

**Hampton Harbor Bridge Project
Summary of Meeting
Public Advisory Committee (PAC) Meeting
Hampton Town Hall, 100 Winnacunnet Road
November 13, 2018, 4:00 p.m.**

Public Advisory Committee

Frederick Welch, Hampton Town Manager
Betty Moore, Hampton Historical Society
Brett Walker, Seabrook Police Chief (Acting)
Richard Maguire, Seabrook Beach Village District
David Walker, Rockingham Planning Commission
Seth McNally, NH Seacoast Greenway
Rep. Michael Edgar, District 21 (Hampton)
Sen. Thomas Sherman, District 24 (Rockingham County)
Catherine Silver, Hampton Resident

New Hampshire Department of Transportation (NHDOT)

Jennifer Reczek, Project Manager
Bob Juliano, Bridge Design
Margarete Baldwin, Highway Design

HDR Consultant Team

Jim Murphy, Project Engineer
Rick Plenge, Project Engineer
Jason Ayotte, Project Engineer
Jill Barrett, Public Involvement
Stephanie Dyer-Carroll, Environmental and Historic Resources

The second Public Advisory Committee (PAC) Meeting for the Hampton Harbor Bridge Project was held on November 13, 2018 in the Selectmen's Meeting Room in Hampton, NH. Jennifer Reczek, the New Hampshire Department of Transportation's (NHDOT's) Project Manager, moderated the meeting. A brief presentation was provided updating the PAC on the project and summarizing the findings of the traffic study. Attendees were encouraged to ask questions throughout the presentation.

Jim Murphy (HDR) began the presentation by explaining that a Public Informational Meeting and a meeting with vessel owners were held in September and October. He said the Project Team has undertaken data collection, and documentation of environmental and historic resources in the project area is underway. They've also reviewed the Rehabilitation Alternative, undertaken a traffic analysis, and looked at typical roadway cross-sections. Meetings with the NH Division of Historical Resources (NHDHR), the PAC, the public, and abutters are planned for December and January to gather input; discuss the data collection efforts; discuss the roadway cross-sections; and share the alignment studies for the Rehabilitation, Replacement with Fixed Bridge, and Replacement with Bascule Alternatives.

Mr. Murphy summarized the input the Project Team received at the public meeting in September. He said there were mixed opinions about rehabilitation versus replacement of the bridge, and that

abutters expressed a desire to meet with the Project Team before the public meeting in January. The meeting with abutters has been scheduled for next month. Mr. Murphy said concerns were expressed about whether the historic nature of the bridge would restrict its replacement. Mr. Murphy said the bridge could potentially still be replaced but consultation would need to be undertaken with NHDHR and mitigation measures would need to be identified. There were also questions from the public about funding of the project and emergency vehicle access.

Mr. Murphy then shared the findings of the Rehabilitation Study. He said the analysis showed that the bridge would need to be modified to carry modern design loads, even if it isn't widened. In order to widen the bridge to meet the needs of the traveling public, the entire superstructure would need to be replaced. Further, the bascule pier restricts the ability to update the bridge's mechanical systems. Jennifer Reczek said that another rehabilitation option under consideration is the construction of a second moveable bridge next to the existing. One bridge would be designated for vehicular traffic, and the other for bicyclists and pedestrians.

Mr. Murphy then shared the data they've collected about vessel usage and the results of the meeting with vessel owners. He said that the bridge is lifted approximately 800 times per year and that 15 boats are responsible for approximately 92% of the requested lifts. Vessel owners stated that horizontal clearance between the piers is a concern, and that there's a need to accommodate equipment for future dredging of the harbor. In addition, they said some vessels have removed their rigging to eliminate the need for lifts, and that it will be important to stage construction so that mobility is maintained under the bridge. Mr. Murphy said the replacement alternatives will seek to minimize openings through increasing the underclearance.

Jennifer Reczek explained the bridge is a community link and part of the transition into Hampton Beach. She said when considering the roadway design, a number of factors were considered including the need to incorporate bicycle and pedestrian facilities, traffic flow and safety, and emergency response vehicles.

Rick Plenge (HDR) then walked through the methodology employed in the traffic study. He said the study focused on the bridge, since it is a bridge project, and looked at both existing conditions and projected future volumes. Data was collected through an automated traffic recorder, multi-modal video turning movement counts, traffic data from the Hampton Beach Master Plan, and growth rates from the Town of Hampton and the Rockingham Planning Commission. The Project Team also reviewed lift logs. He said they looked at both peak months (July and August) and non-peak to ensure they don't overbuild. Peak hour volumes in July were approximately 700-800 automobiles, 30 bicyclists, and 50 pedestrians. On average, there are eight to ten lifts per day in the summer months and the lift takes about five minutes.

The existing bridge cross-section has a narrow sidewalk, a narrow (1-foot) shoulder, and two travel lanes. In determining the number of lanes, the Project Team looked at peak volumes for lane capacity and service, as well as design volumes. The capacity of a lane is 1,500 vehicles per hour, and the team looked at two, three and four lane options. He said the traffic volumes only increase by 10 to 15 percent at peak periods, suggesting a three-lane bridge would not be appropriate. In addition, a large number of vehicles make the U-Turn from Ashworth Avenue onto Ocean Boulevard, creating a potential congestion point. Mr. Plenge said the Project Team wants to make sure the bridge design doesn't negatively impact the functioning of this intersection going forward. They also don't want to encourage higher speeds moving into downtown Hampton Beach.

