because you can't see any of the numbers, but it's just to see the splattering, the spider web of the draw and attraction to that new link.

So what we see is the link is connected directly to the ramps when you continue through the Station so there's traffic drawn from I-90 through that link. We have a whole lot of traffic drawn through Babcock Street, Ashford Street, Malvern Street near the middle as well as Brighton Ave, Comm. Ave, and continuing north on N. Harvard Ave, and a slight amount of traffic on Soldiers Field Road.

So as far as information we get from the models; we're looking at about 1640 vehicles in the morning for the peak hour using this link (955 northbound, and 685 southbound). In the afternoon peak hour, we're looking at 2000 vehicles an hour. So for that particular link with those peak hour volumes, we're looking at about a daily equivalent of 18,000 to maybe 22,000 vehicles a day would be attracted to using that link once that's opened up. So looking closely at the volumes from the model what we see is that there's vehicles reduced from Harvard Ave and Linden Ave because of the new opening. It's a more direct route using this new link northbound, so we see a pretty good amount of vehicles removed from Harvard and Linden Ave - upwards of 200 to 300. And then on Cambridge Street itself, because of those reductions, around 500 to 600 vehicles during the peak hours removed from that section of the network.

As a result, we would expect better traffic operations at some of those key intersections with those hundreds of vehicles removed. For example, the intersection at Harvard Ave and Cambridge Street in the normal 3K-4 alternative would be Level of Service (LOS) E but once we add the Malvern Connection shortcut that would improve to a C. On the flip side, because of the new connection, we're seeing increased traffic on Ashford Street, Malvern Street, Pratt Street, and the B.U. area. Ashford street is not as big of an increase, 60-70 vehicles an hour (at peak hours), but Malvern Street itself, before its tied in with Babcock and Gardner Street is about 1,000 to 1,100 per hour during peak hours. Babcock Street itself we're looking from about 250 to about 400 vehicles an hour added to that particular length.

As I mentioned on I-90 the model shows that having that new connection is actually increasing the traffic on the interchange area by about three percent, another 200 vehicles during peak hours would be attracted or using the interchange because of this link.

Looking at the Packard's Corner - Malvern Street area, Babcock Street specifically, as far as traffic operations in the existing conditions, we have the AM peak on the left and the PM peak on the right. Decent operations in the AM at Babcock Street, which is presently operating at LOS level F. Packard's corner is at more like a C, and then a C to a D in the PM peak. When we add the full vehicular connection through there, of course we get a lot more traffic through the intersections. In the AM we're seeing at Babcock, Packard's Corner, Malvern, all the way through the I-90 Off Ramp will all be operating at LOS F because of the increased traffic. Likewise in the afternoon peak hours, same thing, we're looking at some F's, and at Packard's Corner as well.

This is one of the existing intersection plans for Packard's Corner. I know you've all been out there. It's a unique intersection. One of the challenges with allowing full vehicular access to Malvern Street is, Comm. Ave/Brighton Ave. in the East/West direction is the major move. With Malvern Street we're trying to add a new major move in the north-south direction. That's a challenge, especially with the geometric conditions and the trolley in the middle. We'd likely have to clip corners to allow buses and trucks to move. The left turn particularly is a concern from Malvern onto Brighton Avenue. The intersection is so wide, with the carriage roads on Commonwealth Avenue Clearing that move is lost time – 150 to 200 feet. You have to get those vehicles out of the way before you can then release the Commonwealth Avenue movement. It's not a good intersection to be introducing that kind of a major move because of the geometric conditions.

As I mentioned, some of the corners at Packard's Corner and Malvern would have to be clipped. A few other things would likely have to be done in order to get this connection. 76 Ashford would have to be taken and the building demolished to build this ramp section up to the Station. We'd likely have to remove parking on the east side of Malvern. We would have to signalize intersection at the station because of the traffic at the Station coming through. We'd have to make modification to the Packard's Corner intersection itself. There's a chance that because of how tight the roadway, in order to get vehicles in efficiently, we might have to make this a one way north bound situation for Malvern. That would help out operations at Packard's Corner if vehicles we're coming out towards that intersection. As a result of that, we may look at making Gardner one way to the east. Due to that configuration, other cars would use west Alcorn Street to get down to Commonwealth Avenue Those are some of the issues we're seeing right now, with opening that up to traffic and what kind of roadway and intersection improvements we'd need to make.

The second alternative that we looked at was limiting that connector to transit buses only. The potential inbound route to the station would be Commonwealth Avenue, making a right turn onto Malvern and the outbound move would be coming down the ramp, turning onto Gardner and then using the signal at Babcock Street to come out.

Under this scenario, traffic wise, operationally, we get better results because we're trying to push fewer vehicles though those intersections, so we get closer to the existing conditions. These scenarios assume we did optimization of signals and some of the improvements on the streets to get them to work. For bus operations, there's a little more work that we would consider. We might consider making this one

way Gardner Street eastbound to Babcock so this whole section would be one way, because the road is a little tight with two way bussing or other traffic with the bussing could be a challenge. We would also look to remove some of the street parking at Babcock to get better operations at the signal because it is just one way at each direction at the signal and there is a lot of traffic at Commonwealth Ave so we want this to work as efficient as possible. Any questions for that? There's got to be something, this has never happened before.

Q: Marc Kadish (MK): To recap, this intersection setup would stop diverting the traffic to Brighton Avenue, Harvard Avenue by going through Malvern. What's the big difference between buses and full access? Is there a much larger construction plan that needs to happen with that?

A: EM: The biggest difference is the impacts to the neighborhood. If you're going to open up Malvern as a full connection with no restrictions, it will connect right to the I-90 ramps. It becomes a very attractive route as a shortcut. So people that are today using Harvard Avenue or Linden Street will use this instead. I see it as opening up a new shortcut, so traffic will shift at least in the short term to using these roads and making an issue with traffic congestion in this area, relieving Linden and Harvard for a little while.

Q: MK: But in terms of construction itself, the process would be the same, it's just more traffic?

A: EM: Buses have a hard time making the turns and some of these roads are very narrow. That's why we think we may have to make Gardner one way just to make it easier for the buses. We don't know what kind of buses right now

C: MK: 18-wheeler trucks and deliveries, and everything else now going into a residential neighborhood. Got it. Thank you.

C: EI: Chris, what's the next step for this information?

A: CC: We're presenting what we've found so far with the modeling with both vehicular and bus. We're interested in comments. This will be presented in the draft EIR, we were required to study it as part of the certificated of ENF. All this will be presented formally in the draft EIR document.

Q: ED: And this could work the same with all alternatives?

A: CC: Yes, it's really independent of the major alternatives. Galen?

Q: Galen Mook (GM): I understand that land ownership is an issue but have you evaluated to do use the connection from West Station to Harry Agganis Way, and use Harry Agganis Way and Buick Street as your transit connection. Have you looked at that?

A: EM: No we have not. We're looking at it right now from an operation point of view. Malvern seemed to be the route that had the least harm for the campus and the students and environment so that's what was looked at originally and modeled.

Q: GM: What process should we go through to ask you to look at other alternatives such Harry Agganis Way or Buick Street? We've asked for this before in other Task Force meetings and it has been brought up before. Where in the process does this line up?

A: EM: We'll take note that that's something you're interested in seeing. Some of it is a geometric exercise with Jim, looking at grades and ramps and radiances and things like that. For us, traffic-wise, we are mostly looking at instead of buses coming in one side, they would be coming in and out of the other side. We can look into that.

C: GM: Great, I think it would have impacts on the three different throat options as well - maybe not the ABC alternative but certainly Ari's (Amateur Planner). He's talking about the viaducts for the train having some space for bicycle/pedestrian stuff, which would be incorporated with transit connections along the bank, with Agganis Way. The idea being West Station to Harry Agganis Way to Buick Street, which right now does get a fair amount of bus traffic, especially when there is a sporting event that BU is hosting. The buses route through Allston Village pretty regularly and there's the BU shuttle that uses that route, and all of the deliveries and eighteen-wheelers that access student village and the arena. It's already built for eighteen-wheeler standards which I don't believe Malvern is. Might be easier than Malvern (with all of the turns and dumping into Packard's Corner) from an engineering standpoint.

A: EM: Yes, we definitely want to avoid Packard's Corner.

Q: GM: Are you coordinating with the Commonwealth Avenue reconstruction project phase 3 and 4, which I believe is a combination of state and city interests which will totally redo Packard's Corner? How is this project lining up with that?

A: Eric: We haven't looked at it specifically. We looked at it more for a traffic operations point of view. We've been doing work for the BTD, we've looked at the intersection before. We looked from a traffic phasing point of view, in terms of adding the extra phase needed to run the left turns out of Malvern. That's really where we've limited it. We didn't look at it closer as far as geometrically and in the future.

