



Northern Avenue Bridge  
Mayoral Advisory Task Force  
Meeting #11 – June 27, 2019

BSA Space  
Fort Point Room

## SUMMARY

### WELCOME<sup>1</sup>

Chairman Rick Dimino, A Better City, opened the meeting and welcomed the Mayoral Advisory Task Force (MATF) and members of the public in attendance. He summarized the agenda and the next phase of the project (Design Phase), noting there will be more opportunities for public engagement. There is currently one more MATF meeting planned before the Design Phase in which the City will share whether it has reached a conclusion on the conceptual design of the bridge. He suggested the group consider issuing a report summarizing MATF activities to be delivered to the City. The Chairman noted it should reflect the discussions. It would not be a consensus document recommending one bridge option since there are differing views among MATF members.

He asked if the Task Force members had any edits to the summary from Meeting #10 (May 23). Kate Barrett, RVA, said that based on a comment from Vice Chair Sara McCammond, a footnote on page 2 was added to clarify that the HOV-3+ option was removed from discussions due to the inability to enforce it. Bud Ris, Green Ribbon Commission, said he doesn't understand how HOV-3+ cannot be enforced with available technology. Chairman Dimino said it is possible it can be considered in the future if technology improves. The Chairman asked if anyone had other edits (there were no edits to the minutes). There was a motion, which was seconded, to approve the minutes as amended.

### RESTORE/BASIC HYBRID OPTIONS (slides 4-13)

Joe Allwarden, AECOM, said the City received requests at previous meetings for more detail about the Restore options and AECOM further investigated potential options. He presented the following Restore options (all assuming the full width of 80 feet):

- **Replicate** – all new steel; looks like the bridge does today (but fixed and raised to meet climate change standards); the truss is functional to support all loads.
- **Rehabilitate** – replaces steel in poor condition with new steel and leaves current steel that can be rehabbed (new steel will allow the bridge to carry modern loads); can be done in the following ways:
  - **True Rehabilitation** – rehabilitating the truss to look exactly as it does now; carries modern loads

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<sup>1</sup> The presentation from the meeting is available on the Documents page of the project website, [www.boston.gov/northern-ave](http://www.boston.gov/northern-ave).

- **Hybrid Rehabilitation** – truss is decorative (non-structural) and is placed on top of a basic bridge deck that will support the loads; the truss can be rehabilitated in the following ways:
  - **Full Length** – looks like the truss does now (from end to end)
  - **Partial Length** – truss is rehabilitated in the middle and the flanking trusses are removed

He said the Partial Length Hybrid Rehab option hasn't been presented before as the City has not heard much desire for a partial reconstruction, and the majority of the feedback has supported an "all or nothing" approach to restoration ("go old or go bold" has been cited by some MATF members). He showed a rendering of the Partial Length Hybrid Rehab option and a comparison of the bridge styles.

Mr. Allwarden presented the cost estimates of the Restore options:

- **Replicate** – \$145 million
- **True Rehabilitation** – \$160 million (removing the old bridge is more costly because the demolition must be careful not to disturb the steel members that will be rehabbed)
- **Full Length Hybrid Rehabilitation** - \$160 million (includes construction of the base and providing a 75-year lifespan)
- **Partial Length Hybrid Rehabilitation** - \$150 million (less expensive due to the flanking trusses not being restored)

He noted the costs are still within the \$145-160 million range presented in April. He explained the Partial Length Hybrid Rehab bridge could have narrower spans at the ends allowing for more flexibility with the approaches.

Carol Chirico, General Services Administration, appreciates the work AECOM has done with these options. She is surprised by the high cost of the Partial Length Hybrid Rehabilitation and asked if a cost estimate was done for a bridge with less than three barrels. Mr. Allwarden said the cost estimates included three barrels because the feedback received so far is that anything less than three barrels is not a full restoration. Ms. Chirico said it makes sense from a design perspective to keep the width the same across the length of the bridge and there is value in preserving the truss even if it is not structural. She said the City might as well consider two barrels if it is already removing the flanking ends of the truss. Chairman Dimino said the City is already considering that.

