

Cape Cod Bridges Program
Virtual Public Information Meeting
November 15th, 2022, 6 PM EST
Zoom Webinar

Meeting Summary

This virtual public information meeting took place on November 15th, 2022, at 6 PM EST. The meeting took place on Zoom and informed the public of updates to the Cape Cod Bridges Program. In attendance was the Program team, the public, elected and appointed officials from the local, state, and federal levels, and community organization leaders. 580 attendees were present.

Meeting Notes

1. Introduction: Bryan Cordeiro (MassDOT)

- Bryan Cordeiro (MassDOT) thanks the attendees for joining and passes off the presentation to Joe Yoo (MassDOT).
- Joe Yoo (MassDOT) – Zoom Controls
 - Joe Yoo (MassDOT) introduces the ASL, Spanish, Portuguese, and CART interpreters for the meeting. He explains how to choose between the language audio options. Joe covers the public meeting notes and procedures for meeting attendees.

2. Team Introductions – Bryan Cordeiro (MassDOT)

- Bryan Cordeiro (MassDOT) introduces the panelists.
 - From MassDOT: Bryan Cordeiro, Program Manager. Mike O’Dowd, Director of Major Projects. Gareth Saunders, Office of Legislative Affairs Highway Liaison. Joe Yoo, Facilitator. Makaela Niles, Facilitator.
 - From USACE: Craig Martin, Navigation Section New England District. Scott Acone, Programs and Project Management Division.
 - From HNTB: Dave Anderson, Program Manager. Mark Kolonoski, Deputy Program Manager and Environmental Lead. John Smith, Lead Bridge Designer.

3. Agenda – Bryan Cordeiro (MassDOT).

- Bryan Cordeiro (MassDOT) presents the agenda.
 - The agenda is as follows: Introduction, Public Outreach, Draft Program Purpose and Need, Program Updates, Bridge Type, and Next Steps.
 - After the agenda is the public comment and question period.

4. *Program Team Agencies – Bryan Cordeiro (MassDOT).*

- Bryan Cordeiro (MassDOT) presents the Federal and State agencies involved with the Program.
 - Federal Agencies: US Army Corps of Engineers (USACE) and (FHWA)
 - State Agencies: MassDOT.
 - Bryan states that MassDOT has been working closely with the USACE and FHWA throughout the program to ensure that it remains eligible for federal funding.
 - The USACE currently owns and operates the bridges. When the replacement bridges are installed at the Cape Cod Canal, ownership will transfer to MassDOT.
 - MassDOT will oversee the Program delivery process to install the replacement bridges.

5. *Continuation of the Major Rehabilitation Environmental Report (MRER) – Bryan Cordeiro (MassDOT)*

- Bryan Cordeiro (MassDOT) presents on the MRER findings.
 - The MRER found significant justification to replace the bridges based on a range of alternative solutions which were evaluated.
 - It was concluded that the bridges should be replaced.

6. *Public Outreach – Bryan Cordeiro (MassDOT)*

- Bryan Cordeiro (MassDOT) presents on public involvement efforts throughout the Program.
 - We are in Round 3 of public engagement, with Rounds 1 and 2 taking place in 2021.
 - Bryan covers a summary of themes in the public comments received including property impacts, roadway and bridge maintenance, environmental impacts, and daily commute.
 - Stakeholder engagement efforts include meetings with state and federal delegations, regional transit and planning agencies, chambers of commerce, and municipalities.
 - Stakeholder engagement efforts include meetings with state and federal delegations, regional transit and planning agencies, chambers of commerce, and municipalities.
 - Outreach methods included social media, emails, press releases, newspaper ads and website updates.
 - A meaningful public involvement process is important not only to MassDOT but also to NEPA, the National Environmental Policy Act.

7. *Draft Program Purpose and Need Statement – Bryan Cordeiro (MassDOT)*

- Bryan Cordeiro (MassDOT) presents on the draft program Purpose and Need statement.
 - MassDOT, USACE, and FHWA have reached an agreement on the statement wording.
 - MassDOT is seeking additional feedback from the public on the new wording.
 - The statement is foundational to NEPA and allows MassDOT to evaluate, choose, and dismiss design alternatives as appropriate.
 - Bryan presents the Purpose and Need statement draft wording for public feedback.

8. *Program Updates – Bryan Cordeiro (MassDOT)*

- Bryan Cordeiro (MassDOT) presents on updates for Program grant funding.
 - MassDOT and the USACE have been working together to procure funding from various sources.
 - Efforts have primarily been focused on the IJJA, which is awarded on a competitive basis to projects that best fit the criteria of IJJA initiatives.
 - Bryan covers the applications which have been submitted, including submittals on May 23rd, 2022, and August 9, 2022.
 - MassDOT was informed that funding would not be awarded for this round of INFRA funding, but other opportunities are being monitored. Results have not been determined for applications to the Bridge Investment Program and MEGA funding.
- Bryan Cordeiro (MassDOT) presents on recent and ongoing activities that have been moving the Program forward.
 - Recent and ongoing activities include soil investigations, bridge type analysis, roadway alternative investigations, traffic safety analysis, utility coordination, NEPA class of action coordination, and execution of Section 106 Programmatic agreement between USACE and MassDOT.

9. *Bridge Types – John Smith (HNTB)*

- John Smith (HNTB) presents on the design considerations for the potential bridge types.
 - All the potential bridge types presented will work with any lane configuration and roadway alignments. Location, lanes, and roadway configurations are being developed and will be presented at future meetings for public input.
 - The bridge types and configurations must support the program requirements. This means 2 lanes in each direction will be open throughout construction. Existing local roadways will be maintained during construction as well. Bridge types should minimize impacts to Canal Operations. A sidewalk will be provided during construction and a shared use path will be included in the final construction for cyclists and pedestrians.
- John Smith (HNTB) presents on the twin bridge configuration.
 - Twin bridges at each location will allow for crossing during construction while maintaining all local roadway connections.
 - Twin bridges are more easily constructed and have a shallower structure depth than a single bridge.
 - The Whittier Bridge over the Merrimack River is shown as an example of how the bridges might be constructed, with one bridge being built before the existing bridge is demolished so there are always open connections throughout construction.
- John Smith (HNTB) presents on the construction staging.
 - John shows how one new bridge will be constructed at each location before the deconstruction of the existing bridge and second replacement bridge. The result will be two twin bridges at each location in the place of the former single bridge.
- John Smith (HNTB) presents background on the existing bridges.