C: GM: Potentially, that whole intersection could be blown open and redone.

C: EM: Right, maybe. I wouldn't expect it to change all that much, with the carriage roads, width, and the train going through the center.

Q: Harry Mattison (HM): I just want to understand what the takeaways are from this concept. It seems like one of them is a lot of people want to go from Commonwealth Avenue to the Mass Pike and there is demand for bus service running between Commonwealth Avenue and Cambridge Street, which is

confirming what everyone that lives in the neighborhood knows. The question that comes up for us now is how do you do that in a way…You characterized this as a shortcut? I wouldn't say it's a short cut. It's providing good connectivity through the project area right into the Mass Pike. People taking Linden Street today is a shortcut that we'd actually be fixing by providing a new direct connection in lieu of a shortcut. Two questions are 1) you're mentioning that we have to make a lot of changes for buses but buses go down right now there all the time, using the existing geometry and parking…

C: EM: Not on Malvern, though.

C: HM: There's a Peter Pan bus coming from B.U. sporting events, doing down Babcock that was dropping off people on Ashford.

C: EM: Yes, for some kind of sports contest.

C: HM: You can go any weekend and see them.

A: EM: I think those are more occasional busing. You see that all the time on those types of streets, a couple of times of month. They take up as much of the road as they need to in order to turn. But if you want regular service with ten minute headways, like we've talked about, we want to make sure they're able to do it without disrupting oncoming traffic

When we look at maybe not Gardner at the intersection making turns from Malvern or onto Babcock, we are looking at the swing radius. Jim has laid those templates out on the road. We see that as a potential issue, that's why we're bringing this up. We don't know if it will absolutely need to be done, you could always run test buses, depending on what kind of buses they get, and perhaps it's not needed. But at this point we want to highlight that we think it could be a possibility that you'd have to make some changes and perhaps remove some parking.

Q: HM: Here is my point: B.U. is running test buses down there every weekend when there's a track meet, you can see them every weekend navigating those streets just fine. The need to make all these changes…would they be nice? Maybe. But it's not clear that it's needed. The other point is if one connection is good, but may create some intersections that are going to carry a bunch of cars, is having more connections better? What if you have this connection, and the one already proposed behind Nickerson Field to Agganis Way? Can you balance even more? Maybe some people would take Agganis, and other people would take Malvern, or for that matter a Babcock Street connection, so now you have three.

You diffuse things even more but also you provided better connectivity, more route and more options. It would be like having only one north-south road on the north side of the Pike. Just building Stadium Way would be horrible with so many cars trying to use that one street. There the solution is not just having Stadium Way but also Seattle connector, East Drive, and so forth, so does that same approach apply on the south side of the project?

A: EM: Depends on your thoughts about that and traffic. When I look at this, I see this as taking an issue today that's difficult, making those turns out of Linden and Harvard, and pushing it somewhere else. Some people look at it as making more opportunities; I see it somewhat as a sprawl issue. Now you're providing a direct connection to the ramps, and this is what we're estimating. As soon as that opens up, who knows how much traffic would go there. Some see that as a positive, some see it as a negative. I'm just trying to show you what we're predicting would happen for the model when that link is put into place. You could look at it as more ways to get north-south is a good thing, other people in this neighborhood would say you're taking the Linden Ave issue and pushing it into my neighborhood now.

Do we want to keep traffic constrained the way it is and maybe provide a benefit for transit users (if we open that link and reserve it for transit to give that the boost) or do we want to open it up to everyone and now buses are going to have a hard time because there are cars using it as well. It's different when everyone wants something different. All I'm trying to illustrate is that it would be opened up, and it's showing that a lot of cars are going to use it.

Q: HM: Could you study having two or three connections and if that would diffuse things better?

A: EM: That's what we have now, with Harvard, Linden, Malvern, now. The model is showing us the attraction to that new connection; traffic is coming off the highway, Soldiers Field Road, North Harvard, Comm. Ave, through Pleasant and Babcock.

Q: HM: No, I mean three new ones: Malvern, Babcock, and Agganis Way?

A: EM: We will look into the Agganis one, right now it's not something that has been modeled, but we could look at it from a transit perspective. Basic takeaway could be do you want to make a new potential bunch of problem intersections for traffic benefit, or preserve it for transit and keep traffic under a lid and bump people into transit because it's an easier operation. The street improvements we're talking about are not too drastic, and we can look at it a little more closely, we don't have survey yet, we're just using aerials. Maybe one way operation, removing some parking, or easing corners might improve conditions.

Q: HM: It was people who live on North Harvard Street, Seattle Street, or Hopedale Street would want you to take the same approach to them, we don't want to connect to the Mass Pike to North Harvard Street because that's going to degrade the quality of life of North Harvard Street, and we don't want cars on our neighborhood streets. Obviously that's not what you're proposing on the north, so I think there needs to be some fairness in terms of providing connections on both sides of the project. The logic is falling apart.

A: Chris Calnan (CC): There's a difference in that those roads exist today. We're not creating new connections to Cambridge Street.

Q: HM: There's no road today that routes you from the Mass Pike to North Harvard Street, that's a new road being proposed. I'm not arguing against that but the approach on the north and south sides of the

highway are different. On the North side you're proposing lots of streets to diffuse the traffic, but on the south side you're only going to look at one, and it's overloaded, so we shouldn't do it.

A: CC: Again, the difference is that there isn't that north south connection, on the north had those connections so we have to maintain them.

C: HM: We all know that if there hadn't been a railroad there, of course the connections would exist. Here's our chance to do something about it.

Q: Dorothea Hass (DH): You mentioned the congestion at Packard's Corner, and the LOS that will be F at some point. I know you're talking to Mr. Gillooly. The city has a plan to put in a cycle track system and of course, putting precedent on bikers and pedestrians being able to be safely cross the street. Will you be addressing the impacts of these alternatives on walking and biking?

A: EM: Yes, if we did make that full connection, break through the median and allow left turns, this whole area would have to be corrected with more difficult crosswalks. I'm sure the city will continue the bicycle lanes through this area. It doesn't necessarily affect what we're doing on Malvern but it would definitely affect the placement of signals, and allowing the space out of Malvern onto Commonwealth Avenue If you're going to do that you might as well add pedestrian and bike connections.

C: DH: We want equity and don't want to have to wait too long for phasing.

A: EM: We want to provide all those pedestrian facilities for people walking.

C: DH: This area is very dense.

C: Emma Walters (EW): I want to reiterate, things that I have been hearing. I hope this presentation isn't deterring us from looking at other options, because increased traffic shuttled down Harvard Avenue is unacceptable. We have 264 storefronts in this neighborhood, and having that much traffic be put in front of business, and where our long term residents are is unfortunate. I think you have other options to look at. For me, it looks like the majority of traffic is going to affect where B.U. has their sports facilities and that's a very different impact from Harvard Avenue where our store fronts are, so it's important to keep looking at alternative, instead of saying that there's too much traffic.

A: EM: Right. One of the challenges from a traffic operational point of view is the major east west flow on Comm. Ave and Brighton Ave. All these roads radiate back into the city. Trying to put a major (20,000 vehicles per day) north south connection here is going to be challenging, because it's competing with what's happening on Commonwealth Avenue Right now these east west roads get majority (70%) of green time because the quantity of vehicles making those moves, so trying to inject a north south street is going to be challenging. It's never going to operate that well. It's limited in functionality – it's like a spigot, it can't be opened all the way because of what's going on at the major street.

C: EW: We don't want to see Malvern as a potentially negative option as discouraging you from looking at other options such as Babcock or Agganis Way.

C: No Name Given (NNG): There was a study done that said a flyover wouldn't work. One issue with Linden Street, looking at continuous flow, is that one reason it gets backed up is that they can't merge onto Cambridge. If that was a continuous flow lane, it would take a lot of pressure off.

A: EM: The challenge there is that there are some sight distance issues with pulling out of that street. The bridge crest is happening, I think there is a bus shelter that could maybe be moved, but the angle is difficult.

C: NNG: But if you change the design…?

A: EM: Yes, but all of these improvements would make more people use it. If you build it they will come, which is what I was trying to get at with Malvern Street. You're pushing a problem from one place to another, but the void gets filled in eventually and you reach equilibrium with traffic problems everywhere.

Q: Paul Nelson (PN): I want to thank you for looking at this. I can't tell if we're at the start of this conversation or the end of this conversation. You'll be considering different alternatives in the draft EIR; what factors impact whether you think this is a good thing to include in the EIR or not and what feedback can we provide to help with that?

A: EM: I'm glad you said that, because it reminded me of something. Another challenge with Packard's is that traffic continues north. We would need a signal at the station to manage the 20,000 vehicles per day, and additionally a big impact is to the traffic light at the ramp. We have ramp traffic and when we add that 20,000 vehicles a day, that causes traffic to back up down onto mainline. So that's one of the major factors the FHWA will want to consider that, as well as the neighborhood connection, with not just the view side but also the Pratt Street side. Impacts to the operation of the ramps themselves will also be considered.