Kathy Abbott, Boston Harbor Now, asked about the cost reductions relative to narrowing the width in the Partial Length Hybrid Rehabilitation. Mr. Allwarden said there would be a cost savings, but the reduction is not an equal ratio to the number of barrels (removing one barrel does not remove 1/3 of the cost). He also noted the middle barrel is currently not held up by a truss and there is a space between the two trusses on the existing bridge for the third barrel. Removing a barrel would impact the design of the truss.

Stacy Thompson, LivableStreets, asked if the cost estimates for the Rehabilitation options could be emailed to the Task Force. Chairman Dimino said the team can work on a report and share it with the Task Force but he cannot promise a date.

Mr. Ris said the Partial and Full-Length Hybrid options don't look realistic and he'd like to see a creative/modern concept that looks real instead of looking like the old bridge placed on a new base.

Greg Galer, Boston Preservation Alliance, thanked the project team. It's helpful to see all the Restore options; without them the discussion felt incomplete. He said it is important to ask what is actually being saved if large pieces of the bridge are removed – the existing bridge is special because of its large size. The BPA often has to decide if saving a structure is worth the cost, but in order to do that the agency and Task Force need to see what the alternative is. He feels the Task Force hasn't yet seen the "bold" new design that would take the place of the old bridge if it were not restored, and he cannot make a determination without knowing what the alternative is.

Ms. Thompson said it would also be helpful to understand what the approaches would look like for a full rehabilitation option. Mr. Allwarden said the presentation will include those details.

#### **END TREATMENTS (slides 14-20)**

Mr. Allwarden presented diagrams and renderings of the end treatments at the Courthouse side of the bridge that illustrate how the width of the bridge affects the transition. He noted that due to the bridge being raised for sea level rise, the ends need to transition to existing grades of roadway surfaces with ramps, stairs and/or graded areas.

Mr. Allwarden showed the difference between a 40-foot width (similar to the Northern Avenue roadway) and an 80-foot width (the current bridge's width). The 80-foot width pushes the transitions closer to the Courthouse building. (The dark gray wedge illustrates this difference on Slide 15.)

He explained another design element that impacts the end treatments is the depth or the thickness of the bridge between the underside/bottom (which will be raised) and the top travel surface. Different bridge styles have different "thicknesses": Restore and Basic have about 5 feet of structure depth and Reinterpret and Contextual have about 3 feet. He showed renderings that illustrate how these depths would impact the end treatments.

Richard Martini, The Fallon Company, said the renderings are not accounting for other resiliency efforts in the area that may impact the bridge approaches. For instance, The Barking Crab could end up being surrounded by walls. He urged the project team to take a step back and think about what other projects will be done between now and 2050 (walls and berms). Mr. Ris said he will send Mr. Allwarden the Seaport resiliency study report.

Mr. Ris said it sounds like the narrower and more the modern the bridge, the more flexible the end treatments can be. Mr. Allwarden confirmed this is the case.

Ms. Thompson pointed out that the renderings also do not show vehicles, shuttles or traffic signals, which would impact the view. She said as the use of the bridge is

determined the renderings should be updated to include these, especially since pedestrians will account for the most usage of the bridge.

Susanne Lavoie, Wharf District Council, asked if renderings of the other side of the bridge (west side) will be shown. Mr. Allwarden said the same issues on the east side will be on the west side with the bridge width and depth affecting the transitions. Ms. Lavoie is concerned the impacts may be more extreme on the west side as there is less room. She asked that west side approach renderings be posted.

Mr. Allwarden showed a “flyover” video of the Partial Length Hybrid Rehabilitation option. Chairman Dimino said the team will work on posting the video to the website and noted details such as traffic signals would be added in the next design phase of the project. The visuals now are still conceptual and it is premature to include those details.

Ms. Thompson said she has been saying for a year that more information on the approaches for a 24-foot bridge are needed and she is disappointed not to see them.