- The existing bridges are Arch Truss bridges with iconic historic value. The bridges are shown from the Canal ground view and a driver's view going over the bridge.
- The Arch forms are visually consistent with the surrounding terrain.
- The existing bridges were constructed by building from both sides of the canal, cantilevering out over the canal and meeting in the middle.
- John Smith (HNTB) presents the feasibility criteria for potential bridge types including initial costs, highway geometrics, constructability, and community considerations.
 - These criteria were used to determine the potential bridge types.
- John Smith (HNTB) presents the potential bridge types.
 - The Concrete Box Girder type is presented.
 - The Cable Stayed type is presented.
 - The Arch type is presented.
 - Benefits and drawbacks for each of the bridge types are presented.
 - Public feedback on the bridge types is requested. This feedback will be incorporated into the preliminary engineering assessment.

10. Next Steps- Bryan Cordeiro (MassDOT)

- Bryan Cordeiro (MassDOT) presents on the next steps for the program.
 - Round 4 of public involvement will take place in early 2023.
 - Input from the public will be collected regularly through the PIMA comment tool and emails.
 - Conceptual roadway and lane alignments are undergoing planning.
 - NEPA filings will commence.

11. Q&A – Makaela Niles (MassDOT)

- Representative Steven Zhiaros (District 5 Rep) – I'm impressed as the state representative of both bridges. I'm pleased with your presentation, and we look forward to helping you and getting this going. To see the possible 3 examples of what the bridge could look like was very special to me. I'm excited to hear what the public has to say. Thank you.
 - Makaela Niles (MassDOT) Thank you for attending and for your comment.
- Frances (Member of the public) – When will the Program begin?
 - Bryan Cordeiro (MassDOT): That's a great question. For schedule, the best way I can answer this is by referencing the design schedule from the IJA funding opportunities. This shows us advertising the project to bidders in 2025 which means construction will begin 18 months after that.
- David (Member of the public) – Is there any thought to paved bike paths being closed during construction? When and how long will the bridges be closed to bikes but open to walking and fishing?
 - Dave Anderson (HNTB): We know from talking to the public and from meetings with the USACE how important this bike access is. We want to keep these paths open as much as possible and make sure that we're exploring ways of re-routing these paths, so they are accessible during construction. The short answer is it's too early to tell exactly what will happen, but we understand how important it is to the public that we maintain bike access to the maximum extent.

- Ebba (Member of the public) – Hi, thanks for making this opportunity available. When will the proposed roadway information be available? I would encourage you to choose the bridge configuration with the least disruption on the neighborhoods nearby the approaches. People are nervous whether they'll still have a house. It looks like the Arch would accomplish that, so that's my vote. Thank you very much.
 - Bryan Cordeiro (MassDOT): Roadway alignments are to be worked on and will be a discussion for future public meetings.
- Tom (Member of the public) – Will residents on either side of the canal see changes in access to the canal as we have currently related to walking, bicycling, running, and fishing?
 - Dave Anderson (HNTB): The Purpose and Need mentions improving accessibility and mobility as well as multimodal accommodations for all roadway users. This is stated in our draft Purpose and Need. We know how important canal access is and we know how awkward it is to make those connections now. We'll be looking to improve those connections. We're building upon the work in the MRER that recommended shared use paths across the canal.
- Brian (Member of the public) I agree with the recommendation on the Arch. I live in Sagamore Beach, and I have a keen interest in how this is going to progress. I know you can't tell us where the new bridges will be built yet, but do you know an approximate distance between where the new bridges will be built and the current bridges? For instance, is it a half a mile or a mile?
 - John Smith (HNTB): The intent is to build the replacement bridges as close as feasibly possible to the existing bridges. A half mile is not under consideration, and we can build these bridges very close to the existing bridges.
- Ashton (Member of the public) What do you mean by "Canal?" Does this refer to the Canal itself or both bridges?
 - John Smith (HNTB): We mean a replacement canal crossing at the Sagamore location or at the Bourne location. So, the replacement structures at the site of the existing Bourne and Sagamore bridges.

- Hilary (Member of the public) We have family at the campground by the Bourne bridge and Nightingale Pond. We've been hearing some conversation about eminent domain to make room for the bridges. It would make sense. Is there any idea of when people will be notified if that is the case? My sister is hoping to sell, and the realtor said they wouldn't be able to because this is in the near future.
 - Bryan Cordeiro (MassDOT) We hear you. We have a Right of Way representative here, Lisa- is that something you can answer?
 - Lisa Szamreta (MassDOT): At this time, we do not have any eminent domain because this is just the beginning stages, but when the plans are completed and if anyone is going to be affected, you will be notified by a Right-of-Way agent. They will come out and explain the process to you.
 - Bryan Cordeiro (MassDOT): Tonight, what we're prepared to speak towards is the discussion of bridge types and program purpose and need. In terms of Right of Way and property takings, we are not prepared to talk about that right now. This is something that we do absolutely plan to talk about in the future when we're ready to.
- Mike (Member of the public) The modern red tape might take longer to build than it took to build the other bridges. What is the timeline for construction?
 - Bryan Cordeiro (MassDOT): Working off the schedule submitted with IJJA grant applications, the proposal would go to bid in September of 2025. Construction would start 18 months after that. There is a long permitting process we need to go through, but it leads to a much better project in the end. We are identifying ways to move the process along expeditiously as well.
- Jon (Member of the public): Good evening. I think the Arch type is the only one to go with, but I'm not understanding why we can't have a fatter, wide Arch type bridge to be more consistent with what we have now. Thanks.
 - John Smith (HNTB): Twin bridges will be important for maintaining as many local roadway connections as possible. One large, wide bridge will result in the need for larger foundations for the bridge, which may cause additional impacts to property and land. Larger bridges are also more difficult to lift and requires a deeper structure depth.
- Ashten (Member of the public) How will this impact the Bourne rotary?
 - Bryan Cordeiro (HNTB) This ties into our discussion of roadway alignments and alternatives which is not where we are in our preliminary process of design. The Bourne rotary falls within project limits and new alignments are being explored. This will be talked about in future rounds of public meetings.

