

Meeting: Stakeholder Committee Meeting

Meeting Date: 01/19/10 - 1-3 pm

Location: Kittery Trading Post, Rte. 1 Kittery, Katahdin Room

**Maine-N. H. Connections Study
Stakeholder Committee Meeting
January 19, 2010
Kittery Trading Post, Kittery, ME**

Presenters:

Paul Godfrey, HNTB
Carol Morris, Morris Communications

Committee Members:

Roger Maloof, Shipyard IFPTE
Rose Eppard, Portsmouth
Ken Herrick, Albacore Park
Nancy Carmer, City of Portsmouth
Josh Pierce, SABR
Dan Blanchett, Town of Eliot
Cristy Cardoso, Portsmouth Citywide Neighborhood Committee
Julie Dawson, SMRPC
Steve Workman, NH Seacoast Greenway
Gail Drobnyk, Kittery
Kinley Gregg, Town of York
Chris Holt, Portsmouth Pilots
Peter Michaud, NHDHR
Linda Wilson, NHDHR
Doug Bates, Portsmouth Chamber
Cathy Goodwin, Greater York Regional Chamber
Richard Candee, Portsmouth Historical Society
Stephen Kosocz, Kittery (covering for Ben Porter)
Scott Bogle, Rockingham Planning Council

Other attendees:

Bob Landry, NHDOT
John Butler, NHDOT
Russ Charette, MaineDOT
Gerry Audibert, MaineDOT
Leigh Levine, Federal Highway Administration, NH

Anna Price, Federal Highway Administration, ME
Linda Wilson, NH Division of Historic Resources
Peter Michaud, NH Division of Historic Resources

*All slides referenced can be found in the PowerPoint for the meeting.
Meeting began at 1:05pm*

Carol Morris:

Thank you for coming. Our agenda today:

- Welcome
- Process/Next Steps
- TIGER Grant Application Update
- Results of Round 3 Fatal Flaw Analysis
- Alternatives Recommended to be carried forward
- Detailed Evaluation of Feasible Alternatives

Today we will go over the Fatal Flaw Analysis results and close out the Fatal Flaw Analysis in order to move into the in-depth analysis of alternatives to be carried forward. Next part of the process includes:

- Stakeholder Committee: Feedback from you today on Study Team recommendations
- Finalize Fatal Flaw report/findings by January 31st
- DOT's/FHWA review/approval by mid-February
- Remaining alternatives to have a detailed analysis against all evaluation criteria between Feb-April 2010
- Next Public Meeting – February 10, 2010

We had planned the next public meeting for February 10. The caveat is, we were hoping we would have the TIGER grant notification by then. However, it now appears we might not have it by the 10th. February 17 is the legal deadline, so we may push the next public meeting beyond that to make sure we have that information for folks. People will have a lot of questions about it and we want to be able to provide full information. We'll make that decision by next Friday the 29th and let everyone know.

Q: When what's been done so far goes to the DOTs and Federal Highway, can things that were taken off the table reappear? Options that were taken off the table be put back on, so to speak?

Paul: Yes, if it was felt we had not looked at an option sufficiently.

Continued: Could new options that were never in our analysis be put in?

Paul: I would be surprised given the broad work we have done.

Carol: Do you have a particular item you're concerned with or want to bring up now?

Continued: No.

Carol: We've asked the Federal Highway Administration what kind of documentation we need to take things off the table.

Carol: Fatal Flaw Analysis:

- Fatal Flaw Process
- Study Purpose and Need
- 16 Evaluation Criteria
- Generated 63 different alternatives
- An OPTION is one piece of the ALTERNATIVE.
- An ALTERNATIVE is an entire solution.
- Round 1: 34 alternatives eliminated
- Round 2: 14 alternatives eliminated

We last met in November and then had a public meeting in December. Today, we'd like to show the results of the last round of Fatal Flaw Analysis since that time. We will also look at the options remaining.

Paul: *Fatal Flaw Analysis Round 1, 2, 3 results*

These are the results:

- Steering Committee endorsed Round 1 recommendation
- Stakeholder Committee endorsed Round 1 recommendation, asked for additional alternatives be eliminated
- General Public, Steering and Stakeholder Committee concurrence on Round 1 and 2 findings at Dec. 16th Public Informational Meeting

- Looking for Steering Committee endorsement on Round 3 today

We are looking for your input today. Have we overlooked anything?