Vice Chair McCammond asked the team to produce a comparison chart that shows the elevation and width of the bridge style options in order to better understand how the end treatments would be impacted. The team agreed to produce this.

Mr. Galer said it is safe to say the wider the bridge deck the more complicated the end treatments would be, and it is more appropriate to say the depth of the bridge deck in relation to the surface is what impacts the transitions, not the design. He asked if someone could elaborate on what other resiliency efforts are ongoing in the Seaport District. Mr. Ris summarized the resiliency study which assessed the areas that are of the highest risk to sea level rise. A large portion of the Seaport will need to be elevated, and he said it would be important to consider which design would be the most flexible should the bridge need to be raised even further in the future.

Mr. Martini agreed that the project should consider how the bridge design will be impacted by future resiliency efforts.

#### **COMMUNITY MEETING FEEDBACK (slides 21-25)**

Ms. Barret thanked the Task Force members who attended the June 3 Community Meeting. The City was pleased with the high turnout (170 people signed in) and robust feedback received. A comment form requesting feedback on bridge style and width was handed out at the Community Meeting and posted online to collect responses through June 20. A complete spreadsheet of comments will be posted to the project website with personal information redacted soon.

Ms. Barrett summarized the feedback received, which included 148 comment forms (from the June 3 Community Meeting and online) and 26 emails<sup>2</sup>. The comment form

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<sup>2</sup> See slides 23-25 for charts and tables

requested feedback on three topics presented at the June 3 Community Meeting (*not all respondents provided feedback on each topic*):

- Bridge style preference<sup>3</sup>
  - Of those responding to this topic, Basic received 25%, Contextual received 30%, Reinterpret received 18%, and Restore received 27%.
- Bridge width preference as it relates to style
  - There was a large range of widths provided in responses, which is shown on the table on the left (slide 24). Those responses outside the widths presented at the meeting were allocated to the next closest width that was in the presentation. If in the middle of two widths, 0.5 point was allotted to the widths above and below it.
  - The width responses were 12 feet – 4%, 24 feet – 9%, 30 feet – 28%, 42 feet – 18%, 56 feet – 20%, and 64 feet – 21%.
- Preferred experience using the bridge (could choose up to 10 experiences)
  - “Active,” “Vibrant,” and “Offering a vista” were cited most often. A range of others were provided.

Etty Padmodipoetro, Urban Idea Lab, noted all the “type of experience” responses are helpful for her in shaping the design of the bridge. An interesting result of this question was that some respondents selected both “Active” and “Passive” or another type of experience that seemed contradictory. She said this makes sense to her as a designer because people often want the option of both types of experiences, and although this is not related to a particular bridge style it can lead to designing a bridge to accommodate both experiences (for example, a reflective, quiet pavilion and an active bridge).

Ms. Thompson believes the way the data was collected and presented is problematic and is not how LivableStreets practices data collection. Ms. Barrett stated this was not meant to be a scientific survey, rather a qualitative collection of feedback for the City. Chairman Dimino added the comment form was an informal but helpful reference point on the topics the City will be making decisions on.

Mr. Ris asked how Ms. Padmodipoetro would design a bridge if the pavilion was not included. Ms. Padmodipoetro said it would be possible to design a wider middle section (except for the Restore option) to accommodate the various experiences.

### **LIFE CYCLE COSTS (slides 26-27)**

Mr. Allwarden presented estimated life cycle costs for the four bridge styles and added those costs to the initial construction costs presented in April to come to a “Total Cost” for each style:

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<sup>3</sup> Ms. Barrett noted that if a respondent selected two bridge styles, a half point was allotted to both styles.

COSTS	RESTORE	BASIC	REINTERPRET	CONTEXTUAL
Initial Construction Costs	\$150	\$60	\$95	\$105
Life Cycle Costs	\$61	\$23	\$35	\$36
Total Cost (mid point of construction)	\$211	\$83	\$128	\$141

A similar analysis can be done again in more detail once the bridge width is finalized. The dollar values are calculated for the middle point of construction. He presented the assumptions that went into the calculations (see slide 27) and noted the Rehab options may require a higher level of life cycle costs than the others.