- Laurie (Member of the public) Thank you for doing this. How long is the construction period?
 - Dave Anderson (HNTB): There are many unknowns including securing funding and contract packaging. At this point in time, many of these factors can impact construction timing. 6-7 years is our current estimate for construction timing.
 - John Smith (HNTB): Making sure roadway connections are made includes many micro-stages. The idea is to bring one bridge a year online over the course of four years.
- Makaela Niles (MassDOT): We are getting a few questions about the costs associated with each bridge type, as well as life spans.
 - John Smith (HNTB): Life cycle considerations and operation & maintenance costs are an important part of our analysis. All of the bridge types presented are fairly easy to inspect and maintain. The current Truss type of the existing bridges is more difficult and more expensive than all three potential bridge types. The Arch type is the easiest and least expensive, but all three bridge types are set up to have a longer lifespan than the existing bridges.
- David (Member of the public) Has anyone given any thought to leaving one of the existing bridges up like the Sheldon Falls bridges? As a pedestrian way or Artisans Canopy.
 - Craig Martin (USACE): We faced this question during the MRER and NEPA process. We would still need to maintain the current bridges as pedestrian walkways and the Federal government is not interested in that. Having a massive amount of people on the bridge can be more of a load to handle than cars. Maintaining both old and new bridges would be an increased cost the Federal Government is not looking to support.
- Member of the Public: Will the Corps still maintain bike paths?
 - Craig Martin (USACE): We absolutely need our access roads as a part of the Federal Navigation Project. The bike paths on these roads will be maintained as a result.

- Paul (Member of the public) I'm impressed with what I see. When I saw the project and how massive it would be, I wondered how much land taking would happen to homes on the sides of the bridges. The Twin Bridge plan takes up half of the space. That's inspiring and great. The Arch Bridge is what people are looking for here. The Cable Stay would be out of place. The Cable Stayed is more "Boston." There's a concern about the trains and going across the canal. I know the Cape Cod Commission wants to bring regular train service to Hyannis. That means going over another older bridge. Is there any thought to bringing the train onto the replacement bridges?
 - Dave Anderson: The biggest challenge there would be the grades. We're in talks with the US Army Corps and Coast Guard about the vertical clearance necessary above the canal. The existing bridges are 135 feet above the canal. Railroads require a much flatter grade than roadways. The touchdown points for getting a railroad at the same elevation as the bridges would be problematic. This project is really focused on replacing the bridges with the uses in kind and improving the multimodal accommodations and accessibility.
- Makaela Niles (MassDOT) I see a few questions related to tolling. We're probably a little bit early for any type of conversation like that, but Bryan, can you speak to this consideration?
 - Bryan Cordeiro (MassDOT): At this time, we have not considered tolls.
- Matthew (Member of the public): Before and after these bridges, what will be done with highway expansion? Once traffic backs up on these designs, what's the intent to expand routes 3 and 6?
 - Bryan Cordeiro: This pertains to a lot of the future roadway alignments we need to explore. We have not yet dug into the analysis of operational needs for the program area. Right now, we are focused on bridge types and the beginning of the NEPA process.
- Michael (Member of the public) Depending on the procurement method, could the bridge type be the contractor's choice?
 - Bryan Cordeiro (HNTB): That is not how we would write the contract for a potential builder. We would want the bridge type to be prescriptive based on the feedback we get here in the future.
 - Dave Anderson (HNTB): Our environmental permitting work under Section 106 requires us to be fairly specific as to what actually gets constructed.
- Bob (Member of the public) What is the process for naming the new bridges?
 - Dave Anderson (HNTB): That requires legislation. Our focus is more on the design and the naming is done by the legislature.
- Karen (Member of the public) Will the Bourne scenic campground be impacted?
 - Bryan Cordeiro: This question is related to roadway alignment and alternatives. We are not prepared to speak on this yet. In upcoming public meetings we'll be able to talk about roadway changes.

- Fred (Member of the public): How is the optimal height or elevation of the bridge span determined? What vessels are we trying to accommodate with such impressive high bridges if it'll still be too low to accommodate contemporary cruise ships or military vessels? My thinking is why aren't we spending the budget on more width and more lanes rather than on height?
 - Scott Acone (USACE): When the Cape Cod Canal was authorized, it was for vessels that need 135 feet of elevation. We still have numerous commercial vessels that approach that height and military vessels that use the canal. Unless the canal were much wider and deeper, we could not accommodate any larger vessels. Cruise ships can pass through the canal and some often do. There's an economic analysis that goes into looking at shortening the route for goods to get to port. This was all factored in originally and hasn't changed dramatically over the years. The 135 feet is still a viable height for that use.
- John (Member of the public): This project claims that they'll meet FHWA standards for bicyclists and pedestrians. USACE and MassDOT have both refused to remove snow from the sidewalks on the current bridges which is contrary to current FHWA guidelines. But they are claiming that they will, with this project, meet FHW guidelines. Other guidance from FHWA includes specifically including bicycle and pedestrian representatives from more than one bicycle and pedestrian demographic in user stakeholder groups during the design process. It doesn't look like the current project or current use of the bridges are compliant. Can someone address if they really plan to comply or if there will be carve-outs just as they carve out for the current sidewalks? Thank you.
 - Bryan Cordeiro (MassDOT): Our purpose and need statement includes improving multimodal accommodations. Having this in the purpose and need is the best way to ensure that this is carried into our final design. It is our full intention to do so. I can't elaborate on long term operations and maintenance, but we are taking all comments into consideration. When we have a design we can share, we want to talk to the public and advocacy groups about their needs. Not just what's on paper, but what it will take to have adequate multimodal accommodations as a long-term facility.
 - Scott Acone (USACE): We fully support a multi-use lane. Unfortunately, when the bridges were built, there weren't those requirements, so the bridges were not built for those requirements. We currently do not have a safe way to remove snow from the bridges which is why it doesn't happen. Moving forward, it will be a part of the design.

