

Bridge Study Working Group

August 28, 2008

Meeting Summary

Consultant Team – Virginia Ferriday (Rosales + Partners), David Knowles (David Evans & Associates), Carol Mayer Reed (Mayer/Reed, Rosales + Partners team), Miguel Rosales (Rosales + Partners), Jeramie Shane (Mayer/Reed), Semyon Treyger (HNTB)

Technical Staff – Kenny Asher (City of Milwaukie), Teresa Boyle (PDOT), Troy Doss (Bureau of Planning), Brett Horner (Portland Parks and Recreation), Kaitlin Lovell (BES), Denyse McGriff (PDC), Geraldine Moyle (PDC), Art Pearce (PDOT), Mike Rosen (BES), Jamie Snook (Metro), Mark Turpel (Metro), Bridget Wieghart (Metro)

TriMet – Rob Barnard, Steve Barrett, Sean Batty, Ann Becklund, Bob Hastings, Karl MacNair, Neil McFarlane, DeeAnn Sandberg, Claudia Steinberg, Dave Tertadian

Public – Dylan Rivera (Oregonian)

Meeting Goals:

- The Working Group will narrow down the bridge types from “many” to “some” over the next two meetings.
- At the end of this meeting there should be a list of Top 6-7 bridge types evaluated using engineering criteria and a list of Top 6-7 bridge types evaluated using aesthetic criteria. These may not be the same bridge types.

Key Discussion Points:

- Rob Barnard went over the meeting goals and process for today’s Working Group meeting.
- Sean Batty handed out packets with the engineering criteria definitions and the consultant ranking using engineering criteria.
- Semyon Treyger explained the engineering criteria and the subsequent consultant ranking of the bridge types.
 - The top 6 bridge types ranked using engineering criteria are Cable Stayed, Concrete Segmental, Wave Frame, Extradosed, Tied Arch, and Steel Box.
 - The bridge types were ranked with and without the flexibility criteria and the same top 6 bridge types remained in the top 6 although the ranking differed.
- Sean Batty handed out packets with the aesthetic criteria definitions and a blank matrix for ranking the bridge types.
- Miguel Rosales defined the aesthetic criteria, reviewed the bridge study goals and objectives and showed the bridge type renderings reminding the Working Group of tower heights, pier numbers and size, and bridge materials.

- An aesthetic criterion was added concerning stopping on the bridge and experiencing Portland as opposed to being on the bridge and crossing it — preliminarily called “being on the bridge-static”.
- Kaitlin Lovell suggested adding public safety criteria that might help regarding bridge jumpers, a bridge as an attractive nuisance, and unwanted fishing opportunities.
- Jamie Snook remarked that the Working Group should make sure they’re thinking about not just existing development, but future/planned development as well. The bridge should connect to and integrate well into the district/surroundings.
- There was a lengthy discussion about how best to word the technology and innovation criteria. “State-of-the-art” was left out of the description.
- The Working Group then ranked the bridge types using the aesthetic criteria with 1 being the lowest score, 5 being the highest score and 3 being neutral.
 - The top 6 bridge types ranked using aesthetic criteria are the Wave Frame, Sail Blade, Extradosed, Through Arch, Cable Stayed, and Vertical Lift (high).
- Twenty Working Group members individually and anonymously ranked the bridge types by simple preference. No explanation of the ranking was requested.
 - The top 6 bridge types ranked by Working Group individual preference are Wave Frame, Extradosed, Sail Blade, Through Arch, Concrete Segmental, and Cable Stayed.
- For your reference, below are some samples of the discussion during the aesthetic criteria ranking:

Portland Core Values

- Some felt that more common bridge types should not be scored highly. Others remarked that certain bridge types might reinforce visual connections to the surrounding mountains, which could give them a higher score.
- Some types may appear less exciting from the simple elevations now, but could be improved with more refined design and should be scored based on their potential for a good solution.
- For the Vertical lift bridge types, the “high” option should rank better than “low” option because we value all modes of travel and a “low” vertical bridge type would disrupt river, rail, bike and bus modes more often.

Looking at Bridge

- Some Working Group members have issues with the varying water levels and how it may impact the final resolution of bridge pier shape and proportions.

Being Near Bridge

- Thick decks would most likely rank low for this criteria.

On the Bridge (moving – experiencing the structure - crossing the river)

- Transparency may be preferred for crossing the bridge. The bridge types with no superstructure would have the most unimpeded views.

On the Bridge (static / views)

- Some Working Group members believed that bridge types with no superstructure and unimpeded views should be ranked higher, but others felt that structure added “depth” to particular views (example, photography).
- There was also a discussion about the relative values of a midpoint view from the pathway and views along the way at viewpoints.

Compatibility

- Some participants believed that bridge types with very tall towers would be too monumental, but others thought perhaps Portland might want another bridge marking an entrance to downtown like the Fremont.
- Bridge types with thicker decks may not integrate well into the surrounding land uses.

Technology and Innovation

- The Working Group looked at how common the different bridge types are and ranked them accordingly. The more common bridge types received a lower rank and the less common bridge types received a higher rank.
- There was also a discussion surrounding the efficient use of materials with the notion that types that were less efficient in use of materials should be scored lower.

Green Design

- The Working Group decided to take this topic out of the aesthetic criteria.
- All bridge type options will be held to this standard.
- Concern: is there a potential bridge type that will be dropped during the selection process that had a higher green design potential?
- Issue: Do we know enough at this preliminary level of design to provide effective ranking metrics?
- Action: Sean to meet with Metro and City of Portland (Kaitlin Lovell, Teresa Boyle, Mark Turpel) to discuss.
- If viable metrics are not feasible, then we should develop viable metrics for the next level of the selection process (from “some” to “few” bridge types).

Next Steps:

- Consultants will create more detailed renderings of the top 6 bridge types and at the next Working Group meeting, the list will be reconciled to a single recommendation for bridges to pass this screen from “many” to the recommended “some” bridge types for continued study. This is anticipated to be 6 bridge types.
- Teresa Boyle suggested that the consultants add more explanation into the criteria descriptions to help folks really understand what all the criteria mean.
- Kaitlin Lovell Mark Turpel, Teresa Boyle and Sean Batty to meet and discuss environmental criteria. Teresa Boyle will set this meeting up.
 - Topics to discuss: diffusion (light penetration), abutment clearance from the river’s edge, pier placement/thickness/depth may affect permitting time
- Teresa Boyle requested a more thorough discussion about the flexibility criteria at our next Working Group meeting.

- The River Driver meeting (with Ross Island Sand and Gravel team as well as Portland Spirit General Manager) was held earlier in the week. This meeting resulted in some new information about the navigational requirements that may impact span lengths and the scoring of bridge types to date. The engineering team has been tasked to take a look at the center spans of the bridge types and determine how wide they can go within the budget established for the bridge. The needs of the commercial river users are very important and will be a part of the Coast Guard permitting process. This process cannot start formally until after the Record of Decision is received.

Homework: Take the engineering and aesthetic bridge type rankings back to your constituents and come back to the next Working Group meeting with comments.

**Next Bridge Study Working Group Meeting
September 15, 2008 from 9 a.m. to 5 p.m.
TriMet, 710 NE Holladay Street, Room 1**