Mr. Allwarden explained the cost estimates assumed a width in the middle of the range of options (about 30-50 feet), and the costs for Restore would change if the bridge were replicated with all new steel. He added that the wider the bridge, the higher the maintenance costs due to deck repairs. He showed the funding sources that were previously presented.

**DISCUSSION AND QUESTIONS**

Chairman Dimino asked the Task Force members to share their points of view on the comparison of bridge styles given the new Restore options presented.

Ms. Lavoie asked the project team if the public was asked how they would use the bridge. Ms. Barrett said the purpose of the June 3 Community Meeting was to get feedback on bridge style and width since that is what the City needs to know at this time before making a decision on the use of the bridge. Chairman Dimino asked the project team to prepare a summary of that feedback. He added that the June 3 meeting was only “one stop along the way” and more progress is made with each meeting.

Ms. Thompson said there has already been a lot of feedback received about the use of the bridge and she is surprised that wasn’t shared. She said it is difficult to get helpful and accurate feedback when the questions are misleading or hard to interpret, and she expressed that in writing before the June 3 Community Meeting and is disappointed her recommendations were not utilized. She said the process in which the feedback was collected did not meet the result she intended.

Ms. Abbott said the Task Force was discussing uses of the bridge a lot and it seems strange to stop discussing it. She said that form typically follows function. Chairman Dimino said he doesn’t think the group ever stopped discussing use of the bridge and he doesn’t mean to suggest he only cares about the Task Force’s thoughts on styles presented at this meeting. He asked the Task Force for overall thoughts given the new information that was presented.

Shannon McDermott, MA Convention Center Authority, said it is complicated to evaluate each person’s feedback without knowing their priorities. For example, someone may prefer the Restore style but they feel the cost is too high. She suggested a survey be filled out by the Task Force to rank their priorities. The Convention Center

would like to see as many people as possible moved across the bridge so a wider bridge is preferable. She believes the Restore option is beautiful and Conceptual is her second choice (she does not care for Reinterpret).

Patrick Sullivan, Seaport TMA, is grateful to the City and AECOM team for the new information presented at this meeting, but now has more questions (such as two barrels versus three). He would like the Task Force to decide on a deck width and then discuss the approaches, cost, and potential design further. Seaport TMA wants a bridge that has bicycle and pedestrian facilities and a dedicated bus lane. A 42-52 foot wide bridge would be the TMA's preference but it would need further analysis for the exact width determination. He said the cost of replicating the bridge is concerning. While almost as expensive, the new partial length hybrid option might satisfy interest in preserving some of the bridge.

Mr. Martini agrees it would be helpful to see a chart of how the bridge styles would affect the end treatments. He finds the fact that the Partial Length Hybrid Rehabilitation option costs as much as a new bridge depressing and he said the Basic option is boring. He suggested it might be helpful for the group to see photos of actual bridges that use the same four design concepts (disregarding widths). He would like the final bridge width to be as wide as possible and he doesn't care how it would be programmed.

Mr. Galer said the Restore options presented were very helpful. He agrees that no one likes the Basic bridge design, but there may be more creative ways to approach it as it has the benefit of a thinner bridge deck. He said the historic bridge has a lot going for it, the proportions are important, and he reiterated the need to see what the alternative is if the City decides not to restore it. He said the wider the bridge the more complications there will be with the end treatments. He added that traffic data does not show that vehicles on the bridge will reduce traffic and the bridge would be less conducive to emergency vehicles with other vehicles on the bridge.

Ms. Lavoie said she is struggling with this because she feels strongly that the old bridge design is special, and she doesn't want to lose it. However, she is also concerned about the approaches from the Wharf District area due to the limited space. She is hesitant to comment without seeing more information about the approach from that side, especially regarding bicycle and pedestrian safety and how bicyclists would transition.