Q: PN: I think we still don't know what kind of station West Station will be, whether transit hub or just commuter rail, kind of like Yawkey. Will there be someone to look at how much flexibility this link would add versus not having it for transit? There some major bus routes that run by it (but not quite, such as the 57 and 66) and we could use this to make them sort of convenient. Will this be included in the EIR?[3]

[3] West Station has been upgraded to a much more robust facility capable of supporting significant live berthing of buses as well as layover vehicles, future DMU service, and increased commuter rail service as result of community input. This enlarged West Station was presented in detail at the 12/8/15 public information meeting, which can be seen here:

A: CC: We're not doing an operations analysis of buses; it's more that we built it with provisions for bus routing that could change. Early discussions have been to make that a combination for any rerouting that could happen, but we're not in the position to dictate operations.

C: PN: So you're just making accommodations for buses at intersections, but leaving programming for a later date for the MBTA?

A: CC: Yes.

C: EM: The Station itself is being designed to allow for the layover of a certain number of buses to allow for this service to happen. It's not just a pass through.

C: NNG: We've set up five live births and five layover births.

C: EM: I think this is probably the beginning of the discussion, because if you have questions we'll go back and take a look, and try to report back next time. It's helpful if you can write them down and pass them to me, Ed or Nate.

C: Nathaniel Cabral-Curtis (NCC): We're writing them down for you.

C: John Shields (JS): I'm an urban designer with the Charles River Alliance, and we've been looking at this, mostly along the river. I'm probably about to become unpopular, but Alcorn Street looks like another potential corridor that could be opened up, if we're considering a taking. If it weren't for those buildings.

A: EM: There are already signals here, and in order to get buses to turn left, you'd be introducing another. It might work for right turns but not for buses or shuttles heading towards LMA.

Q: JS: My bigger question is, (Fred has probably mentioned this), if West Station is done correctly and does become a transit center, this part of the city is going to be as hot as or hotter than the portion we're talking about building air rights on. I might be talking to the wrong group of people but is seems like that whole area needs to be looked at and not simply from the perspective of "that signal is too close to that signal." It needs a more comprehensive look.

A: EM: These are all good questions and I would love to keep studying them with MassDOT as we go along. Each one of them needs a lot of study in order to assess impacts, and right now we're looking at so many things (at once). It's a good overview but we would need to continue to study them to understand impacts and neighborhoods and businesses.

C: AO: I think with my plan and maybe others, you'd have that flat connections at north end of Agganis Way, which would be somewhere where you could build. It would give you that level of connection

where which already has bus traffic so the geometry works. It wouldn't be introducing buses to a new area, so it might be a decent transit connection to look into. Whether you want to put cars there, I think is a much bigger question for implications and traffic modeling.

The second piece is that in this section you're saying if we build it they will come. If we build wider, bigger roads, we'll have more cars. Yet on the north side, we've been shown streets that are 120 feet wide (6 lanes of traffic) and the same should apply – if we build it they will come. If we build something smaller, maybe we can incentivize less driving, incentivize people to choose different modes. If we build streets for cars, we will get a lot of cars. If we build streets for cars and bikes and people we will get cars and bikes and people, and I think that's what we want. Six lanes of traffic and a median is not a friendly street for anyone but cars.

A: EM: Primarily the streets are four lanes. At the intersections, we do have left and right turning lanes, which does increase crossing time. We've been talking with DOT about the question of how wide are the roads. Part of the difference is that today, all of the development on Cambridge Street is on the north side. We're adding a whole street network to the south. The fact is that none of this is really about attracting more cars or making more space for cars. We're really just reconfiguring the existing interchange out of its current, suburban configuration. That means some places need turning lanes.

Today, if you're going up North Harvard, you're making a left turn or a right turn. Now you will have the opportunity to go on the south side: we're adding demand. Ramps can handle 67,000 vehicles a day. We're spreading that out to try and mitigate the impact of having two mega-huge intersections. It's a challenge. We're listening to what you're saying and we're going to continue to look at it. But if you look closely at the concepts, there are a lot of key intersections where cars make right turns to get to ramps, and then there are other areas where four lane roads get turn pockets as you get closer to the intersection.

C: AO: I think we should look at the Seaport as a lesson. That's a failure for traffic. Maybe we don't need those 6 lanes; maybe if we provide better transit and look at that in the modeling?

C: ED: One more, then we'll move on to staging.

C: Linda Jayson (LJ): Brookline has not had a seat at any of these meetings so far. I want to remind you that this is Brookline we're talking about. There's a lot of interest in Brookline and from the Longwood Medical Area (LMA) getting access back and forth, from Harvard and the Medical School and also people who work at LMA. We are advocating for public transportation there. We're interested to be sure that there's sufficient access for public transportation, taking into account that it will pass through Brookline and we need to be a part of that discussion.

A: EM: Certainly transit and shuttle are important, because it's taking cars off the road. Lots of companies have their own shuttles now. They're all over the place, and we're looking into this.

Q: TR: We're looking at development between IMP and the Rail Yards area. Paul nelson can confirm these numbers, but I think in the Longwood Medical Area, they're looking at between 7 and 14 million square feet of planned and approved development. Between those two nodes of new development, there's a critical need for transit service in this area, and we would applaud that. In addition, have you explored the option of running buses along Soldiers Field Road? Is that out of the question because it's a parkway?

A: EM: That may have been explored a bit in the Urban Ring project. At least a short connector to get to the B.U. Bridge Area

Q: TR: Is that feasible?

A: EM: These are all great considerations, but we're trying to focus on things connecting to the project area. We're getting into regional questions. I would love to look at it but we have to draw a line somewhere. It is important to look at these things with this project, to see where we can try to address these long term changes. There has to be a mode shift, we can't keep making things better for cars, we have to give transit advantage. The CTPS model shows a mode shift by 2035 towards walking and biking, primarily because of that station. In this area, that's a good thing.

Q: HM: If we just talk about buses, what is your summary? Are buses fine and we should go ahead with buses only and cars needs more discussion?

A: CC: The takeaway is that DOT isn't committed to any of these. We are presenting ideas that are out there. We like to make provisions for these. This is to let you know where we are with analysis. We'll present this information with the draft EIR, we have a scope to do that. We will report those findings and then see where that goes with the DOT.

C: EM: We're not trying to be biased; we are trying to present all the information as well as we can to get your input, your pluses and minuses. Email Nate, flood him with emails.

C: EI: Okay, let's move on to staging. Jim?

Staging of 3K

C: Jim Kelleher (JK): Good evening everyone. We're going to present 3K staging, the general approach. We've been working for quite a while and have some more detail. These are available if folks want to get more into the weeds, we can do that but for tonight we'll go over the general presentation somewhere along the lines of HNTB's presentation of the two at-grade alternatives.

Everyone has seen this draft of 3K-4. From the general perspective of staging, first and foremost, priority is maintaining bike and pedestrian movements at all times. Cambridge Street, Soldiers Field Road, the Dudley White Path, and the crossing over I-90. One of our top priorities is to try and

construct a new Franklin Street Pedestrian Bridge as early action item. During construction of that, the Lincoln Street connection would have to be used.

The second priority is maintaining at least one commuter rail line at all times, same with service to Grand Junction as well as Houghton Chemical at this time. Maintaining traffic movements at Cambridge Street and Soldiers Field Road, maintaining two lanes in each direction at all times. For I-90, maintaining three lanes in each direction at all times (westbound and eastbound), down from the four currently today is a priority.

Finally, all the ramp movements make the staging quite difficult. This is because we're going from a grade separation, to removing the grade separation with construction of a completely new interchange. The grid system and urban interchange concept with all the connector roads, Cambridge Street South and Cambridge Street will all have to be maintained through temporary connections and roadways.

We have roll plans and cross sections at critical sections we'd like to go through. There is a lot of information. We have five stages, but this could be expanded to up to twelve if we include the sub-stages. For now we are trying to keep it simple, but there is a lot in the last stage. We do have additional plans, and can sit down with individuals to discuss in more detail. We also have several people here from the project team who can answer specific questions.

First, going over the legend, the colors shows on 3K-4 everything remains open. There is some night construction and off peak hours, but to remain two lanes in each direction on Soldiers Field Road during the peak hours. The blue coloring is Grand Junction Rail lines and Houghton line. Commuter Rail is magenta, yellow hatching is roadway work and temporary bridges and viaducts. Proposed track work is an orange dashed line.