Fatal Flaw Analysis Round 3:

- Compared options and alternatives against:
 - Impacts at/near Port of New Hampshire
 - Order of Magnitude Life Cycle costs
 - Mobility of Study Area without Sarah Long bridge during construction
 - Result – 15 alternatives reduce to 9*
- * - *includes No-build alternative*

We met with the head of the Port of NH to go over the strategies. The Sarah Long Bridge carries more traffic than the Memorial. It carries fewer non-discretionary trips. The Sarah Long is a more critical bridge in terms of its ability to carry regional traffic. If the Sarah Long wasn't there, would that be bad enough so that it's a Fatal Flaw? Well, even though there would be impacts, they are not sizable enough to be fatally flawed.

Q: The assumption that you made about the importance of the Sarah Long is true as far as it goes. What is not said is there are a lot of quality of life issues surrounding the Memorial.

Paul: We don't disagree. The Purpose & Need talks about that. Fatal Flaw Analysis is a high level of screening.

Q: You made the statement that there was less discretionary traffic on Sarah Long. How did you determine that?

Paul: The origin / destination study we conducted allowed us to understand types of trips and duration of trips. For the Sarah Long, 61% of trips were work-related. The Memorial was 48% work-related. From our definition, we looked at recreation, shopping, tourism as discretionary. When the Memorial closed, we expected the 12,000 vehicles to shift to another bridge. We recognized that some people were deciding not to cross the river.

Carol: We asked each survey participant which category of trip we should use for him or her that day.

Comment: Had the Memorial closure been longer or permanent, we might have seen that some of the "discretionary" trips (shopping, recreation) that did not transfer to the other two bridges during the temporary closure, would come back over time. It's not uncommon to see those kind of changes over time as traffic patterns adjust.

Q: When the bridge was closed, we had pedestrian and bike access. That's equivalent to the pedestrian / bike option for the Memorial. Our local businesses were decimated.

Carol: I will address the issue of how we will measure economic impact later in the meeting.

Comment: When the bridge was down, it was a different time of year than when the initial surveys were taken. It could be wrong.

Paul: We acknowledge that the origin / destination survey was a snapshot. But things like work trips do remain. Recreational trips are where we get variance. Even though we concluded that not having Sarah Long during construction is ok, there would be impacts. It's not easy, there are detours, etc. People (businesses) felt it when the Memorial closed. But it wasn't enough to take it off the table.

Q: Hypothetically, say we get the money for both bridges. Would construction time be the same for both?

Paul: We have determined that we cannot live without both at same time. We've not determined which is first.

Comment: Using your upstream alternative, you could have both under construction at the same time with traffic still maintained on the existing Sarah Long.

Comment: The Memorial should not be worked on during the summer.

Carol: It would take two years to rebuild or rehab the Memorial.

Bob: In either we would have both summers impacted, with the need for painting and other things that are temperature-related.

Paul: Let's talk options we are *recommending to eliminate from further consideration*.

SL3, replace the Sarah Long with a new midlevel bridge – We get an additional 50 feet of clearance. There'd be an elevated rail from Market Street across the river. We'd relocate Bridge Street in Kittery with an elevated rail on the Kittery side. Impacts: Historic properties in Portsmouth. The Port of Portsmouth has at-grade rail now. With this option, we must bring it 20 – 25 feet in the air. Even though they do not use the rail now, they want the option to use it. It would require relocation of the warehouse. Market Street needs to be picked up 19 feet. On the Kittery side, the footprint would impact residences and commercial. Based on this, we recommend eliminating this one.

Audience agrees with elimination of this option.

SL3A, midlevel upstream: It's the same configuration and opportunity for increased vessel clearance. The impacts are worse – in Kittery, more residences. Impacts are similar overall. Again, study team recommends this be eliminated from further consideration.

Audience agrees with elimination of this option.

In terms of life cycle costs, we are looking at the \$250 – 400M range for all the remaining options, including capital, operations & maintenance for a 100-year cycle. That range is reasonable.