Ms. Abbott said although the point of a bridge is to get from one end to the other, placemaking is also important. She doesn't want the bridge to be too narrow to lose its impact as a place, but she also doesn't want the bridge to be so wide that it is too expensive. She agrees with Mr. Martini's comments on design and feels the group hasn't seen a design that compels them to choose something new instead of Restore. She believes the bridge should carry emergency vehicles but is leaning towards the middle range of widths as long as the approach works on the Atlantic Avenue side. She acknowledged dedicated bus lanes and public transit are important and the bridge should carry public transit if it is able to.

Ms. Thompson agrees with Ms. McDermott that the Task Force needs to settle on priorities. She sees a consensus with “go old or go bold.” She noted questions keep coming up about the approach on the Wharf side and stated the bridge will lose its value with messy experiences at the ends. She would like to see how the approaches would work with a full restoration (signals, pedestrian crossings, etc.). She hasn’t seen data that would support the idea that shuttles on the Northern Avenue Bridge would be more advantageous than a BRT on Congress Street. She also noted the elected officials on the Task Force have not been to recent meetings and she would like to see them attend the next meeting to voice their opinions.

Ms. Chirico acknowledged she previously supported the Restore option but is now intrigued by the Partial Length Hybrid Rehabilitation option. She believes that option is worth exploring because preserving the industrial past of Fort Point Channel is important. She is concerned about how a wide bridge would impact the Courthouse. She is also concerned about how the approaches from Atlantic Avenue would work and how buses would impact access to the Coast Guard building. She likes that a narrower bridge would have less complicated approaches, so she is conflicted about a full restoration. She would like to see more exploration of the Hybrid options and she is still not convinced a bus lane on the bridge would help traffic.

Mr. Ris would like the bridge to be 30 feet wide, as it is not feasible to go any wider and still be resilient. If the City wants to be carbon free by 2050, the bridge should be an example by prioritizing pedestrians and bicyclists. He would like the design to “go bold” and would like it to be Contextual (though he doesn’t like the particular example that was presented). He urged the City to forget about the pavilion and save the money to spend it on maintaining other bridges so the Northern Ave Bridge would never be needed in the event of an emergency to carry vehicles. He said a bicycle/pedestrian bridge that is 30 feet wide is more conducive to emergency vehicles. He reminded the group that the mobility study showed adding one lane of westbound vehicle traffic on the bridge would only save four car lengths on the Moakley Bridge.

Vice Chair McCammond said the Northern Ave Bridge is a gateway between neighborhoods and maintaining those connections with a fluid transition to the Harborwalk is important. She said there is a lot to factor into the design for resiliency and she would like the experience of the bridge to be extremely pedestrian and bicycle friendly with support for emergency vehicles. She agrees with Mr. Galer that the group has not seen what a new, iconic bridge would look like if it were to be replaced and it is hard to move away from the existing bridge without another option to consider.

Mr. Galer is disappointed that Silman has been absent from these discussions as the firm is part of AECOM’s team and is known for its creative approaches to preservation. He urged the City to bring the firm back into the discussion.

Chairman Dimino said the opportunity for fully exploring creative ways to design a new, iconic bridge are still ahead and will happen in the next phase of the project. He is leaning towards a bold, new design but is open minded to seeing more information about the Restore options. He advocated for transit use on the bridge as the Seaport is currently underserved and the number of people that can be moved in transit vehicles



is significant. The Seaport is forecast to grow dramatically and he has seen transit, pedestrians, and bicyclists coexisting very well together.

## **NEXT STEPS**

Chairman Dimino summarized the upcoming schedule:

- Next MATF Meeting – Late summer/early fall 2019
- Design and Permitting – 18 months (2020/2021)
- Future Public Meetings – Throughout design process
- Construction Contract Award – 2021

Chris Osgood, City of Boston, is looking forward to hearing the Task Force’s ranking of priorities and agreed there should be more clarity on that.