- Judith (Member of the public): Can you give us an idea of whether there is a traffic differential between the designs- does one bridge type accommodate more traffic than another? What will the volume increase potentially mean for the Cape? In the past, utility companies have cited the bridges as a barrier for not upgrading services and that the Army Corps has prevented that from happening. Will these designs have any impact on that?
 - Bryan Cordeiro (MassDOT): These bridge types were developed without respect to traffic volumes. The lane alignments will determine traffic volumes and patterns. We do not have that information at this time, but it is something we will investigate and share with the public in the future.
 - Dave Anderson (HNTB): Our next steps for traffic development studies will be upcoming in future public meetings. We have had conversations between MassDOT and Utility companies about how we can accommodate them in the new bridge structures. These conversations will continue.
- Phil (Member of the public): I have a comment and a question. As someone who plows snow in the winter, the bridge is the last place anyone should be in the snow. Plows throw snow off the blade. We have Uber and other forms of transportation. Snow should be considered an Act of God. If we're going to discuss snow, we should be discussing covering the bike paths from the lightning so people can go over in a thunderstorm. It's common sense. Please let's not have the bicycles. Just stop with the bicycle people. Can you move the slide back to the 3 different types of bridges? Arch is similar to what we have now. Because we're in an area that is heavily granite, we do have Earthquakes at times. We may never see anything over a 2 or 3. What is the difference in structural integrity of the three different bridges and are all three just primarily concrete and rebar?
 - John Smith (HNTB): Current seismic design standards would lead us to these three bridge types for any expected seismic event for this area. You're right about the granite, it's very deep down and there's 120-140 feet of glacial sand on top of the granite. For any of these three bridges, we'd be building to the current standards of seismic loading. The Arch Bridge's primary materials are steel and reinforced concrete. It is steel for the Cable Stayed and the towers are concrete. The stay-wires are high strength wire. The concrete box girder is primarily concrete with post tension cables inside the concrete. They're all three hybrid structures of concrete and steel, but any one is designed for seismic loading.

- Ed (Member of the public): Is someone from Congressman Keating's office here to discuss funding strategies? If not, please invite them for the next meeting.
 - Bryan Cordeiro (MassDOT): We have briefed the Federal and State delegation including Representative Keating's office. We are working closely with their team to ensure we're all on the same page regarding the funding strategy.
 - Steve Zhiaros (Representative): It is a team effort. We work closely with Congressman Keating, Senator Markey, Senator Warren, everyone- Bourne selectmen, Sandwich selectmen. To Ed's point, yes, we need to get that funding. We're working very hard at that. I can assure you we're all working together to get that funding over the goal line.
- Michael (Member of the Public) The USACE has mentioned in the past that the Sagamore bridge will need major renovation by 2025. What happens if renovation can't start until then?
 - Scott Acone (USACE) We inspect the bridges regularly. 2025 is our best estimate of when they'd need to be replaced. There are other repairs and work we can do to extend that lifespan. Our engineers have a maintenance plan. It still may require some lane closures. We will do the repairs and maintenance necessary to keep both bridges safe and open until replacement can transfer traffic to the new bridges.
- Matthew (Member of the public) What is the plan for Route 3 and 6 expansion above and beyond the new structure? How long will that expansion carry down both highways?
 - Bryan Cordeiro (MassDOT): At this time, we have not considered a significant expansion of Route 3 and 6. We'll continue to evaluate roadway alignments and alternatives while looking at our existing traffic data. It's something we'll consider but it's not something we're looking into heavily.
 - Dave Anderson (HNTB): Our focus is on cross-canal mobility and making connections.
- Jack (Member of the public) There are no historic districts in Bourne. What do you mean by historic district?
 - Mark Kolonoski (HNTB): Because of the historical significance of the engineering and completion of the bridges and the Cape Cod Canal in the early 20th century, it will likely be considered eligible for listing on the national register of historic places. Being considered eligible for listing would then offer protection from jurisdictions as provided by Section 4f and Section 106. Through that coordination, the Bourne and Sagamore Bridges themselves would likely be considered contributing elements to the Cape Cod Canal Historic District.

- Elizabeth (Member of the public): Is there a style of the bridges that helps minimize the effects of wind on the user for both motorists and non-motorists?
 - John Smith (HNTB) We've done testing on all three types, and it will be taken into consideration. The concrete box girder has the least dynamic wind effects especially noticeable by pedestrians and bicyclists. Of the other two, the network tied arch would be easier to design around these considerations than the cable stayed. We will do further wind tunnel testing.
- Wendy (Member of the public) Have you forecasted for sea level rise? How much higher are engineers expecting tide levels to be during the lifespan of the bridges?
 - Bryan Cordeiro: This is something we'll need to consider as we design in the future. The USACE took sea level rise into account in the MRER. MassDOT will continue to analyze and evaluate sea level rise projections. We will let the environmental review process guide us to the answer that balances other impacts with different goals to accommodate climate change adaptation and resiliency. The MRER projects 8 feet but that is not to say MassDOT will continue with that number after more evaluation.
- Steven (Member of the public) Can you please explain why the Purpose and Need Statement wording is so important? Can you give an example of some of the feedback that has impacted the wording?
 - Mark Kolonoski (HNTB): The Purpose and Need plays an important role in the National Environmental Policy Act. This is the federal environmental review process requiring project review. The Purpose and Need statement determined what set of alternatives need to be carried forward in a more robust alternatives analysis. We received a lot of great feedback in Rounds 1 and 2- a lot having to do with the incorporation of multimodal accommodations, impacts to traffic during the construction period, and Right of Way impacts. Depending on what the feedback is that is received, it helps to inform the Purpose and Need wording. The final approval of this statement comes from a lead Federal agency. At this point, where we are in project development, it was the USACE and FHWA who agreed on the wording in its current form. So again, we will continue to solicit comments on the Purpose and Need, and we'll reconsider and revise.