Franklin Street Pedestrian Bridge as I stated earlier, will be an early action item – we go in prior to almost anything else happening. This is a temporary eastbound I-90 alignment required for us to do the existing rail bay under the Commonwealth Avenue Overpass. We reconstruct I-90's lowest profiles and push the I-90 eastbound/westbound traffic in various stages. That will be stage 1. There will be quite a bit of track work before we can get into that bay. Track 5 needs to go down to track 1 on a temporary basis. Let me explain the numbering, because I have to refer to them that way. Thinking about the tracks from bottom to top, they are numbered: 2, 1, 3, 5. 2 and 1 are for commuter rail, and 3 and 5 are Grand Junction, Houghton Chemical and freight.

We need to make a temporary connection from Boston Landing Track, and we're assuming that track 1 is completed as part of that process or somewhere thereafter for double track commuter rail landing somewhere between Boston Landing and Yawkey. We have to shift all commuter rail to existing track 2 in stage 1 and shift freight and Grand Junction to existing track 1 through stage 1, in order to open up that bay to do the I-90 temporary alignment.

From a highway perspective, the goal is in stage 1 to build all of the I-90 realignment and do mainline and ramps for eastbound and westbound. Also set temporary bridges over existing I-90 westbound and eastbound to facilitate eastbound off and on ramp moves (which come later in stage 3). Note that the traffic operations during this operation are all as they are today. Moving east, in very early stage 1, this is a temporary realignment of the Grand Junction and Houghton. The yellow portion is the new widened section of the westbound viaduct as well as the portion of the existing that gets demolished. For that to be constructed, we have to get Grand Junction and Houghton away from it, so that's the reason for the temporary realignment.

The westbound viaduct widening will be constructed in stage 1. The scheme for the viaduct is to start north and head south and eastbound and finish in the middle portion which is the existing westbound. So with stage 1 for the viaduct, as stated, the new widening construction as well as another temporary Grand Junction and Houghton Chemical connection, the orange dashed lines, for a future stage. This is because we have columns and have to move things around to get everything to fit in during staging of the viaduct.

Greg has the cross sections for this stage. The cross section is located at pier 9 on the I-90 westbound viaduct. That cross section shows the demolition of a portion of the existing westbound barrel, temporary column placed to support remaining viaduct. Then we replace it in the next phase of Stage 1, and build the new widening, as well as replacing a portion of the existing with the final column location. The section also shows the temp Grand Junction and Houghton Chemical alignment. The colors also match the legend of the large plan.

Q: AO: What's the additional width of the construction versus current towards the river?

A: JK: We can count off the grid, so 22 feet, at pier 9. As you head to the westbound off ramp, you transition. This is the 135-9. So, that's Stage 1.

C: JK: Stage 2, as far as roadway, highway work going on, there's not much we can do because we're waiting for the east bound portion of the viaduct to be finished before we can put traffic on the new ramps. Traffic on the westbound section is going to take quite a while, because of the viaduct. Franklin Street Bridge is complete, and everything is open at this time. Rail is where it was in stage 1 until it gets to the yard. Now we look at constructing the final alignment for track 1 and 2 (track 2 is down at the bottom, track 2 is on the North side of the south platform). We are tying in some temporary alignments to Grand Junction for future connections so that alignment works out. Everything within the interchange is existing traffic operations. We're not touching Soldiers Field Road or the Paul Dudley White Path yet.

I forgot to note that in early stage 1, there is a temporary widening on the east limit of project to get enough width for both barrels for when we shift west bound traffic in the south. Now that we have the westbound widening finished, we can put the westbound traffic there, and we can shift eastbound traffic where the existing westbound was. That frees up the east portion for demolition and

construction of a new eastbound barrel as well as installing track beneath it to bring the final alignment of track 1 and 2 (the commuter rail) in final condition. Here's the cross section; same thing going on here, demo and replacement on the eastbound side. We're removing existing columns, and one temporary column is being installed on the north side of track 2 and then we can demo and construct new east bound barrel.

Moving on to Stage 3, moving again from west to east: the I-90 temporary alignment is complete, and the eastbound was completed in stage 2; so now we have traffic on the new east bound barrel, and we can open up the new ramp system. The temporary bridges have been installed so east bound off ramp route is going to Cambridge Street. They can use the overpasses in their final locations over I-90. And same thing, we have a temporary bridge connection over the eastbound on ramp. So, the eastbound mainline and ramp system is activated as well as the eastbound portion of the viaduct. From the rail perspective, tracks 3 and 5 are now through the yard being constructed with the north platform.

The final alignment of tracks 3 and 5 and the Houghton spur are also being constructed now that we have the westbound portion of the viaduct and eastbound coming to the middle (which is the existing westbound barrel). That gets demolished, and tracks 3 and 5 get installed in that bay, as shown on the cross section. The traffic will be in the interchange at this point. Westbound movement and ramp system are still on the existing conditions. Only eastbound activated at this time. That frees up the ability to reconstruct the existing I-90 barrel as well as the lower profile. It's a big profile change between existing and final condition.

Now in Stage 4, now that the eastbound temporary move is (still) being used and the eastbound ramp movements previously discussed, the final condition for eastbound is complete and we can tie in westbound moves from ramps. We'll use that so we can construct the final condition of the westbound barrel, by lowering the profile. Westbound is now available to us, (from the viaduct) so we can open the westbound barrel of viaduct. The mainline of I-90 has been realigned and is completely in use. Temporary bridges for eastbound travel are still in use. Westbound off ramp from viaduct is still using existing at this time. As far as rail, the majority of the work was done in stage 3. There us a spur into the yard can be done at this time. Then we're in final alignment for tracks 2, 1, 3, 5. With the temporary I-90 eastbound shift, we can add service earlier for two commuter rail lines.

So the viaduct at this point (at the location of our critical section) is complete. That's shown in the cross section. We still have a small piece of the westbound viaduct. We have the opening for three lanes to get out and the ramp we still need to use to get middle portion done. We still have the existing ramp system to get done which is why construction to the north hasn't happened yet.

Stage 5 has a lot going on, as I was saying before. Our stage 5 is bringing in probably 7 sub stages. Now that we have the I-90 mainline and the eastbound ramp system open and the viaduct is complete we can open up the westbound off ramp alignment. We have the ability to open up the northern section. There are a series of temporary ramp connections for the westbound move. We've looked at profiles and we're pretty comfortable with the layouts.

We need temporary bridges in order to remove the grade separation. These are all temporary road connections to facilitate construction of grid, Cambridge Street South, and keep the traffic moving. This is early and open for refinement. We're also constructing the yard at west station. The MBTA labor facility, west station, that could change but right now we're assuming the access will be from the temporary I-90 eastbound connection. There are also rail reasons we haven't done much there until this stage. This stage is the longest. We're also doing the Soldiers Field Road realignment now that the viaduct is complete and we can tuck it under the cantilever portion. Also constructing the Soldiers Field Road Pedestrian Bridge and all other connecting roadways will take place during this stage.

Stage 6 shows the final condition. But again stage 5 has multiple stages to it. Again, we have it broken down a little bit in other plans.

To recap what you've seen a few couple of times now. This is pretty much verbatim what we've presented a few times. Changes we've made from ABC concept are included here. At the last workshop, someone brought up concern about Paul Dudley White (PDW) path and why did it have to be six months closure. We've been looking at some alternatives; we could maybe add a stage to shift Soldiers Field Road to the south, which wasn't a stage that was previously shown. It appears that it could be opened up, and it would add a few months to the project and then we could probably get the PDW Path to remain open. We're pretty confident in that.

We also started looking at Amateur Planner. At this time we haven't come up with anything because the scheme requires traffic be on the PDW Path for a period of time. We're not saying it can't be done, but we need to spend more time and look more. It's really a width question between the at-grade and the DOT alternatives.

Construction Durations were presented HNTB, these were grabbed as meeting notes. ABC is in the realm of 52-76 months, 66-96 months for Amateur Planner (this could be refined with deeper level of study); and 58-72 for 3K. We've gone further into the durations, and have been taking utility work into account. These numbers have some play but generally these are what we assume. That's about it.

Q: EI: Questions for Jim?

C: TN: We would welcome the opportunity to sit down with you and see the weeds.

A: JK: No problem.

Q: EI: Mike, you'll set that up?

Q: JS: There's a whole bay under the viaduct that is still empty? Have you looked at tucking Soldiers Field Road under there?

A: NNG: Yes, we have looked at that, but you can't tuck it under for a long distance. By the time you get it transitioned under, you'd be coming back out. It would require the construction of some more columns

out in the center of Soldiers Field Road. You gain a little more parkland but there would be some sight distance issues by putting columns out in the middle of SFR. At this point we're sticking it in the old lane.

A: NCC: If you look at some of the old power points from 2014, I used to ask the team to put a big red X in that open bay because there's a few sections where it does look open. But in terms of having a nice long pass-through it's not there. It's just open in that section.

