Bridge Study Working Group  
August 7, 2008  
Meeting Summary

Attendees:

WRBAC – Rick Saito

Consultant Team – David Calver (HNTB), Greg DeMond (HNTB), Virginia Ferriday (Rosales + Partners), Bill James (HNTB), Carol Mayer Reed (Mayer/Reed, Rosales + Partners team), Etty Padmodipoetro (Rosales + Partners), Miguel Rosales (Rosales + Partners), Semyon Treyger (HNTB)

Technical Staff – Kenny Asher (City of Milwaukie), April Bertelsen (PDOT), Teresa Boyle (PDOT) Brett Horner (Portland Parks and Recreation), Roger Geller (PDOT), Lora Lillard (Bureau of Planning), Kaitlin Lovell (BES), Denyse McGriff (PDC), Geraldine Moyle (PDC), Art Pearce (PDOT), Mike Rosen (BES), Jamie Snook (Metro), Patrick Sweeney (PDOT) Mark Turpel ( Metro)

TriMet – Rob Barnard, Steve Barrett, Sean Batty, Ann Becklund, DeeAnn Sandberg, Claudia Steinberg, Dave Tertadian

Meeting Goals:
- Review and discuss baseline assumptions.
- Confirm “all” to “many” bridge types selection criteria.
- Use “all” to “many” selection criteria to narrow bridge types.
- Discuss selection criteria to be used to narrow bridge types from “many” to “some”.
- Summarize Working Group meeting and prepare for WRBAC meeting August 8th.

Key Discussion Points:
- Rob Barnard reviewed Working Group Vision, Goals and Objectives. (Find document at trimet.org/wrbac)
- Rob Barnard reviewed bridge study process through the framework concept slide (funnel). (Find document at trimet.org/wrbac)
- Sean Batty reviewed baseline assumptions. (Find document at trimet.org/wrbac)
  - Will high point of bridge be located in the middle of the span or in line with the navigational route? (See Next Steps)
  - Bridge type discussion can continue with a range of 0-14 feet of fill on the west side of the bridge.
  - NOAA to answer official description of “shallow water” on August 8th.
- Semyon Treyger reviewed presentation covering engineering selection criteria. (Find document at trimet.org/wrbac)
Should the bridge footprint be introduced as criteria?
- Fish may avoid heavily shaded areas so the larger the footprint, the more a bridge might limit fish movement.

Should criteria for how bridge deck width is used be added? What configuration for bikes/peds and transit? What are the implications of wider decks? (See Next Steps)
- Is an asymmetrical transit/ped-bike configuration possible? (See Next Steps)
- City of Portland would also like to see the “stacked option” continue to be on the table and discussed. (See Next Steps)

Need to better understand the “bounce factor” (deck deflection) for pedestrians on bridge decks. (See Next Steps)

TriMet won’t accept transit lanes being split apart due to maintenance and operational flexibility concerns.

TriMet operations is not in favor of movable bridge types because of the adverse affect on transit schedule reliability. This reduction in reliability could also affect the Project’s cost effectiveness rating (TSUB).

Semyon Treyger presented the “universe of bridge types.” (Find document at trimet.org/wrbac)

Miguel Rosales presented the design goals and objectives, the aesthetic/urban design evaluation criteria and the “many” bridge types.
- Criteria used for “all” to “many” – fundamental engineering criteria, baseline assumptions and initial budget.
- Working Group recommended advancing the following “many” bridge types to the WRBAC for review and guidance: steel I-girder, steel box, concrete segmental box, wave frame girder, sail blade girder, tied arch, continuous through arch, cable-stayed extradosed, cable-stayed, movable swingspan, movable vertical lift and double deck. Asymmetrical option still being analyzed.

Working Group prepared agenda for WRBAC meeting on August 8th and made suggestions for changing the PowerPoint to best present the criteria, the universe of bridge types and the “many” bridge types.

Next Steps:
- TriMet to conduct “river driver” interviews to discuss bridge high point position relative to existing navigational routes. This meeting should happen before next Working Group meeting.
- TriMet to give briefing to Lower Willamette River Harbor Safety Committee.
- City of Portland (April Bertelsen) to organize meeting between TriMet and City of Portland staff to discuss and explore bridge cross-section options. Specific discussion will be about how cyclists and pedestrians could use the deck and the associated opportunities and challenges. Other City attendees should include Teresa Boyle, Roger Geller, Brett Horner, Patrick Sweeney and Art Pearce.
- Consultants will provide criteria and examples of limits for allowable deck deflection. This relates to pedestrian comfort on long span structures.
• Sean Batty will give the river user survey to April Bertelsen, Teresa Boyle and Roger Geller.
• Consultants to give bridge type cost comparisons at future meetings.
• Consultants to include poles, lighting, and OCS on future bridge type renderings.
• TriMet and the consultant team to explore asymmetrical cross-section configurations.
  o Consultant team to be prepared to discuss the opportunities and challenges associated with this configuration for the “many” alternatives.
• TriMet and the consultant team to explore the stacked deck option.
  o Provide plan and profile drawings as well as cross-section and elevation views for use by the Working Group to facilitate their evaluation at the next meeting.
• Next screening must consider how maintenance could be accomplished and how it will affect each mode on the bridge.
• Consultants to write a paragraph about each selection criteria to provide better definition.
• Consultants to provide examples of evaluation methodology for use with the aesthetic – urban design – function matrix and their recommendation on which methodology has worked well for screening “many” bridge types to “some.”
• August 28th Working Group will focus on the following items:
  o Consultant team will prepare a matrix of engineering selection criteria.
  o Consultant team will rank alternatives using the engineering selection criteria.
  o Working Group to review, comment and reach consensus on the engineering evaluation matrix and proposed top six ranking provided by consultant team.
  o Working Group to reach consensus on a rating method for use with the aesthetic – urban design – function selection matrix.
  o Working Group to reach consensus on aesthetic – urban design – function selection criteria for the “many” to “some” screening.
  o Working Group to rank each alternatives performance for each aesthetic – urban design – function selection criteria to arrive at a list of the top six.
  o Goal for next meeting is to have two lists of the top six from each matrix.
  o Goal for 9/15/08 meeting is to reconcile the two lists into one recommendation for review and guidance from the WRBAC on 9/16/08.

Homework:
• Possible screening criteria to reduce bridge types from “many” to “some” (DUE August 15, 2008)
• Possible screening criteria to reduce bridge types from "some" to “few” (DUE September 2, 2008)

Next Bridge Study Working Group Meeting
August 28, 2008 from 9 a.m. to 5 p.m.
TriMet, 710 NE Holladay Street, Room 1