Mr. Plenge said the analysis showed that the projections for peak hour counts in 2023 are well below the capacity of one lane. Projecting out an additional 20 years using a conservative 1.5% growth rate, the vehicle counts are still below the lane capacity. This indicates that a single lane in each direction is sufficient to accommodate volumes now and in the future. Mr. Murphy said that though there are traffic problems in the area, increasing the roadway capacity at the bridge won't solve those problems.

In addition to lane capacity, Mr. Plenge said the Project Team looked at the impacts of the movable bridge on traffic patterns. He said that the average bridge lift cycle is five minutes and that from the time the bridge goes down to when traffic is cleared is generally about 15 minutes. Queueing could be reduced if the vertical clearance was higher.

Mr. Plenge said that although the focus of the study was the bridge and the immediate approaches, the Project Team also took a high-level look at the intersections north of the bridge. As previously mentioned, there are 400-600 vehicles taking a U-Turn at Ashworth and Ocean. Carrying additional lanes of through traffic would create additional conflicts at this intersection.

In summary, Ms. Reczek said the traffic distribution doesn't support a three-lane cross-section, and a four-lane cross-section would provide minimal benefit in terms of overall traffic operations and could increase traffic speeds. In addition, both the three and four-lane configurations could create a more challenging crossing for pedestrians. Moreover, additional lanes would not improve access for emergency vehicles, as cars would be in the travel lanes. Therefore, NHDOT's recommendation is for two traffic lanes on the bridge.

Ms. Reczek said the team wanted to share what they observed in the videos and how to address the issues. The videos showed bicyclists on the sidewalk, in the shoulders, and in the travel lanes. Cars were observed moving into the opposite lane to avoid bicyclists, and bicyclists were observed crossing the travel lanes to get to the other side of the road. Mr. Plenge said NH State law doesn't allow cyclists on the sidewalks, but bicyclists use of the sidewalk indicates their discomfort with the current roadway configuration.

Mr. Plenge stated that it is best practice to provide a minimum of five feet of shoulder width for bicyclists when adjacent to the curb, but that national guidelines suggest six to eight feet. He also said guidelines recommend 18 feet from the centerline to the curb in order to allow emergency vehicles to pass. An eight-foot shoulder allows for side-by-side riding, and for vehicles to pass comfortably. It also allows for easier passage of emergency vehicles as there is space in the shoulders for vehicles to pull over.

The discussion then turned to sidewalks. Ms. Reczek stated that the sidewalk on the bridge, 4.7-feet wide, is currently undersized. Mr. Plenge said they are narrow for pedestrians to pass each other and they are further crowded by bicyclists using the sidewalk. He said there's a desire to have the pedestrian facilities on the bridge connect with those to the north in the area covered by the Hampton Beach Master Plan, and that, based on video observations, pedestrians want sidewalks on both sides of the bridge. The Project Team also needs to consider people fishing from the bridge and sightseeing. Because of all these considerations, the Design Team is recommending that the sidewalks be increased to a modern standard of six feet.

Mr. Plenge then asked David Walker (Rockingham Planning Commission) what the bicycle and pedestrian vision is for the corridor. Mr. Walker said there's been a project in the planning stage for a while but there hasn't been much focus on it. Ms. Reczek asked Mr. Walker if he is supportive of

sidewalks on both sides of the bridge. He said he was, that NHDOT should design for the future. Ms. Reczek then asked if the PAC members were in agreement that the bridge should have two travel lanes, with eight-foot shoulders, and sidewalks on both sides with bump outs. There was concurrence from the PAC members in attendance. She said the Design Team would have more information next month on the potential alignments and where the bridge would touch down.

Ms. Reczek closed the meeting with a quick discussion of next steps. She said the Project Team will continue development of the Alignment and Profile Study. The next PAC meeting will be held December 4, 2018 to review alignments and profiles for the replacement alternatives and further discuss the Rehabilitation Alternative. The next Public Informational Meeting will be held in January.

Throughout the presentation, PAC members asked questions and offered information and concerns. They are noted below with responses made by NHDOT or the consultant team.

Bridge design – size and type

Q: Why do the piers have to be widened if the bridge is rehabilitated? Would the existing piers be unable to handle the load of a wider bridge?

A: The rehabilitated bridge would be wider than the existing bridge and the existing piers could not handle the increased load. Widening would likely occur only on the east side, as the operator's house would have to be demolished if the bridge was widened to the west side.

Q: Would you widen the opening for vessels?

A: The opening would not be widened in the rehabilitation alternative. If a new bridge is constructed, the clearance may be between 80-150 feet.

Q: Has the team asked the nuclear plant what they need for a bridge opening? The tug they now use barely fits through the bridge and is near the end of its useful life. A new tug will be expensive. If the plant is decommissioned, spent rods could potentially not be brought out by boat and they will not be allowed to travel on the road.