Q: Jack Wafford (JW): Will you do staging plans for the other two alternatives?

A: JK: We have plans and we've been looking at those, but I don't know how much more detail we'll get into.

A: CC: They were presented by HNTB. All three will have construction staging presented in the draft EIR.

Q: JW: So you've gone through the details on this but not the other two?

A: EI: HNTB did, with their presentation back in November. There are three staging sets with roughly the same level of detail. Two were done earlier in the evaluation of ABC and AP Plans. All that's been done for those subsequently is trying to address if they could be more optimal, looking at primarily the closure of the PDWP in Amateur Planner plan. We picked off those key issues to try and see if we could. But they're basically at the same level of detail, mostly to demonstrate feasibility and staging.

A: JK: They were taken to a pretty decent level of detail from a staging perspective. There's been constraints because of the widths at the throat, (trying to take something that is elevated and put it at grade) and still trying to maintain everything at grade. That's really where the difficulty comes in for keeping things in service. The 3k is elevated so the rails underneath and opens up so much more space to fit things in on a temporary basis. That's why the closures are currently defined as less.

Q: NNG: At the last meeting you discussed building a platform in the early stages. Is that decided? How would the funding work?

Q: EI: You mean an air rights platform? That's a good question. Mike?

A: MOD: That's a discussion between MassDOT and Harvard University. It's still in the process.

A: EI: All three of the staging schemes accommodate future columns for a platform like that but don't install them. There's room for foundations and columns to come up to the structure but no installation of foundations during the construction that we've been shown. In theory, we don't know what's going there for air rights so we don't know what the columns will look like. Better to leave adequate room for future columns. Other staging questions?

Q: GM: Hypothetically, if you were to install columns during the stages, would they be in every stage? Or stage 2? Is that too broad a question?

A: EI: It would probably vary, because sometimes they'd be in the way of temporary roadways and contractor lay down space.

C: GM: I think it's worth keeping it in the conversations. We've been advocating for as much decking as possible because of the expense. But I have a real question. There was a plan for the I-90 Cambridge Street Overpass that was designed and also potentially allocated funding that is 2.5 years old at this point. That project was shelved because this project might preclude that because of the columns of the I-90 overpass. Are you moving the columns on the overpass and if not where does that smaller scoped project fall into this?

A: CC: This project doesn't impact the columns so it works with those columns.

A: EI: Once you get a bit away from the throat, they're all pretty much the same, with the last couple of stages.

A: JK: The only real difference is the potential level of cut.

C: MOD: As to the second element; Mark and I have been meeting to see if the overpass could be used for utilities into the yard. Eversource has a power station and substation. We're looking at using utility bays in the existing structure. We've had a couple meetings and will probably have more. The lay down area in the station itself will need a minimum of 3 substations. There's fair amount of power and utilities. Once we resolve that, we can allocate 11-12 million to advertise that in advance of this. We haven't lost sight of this, but there are a lot of things moving forward.

Q: GM: Event though the utilities would be included in that project it wouldn't be in the scope? I guess it's an allocation question?

A: MOD: If money is available to free up, then we could move forward with it.

Q: Glen Berkowitz (GB): How many lanes are assumed to be provided at say 2am? What's the list of assumptions during night shifts?

A: JK: There may be temporary closures.

Q: EI: Do you think there could be total temporary closures, or just 1 lanes or 2 lanes?

A: JK: No.

Q: EI: I think the question is, are you ever going to take out all three lanes at night?

Q: GB: What's the assumption on the graveyard shift for demolition?

A: JK: I don't have an answer at this level of detail.

Q: GB: In the last viaduct stage, coming into the center - Stage 3? Briefly, how do you go about the demolition of the middle viaduct without impact traffic to north and south?

A: NNG: We've been able to push the trains to either side and for majority of structure we have a completely open corridor. That gives us the clearances to have the open area for construction without conflicting with trains. That's a big benefit. We can shift the trains in each stage to allow each corridor of construction.

A: CC: You can excavate from the bottom or the top. There's flexibility because of the longer corridor.

C: NNG: You might be able to drop steel directly.

Q: GB: Are there a couple of rows of temporary columns and supports at every pier?

C: NNG: We're showing one section but every pier is different, because of the track zones. At this one maybe we have 2/3 but at another section we might have 1 or 4. It bounces all over because of the configuration of the current structure. This section is typical but there is variance.

Q: GB: If the sequencing was different would it be cheaper to build West Station early? With the contractor being able to use the track area to the north rather than trying to build West Station at the end when everything is built up surrounding it?

A: NNG: Mark will have more information, I assume at the time when they are building the platform, they will also be building the support columns that are needed.

A: Mark Shamon (MS): During the early stages we will actually be prepping a lot of materials in the yard. In stages 1 and 2 there is yard work and platform going on, and in stage 3 where major final work will happen. We can't make all the tracks work on the left side because the bay at Cambridge Street still being occupied. There are some things we can do in the yard area. But the contractor will be free to build it at whatever stage is most convenient for him. There's a lot of foundation underground work.

Q: GB: Does that imply that the contract building the highway and station will be one and the same?

A: MS: that's the way it is right now.

C: Fred Salvucci (FS): Thank you. We've been asking to see this for a while. This is complicated stuff. We've talked about ceasing operations of Grand Junction and service to Houghton for periods during construction. I raise the issue for two reasons. I want people to think about it. Trying to build all of this with everything open is very difficult especially as you get into the detail. As we get to the draft EIR, you want to have clearly in there some options that close those operations during construction operations with some indication of the flexibility that gives. I'm not saying you'll do it but have the concept. Sounds like it's more but could be less work if you suspend some of those assumptions, see what it's worth, document it, for all three, and I suspect the benefit will be for all three. If you don't find

it now, there will be big cost. You don't want to be where the extension is now where they're talking about suspending commuter rail operation because they have assured people all along that it wouldn't happen. I think now is the right time to be a little more pessimistic and document them. What's the cost and advantage of that? You don't want to be forced back to the draft.

A: EI: The way I think about it from an EIR/EIS standpoint, you don't want to drive the selection of an option because you can avoid closures, only to find out later that realistically you can't avoid closure then, if that was the primary reason for the selection, you have to reopen the EIR process.

Q: FS: I suspect it's a lot of money and time on all three. We are going to get to the point of cost. You want all the flexibility you have to use lower cost options. I'm sure MBTA would rather have access over Grand Junction. But at the end of the day if trains are dodging construction workers the whole time, the MBTA might say let's bite the bullet.

C: HM: Could you show the final condition cross section again? What's the approximate space on left bay?

A: NNG: 30 feet or so

C: HM: I kept waiting to see the phase when Soldiers Field Road will shift 25 feet to the right? Maybe that's was an X in the drawing (from last year) that wasn't real? But it seems like an advantage of the viaduct is the space we're creating, but if we're not using 30 feet of that space, that makes it harder to support considering we've looked at other ways, with more cantilever or less. All so we can say we're moving the highway closer to the river because we're respecting the situation, not leaving 30 empty feet near the river, etc.

A: Mark Fobert (MF): We're looking at making that detention basins or swales to achieve goal of 60% phosphorous removal. That's hard to do. We can use that area for gravel wetland or something. That's the concept right now that we're looking at. I can't say we know it works right now but that's what we're thinking of.

Q: HM: From a land use or recreational perspective, don't you want that on the other side of Soldiers Field Road?

A: MF: That doesn't really matter.

C: HM: Sure it does. Would you rather walk along the river with Soldiers Field Road three feet away or have thirty feet of swale next to you?

A: NNG: One thing, Harry, we have this section at one location, where Grand Junction has to cross back over, and we have to develop a ladder for the yard and Houghton. So at the section we showed its thirty feet, but not along the entire length of the viaduct. It's only certain portions.

C: HM: It's 20 or 18 feet in some other places which it's still real space. You're encroaching onto the river and existing parkland. I hope in the future we'll see a more integrated approach with storm water retention and increasing park land. How can this option be better by creating more park land and not leaving so many feet of space not serving any aesthetic, and it's not doing anything for people traveling along Charles River by bike or foot.

C: CC: This is a good time to segue into 4(f) discussion.

Q: HM: My other question, in one of the earlier stages, as seen on the cross section, are there going to be any temporary closures of Soldiers Field Road or any impact to inbound travel here?

A: JK: We don't anticipate any at this time. There's a possibility of off peak, closing a lane for some overnight work but not over any substantial length of time. The constraint is keeping two lanes at all times at the minimum during peak hours.

Q: HM: There are spots where it's really close, where existing columns are close to Soldiers Field Road. So my question is how you're going to bring in cranes and cement trucks and all of the staging and still let people and still let people drive westbound.

A: JK: That's a good point.

A: CC: It could be down to 1 lane off peak.