- Makaela Niles (MassDOT) We have a few questions about some of the bridge types that were considered but not ultimately chosen. Can you speak to the process of getting to where we are today, including old materials from past meetings that got us to where we are?
 - John Smith (HNTB): We will be issuing a screening report that talks about the positives and negatives of all the different types. A suspension bridge is more cost effective for a much longer span. It requires much more expensive anchorages and it's difficult to build. It wasn't cost effective or efficient for the canal crossing we have. Some of the other bridge types considered were tied arch, tied arch with delta frames. A truss type is more difficult to construct, operate, and maintain. This will all be part of a formal bridge screening report that determined why other bridges were ruled out and why these three options are feasible moving forward.
- Eve (Reporter) What is the width of these bridges and how does it compare to the current?
 - Bryan Cordeiro: This will be dictated a lot by the lane assignments and multimodal accommodations. This is something we plan to discuss more in the future. There is a lot of analysis behind what alternatives are feasible. We'll be able to answer this question in the future.
- Member of the public: Does the third entrance/exit lane add significantly to traffic flow? And towards the center does it become simply a third traffic lane?
 - Dave Anderson: The lane configuration showed builds off the work of the MRER. Because of the acceleration length needed to get onto the bridges, and the deceleration length need to slow down to get off the bridge. The purpose is really focused on providing safety and sufficient room for vehicles to join the adjacent travel lanes. What we intend to do in future meetings is go through an analysis to ensure that we're validating the work in the MRER.
- David (member of the public) Is it possible to change the Arch design to make it more visible for a Cape design?
 - John Smith (HNTB): Designs can vary over time based on the feedback we get in public meetings. I believe the question is asking if we can make the arches bigger. Really what we're trying to do is make the Arch a more manageable size so it can be lifted into place. The Arch scale we're showing is similar to the scale of the existing bridges.
- Member of the public: What is the relationship ongoing with wastewater and utilities in the area?
 - Bryan Cordeiro (MassDOT): This is definitely something we'll need to consider in the future as we advance other aspects of design. We are meeting regularly with stakeholders including the town of Bourne so we will explore all necessary alternatives for amenities in and around the program area, and we'll continue to meet with the town of Bourne.

- Member of the public: Will Route 28 be improved as far as congestion as a part of this project?
 - Dave Anderson (HNTB): Our focus is really on our Purpose and Need which is to improve the Cross-Canal mobility. Obviously, we need to look at what happens as the bridges and roadways touch down and how we make connections on the ground. Certainly, there will be reconfigurations and the extent of those would likely vary in different quadrants. It's a little too early to tell but we do believe that we'll be focused on the cross-canal sections and immediate touchdown areas and not too much beyond that.
- Eileen (Member of the public) Has there been thought to access to Sandwich Street? Has any consideration been given for access for neighborhoods on that road?
 - Dave Anderson (HNTB): This is part of the work that will be occurring at future meetings. We want to make sure connections that exist today exist after the project is complete. There is more to come on this in the future.
- Member of the public: Is there any information on the Eleanor Ave neighborhood?
 - Bryan Cordeiro (MassDOT): We do not have the information available on specific neighborhoods or streets. We will share this information with the public when we ready to share that.
- Ryan (Member of the public): Does a specific bridge type need less maintenance or will be less costly in the long run?
 - John Smith (HNTB): Overall, taking everything into account, all 3 bridge types will require less maintenance and lower costs than the existing 1930's arches. They're all fairly maintainable. The least costly would be the Arch type. Deck replacements lane by lane on the Arch are easier and it's a more redundant structure. I would rank them Arches, then Concrete, then Cable Stayed.
- Thomas (Member of the public) Will the new bridge piers be located on land and not within the canal?
 - John Smith: There is a desire to get the piers out of the water so there wouldn't be impacts to navigation or barges hanging up. We honed in on two possibilities to have the piers out of the water. The 700-foot span would have piers in the tidal zone but not in the water. We also looked at a longer span which is fully on land. For permitting and constructability reasons, it's much more difficult to construct piers in the water, so we settled on the piers being out of the water. The span will be longer than the existing bridges.
- Cynthia (Member of the public): Would it be possible to have more than two lanes on each bridge?
 - Bryan Cordeiro (MassDOT): That is possible. As it was shown in the presentation, we used a cross section that was consistent with the MRER, which has two lanes in each direction and then an entrance/exist lane associated with the highway interchange ramps. That is something that's being explored right now. We're looking at different options and alternatives and will be ready to share it in the future.
- Member of the public: Are there any spots for recreational fishing in the project or connections to paths along the canal?

- Bryan Cordeiro (MassDOT): This is something we'll look at as the design advances in the future.
- Craig (Member of the public): Is there any way of keeping the same look at the existing bridges with the latest technology with the twin bridge concept?
 - Bryan Cordeiro (MassDOT): The short answer is yes. The tied Arch harkens back to the existing bridges. We feel confident that the Arch bridge type is consistent with the current bridges.
 - John Smith: The current bridges are truss types which are no longer commonly used for this span length because they're more difficult to build and require much more inspection and maintenance. We were trying to identify the bridge type that most closely resembles the old bridges. The Arch type is very constructable. While it's not an exact replica, it's state of the art for its time as the original bridges were.
- Makaela Niles (MassDOT): There are a few questions about right of way and land takings.
 - Lisa Szamreta (MassDOT): As for the ROW process, you are contacted by a right of way agent, and they will come and explain the process to you. The process would be we would show you on the plan what we would either be taking or use in a public utility easement or even a temporary construction easement that would state we'd step onto your property to do any grading or sidewalk work or anything like that. As of right now like I stated earlier, we do not know the determination of any takings. That will definitely be discussed in a future meeting.
 - Bryan Cordeiro (MassDOT): We're anticipating using Federal Funds which requires following the Uniform Act. That's a federal regulation that sets pretty stringent stands on how we can go about acquiring different types of Rights of Way for our project.
- Member of the public: Thank you for the presentation. Concur about the Arch type as well. Is there a possibility of adding ferries for trucks going to Martha's Vineyard from New Bedford?
 - Bryan Cordeiro (MassDOT): That is beyond the scope of this program. I'm not sure if we'd be able to talk about that. It's definitely outside of our program area, so I will leave it at that.
- Michael (Consultant): What procurement methods are being considered?
 - Bryan Cordeiro (MassDOT): We are considering Design-Build and Design-Bid-Build. Beyond that, there are different ways to break up how we award the contracts. It could be a contract for each bridge, different roadway sections, and so on. At this point we have no final determination.
- Roseanne (Member of the public): Can anything be done right now to improve traffic?
 - Bryan Cordeiro (MassDOT): Unfortunately, I don't know if I can do anything. I'd want to talk to the District office, but they aren't here. We're looking internally at improvements to the traffic circle but it's still underway.