A: The team has not spoken with nuclear plant officials. It is our understanding from our coordination with some of the Federal Agencies, that nuclear materials have been stored in-place on site in recent decommissioning.

Q: What is the height a fixed bridge would need to be to accommodate the vessels that account for 92% of lifts? What is the current clearance?

A: The Project Team is still working on determining what height would be needed to accommodate vessels if a fixed bridge is constructed. The current clearance is 18 feet.

Q: If the bridge doesn't remain a bascule, how much clearance would the US Coast Guard require?

A: The Project Team is working on a navigational report which will make a recommendation about height.

Q: If a movable bridge is decided upon, would it definitely be a bascule?

A: The Project Team is heavily focused on the bascule because of the potential for the loss of the bridge type in the state.

Q: If you built a secondary bridge, there would be no sidewalks? Would this be safer?

A: You are correct that there would be no need for sidewalks if we constructed a secondary bridge, but NHDOT would need to consider how to cross pedestrians.

Q: Is the Project Team considering sea level rise?

A: There is a state law that mandates projects must be managed to account for sea level rise. NHDOT is still working on developing best practices.

Q: What is the cost of widening the bridge?

A: Based on average costs for similar projects, cost increase for each additional foot of width is estimated to be in the order of \$500-600 thousand dollars.

Q: What is the projected budget for this project?

A: Approximately \$30 million has been allocated in the Ten-Year Plan.

Q: As long as there are no lifts, does the traffic flow well and is there capacity for growth?

A: Yes, the traffic issues are located off of the bridge, not at the bridge itself.

Q: Was the Project Team involved in the Hampton Beach Master Plan?

A: No, the area studied was different, but the Design Team reviewed it and their projections match those that were developed for this project.

Bridge design – location

Q: How much impact would a new bridge have on the north side? People who live near the bridge want to see the existing bridge rehabilitated. We're terrified our area will become an on-ramp if a new bridge is built.

A: The Project Team is starting to look at alignments. Once this assessment is complete, we will have a better idea of impacts.

Shoulders, sidewalks and bumpouts

Q: Is there a shoulder width that encourages "cheaters" who try to get around stopped traffic to avoid waiting?

A: Yes, this happens in urban areas. There are measures that can be taken to discourage that such as line-striping and rumble strips.

Q: Do you see motorized scooters using shoulders?

We are beginning to see motorized scooters and bicycles on sidewalks and multi-use paths. These vehicles have a vehicle speed capped at 15-20 mph and have legal use of the roadway. Travel on shoulders would be allowed.

Q: Would NHDOT build bump outs if the sidewalk is not wider than six-feet?

A: Yes, NHDOT would consider that. Bump outs are less expensive than widening the entire length of the sidewalk.

Q: Multiple bump outs make a lot of sense. They work well on Portsmouth's Memorial Bridge. Do you have any data about increased use by pedestrians?

A: We do not know if there is data, but we will look into it.

Q: Did you consider including a multi-use path on the bridge?

A: The team looked into it and dismissed this option. There is not much connectivity to this type of a facility on both ends of the bridge. Additionally, since wide shoulders are desirable for multiple reasons (bicyclist usage and access for emergency vehicles), wide shoulders are preferable to a mixed-use path. If a path were built, the east side would likely be preferred.

Q: Could the sidewalks have different widths? For example, a sidewalk on the west side could be narrower, perhaps 2 feet, with a wider sidewalk on the east side?

A: Four feet is the minimum width for a sidewalk.

Q: Will there be a railing between the shoulder and the sidewalk?

A: Although the department has done this on some bridges, there are challenges with terminating barriers.

Comments:

- I think the team's traffic assessment got it right. A two-lane bridge is adequate, and you understand how traffic works on the roads north of the bridge.
- A new bridge will become an attraction. It should be built not simply to function for vehicles but to accommodate people.
- I worry about the grade for bicyclists if a new fixed bridge is built.
- Let's not look at current bicycle and pedestrians use. We should assume it will increase if sidewalks and shoulders are improved. In the future better bicycle and pedestrian facilities may be built along roads leading to the bridge. Examination of the pedestrian counts on Memorial Bridge before the new bridge was built and after it was constructed could give an indication of the potential induced demand.
- Sidewalks should be built on both sides of the bridge and they should be generous. The last thing we want is people walking into the road because the sidewalk is crowded with people walking and fishing.
- We'll see more value with wider shoulders. Millennials don't drive.
- The Project Team should determine what makes sense at the park entrance. If a traffic light would cause backups on the bridge, the study should indicate that.
- When fishing is really good, people just cross the travel lanes on the bridge to avoid the fishermen. You should keep fishing on one side of the bridge, so people don't walk into the roadway.
- Anything you can do to minimize crossings on either side of the bridge would improve safety.
- Building a second bridge could have an even bigger impact on the north side of the bridge.
- *The Memorial Bridge, with bumpouts, provides a pleasant experience for bicyclists and pedestrians. (Note: The Memorial Bridge has 5' shoulders and 6' sidewalks on either side.)*

The meeting adjourned at 5:40 PM.