A: JK: Off peak is considered 11 to 2 or 10 to 2.

C: EM: That's similar to some of the staging going on for Longfellow Bridge, where it's opened back up by 5 AM.

Discussion of 4f Permitting

C: EI: Okay, in an effort to clarify the 4(f) section 106 after the last workshop, Meredith Avery of VHB and Mark Fobert from TetraTech and will walk us through some information. Folks from DOT will chime in with additional information as needed.

C: Meredith Avery (MA): It occurred to me last time that everyone may not be familiar with 4(f), so this is a background what 4(f) is. It's a complex regulation, which is saying that if you're doing a transportation project and you have the potential to impact a 4(f) property, historic resource or a parkland, or a wildlife refuge, which thankfully we don't have you need to go through an alternatives analysis and avoidance criteria to make sure that you're avoiding the resource if you can, and then doing all planning to minimize harm if you can't.

Mark will walk us through a few figures of all of the alternatives. This is the framework in an effort to look at all three alternatives. For these new alternatives, we've taken them as far as we can, we've brainstormed about how to avoid impacts to resources all the same way with same understanding. If

you minimize the harm and avoid, you have three policy alternatives that you can permit, and DOT has to get one of them. *De minimis* means it's such a small impact, really negligible, not going to affect the parkland. We don't anticipate we'll get *de minimis*, it's unlikely.

There is also a programmatic arm, which is where you may have some harm but you can mitigate it, and minimize it to the point that the parkland is really unimpaired. The third option is an individual; we don't want to have impacts that lead to an individual evaluation. Primarily in walking through the alternatives analysis, you look to avoid, then minimize harm. After you've gone through those two, you can look to mitigation. We're going to walk through these alternatives and look at how they interact with the parkland. For now, we're focused on physical impacts to parkland. I understand there's a concern about second impacts, such as noise or shade. Right now, we're looking at physical impacts.

C: MF: Starting with the existing conditions plan, the yellow line is the edge of the boundary, green parkland and historic, which is on both sides, Soldiers Field Road shown in pink, and the historic area is shown in blue. Starting with 3k, the yellow line is the boundary of park (and the historic – it is the same boundary in this case). The green space is created park land, which will be more visible on the next side, where I zoom into the throat section. You can really see the yellow line here which is the Soldiers Field Road property boundary here, next to the park which is the 4(f) area. This is the park land creation area for 3k, and this is the direct impacts: about 12 footings, maybe a few more, shown here in purple. There's also an orange indirect impact- that is the overhang of the new pike over the parkland.

This is the ABC alternative. With this park creation, all these are essentially the same in this area. They use similar Soldiers Field Road alignment in this area, so the green area the same for all of them pretty much. In the throat, there is no parkland creation, there is some parkland/historic impact on both sides and the blank space is Soldiers Field Road. In this case, you have the Turnpike at grade, in 4(f) land, which is why we're calling it direct impact. Soldiers Field Road is impacting the green space currently out there, including the Paul Dudley White Path, and park.

Finally this is the Amateur Planner alternative. This alternative has the same parkland creation. Down at the throat there is additional parkland creation. Again this is the Mass Turnpike landing in 4(f) land and causing an impact. These are the numbers, which is first draft, this is what you're looking at in terms of those shaded areas.

For the 3K alternative, 65000 square feet of created park space. For ABC, this is interesting, you have 45,000, but you're losing 24,000, so you're netting 21,000 square feet. Amateur Planner is creating 58,000 square feet of created park space. For historic parkland/indirect impacts, the only thing with impacts is 3K, which is 21,000 square feet. There are no indirect impacts in the other alternatives. Parkland/historic direct impacts for the 3K alternative is 22,000 which is from the footings, for the Turnpike. 88,000 direct parkland impacts for ABC is a combination of SFR, parkland and the Mass Pike at grade. 26,000 Amateur Planner is also the existing Mass Pike at grade, in the 4(f) lane. There's also a small land under water under ABC, where SFR goes out into the river for a very brief amount of

time. Now, this is our first cut. We want to look at the red areas to see if we can reduce the areas of direct impact.

Q: AO: A couple of things. If we're looking at the parkland between Soldiers Field Road and the railroad tracks in 3K, that is completely inaccessible to anyone, and it's underneath the highway, and I would call that a direct impact. I don't know if anyone would agree with me, and I don't know the policy.

A: MF: It's a similar condition to what's out there today; it's considered parkland and historic today.

C: AO: Parkland seems tough because you're saying that it's an indirect construction impact, but right now it's not underneath the highway, and impact that seems like a direct impact to me.

A: MF: And we're here to talk about that today.

Q: AO: I would say that that is the same impact. If the people's pike were built, would that count as created parkland?

A: MF: It would definitely be a benefit to the park.

Q: AO: Could you count that as created parkland?

A: EI: It probably wouldn't, because as you create 4(f) land, pedestrian and bike paths are not park land, for the same reasons we're talking about now. They become impossible to change or modify because of the 4(f) rules. The amenities you have in MassDOT right of way, bike or pedestrian paths - park like areas, are still in the MassDOT right of way but not officially 4(f) parkland because it becomes impossible to change.

C: AO: It seems like there are a lot of semantics here, because parkland under the MassDOT right of way is indirect, but useful parkland next to the right of way doesn't count. Maybe we should penalize based on how it will be used, rather than sandbagging one alternative versus another based on this.

A: MOD: We're not sandbagging any alternative by applying these semantics. We are doing this fairly and equitably.

C: AO: I don't feel like that's the case here. I guess I'm wrong. It seems like you're saying parkland under a MassDOT right of way that is not useful to anyone, is perfectly good parkland, but parkland above a MassDOT right of way can't be counted.

A MA: What we're looking at where impacts occur, before we talk about anything else. We have to go through the process of trying to minimize impacts. We can talk about whether we want to classify overhang as part of the impacts, if that's what we're saying. What we'd like to do it if you're changing part of Soldiers Field Road and DCR land into I-90, how can we minimize that impact. Looking at connections to parkland is a way to promote and better the project. But the 4(f) framework is so strict

on how we analyze it. We need to go through the exercise for all alternatives, so that we're looking at the same playing field for all of them.

Q: AO: So there is language in 4(f) defining what is a direct versus indirect impact? Is it specific to things like highway overpasses?

A: MA: Yes. It has what's called constructive uses, they're pretty rare but they're considered a real impact. We can look at the overhang and the language and decide what it should be called, I think that's a fair point. But we need to get all of these down to the minimum footprint we can.

Q: JS: Is the only criteria square footage? There's nothing about the quality of land, or location, or accessibility or ease of use?

A: MA: Yes, you don't want to have a loss of park land, that's what triggers it. If you have a noise impact, or smell impact, those can be considered.

Q: JS: So if you were to add an acre of parkland and take away 10,000 feet that would be good?

A: MA: Right, we do want to get to the point where the project has a net benefit but before we get to what we're putting back, we need to try and minimize what we're taking away. So if you have 10,000 feet and 5,000 feet alternatives, and both impact the same amount, you have to figure out how to get the 10,000 square feet down.

C: JS: That destroys the logic of doing alternatives, because you just go to minimum harm done in terms of square footage.

A: MA: It is very strict language. Jim's reminding me that we talk about physical impacts to parkland a lot. The other consideration that Stacey and Jeff will remind us of is the historic integrity of the district: whether the alternations are considered an adverse effect to the historic district. That's also considered 4(f).

Q: JS: For a park, you're saying if we take away 10 feet of parkland but let's add 20 feet along the next 1000 feet. That's an adverse effect?

A: Jeff Shrimpton (JSH): Adverse effects are only for historic sites. They are 4(f) properties. 4(f) is part of the process but the end of the process is for dealing with historic sites. Sometimes it's not even necessary but we have to start with the section 106 process. The only way we can determine if we avoid historic sites is if we have no adverse effect on historic properties, which we only know from consultation with state historic preservation officer. But we can't do that until federal highway allows us to do that, and there are various obstacles for getting there.

Q: JS: Will you go with alternatives?

A: JSH: Typically, they want to see a preferred alternative; however we will explain other alternatives. We need to end up with a no adverse effect, if we do that we have successfully avoided historic sites and have avoided a full 4(f) for historic but we still need to do the parkland.

Q: NNG: Isn't there an implication here that if there are any adverse effects that the alternatives should be changed to not have an impact?

A: MA: Correct, that's the goal - that's what the process is trying to do.

C: NNG: I would suggest instead that instead of 3 that you should have 6, each one mitigating some objectionable features. They're all going to have similar things, but each one might have a better version.

A: MA: That's what we're trying to do, trying to have the best version of every alternative.

Q: NNG: How?

A: MA: Hopefully through this process. That's what we're looking for, ways to make these three alternatives better.