The Task Force will hold another meeting ahead of the next MATF meeting to discuss an approach for obtaining feedback about weighted perspectives. Chairman Dimino reiterated it is okay for there to be differing opinions but it would be helpful structure the feedback with more context about priorities. Vice Chair McCammond and Ms. Thompson volunteered to help and agreed everyone should be present for there to be a productive discussion about the approach to gathering weighted feedback.

## **ACTION ITEMS**

- AECOM:
  - Provide cost estimates for the Rehabilitation options
  - Post renderings of the west side approach
  - Post flyover videos
  - Prepare a comparison chart that shows the elevation and width of the bridge style options in order to better understand how the end treatments would be impacted
  - Interim meeting on mechanism to collect ranked preferences and priorities from MATF members
  - Prepare summary of feedback from Community Meeting #2 – *feedback spreadsheet is posted on the website*
  - Prepare a chart of how the bridge styles would affect the end treatments and provide photos of actual bridges that use the same four design concepts (disregarding widths)
- MATF members:
  - Mr. Ris said he will send Mr. Allwarden the Seaport resiliency study report – *completed*

## **PUBLIC COMMENTS**

Chairman Dimino asked the members of the public to provide comments.

Steve Hollinger agrees with Mr. Ris on the 30-foot bridge for pedestrians and bicyclists and doesn’t see a justification for transit on the bridge. The presence of vehicles on the bridge impacts the experience for pedestrians. He said if vehicles are included on the bridge then the City should commit to funding the pavilion. However, the pavilion needs to be constructed to account for sea level rise. Vice Chair McCammond agreed that resiliency should be a priority and whatever gets built should be elevated.

Mike Tyrrell, Friends of the Northern Ave Bridge, thanked the City for holding a discussion about the Hybrid Rehabilitation options but he is skeptical about the \$150 million cost estimate. He urged the City to maintain three barrels on the bridge (one for pedestrians, one for transit, and one for bikes). He does not want to see icons of the Waterfront being lost (the North Washington Street Bridge is being replaced with a modern structure). Vice Chair McCammond thanked Mr. Tyrrell for his comments and appreciates him bringing this discussion to the meetings.

Vice Chair McCammond reiterated the importance of the new, iconic bridge design being specific to Boston and a reflection of its maritime history. She thanked everyone for coming and adjourned the meeting.

### **TASK FORCE MEMBERS**

Congressman Stephen Lynch (not present)  
Senator Nick Collins (not present)  
Councilor Michael Flaherty (not present)  
Councilor Ed Flynn (not present)

Rick Dimino, Chair, A Better City  
Sara McCammond, Vice Chair, Fort Point Neighborhood Association

Kathy Abbott, Boston Harbor Now  
Dennis Callahan, MA Convention Center Authority (represented by Shannon McDermott)  
Carol Chirico, General Services Administration  
Handy Dorceus, Tufts University (not present)  
Gregory Galer, Boston Preservation Alliance  
Susan Goldberg, U.S. Court House  
Susanne Lavoie, Wharf District Council  
Richard Martini, The Fallon Company  
Bud Ris, Green Ribbon Commission  
Patrick Sullivan, Seaport TMA  
Stacy Thompson, LivableStreets

### **City of Boston**

Chris Osgood, Chief of Streets  
Para Jayasinghe, City Engineer  
Benjamin Sun, Chief Structural Engineer

### **AECOM Team**

Joe Allwarden, AECOM  
Etty Padmodipoetro, Urban Idea Lab  
Kate Barrett, Regina Villa Associates  
Emily Christin, Regina Villa Associates  
Nancy Farrell, Regina Villa Associates

### **OTHER ATTENDEES**

Trevor Etheridge, Save the Harbor/Save the Bay

Mason Granof, Office of Councilor Flaherty  
Steve Hollinger  
Amber Johnson, LivableStreets  
Douglas Lemle  
Anna Moll, Skanska  
Miguel Rosales, Rosales + Partners  
Michael Tyrrell, Friends of the Northern Avenue Bridge  
Charlene Wang, Office of Councilor Wu  
Bill Zielinski