

Better. Safer. Connected.



Policy Group Meeting #2 Meeting Summary

August 23, 2017 3:30–5:00 p.m. Multnomah County Building 501 SE Hawthorne Blvd., Portland

Policy Group Members and Alternates Present

Councilor Cate Arnold, City of Beaverton Chloe Becker, Alt. for Representative Barbara Smith Warner, Oregon State Legislature Mike Bezner, Alt. for Commissioner Paul Savas, Clackamas County Christina Deffebach, Alt. for Commissioner Roy Rogers, Washington County Phil Ditzler, Federal Highway Administration Phylicia Haggerty, Alt. for Representative Suzanne Bonamici, U.S House of Representatives Council President Tom Hughes, Metro Chair Deborah Kafoury, Multnomah County Amanda Kraus, Alt. for Oregon Senator Kathleen Taylor

Neil McFarlane, TriMet Brian Monberg, City of Gresham Jagjit Nagra, Alt. for Senator Jeff Merkley, U.S. Senate Andrew Plambeck, Alt. for Rian Windsheimer, ODOT Region 1 Commissioner Dan Saltzman, City of Portland Grace Stratton, Alt. for Senator Ron Wyden, U.S. Senate Tara Sulzen, Alt. for Congressman Earl Blumenauer, U.S. House of Representatives Co-Chair Commissioner Jessica Vega

Pederson, Multnomah County

Policy Group Members Absent

Kimberly Branam, Prosper Portland

Staff and Consultants

Ian Cannon, Multnomah County Megan Neill, Multnomah County Mike Pullen, Multnomah County Christian Gaston, Multnomah County Kim Peoples, Multnomah County Joanna Valencia, Multnomah County

Members of the Public and Guests

Alex Ubiadas, *TriMet* Nathaniel Brown, *Portland Business Alliance* Jay Wilson, *Clackamas County* Heather Catron, HDR Steve Drahota, HDR Jeff Heilman, Parametrix Vaughn Brown, JLA Public Involvement John Todoroff, JLA Public Involvement Bruce Warner, Warner Group

Art Graves, Multnomah County Bike/Ped Advisory Committee Jana Jarvis, Oregon Trucking Associations Frank Scheer





Welcome and Introductions

Vaughn Brown, JLA, opened the meeting and led a round of introductions from the committee members. Multnomah County Commissioners Jessica Vega Pederson and Deborah Kafoury gave opening remarks and thanked the committee for attending. Vaughn reviewed the agenda.

Project Update

Heather Catron, HDR, reviewed the project team's activities since the last Policy Group meeting. Outreach has included meetings of the Stakeholder Representative Group and Senior Agency Staff Group committees, as well as many briefings for community organizations and government agencies.

Project staff was involved in two workshops with the technical community. Discussions about emergency response plans at the Emergency Management Roundtable meeting resulted in three key findings:

- 1. Many emergency response routes will be adversely affected by bridge collapses after a major earthquake
- 2. Agencies and jurisdictions are working toward the same goal of being prepared
- 3. There are opportunities to coordinate moving forward

Members of the project team will attend the Regional Disaster Preparedness Organization meetings in September and October.

Steve Drahota, HDR, discussed the recent meeting of the Seismic Resiliency Committee, where engineers, geologists, and other technical experts talked about topics such as earthquake loads, post-quake emergency and other vehicle needs, and bridge and roadway design assumptions. Geologists produced a geotechnical analysis which predicts liquefaction and lateral spreading at the Burnside Bridge site. Based on this analysis, large portions of the east bank are expected to slide into the Willamette River during a major earthquake event, and uneven settling would result in damage to the current bridge's structure.

Heather presented the online <u>"Teaser" video</u> which introduces the project and explains the need for an earthquake resilient river crossing at Burnside Street. She also briefly summarized the four other videos which were produced for project outreach, including the animated <u>simulation</u> <u>video</u> which has been viewed more than 56,000 times on YouTube.

Next, Heather presented the preliminary results from the online survey. The survey was promoted on Multhomah County's social media accounts and collected 170 responses. Nearly half of respondents reported that they use the bridge once a week or more. A large majority cross the bridge in automobiles, but many also use the bus, walk, or bike.





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Heather summarized some of the themes that emerged from responses to the first three of the four main questions in the survey:

Question 1: What should Multnomah County consider as we begin to look at options for an earthquake ready river crossing?

- Safety
- Getting something in place quickly
- Reliability
- Improve bridge operations
- Enhance multi-modal use
- Several design suggestions

Question 2: What opportunities do you see with this project?

- Raising general public awareness of earthquake threat
- Making multi-modal improvements
- Creating jobs

Question 3: What questions do you have about this project?

- What option is the best approach to solving the problem?
- How much will it cost, and how will it be paid for?
- What other emergency planning preparedness is underway?

A committee member asked how an earthquake would impact the new developments near the Burnside bridgehead. Steve answered that geotechnical analyses done for this project and for the recently constructed buildings indicate that the buildings are on fairly solid ground. It is not expected that they will suffer foundation problems, but superficial damage to buildings is expected to result in debris falling onto the street.

Screening Process

Jeff Heilman, Parametrix, gave an overview of the project screening process. River crossing alternatives were first analyzed based on three basic pass/fail criteria:

- 1. Compatibility with existing major infrastructure (i.e. I-5 and railroad)
- 2. Seismic resiliency
- 3. Ability to support emergency response immediately after an earthquake.

Any alternative that does not adequately meet all three of these criteria was eliminated from consideration. In the next phase of the screening process, each remaining alternative was given a score based on six equally-weighted criteria pertaining to its pre- and post-earthquake functionality.