Let's go back through alternatives we still have on the table.

No build: This is required to be there. Under this, the Memorial Bridge is closed completely.

Audience understands this option must be carried forward for comparison purposes.

MB1, rehab on existing: The Memorial would remain 2 lanes.

Audience agrees to carry this option forward for further study.

MB2, replacement on existing alignment: Everything from the substructure up (superstructure replacement) would be replaced. We recommend moving it forward.

Audience agrees to carry this option forward for further study.

MB6, Pedestrian / Bike movable or Fixed High Level bridge: The Memorial Bridge is closed, removed and a new bridge built. This

morning we had an interesting discussion about how it would actually operate. Should it be movable? Fixed? We'll get into the details soon enough.

Q: How has this option survived?

Paul: We have not demonstrated that this is not feasible. We understand that if you close Memorial, there's impact. We'd balance that impact. If we can keep mobility in the region, it's fair to keep this one.

Carol: We can do it from a mobility perspective if the Sarah Long is 4 lanes wide. And it preserves the bike/ped access.

Q: What about emergency vehicles?

Carol: This bridge option could take emergency vehicles.

Paul: Yes, it could be made wide enough for that.

Carol: The reason a pedestrian/bike option remains is because of the Purpose & Need of this study – there is no reasonable way to replace that kind of traffic over the Sarah Long.

Comment: My concern is that cost is being weighted more heavily than costs to residents and businesses.

Carol: That's not a fair statement at this point. For Fatal Flaw Analysis, we said we were only looking at major factors. Now, we get down to the fine-tuning. Further, we have not even brought cost into it yet. No option has been removed due to cost.

Paul: How we weight and score the criteria is up to the DOTs, FHWA, this committee (Stakeholders) and the Steering Committee. We need your understanding on what criteria are at the top.

Continued: Some options will never make it though because they get tossed in the first round.

Paul: We removed those with obvious documentable flaws: impacts, capacity...and you all have agreed with those.

Q: For this option, do we need parking?

Q: One issue with a pedestrian bridge is with evacuation for Portsmouth – Memorial is easier to take right now. You need to think of this.

Paul: We have identified evacuation as a factor. We're saying it is rational to continue evaluation of this option.

Comment: You had stated that maintenance costs are a factor or had been estimated. Is it the appropriate time to review those now? I have done some research – we can use something other than steel to reduce all costs. We need to identify this at some point.

Paul: We want you to give us feedback. That's one thing. Cost will be one factor. If we're missing something, your input is needed.

Comment: This item appears amorphous. Depending on how it's defined, there are reasons it would not survive. If it is a high-level bridge for example, how do you get to it? And a lift has maintenance issues.

Carol: We'll see as we get further along if the various iterations of this option stay on the table.

Continued: But all the rest are defined.

Paul: There would be elevators at either end to bring up bikes and pedestrians.

Continued: With elevators, this is not an emergency vehicle bridge. It could really be a placeholder for six totally different options.

Paul: We're not discounting anything you've said. These thoughts will be taken into consideration as we move through the process.

Carol: As Paul will show as we move along, the footprint of a few of the other options we'll be looking at more closely are amorphous also.

Paul: We'll look at different options and details and bring back more information in March. Some may go away based on cost alone.

Audience agrees to carry this option forward for further study.

SL1, rehab on existing: This is a 2 lane with the same openings as we have today. No opportunity for vessel improvement. The study team recommends further study.

Audience agrees to carry this option forward for further study.

SL2, replace on existing: This is either 2 or 4 lane and means replacement of the superstructure and the substructure. This option is on alignment – the impact is you close the bridge for an extended period of time during construction. Study team recommends further study here.

Audience agrees to carry this option forward for further study.

SL2A, low level upstream: It's similar to what we have today. Impacts include properties on the Kittery side. It's still at grade through the Port of NH yard, though. They want that. We don't want to impact operations there. We want to recommend carrying this ahead. Primary rationale is we can keep the bridge open during construction.

Q: Does the old bridge remain like a ghost bridge?

Paul: For these, once the new bridge is built, the old one will be removed. No downstream options exist on Sarah Long because of the turning basin located there. With any of the new bridge options, we have the opportunity to make the opening bigger for ships. We will begin discussions soon with the Coast Guard.

