Lake Champlain Bridge Project

PAC+ Meeting (PAC #8)  
Reaching Consensus on New Bridge Concepts  

December 15, 2009
PAC+ Agenda

1. Welcome
2. Meeting purpose and expectations
3. Summary of recent PAC+ and public input
   1. PAC+
   2. Public meetings and survey
   3. On-line survey
4. PAC+ discussions/PAC recommendation
5. SHPO Comments
6. Comments from Acting Commissioner Gee and Secretary Dill
7. Next meeting/future PAC business
PAC+ Meeting Purpose

1. To summarize 12/11/09 PAC+ charrette results
2. To hear results of public meetings and on-line survey
3. To discuss and try to reach PAC consensus on a recommendation to co-lead agencies for a new bridge concept
4. Other discussions as desired
Summary of PAC+ Charrette—Design Features

General design considerations:

- Design for easy, low cost maintenance ++
- Ability for sidewalk snow removal +
- Short construction time +
- Simplicity
- Develop maintenance plan for bridge
- Cost of construction
- Innovative de-icing to minimize salt
Summary of PAC+ Charrette—Design Features

Integration with surroundings:
- Minimize bridge footprint/impact on historic sites
- Connections to bike paths, parking lots, historic sites (esp. in NY) ++
- Better integration with historic sites/need for a good site plan for area
- Bridge area as a destination
- Provide bike & parking area near bridge
- New Park & Ride facility
- Sensitivity of approaches to surrounding uses
- Good transition for pedestrians from the bridge to ground area
- Keep elevation separation (from historic site) on VT side
- Bus turnaround/shelter near bridge
Summary of PAC+ charrette—Design Features

- **Specific features:**
  - Bike accommodations (6’ wide) +++
  - Observation areas ++
  - Aesthetic lighting ++
  - Pedestrian facilities – connect sidewalks (road crosswalk or suspend under bridge) ++
  - Farm equipment access/oversized vehicles ++
  - Build pedestrian sidewalk under bridge
  - Use light colored materials
  - Ice breakers on piers
  - Open shoulder so cars can pull over
  - Fishing platform
  - LED lighting/uplighting of bridge
  - Warning lights for boaters
  - Re-use parts of existing bridge (if possible)
  - Charge to bridge designer: Pay attention to design details
Summary of PAC+ Charrette—Design Concepts

Design Concepts

• Overwhelming support for a signature rather than a “blah” bridge (“it would be a “crime” to build a plain bridge”)

• Initial top choices of design concepts at charrette:
  – Network tied arch: 25
  – Cable stay: 13

• Preference for a “modified” network tied bridge over a cable stay bridge*

• Of the cable stay concepts, two of the four groups specified a preference for the extradosed cable stay

*In response to this discussion, the design team developed a modified network tied arch concept to present at the public meeting
Commemoration of the Old Bridge

**Commemoration at Demolition:**
- Free public viewing of demolition
- Event – A party (or wake?)
- Suggested tagline: Demolition will be “largest explosion at Crown Point since 1759”
- Involve people who attended original 1929 ceremony
- Bag pipes for ceremony
Commemoration of the Old Bridge

Commemoration for future generations:

• Documentary (include history) ++
• Exhibit on bridge outside area (on Northway, etc.) to draw tourists ++
• Make 3-D scale model of bridge +
• Popular history (oral)+
• Save lamp posts and reuse +
• Bridge Website (with lots of links - useful for classroom)
• Exhibit should include history of truss bridges
• Build model out of existing bridge members
• Engage interest in oral histories by NPR’s StoryCorps
• Re-install plaques at viewing platform
• Re-use steel from bridge in vicinity of new bridge
• Liked everything on list
Public Meeting Summary

• Approximately 450 attendees
• Evenly spread throughout the day
• Approximately 30-35% from Vermont (increased at each presentation)
• 252 surveys turned in at meetings
On-Line Survey

• Material was posted to website 9 a.m. Saturday
• Over 100 responses before noon Saturday
• 1600 responses by Monday morning
• 2600 responses by Monday 5:30 p.m.
• 3200 responses by midnight Monday
• Results consistent since first 100 surveys
• On-line version had information on 6th alternative (modified network tied arch)
Survey responses
Features and design criteria

- Maintenance cost
- Construction cost
- Attractive lighting
- Bike accommodations
- Sidewalk
- Visually pleasing
- Length of time to construct

[Bar chart showing comparisons between online and paper responses for each feature or criterion]
Steel girder bridge design
Segmental concrete bridge concept

- **Unfavorable**
  - Online Response: 60%
  - Paper Response: 70%

- **Neutral**
  - Online Response: 20%
  - Paper Response: 20%

- **Favorable**
  - Online Response: 10%
  - Paper Response: 5%

Legend:
- Online Response
- Paper Response
Cable stayed bridge concept

- Unfavorable: Online Response (40%) vs. Paper Response (50%)
- Neutral: Online Response (30%) vs. Paper Response (30%)
- Favorable: Online Response (20%) vs. Paper Response (20%)
Concrete extradosed bridge concept

The chart shows the distribution of responses to a survey question regarding the concrete extradosed bridge concept. The responses are categorized into three groups: Unfavorable, Neutral, and Favorable. The chart compares the percentage of responses for Online Response and Paper Response.

- **Unfavorable**:
  - Online Response: Approximately 46% (46% of respondents have a negative view)
  - Paper Response: Approximately 52% (52% of respondents have a negative view)

- **Neutral**:
  - Online Response: Approximately 33% (33% of respondents have a neutral view)
  - Paper Response: Approximately 28% (28% of respondents have a neutral view)

- **Favorable**:
  - Online Response: Approximately 21% (21% of respondents have a positive view)
  - Paper Response: Approximately 18% (18% of respondents have a positive view)
Network tied arch bridge concept
Modified network tied arch bridge concept
Preferred ways to commemorate old bridge

- Salvage and display pieces of the bridge
- Permanent historic website
- Popular history of bridge for schools / libraries
- Interpretive roadside display
- Oral / written memories by residents
- Permanent museum display

Legend:
- Green: Online Response
- Blue: Paper Response
A Reminder about PAC Role

• PAC recommends consensus opinion to co-lead agencies
• If PAC is unable to reach a strong consensus, there is provision for a “majority” and “minority” opinion
• Co-lead agencies consider PAC and other public input in decision-making
PAC Roundtable

- Questions
- Discussion
Continuing PAC role

- Design process
- Construction process
- Commemoration of old bridge
- Celebration of new bridge