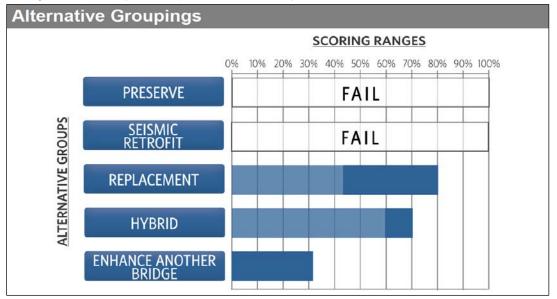
Screening Results

Steve discussed how alternatives were grouped into categories and explained the scores they received in the scoring process. All of the "Preserve" and "Seismic Retrofit" alternatives failed the first round of screening criteria. Preserving the Burnside Bridge would not comply with the "Seismic Resiliency" pass/fail criteria whereby all options must comply with the project specific Seismic Design Criteria. Full retrofit alternatives would not comply with the "Major Infrastructure Compatibility" pass/fail criteria because they would require a prolonged, substantial interruption of I-5. The "Replacement" and "Hybrid" (combination of new construction and retrofit) groups all passed the pass/fail phase, with many among the best performing alternatives in the scoring phase.

Only one alternative from the "Enhance Another Bridge" group, the Morrison Bridge, passed the first screening step; however, it scored low because of the bridge's distance from the Burnside lifeline route, its lack of bike/pedestrian amenities, and its overall worse rating when compared against equivalent Burnside Bridge replacement alternatives. For these reasons, it will not be considered in the next phase of evaluation.

Other findings from the Replacement Alternative grouping include:

- Fixed span bridge alternatives scored lower than moveable bridges because a fixed span would have to be significantly higher to accommodate river traffic, requiring longer landings and steeper grade approaches.
- The tunnel option scored the lowest of the replacement options due to impacts to bike and pedestrian access and challenges for connectivity back into the transportation network.



Going forward, only the Replacement and Hybrid alternatives will be evaluated.

In the above chart, the dark blue areas represent the range of scores that were assigned to alternatives in each grouping.





A committee member asked how high a fixed span bridge would be, and Steve responded that the alternatives the project team are analyzing range from 97 to 120 feet.

A committee member asked how a moveable bridge would be supplied with power in an emergency situation. Steve replied that this requirement, likely via an emergency power generator, will be considered during the upcoming evaluation phase. He emphasized that there were many considerations the engineering team did not look at during the screening process that could be included in the evaluation phase.

A committee member asked if the Morrison Bridge alternative involved retrofitting or replacing the bridge. Steve replied that for the purpose of the scoring process, the team made assumptions that it would be replaced.

An observer asked about replacing the Hawthorne Bridge with a high span bridge. Steve replied that the concept was considered during the Pass/Fail step, but it would involve too far of a diversion from the lifeline route and too many post-earthquake obstructions. Therefore it failed the Screening Process.

A committee member asked, why not the Tilikum Crossing? Steve replied that this option was eliminated from consideration because of its long distance from the Burnside lifeline route.

Alternatives Evaluation

Heather presented the upcoming Alternatives Evaluation phase of the project. A set of guiding principles and evaluation criteria will be developed along with further engineering, cost estimates, and technical guidance in preparation of narrowing down the remaining river crossing options to a range a feasible alternatives that will go proceed to the National Environmental Policy Act (NEPA) phase of the project. Example of potential criteria topics include:



Potential evaluation criteria

Heather then reviewed the upcoming project schedule. The project team will solicit input from the public and from project committees regarding the evaluation criteria. There will be an online event in November for the purpose of gathering public input. The project team will share the alternative evaluation results at the next Policy Group meeting in the spring of 2018.





Public Comment

About a dozen observers attended the meeting. Jay Wilson, resilience coordinator for Clackamas County, commented that it is important that community values will be reflected in the process. He asked the committee to consider addressing the Chamber and realtor community as stakeholders. The project team must recognize the value of the bridge's continuous service after an earthquake, which will be a livability issue. He expressed appreciation for the project elevating the discussion of earthquake risk in the public discourse, and thanked the committee for their work.

After Jay's comment, some committee members brought up questions and comments. One asked if OHSU or other major healthcare providers are being included in outreach. Mike Pullen, Multnomah County, responded that the project team will follow up with outreach to local hospitals.

A committee member suggested reaching out to the regional business community beyond Multnomah County to get buy-in for the project.

A committee member asked for more details about the potential design of a tunnel. Steve responded that the location of existing sewer infrastructure (the CSO Big Pipes) would require constructing a deep tunnel. Designing the tunnel with a limit of a 5% grade would require the openings to land around 28th Street on the east side, and near I-405 on the west side. The tunnel would also likely be the most expensive option of all of the Replacement alternatives.

Jana Jarvis, Oregon Trucking Associations, commented about another problem with the tunnel, noting that there are many commodities, like fuel, that are not allowed to be hauled through tunnels, and restrictions like this would hamper earthquake relief efforts.

After Vaughn noted that September is National Emergency Preparedness Month, Mike described some of the related outreach events coming up, such as aligning with KGW's programming and events on the theme.

Chair Kafoury suggested that the project's social media posts get sent to Policy Group members so they can repost the content and boost the message within their own jurisdictions.

Vaughn reminded the committee that the next Policy Group meeting will be in the spring of 2018. He also requested that PG members inform the project team of any ideas they have for interagency coordination or outreach.

Closing Remarks

Co-Chair Jessica Vega Pederson thanked the presenters, and asked members of the committee to reach out they are aware of other projects that might connect or relate to the Earthquake Ready Burnside Bridge project.