Comment: Ships are getting bigger. Think about the evolution of ship design 35 years out.

Paul: Yes, this becomes interesting. Right now the Memorial rehab option does not increase any ship clearance. The replacement does keep the substructure, so you cannot increase clearance in that option either. The only option that helps the clearance for Memorial is if it's high level and we have removed that from further consideration.

Q: How do the upstream versions align to the Route 1 Bypass?

Paul: It's not far, maybe 80 to 100 feet. The further upstream, the more impacts to residences.

Q: If the Sarah Long gets closed, we can absorb this traffic. Is it an option to eliminate the Sarah Long?

Paul: No. We can't handle the traffic and also must maintain rail. Not having rail is a Fatal Flaw.

Audience agrees to carry this option forward for further study.

Recap Fatal Flaw Analysis:

- Study Team Recommendation :
- 63 alternatives reduced to 8 alternatives plus No-Build
- 3 Memorial Bridge options
- Rehab (2-lane)
- Low level replacement on existing alignment (2-lane)
- Bike/Ped Moveable Bridge or Fixed High Level Bridge
- 3 Sarah Long Bridge Options
- Rehab (2-lane)
- Low level replacement on existing alignment (2 and 4 lane)
- Low level replacement on upstream alignment (2 and 4 lane)

Carol: Remember, it's eight options and not six because of the combination factor of two bridges.

Alternatives matrix: *Refers to chart on Slide 23.*

Q: Are the new build Sarah Longs still lift bridges? What's the greatest opening for a 4-lane lift? Would you build it as 4 lane? Or, as two 2 lanes that use the same control arm?

Paul: There are 300-foot lifts for 4 lanes. Don't know what degree beyond that is achievable.

Comment: Ships come to the Memorial at 90 degrees and the Sarah Long at 40 degrees. We saw two pictures that show double lifts with 2 lanes on each. Four lanes, with rail on the same level. At some point, we need to go into cost and reliability.

Comment: Use aluminum instead of steel.

Paul: Durability is a big thing. There's a reason lifts are built the way they are and with steel.

Q: Has PanAm had anything to say around this?

Paul: We will match the rail line to the current standard.

Carol: They are on the committee and have attended a few meetings.

Paul: So now the complete Fatal Flaw Analysis report goes to Federal Highway and the DOTs. Then, we move into the more detailed analysis:

- A more detailed evaluation, analysis and assessment of feasible alternatives
- Compare findings to Study Purpose and Need and measure against criteria developed by all
- Criteria not previously assessed will be evaluated
- Work with DOTs, FHWA, Steering Committee, Stakeholder Committee, and the public to finalize how criteria should be weighed or scored

The criteria will be the hard part of the process.

Carol: The economic analysis will be part of the final, detailed analysis. We met with representatives of the two chambers as well as a handful of Stakeholder Committee members about how we could conduct the analysis. We looked into retail sales data but as presented, the geographical breakdown was too large to give us what we want. And in New Hampshire, you have no sales tax, so no data. At that meeting, we did not come up with a process we were happy with, since it has to be quantitative and not based on anecdote. Now, depending on the TIGER decision, this could be irrelevant. Only the pedestrian / bike bridge option would have potential economic impact. We decided to wait to hear on TIGER. In the interim, we will meet with the DOTs to develop a proposal and bring it to the public meeting in February. Fair enough?

General agreement.

Paul: Start thinking about these questions. We need your input on:

- Detail of replacement Memorial Bridge
- If ped/bike Memorial Bridge, how will it connect to the communities?
- What additional roadway connections might we need to consider to the 4-lane Sarah Long with the removal of vehicle traffic on the Memorial Bridge?
- What additional roadway connections might improve a rehab or replacement 2-lane Sarah Long Bridge?

If you have things today you want to mention, let us know.

Comment: We need different materials for the bridge.

Paul: With a lift bridge, are there other viable materials?

Comment: I made some copies. Last week I was at the Ocean Wind Energy Conference in Portland, and on Friday, went to the AEWC Lab in Orono. The State of Maine is doing a variety of bridges made of composites. How big is the Memorial span?