A: JS: When you're minimizing, and you say, gee there's 10 feet of land that BU is just using as a slope, can we push that and reconsider our highway widths. They're 100 feet now and we can keep that. Wouldn't that be the place where you would start to bend these things back?

A: MA: absolutely.

Q: HM: Does that mean there will be a new version of 3K with no impact? So, fix 3k so it avoids 4(f) impact.

A: MF: Yes, we should be. We are required to try to avoid.

Q: HM: On one side you have land that is dramatically underused, and an existing highway with no 4(f) impact, and a little wiggle room between the fence line and the existing highway and columns. If 4(f) requires you to avoid, I don't understand why you have a 3k that fails to avoid impact.

A: JSH: Again it requires us to *try* to avoid.

C: HM: It doesn't sound like you're trying, because there's still a slope on the south side of the highway that you're not using, and you're still widening the highway.

Q: MOD: The process is that you have to compare what the transit assets and benefits are going to be versus bottom line impacts for 4(f) or avoided entirely. It's a process we have to go through. It's not an unusual process. You have to determine the best transportation option for users, and then evaluate 4(f) impacts and if they are so great that they should limit transportation.

C: HM: I never heard anything about if CTPS thinks that we need to have enough throughput for X number of cars per hour. In your discussion of what 4(f) requires, and says that the first thing is to avoid, I never heard anything about if we think there's going to be a lot of cars, then we need to make the highway wide enough to handle the cars. Boston University doesn't want to cooperate with their slope, so oh well. What you're saying is we don't want to avoid impact because Boston University doesn't want us to, or it might cost more money or do something about their parking lot, or we want a six foot shoulder on one side, so we don't need to avoid impacts.

A: MOD: This is a process we need to go through and yes, CTPS does give us a whole range of volumes that we need to be able to accommodate. We have to evaluate how to design the structure to accommodate those volumes. If structure imposes on 4(f), we need to consider whether we should reduce the structure, still be able to achieve the overall same transportation benefit, but at the same time reduce the impacts. So it's a process we have to go through.

Q: Linda Jayson (LJ): It seems like the transportation benefits are coming first. What is the evaluation – is it the number of cars?

A: MOD: That's one of many considerations. We have a particular volume of cars that have to be able to go through. There are levels of service that have to be maintained.

C: MA: We can get deeper into this. This is binders of information. You do need to have a project that meets certain needs of the project. We could avoid impact by not doing the project but we wouldn't be achieving anything. We need to have these three alternatives that reasonably achieve the project goals. Within that, we evaluate these different alternatives that all fit the purpose of moving vehicles, fixing a bridge, and getting people where they need to go safely. You look at different ways of achieving that purpose of need.

Q: HM: That's a ridiculous statement to make. It's one of the many ways to avoid impact, and the question is will you develop a version of 3K that avoids impact on the parkland?

A: JSH: The first alternative we have to look at is actually repairing the existing transportation facility. If that doesn't meet the purpose and need, then we have to look at the alternatives.

Q: HM: So purpose and need trumps 4(f)? If the purpose and need said we need a twelve lane mass pike…?

A: JSH: We make that argument when we say that repairing the bridge doesn't meet the purpose and need, but that is actually one of the alternatives.

A: MOD: I'm not sure why BU's land keeps coming into question. I'm not sure how it is going to be the cure all. Many people must think that taking BU's land is the cure all. BU has suggested we go in and do the survey work, they've been receptive to our teams, ensuring that we have the correct information. We're going to do that, to see if there's any benefit to utilizing the embankment. But right now we don't see that there is a significant benefit to taking BU's land in order to minimize 4(f). That could change.

Once we get survey information back, see if there's any benefit for an additional shift in the Turnpike in smaller areas.

Q: JS: Wouldn't 4(f) say that if you can pick up 6 or 8 feet of land that isn't parkland and you can gain the 6 or 8 feet of parkland, wouldn't they say duh?

A: MF: That's what 3k tries to do; it slides Soldiers Field Road away from the river to create more green space.

C: FS: I have an interpretation that might that the temperature down. If I'm hearing right the game plan is to make all the options as good as they can be in a number of ways including 4(f). It's not just CTPS numbers, have to go into a complicated conversation of what the best option is. If I'm hearing right We're in the phase now of trying to make each as good as they can be including 4(f). All three go into draft EIR without specifying the preferred alternative. The public has a change to weigh in formally with comments.

After that process, tough decisions are made about which will be the preferred. We're not becoming so competitive that we want to destroy the others. I think that's a fair interpretation. It's in each advocates interest to make it look as good as possible from all perspectives including 4(f). That's a good incentive. Mike might prefer breakdown lanes that other people don't think are important. If each advocate has a motivation to look as good as possible from a 4(f) perspective, that's a good thing. Then they all become their best. People will comment on that point in time. I think there's an important discussion but it's important to bear in mind that we're putting together a draft where each alternative will be as good as possible. Afterward, we want whatever is chosen to be buildable.

A: MF: Believe me, it's our intent to make each of these their best. This is what we do. We're hoping on some input on benefits of alternatives.

C: FS: The two at grade options both include building a Grand Junction bridge over Soldiers FR. That's primarily for rail reasons. That means you have to rebuild structure. While you're doing that you could get rid of the concrete, and connect to the Paul Dudley White Path. I believe that MassDOT viaduct option would equally benefit from the flexibility from the curve of the rail. To get this to apples to apples comparisons, if that bridge replacement were common in all three, we would then end up in a situation where there is a clear enhancement at eastern and western end. I think our objective is to move expeditiously. Push all 3 to net benefit. If we can we be creative and generous at each end, recognizing that all three do have impact. It might be crummy parkland. But if we can net out positive impacts at east and west, it's in all of our interest to have all three pass the test.

A: Stacey Donahoe (SG): The Grand Junction Bridge over Soldiers Field Road is within the historic district, it is a contributing element. The removal or replacement of that bridge could be an adverse effect.

C: FS: The purpose and need is to have a two track rail road that works. That bridge is older than me, and it's got to be replaced. We need better alignment for those tracks, and the need for a safe bridge. I would encourage you to take the risk that we won't recreate a giant concrete bridge blocking the PDWP Path, because it's historic. Take a picture and say how stupid we used to be and we fixed it. We need to make the best place we can. That ought to be common to all three; it shouldn't be a big deal

A: JSH: It's important to note, under Section 106, there are acceptable and unacceptable adverse effects. Acceptable adverse effects can be mitigated, with consultation from a state preservation officer. An unacceptable adverse effect is one where the state historic preservation officer might shut down consultation. If we have to have an adverse effect, we try and mitigate it successfully through good design, creating more parkland. Through something the SHPO can accept.

C: FS: I understand the need for some of those, if there's an adverse effect. Let's take the Longfellow – there was historic granite that was replaced with new granite, which will always be a different color. Nonetheless, an additional lane going to Charles Street was part of the purpose of the project, and now it's getting built.

A: JSH: We completely avoided an adverse effect on the Longfellow.

C: FS: You got someone to say it was a no adverse effect; it's not 'no adverse effect', that was real beautiful granite.

C: JSH: Through good design.

C: FS: You got through the process because of the way you define adverse effect. You telling me you can't have two tracks here because there's a piece of concrete here that no one can see, and it's an adverse effect.

A: JSH: Demolition on that bridge, if it was a contributing property, would be an adverse effect, however, it's not an important bridge so we could mitigate it with the construction of a new bridge. But demolition is an adverse effect, by definition something else. We did not demolish the Longfellow, so there was no adverse effect there, we did not go through 4(f) for that bridge.

Q: EW: you said you were obliged to minimize the footprint? Minimize harm is what the statute says. I would think that's a much more general concept, because it looks at the bigger picture. Is there something in the regulation that makes you look at square feet?

A: MA: It's harm.

Q: JW: Moving to the footprint is itself a decision that is not required. The other question, related to that is, that we talked about 3 phases, avoidance, minimize, and mitigation. You were saying you don't even get to mitigation piece if you resolve minimization? I thought the purpose of the statue was to look at the end result, on the environment and the enhancement of the environment. Again, the big picture at

the end of the process should trump if we're going to take 1000 feet rather than 500 feet of 4(f) land that unusable, if we're going to turn it into 10,000 feet along the river. You should look at the end result in the evaluation. Is that how you will present it?

A: MA: Yes, absolutely.

C: JW: The chart showing square footage impact should be significantly changed to give what we call verbal deceit of what the real impacts are. People don't sense what square footage means but they understand if you're cutting down trees. The closer to the facts in lay language that you can use the better and the more serious you get to the purpose of the statute.