- Craig (Member of the public): Is one Bridge type safer than another?
 - Bryan Cordeiro (MassDOT): No, they'll all meet the same criteria in terms of standard roadway widths and stopping sight distances. There is not much difference in safety between bridge types.
 - John Smith (HNTB): Agreed, they are all safe.
- Brian (Member of the public): What will be the lifespan of the new bridges?
 - John Smith (HNTB): We are designing for a 100-year lifespan. However, a rehabilitation might be necessary during that time.
- Frances (Member of the public): How much space would be between the bridges?
 - Bryan Cordeiro (MassDOT): We don't know that answer at this time. The final design process will reveal this.
- Catherine (Member of the public): With the new bridges would it increase wind sustainability?
 - John Smith (HNTB): Yes, the new bridges would be much more wind resilient than the existing bridges.
- Member of the public: With more traffic volume given twin bridges that might equate to more traffic being able to travel onto the Cape, would route 6 need to be widened?
 - Bryan Cordeiro (MassDOT): I'll go back to the Purpose and Need Statement here. Roadway capacity isn't identified as a need, so we are not intending to increase capacity at this time. It is not a core goal of the project. Any improvements to the cross section would be to improve safety or multimodal accommodations. We wouldn't need to go so far down route 3 and 6 respectively.
- Pam (Member of the public): The Canal is a vital recreation area including bikes year-round and planning for connecting the rail trails are also in planning. It's needed for canal safety and should be considered in the design.

12. Closing Remarks – Makaela Niles (MassDOT)

- Makaela shares other ways to leave public comments including mail, email, and the PIMA comment tool. Makaela passes it back to Bryan Cordeiro (MassDOT).
- Bryan thanks everyone for listening and attending. He says we have some great feedback and will provide responses to unanswered questions with the Program team.
- Bryan closes the meeting.

Attendees

Program Team:

- Bryan Cordeiro (MassDOT)
- Mike O'Dowd (MassDOT)
- Gareth Saunders (MassDOT)
- Joe Yoo (MassDOT)
- Makaela Niles (MassDOT)
- Gareth Saunders (MassDOT)
- Lisa Szamreta (MassDOT)
- Craig Martin (USACE)
- Scott Acone (USACE)
- Dave Anderson (HNTB)
- Mark Kolonoski (HNTB)
- John Smith (HNTB)
- Erica Blonde (HNTB)
- Patrick Marvin (HNTB)
- Sara Stoja (HNTB)
- Mikayla Jerominek (HNTB)
- Rafael Freire (Portuguese Translation)
- Alisa Clements (Portuguese Translation)
- Camila V. (Spanish Translation)
- Alexandra Fortich (Spanish Translation)
- Thomas Lauterborn (ASL Interpretation)
- Lucy Annett (ASL Interpretation)
- Catherine Zelinski (CART Interpretation)

Other Attendees:

1. Eileen K.
2. Amy Sharpe
3. Priscilla Harcourt
4. Michael Murphy
5. John Hession
6. Jane Niederberger
7. Arthur Spruch
8. Barbara Dinn
9. Dolores Barbati-Poore
10. Paul Hession
11. Colleen Medeiros (Cape Cod Commission)
12. Katherine Patch
13. John York
14. Adetoyin Olaoye (MassDOT)
15. Clifford Baker
16. Paul Murphy
17. Ken Cheitlin
18. Michael Farrell
19. Andrew Clarke
20. Cassandra Ostrander (FHWA)
21. Ken Coelho (FHWA)
22. Christopher Raber
23. Caitlin Burner
24. Paul Silvia
25. Petah Steiger
26. Tony Santoro
27. Jim Ferrier
28. Wayne Beauregard
29. William Crocker
30. Julie Vers
31. Ralph Nardi
32. Lisa Cleary
33. David Coleman
34. Jamie Veara
35. David Cronin
36. Alessandra Keller
37. Kristine Keeney
38. Fayssal Hussein
39. Jin Fu
40. Paul Tilton (Town of Sandwich)
41. Thomas McCarthy
42. Marino Curati
43. Liam Horsman (Senator Ed Markey's office)
44. Don Keeran (Association to Preserve Cape Cod)
45. Danny Vinik (Senator Ed Markey's office)
46. Henry Marcel
47. Judith Riley (MassDOT)
48. Steve Voluckas
49. Ben Thomas (Senator Ed Markey's Office)
50. John Vitagliano
51. Paul Cunningham
52. Judy Switzer
53. Ed DeWitt
54. Alayna Lucero
55. Stu Lipshires
56. Mike
57. Jeffrey Andrews
58. Paul Mangaudis
59. Hilary Anderson
60. Rob Pine
61. Jeffrey Berg
62. Michael Cusack
63. Lisa King
64. Alexander Klein
65. Andrea Rugh
66. Amalia Amado
67. Louise Hardiman
68. Marinetti Matos
69. Deborah Wyman
70. Leonard Pinaud
71. Jacob Heinz
72. Wendy Northcross
73. Andre Chauvin
74. Emma Loughlin
75. Pam Harding
76. Trudy Cushing
77. Marie Dexter
78. John MacPherson (USACE)
79. John F Carroll
80. Karen Portman
81. Beth Agrillo
82. William
83. Ron Blair

84. Jackson Hurst
85. Mary Loden
86. Karen Olcott
87. Art Akeley
88. D. Mulcahy
89. Genevieve Cahill
90. Lindy Mcara
91. Edward Arthur
92. Lynn Harris
93. William Crosbie
94. Tony Molis
95. Laurie Hutton-corr
96. Jeanne Azarovitz
97. David Bryan
98. Evan Costa (Cape Cod Commission)
99. John Cotton
100. Judith Shumway
101. Tim Sullivan
102. Rick Caselden
103. Kenneth Davidson
104. Michelle Cavanaugh
105. Kenny Rogers
106. Gregory Hunter
107. Liz Roper
108. Kim Chesler
109. Jeff Finitz
110. Brendan Boyce
111. John Wheeler
112. Alissa Hike Harris
113. Frank Mahady
114. Maria Theresa Balagtas
115. John Baudreau
116. Francis Sullivan
117. Janice Hughes
118. Debra Sundman
119. Loretta Eysie
120. Ted Burt
121. Wil Gonzalez
122. Russell Hartenstine
123. Elizabeth
124. Daniel Thomas
125. Kathleen Kolva
126. Mary Peterson
127. Brian Lawlor
128. B Deutsch
129. Michael Simpson
130. Sandy Hoover
131. Mark L.
132. Stephen Mellin
133. Nick Nicholson
134. Jeffrey Paul
135. Pam Alden
136. West Dennis Yacht Club
137. Elizabeth Collins
138. Denise Toomey
139. David Steele
140. Elizabeth Bradley
141. Peter Grose
142. Sandy Richter
143. Miguel Rosales
144. Anne Truesdale
145. Wendy Bachmann
146. Samantha Gray
147. Scott Swanekamp
148. Ulandt Kim
149. Pauline Lim
150. Francis Siska
151. Ken Carpenter
152. Adam Chadwick
153. Kayla Sousa
154. Peter Sutton
155. John Montrym
156. Paul Rendon
157. Steve Canavanaugh
158. Kathy Doherty
159. Charles Noyes
160. Paul Scorzelli
161. Eric Thorkildsen
162. Mercedes Rodman
163. Chris Engel
164. Shawn Leahy
165. Rosie King
166. Stephen Tousignant
167. Kathy Jacobsen
168. Michelle Ho
169. Kate Eldred
170. Gregory Lauer
171. Mike Beintum (HNTB)