Paul: The movable span is 300 feet. It is steel. Can we improve cost and maintenance?

Continued: This is a Maine company, Maine workers. It may have political impact.

Comment: Ten bridges in the state are slated to be composite. Most of those are much smaller in nature. Our bridge designers are very aware of the composite activity. The question is, can it be applied here?

Comment: The Hillman beam could be.

Q: Can we use aluminum?

Paul: That's not my specialty. Are there other materials we can use that have a cost differential and maintenance? We will do the research and let you know what we've found.

Q: We hear a lot about carbon sequestration – carbon composites like they use in Orvis flyrods. Very resilient and durable. Is that something longer term we can look into? Turn a waste product into a usable material. Also, in terms of colors for the Memorial – we learned that carbon coatings are very desirable. They are expensive now but maybe not in the future.

Paul: I know a lot's going on in that area but have not heard anything around movables. That is interesting and we will do our due diligence here.

Q: As far as roadway connections, we are in funding limbo. The State of NH has not funded a Market Street extension – are you considering fast tracking these projects before any bridge construction?

Paul: We will look at what do you need to do to make things reasonable? The DOTs will figure out how to put these pieces in place. Our charge is to look at what we need to make it work at a reasonable level.

Q: I am trying to understand emergency vehicles over the bike / pedestrian bridge. What's the difference between what you have to repair vs. full capacity?

Paul: Simply in terms of cost, that bridge is half the width of today's bridge. Capital costs are about half. We are still exploring what that means for operations and maintenance. The question will be whether the cost differential is big enough to offset the negatives.

Continued: Define emergency vehicle. What about evacuation?

Paul: Evacuation routes we understand. That is part of the detailed assessment.

Comment: With evacuation you're only going one way.

Paul: For detail's sake, the load you assess (weight) to have people on the bridge is more than a fire truck weighs.

Bob Landry: I have a question. Do people want to maintain the same shape of the bridge? Is that the perception out there? That kills the potential for other materials.

Comment: Not necessarily.

Q: So, make it the same...? Or more pleasing?

Cont: Make it look the same from the distance, with the arches the same. Not a replica. Some of the details from 1921 – 23 were based on the technology of that time.

Paul: It's important for us to hear from you. It is part of the record.

Comment: That's a historic monument. I assume we repair and restore it.

Comment: There are parts we won't repair. We would have a replica. It has bad details. The item that came up is a new plate girder vs. arch.

Cont: I won't argue changing a bad design.

Comment: We would need visuals to really have an opinion.

Comment: When laypeople in Portsmouth hear "save the bridge", they mean one of two things. They think, "save the connection" to use the road – OR take it to mean, "save the actual structure." Those are two very different interpretations.

Comment: Once you get designs, it will be resolved.

Comment: Depending on the cost differential, we may be pushing the envelope of what we want vs. what we need. Do want a replication – or a bridge that still gets you across the river? If the cost were significant, people would say it is more important to get across the river. On a different topic - people would agree that making the Memorial Bridge accommodate heavy trucks is not critical. Despite the weight of people – design costs of a movable span are lower if it only had to accommodate 15,000 lbs.

Paul: Our costs to date have assumed a certain, lower weight.

Q: It's a legal load for trucks or you have federal funding issues. Can you get federal funding for a lesser-weight design? Not typically.

Comment: So we could get a deviation or waiver...

Continued: We've done it on some covered bridges. Portsmouth has eliminated trucks on that bridge other than small single-unit trucks. The pedestrian load is almost there already – not that much difference.

Paul: The TIGER grant will guide us...the Federal Highway and DOTs will guide us. In March we come back with facts and findings.

Comment: I'm assuming it would be imprudent to have an open grid bridge because of danger to bikes. I propose the east travel side be for cyclists – or prohibit them on the west. This is safer.

Comment: It's not that great in a car either.

Comment: I propose we use the Hawthorne Bridge in Portland, Oregon as a case study. I intend to have a paper completed and send it out to you. I wanted to have it by today, but other people need to review it.

Carol: That's great. Thanks.

Paul: Carol will let you know when the public meeting will be.

Meeting adjourned 2:25pm.