A: JSH: That's how we address section 106. We would try and show SHPO all benefits of our design. We would hope those benefits would allow no adverse effect but if there were, we hope the benefits in the design would mitigate the adverse effect to be acceptable for section 106. But having an adverse effect we would still have to go into 4(f), and Federal Highway would have to evaluate the harm. We have to get through SHPO first

A: MA: It's not just a numbers game; it's not just the table being the differentiator between alternatives. It's complex. It's one element. Now you're beginning to understand how hard it is to write these documents, trying to balance the numbers, the pictures, and the evaluation. We're just looking at 4(f) now. This is one of many, many concerns we'll have to evaluate. It'll be the functionality of the park at the end.

Q: JW: So the big picture, before and after?

A: JSH: SHPO is more impressed with good design than by numbers. But we have to get through 106. It is a key component of this process.

C: JW: I'm not minimizing getting through it. But the big picture will sell this total project to the general public and politicians. We need to be thinking about the big picture.

C: MF: this is just one piece. This all gets included.

Q: FS: All of this comes after draft EIR

A: MF: In the EIR.

Q: FS: I think the prioritization of 106 and 4(f) is what federal language says. We can have the argument later, after the public hearing on the draft EIR. But I hope you'll all be on the same page of why this project could be so great that SHPO will say that's fine. Whether there's an interpretation of adverse or not. If it's compelling, it's compelling. We can argue about semantics. If she's allowed to have that much power, then the particulars have to eye people.

A: JSH: We're not concerned about the rail road bridge. That won't be a major issue. We are concerned about other impacts on encroaching on the parkland. It's rare to have historic site and park land that are exactly the same. We've never dealt with a resource that is both a park and a historic district. The entire property is both types of 4(f) resource.

C: FS: I'm very glad to hear you say you're not worried about the railroad bridge. If that's not a problem then all three options can be apples to apples. The connectivity of Paul Dudley White becomes real. That will help all three.

Q: GM: I feel turned around. Your team is coming across as afraid of the 4(f) process to avoid as much as possible writing something that might draw some ire. Whereas you're tasked with it because it's so important to this project, so if there's 4(f) impact it's your job to make it conceived in such a way that it's convincing. But you're starting point is no. That's the way it's coming across in these conversations.

From a task force resident user standpoint it seems like avoidance, thought that's your mandate, is not acceptable because it's going to happen either way. Examples I can think of such as the boardwalk under the B.U. bridge. Was that dealt with similarly? Is that both historic and parkland, and still got a green light? I'm sure it was complicated, and lots of letters from the community had to be written, but it was done.

A: SD: I don't know the details; it probably wasn't a Department of Transportation project so it didn't go under 4(f).

C: MA: There's a federal action.

C: GM: If you've been to Philadelphia and seen the boardwalk to connect Schuylkill to the parkway as well.[4]

A: MA: You have to have that federal nexus and it has to be transportation.

C: GM: I believe it got a TIGER grant. So it's possible, and it's your job to make that possible, and I'm not getting that encouragement from your team. That's a general statement. My question is about secondary impacts. What are those? ABC and AP had 0. 3K has 21,000 feet.

C: MF: That's purely the overhang. Shadows and noise are another piece of the puzzle.

Q: GM: That's my other question; would noise be a part of this?

A: MF: This is the first pass through.

[4] Since this set of minutes was taken, the project team has made inquiries into the status of the Schuylkill River of the organization which built the boardwalk. At the location of the boardwalk, the Schuylkill has no historic designation, unlike the Charles at the location of the Allston viaduct.

Q: GM: My next question is on the purpose and need statement; it's probably a general question. Mike, is that to have a continuation of the bike path? If so, does the Paul Dudley White Path fall under that?

A: MOD: The purpose and need of the project is to build pedestrian bridge that would serve pedestrians and cyclists.

Q: GM: If we're judging that bike path as a substandard bike path, which we're doing right now leading up to the bridge, where does that fall under what the process leads to, to either play with parkland or add parkland?

A: MOD: Right now the idea was to bring the pedestrian bridge over to access Paul Dudley White Path, and to do so we had to add width to the existing Paul Dudley White Path. That's what led to us looking at Soldiers Field Road as a whole, because it was making touch downs for the pedestrian bridge, and improved upon the width of that section.

C: GM: But you are touching it further westbound where the real pathway conflict occurs.

A: MOD: A transition occurs.

Q: GM: As it approaches River Street it's narrow and quite dangerous. If you're touching a pathway which is substandard and is parkland is there a mandate to repair it, like there would be for ADA?

A: MOD: It's not like a handicap ramp but we would make every effort to improve it. That's not to say we're going to, it's a pretty tight area right now. It's not ideal but our ability to be able cure that without going to drastic measure would be beyond the scope of his project.

Q: GM: If you were to build out over the water sheet…

A: MOD: I've heard that said. Not on this taskforce but in other venues to use a cantilever structure to get all this sub grading. I have heard that.

C: GM: That's what I'm saying. We've seen examples of it locally and across the country. If you were to evaluate the pathway, it would be considered a substandard park, and yes you would have impacts because of overhanging the river, but the mitigating factor would be creating safety of pathway corridor, therefore connecting the Charles River Basin. It's maybe hypothetical argument but in my opinion as a user of the park I would put the impetus on you to figure out how to use these arguments so they aren't nonstarters. Obviously this has impact, because its historic and parkland, but…

A: MA: We'll look to all the alternatives. I didn't mean to make is sound like it was a non-starter. But looking at improving things by creating more space is a great part of the conversation. I didn't mean to make it sound like it wasn't. Our purpose tonight was to compare all three so we can get through the process. We still have to figure out which one works within the framework of 4(f). We want to look for ways to minimize the impact, and incorporate benefits in all the places that we can.

C: GB: We've use the work parkland a thousand times, and so I googled it. Most definitions include the term "public use". Does parkland equate to public use and if it does, don't we have two different parklands that are in play here? A gigantic place between Soldiers Field Road and I-90 that I believe it is illegal to access. I would posit that there is no public use. If you go back to your chart, the majority of the impacts are in that chart but there's no public use. Where can we as a group make a fair evaluate of 3 alternatives, how can we approach the 4(f) so that we can agree to talk about park land but separate it into a chunk that does and doesn't have public use.

C: Karl Haglund (KH): DCR has to declare purpose of its land takings. When DCR took the piece that became Soldiers Field Road, it becomes parkland that happens to have a bumper sticker. A parkway is not a road with trees on it. It's a park that has a road. It's legal. It's not a matter of public use.

C: MA: That's how we viewed it on the Longfellow too. Everything within the footprint of what DCR owns is legal parkland. We can talk on and on about green space, versus usable green space, versus road space. But technically the entire parcel is all parkland. We agree that from 4(f) it's fuzzy if it would actually be considered parkland.

C: SD: Under the historic district, it would be more a consideration; to some degree.

Q: JW: Could you create some categories of uses? That kind of description gets to what this is about.

A: MF: That will come down in the qualitative piece; tonight we saw the quantitative piece.

Next Steps

The next Task Force meeting is scheduled for Monday the 28th of March[5], at 5pm in this room (at the Fiorentino Center); the agenda will be BRA outputs. The meeting after that will be April 7th, at 6pm, also here. The tentative agenda for that meeting is the shadow study, and evaluation matrix.

[5] This meeting was postponed. The next meeting was a Site Walk on March 30th, followed by a task force meeting on April 7th.

Appendix 1: Meeting Attendees

First Name	Last Name	Affiliation
Meredith	Avery	VHB
Harris	Band	Task Force Member
Andrew	Becknely	Task Force Member
Joe	Beggnan	Task Force Member
Glen	Berkowitz	ABC Consultant
Jorge	Briones	Task Force Member
Nathaniel	Cabral-Curtis	Howard Stein Hudson
Chris	Calnan	TetraTech
Bill	Conroy	BTD
James	Curley	Task Force Member/BU
Donny	Dailey	MassDOT
Bill	Deignan	Task Force Member
Stacey	Donahoe	MassDOT
Courtney	Dwyer	MassDOT D6
Elizabeth	Flanagan	Howard Stein Hudson
Mark	Fobert	TetraTech
Anabela	Gomes	Task Force Member
Karl	Haglund	Task Force Member
Dorothea	Hess	Walk Boston
Ed	Ionata	TetraTech
Marc	Kadish	Task Force Member
Jim	Kelleher	TetraTech
Oscar	Lopez	Task Force Member
Eric	Mackey	MassDOT
Amy	Mahler	Task Force Member
Harry	Mattison	Task Force Member
Galen	Mook	Task Force Member
Tom	Nally	Task Force Member
Paul	Nelson	Task Force Member
Mike	O'Dowd	MassDOT
Ari	Ofsevit	Task Force Member
Fred	Salvucci	Task Force Member

Mark	Shamon	VHB
John	Shields	Charles River Alliance
Jeff	Shrimpton	MassDOT
Steve	Silviero	Task Force Member
Emma	Walters	Task Force Member
Jack	Wofford	Public