172. Marlene McCollem (Town of Bourne)
173. Larry Plummer
174. Matthew Bruce
175. Kathy Fox Alfano
176. Richard Bryant
177. David Howard
178. William Goodbody
179. Craig Ferrari
180. Gary Markowitz
181. Kristy Senatori (Cape Cod Commission)
182. Gary Shuman
183. Fred Hancock
184. John Temple
185. Betsy Shreve-Gibb
186. Richard Andre
187. Jenny Flood
188. John Osorio
189. Tim Lydon (Town of Bourne)
190. Jennifer Copeland (Town of Bourne)
191. Vin Bartucca
192. Robert Palermo
193. Suzanne Brock
194. Lawrence Garfinkel
195. Debra Lazar
196. Peter Okun (Cape Cod Commission)
197. Ebba Hierta
198. Ryan Clark
199. Frederick Moseley
200. Michael Turner
201. Bob Wright
202. Robert Edmunds
203. Kathy Donahue
204. Diane Sharron
205. Stephanie Rogers
206. Philip Juhas
207. Shove
208. Shannon Reilly
209. Donella DeCoursey
210. Peter Mancuso
211. Michael Klehm
212. Sue
213. Adrienne Guptill
214. Paul Ward
215. Allen Himmelberger
216. Amy Henderson
217. Eugene Olearczyk
218. Joan OConnell
219. John Hallgren
220. Rudi Pizzi
221. Renee Gratis
222. Len Levin
223. Michael Hanlon
224. Rick Miner
225. Ann OConnell
226. Richard Ziino
227. Daniel Prior III
228. Theodore Zoli
229. Kathleen Sullivan
230. Catherine Weston
231. John Coughlin
232. Richard Killeen
233. Cole Bateman
234. Richard Platt
235. Lawrence cormier
236. G Galvin
237. Berit Berntsen
238. fred DaCosta
239. Eliza McClennen
240. Stephen Buckley
241. Tom Lagowski
242. John Sasonoff
243. Daniel Doherty
244. Daniel Lucca
245. Michael Corbett
246. Robin Morde
247. Sharon Lucido
248. Brian Handy
249. Doug Butler
250. Alice Robinson
251. Mike Gilmour
252. Mark Buell
253. Richard Mignone
254. Edward Baker
255. Linda Deasy
256. Gail Worsfold
257. Lucy Young
258. Elaine G.
259. Jennifer Brown

260. Alison Ross
261. Kathy OBrien
262. Lisa Travaly
263. Donna Noonan
264. Tracy Warncke
265. Noemi Cruz-Lymon
266. Cynthia Goff
267. Kensa
268. Steven Puchkoff
269. D. Best
270. Janice Morneau
271. Robert Boon
272. Janet Maxim
273. Dan O'Grady
274. Linda Linda
275. Sarunas Norvaisa
276. Terri Moran
277. Tim Shea
278. Paul Roche
279. Donna Moor
280. Timothe Litt
281. David Rooney
282. Bev Ryan
283. Michele Capossela
284. Richard Jordan
285. Charles Swanson
286. Daniel Roy
287. Cheryl
288. Natalie Galligan
289. Greg Wirsen
290. Mark Ennis
291. Peter Morrison
292. Brian Cleary
293. William Brown
294. David Carson
295. Lauren McDonald
296. Patricia Moriarty
297. Clifton Boyd
298. Michael St.Mary
299. Thomas Watts
300. Thomas Andrade
301. William Butler
302. Sanders Davies
303. Steve Smith

304. Joseph Povoas
305. Richard Packard
306. Lawrence Mello
307. Elise Kaiser
308. Michael Tyrrell
309. Josh Webb
310. edward fothergill
311. Martha Sheehy
312. Olivia Murphy (MassDOT)
313. Oanh Le (MassDOT)
314. Kawtar Raitam (MassDOT)
315. Devon Mexcur (MassDOT)
316. Tim Connelly
317. Susan Bunbury
318. Ewell Hopkins
319. Paul Richards
320. Elizabeth Prior
321. Dorie Weintraub
322. Carol DeVincent
323. John Cecil
324. Jean Casey
325. Donna Cohen
326. Yvonne Dekornic
327. Michael O'Reilly
328. Eve Zuckoff
329. Michelle DuBois
330. Kathy Jansen
331. Nancy Brooks
332. Jeffrey Hamilton
333. Dave Coe
334. Denise Morreale
335. Bob Wittstein
336. John Sorocco
337. John Sarnosky
338. Susan Feinberg
339. Jennifer Bombard
340. P. Streck
341. Mary Hatch
342. Matt Wilson
343. Tom Dignes
344. Bob Smith
345. Frank Tarara
346. Deborah Arak
347. Myra Schwartz

- 348. Bill Gindra
- 349. Lenny Rowe
- 350. Milton Berglund
- 351. Keith Ciampa
- 352. Sam Slarskey
- 353. Kyle Bergeron
- 354. Donna Wilson
- 355. John Pourbaix
- 356. Jim Waterman
- 357. Joan Hester
- 358. Jason Venditti
- 359. Jeffrey Fryar
- 360. Christine Sweklo
- 361. Leslie Scherer
- 362. Sherri Williams
- 363. Charles Soule
- 364. Stephen Bryant
- 365. Cindy McConarty (MassDOT)
- 366. William Blunt
- 367. Alicia Good
- 368. Bruce MacDonald
- 369. Tom Weaver
- 370. Henrietta Weaver
- 371. Jason B.
- 372. Richard Prior
- 373. Michael Anderson
- 374. Alex Megerle
- 375. Emma Healey
- 376. Douglas Nelson
- 377. Kathleen Rogers
- 378. Dennis Lassige
- 379. Paul Mulrone
- 380. Linda Williams
- 381. Adam Marks
- 382. Nicholas Jackson
- 383. John Gregg
- 384. Carla Elwell
- 385. Nancy Wendlandt
- 386. Dale Baker
- 387. Michael Paiewonsky
- 388. Fred Gottemoeller
- 389. Peter Bangs
- 390. Thomas Ashe
- 391. Elizabeth Nicol
- 392. Kevin Walsh
- 393. Paul Weiner
- 394. Lola Campbell
- 395. Carol Bowers
- 396. Darren Conboy
- 397. John Hapkiewicz
- 398. Michael Kondracki
- 399. Aram Darmanian
- 400. Ed Baumann
- 401. Hasmukh Patel
- 402. Rachael Welch
- 403. Jill McLaughlin
- 404. Edward Lavelle
- 405. Mary Grieco
- 406. Michael Lazar
- 407. Bob Barry
- 408. Zach Palmer
- 409. Deb Wright
- 410. Anne O'Flaherty
- 411. Barb DiFranco
- 412. Jean Challies
- 413. Peter Vacca
- 414. Erik Fredericks
- 415. Susan Bookhout
- 416. Victoria Garvey
- 417. Ryan Newfell
- 418. Bob Butcher
- 419. Robert Dutch
- 420. Steven Xiarhos (MA House)
- 421. Lynn Beaupre
- 422. Michael Jackman
- 423. Phillip Poinsette
- 424. Sarah Walker
- 425. Allen Hardon
- 426. Donna Coye
- 427. Andrea d'Amato
- 428. Forster Hinshaw
- 429. Kathleen Daddona
- 430. Joanne Robertson
- 431. Sherri Doolin-Benoit
- 432. Jacquelyn Shea
- 433. Kevin Piccini
- 434. Julie Kratochvil
- 435. David Derosier

- 436. Rick Camuso
- 437. Nadine Firth
- 438. Darren Braz
- 439. Alex Duggan
- 440. Trina Novak
- 441. Michele Regan
- 442. arlene lowenstein
- 443. Mary Gately
- 444. Walt Woo
- 445. Dianne Moniz
- 446. Peggy Freitas
- 447. Brett Fiocchi
- 448. Richard Leibowitz
- 449. William Rugh
- 450. Benjamin Molina
- 451. Ronald Held
- 452. Susan West
- 453. Audrey Venooker
- 454. Lynda Martell
- 455. Steve Siegert
- 456. Wendy Scandurra
- 457. Nancy Wong
- 458. Thomas LeBlanc
- 459. Chet Yacek
- 460. Nancy Bent
- 461. kathy hutcheson
- 462. Christopher Quinn
- 463. Mickey LaRose
- 464. Lyris Liautaud (MassDOT)
- 465. Jack Vaccaro
- 466. Dan Gould
- 467. Leslie Nolan
- 468. Hishan Fernando (MassDOT)
- 469. Richard Mikolajczak
- 470. Judi Carr
- 471. Nancy Ryan
- 472. Peggy McCarthy
- 473. Margie Knight
- 474. Jack MacDonald
- 475. Fran Fedele
- 476. Katherine Gillis
- 477. Tuija Voutilainen Lynch
- 478. Wayne Lamson
- 479. Ashten Sprague
- 480. Barbara Keene
- 481. Jonathan Hobill
- 482. Paul Kelliher
- 483. Richard Reyes
- 484. William Hike
- 485. Chris City
- 486. Steve Howland
- 487. Steve Pires
- 488. Steven Tupper (Cape Cod Commission)
- 489. James Howard
- 490. Kevin Farr
- 491. Anonymous
- 492. Timothy Martin (WFXT Boston25)
- 493. Carl Nelson
- 494. Gaby Pipp
- 495. Thom Giff
- 496. Matt Snyder
- 497. Kevin Donnelly
- 498. Brooke Kushwaha
- 499. Phil Afonso
- 500. Judith Laster
- 501. Darrell King
- 502. Scott Moles
- 503. Rosanne
- 504. Michael Manfredi
- 505. N Bennett
- 506. Tom Lopez
- 507. Gail Tavares
- 508. Bob Ruzala
- 509. Matthew Silvia
- 510. William Reed
- 511. Liz Ward
- 512. Paula Rea
- 513. Tony Esposito
- 514. James Hall
- 515. Sue Gray
- 516. Andrew Nelson
- 517. Ross Cristantiello
- 518. Julie Ricca
- 519. Pat Marmen
- 520. Jill Talladay
- 521. Jim Waterman
- 522. Joyce Bertschmann

- 523. Eric Thornley
- 524. Matt Greggains
- 525. Allen Maynard
- 526. Kathleen Morley
- 527. Joe Cahill
- 528. Heather DiPaolo
- 529. Aldo D'Amico
- 530. Robert Barat
- 531. Bob Dermody
- 532. Edwin Smith
- 533. Jean Hills
- 534. Jane DeNoyer
- 535. Joe Sullivan
- 536. Jamie Regan
- 537. Evan Christian
- 538. Chris Tonello
- 539. Jill Erickson
- 540. Mark M.
- 541. Geoffrey Hite
- 542. Oscar Guy Bargnes
- 543. Adrian Sullivan
- 544. Eamon Kernan
- 545. H Patel
- 546. Steven Hiersche
- 547. Nicole Hunt
- 548. Donnie Hayes
- 549. Craig Najjar
- 550. Maggie Reilly
- 551. Dave
- 552. Dan Lawlor
- 553. Bob McCarty
- 554. Barbara Gignac
- 555. Mark Duffy
- 556. Brandon Rayno
- 557. Leigh Miano
- 558. Matthew Person
- 559. Matt Patronick
- 560. Kim Selby
- 561. Mark Bergeron
- 562. Michael Sorenti
- 563. Donald Hassett
- 564. Dan Abell
- 565. Jason Graziadei
- 566. Teva Boothe
- 567. John Fialkowski
- 568. Jackie Ferguson
- 569. William Malomo
- 570. Christine Tanso
- 571. Victoria Sittig
- 572. Zachary Bennett
- 573. Eileen Divver
- 574. Catherine Moretti
- 575. Elizabeth Bar
- 576. Eric Kinney
- 577. Joy Sylvester
- 578. Josh Nigro
- 579. Kyle Burgos
- 580. Kathryn Plante