EARTHQUAKE READY BURNSIDE BRIDGE

Multnomah County is creating an earthquake-ready downtown river crossing.

BETTER – SAFER – CONNECTED January 25, 2021

Community Task Force – Agenda Meeting #23

Project:	Earthquake Ready Burnside Bridge
Subject:	Community Task Force Meeting #23
Date:	January 25, 2021
Time:	*Early Arrivals: 5:30 p.m. – 6:00 p.m.* Meeting Timing: 6:00 p.m. to 8:00 p.m.
Location:	WebEx Virtual Meeting

TASK FORCE MEMBERS

Amy Rathfelder, Portland Business Alliance
Art Graves, Multnomah County Bike and Pedestrian Citizen Advisory Committee
Dennis Corwin, Portland Spirit
Ed Wortman, Community Member
Frederick Cooper, Laurelhurst Neighborhood Emergency Team and Laurelhurst Neighborhood Association
Gabe Rahe, Burnside Skate Park
Howie Bierbaum, Portland Saturday Market
Jackie Tate, Community Member
Jane Gordon, University of Oregon
Jennifer Stein, Central City Concern
Marie Dodds, AAA of Oregon
Neil Jensen, Gresham Area Chamber of Commerce
Paul Leitman, Oregon Walks
Peter Englander, Old Town Community Association
Peter Finley Fry, Central Eastside Industrial Council
Sharon Wood Wortman, Community Member
Stella Funk Butler, Coalition of Gresham Neighborhood Associations
Susan Lindsay, Buckman Community Association
Tesia Eisenberg, Mercy Corps
William Burgel, Portland Freight Advisory Committee

PROJECT TEAM MEMBERS

Megan Neill, Multnomah County
Mike Pullen, Multnomah County
Heather Catron, HDR
Cassie Davis, HDR
Steve Drahota, HDR
Liz Stoppelmann, HDR
Jeff Heilman, Parametrix
Allison Brown, JLA
Sarah Omlor, EnviroIssues

Meeting Purpose:

- Provide a project update on recent and upcoming activities
- Review and refine draft evaluation criteria and measures

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Agenda:

Time	Session	Lead
5:30 p.m.	*Early Arrivals* • *WebEx meeting platform will be available for folks that want to join early and test computer functions before meeting start*	*Project Team*
6:00 p.m.	Welcome, Introductions and Housekeeping • Meeting Protocols • Round Table Introductions	Allison Brown
6:05 p.m.	Public Comment • Acknowledge Any Public Comments Received	Allison Brown
6:15 p.m.	Project Update • Draft Environmental Impact Statement • Community Outreach Activities • Working Groups	Heather Catron Steve Drahota
6:25 p.m.	Bridge Types Review	Steve Drahota
6:45 p.m.	Evaluation Criteria Development • Criteria and Measures Review and Refinement	Allison Brown Heather Catron Steve Drahota
7:45 p.m.	Next Steps	Allison Brown
7:50 p.m.	Open Discussion	Allison Brown
8:00 p.m.	Adjourn	All

The purpose of the CTF is to serve as an advisory body to Multnomah County by:

- *Considering the potential environmental impacts of the alternatives*
- *Providing informed insights and opinions on the impacts being evaluated*
- *Discussing technical recommendations, suggesting measures to avoid, minimize or mitigate potential impacts*
- *Representing the interests, needs and opinions of community, business organizations and groups*
- *Considering input and information from other community members, stakeholders and interested parties.*

CTF members approached by interest groups other than their own constituencies are encouraged to share these conversations at CTF meetings. For information contact Mike Pullen, County Communications Office at mike.j.pullen@multco.us

DRAFT Type Selection Evaluation Criteria

Introduction

In December 2020, the Earthquake Ready Burnside Bridge (EQRB) Community Task Force (CTF) recommended draft evaluation criteria topics, based on information available at the time, to recommend a bridge type to advance into Final Design phase. The project team has since gathered input on the CTF's draft criteria and measures from other agency staff and the Urban Design and Aesthetics Working Group (UDAWG). The purpose of this document is to consolidate the input into a cohesive set of criteria and measures to support the selection process.

Community Values: During the CTF's development of the Bridge Type Selection criteria, some guiding principles emerged that express the intended outcome of the process. These provide an overarching context from which the criteria and measures were derived. They include:

- The bridge type should be a physical manifestation of Portland's values and aspirations for inclusiveness, resiliency, accessibility, creativity, vitality, and sustainability.
- The bridge type should acknowledge its unique location at the center of the City quadrants; the heart of the City.
- The bridge should further promote Portland's moniker as a "City of Bridges."

Regulatory Requirements: While some of the evaluation criteria are intended to measure the extent to which options would implement certain regulatory objectives, the evaluation criteria are not intended to replace or supersede any relevant regulatory requirements. Any selected option needs to comply with relevant regulatory requirements applicable to the topic.

Criteria Groups, Topics, and Measures

The criteria within this document will be used to support a bridge type recommendation for the Replacement Long Span alternative. It is comprised of the following three Criteria Groups, with applicable topics and measures that correlate to the key interests identified by the CTF:

1. Human Experience & Bridge Surroundings
2. Overall Look and Feel of the Bridge
3. Cost and Construction Impacts to Users

The criteria topics (designated as 1a, 1b, 1c, 2a, etc) describe the key interest being addressed, and the criteria measures (designated as 1a.1, 1a.2, 1b.1, etc) further define how each topic will be evaluated.

1. Human Experience & Bridge Surroundings

1a. On-bridge Experience: How well does the option provide benefits to people when they are on the bridge?

- **Measure 1a.1:** Qualitative assessment for how well the option provides:
    - Clear views from the bridge deck to key visual features such as the cityscape, including downtown and the Eastside; distant landscapes and natural environment (West Hills, Willamette River, Mt Hood, Mt St Helens, and open skies); adjacent bridges in the up-river and down-river directions; and other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower).
    - A bridge surface suitable for public events (such as the Rose Festival Grand Floral Parade) and other civic gatherings, as well as human-scaled features that enhance the experience for bridge users.
- **Measure 1a.2:** Qualitative assessment for how well the bridge option creates an intrinsic gateway and enhanced sense of arrival to / from each side of the river. Measurement could include:
    - Presence and type of physical structural member at the bridge ends

1b. Below-bridge Experience: How well does the option provide benefits to people when they are under the bridge (in areas such as parks, roads, and the river)?

- **Measure 1b.1:** Qualitative assessment for how well the option preserves and enhances the integrity of Tom McCall Waterfront Park and its key features, such as the space under the bridge, the existing trees adjacent to the bridge, the Japanese American Historical Plaza, the Ankeny Plaza and the Bill Naito Legacy Fountain, and a safe and functional transition to Better Naito Forever. Measurement could include:
    - Column locations or spacing that improve personal safety by providing adequate sightlines and clearances below the bridge that enhance user experience.
    - Support locations that further activates and enhances the under-bridge space within Waterfront Park for community events and other activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, and other Portland Parks functions)
    - A structure that maximizes vertical clearances to create an “urban roof” that enhances the under-bridge experience.
- **Measure 1b.2:** Qualitative assessment for how well the option enhances the varied Willamette River in-water uses by minimizing the bridge in-water footprint and maximizing visibility of and connectivity with the river from under and around the bridge. Measurement could include:
    - Geometric sightline comparison of in-water piers from Waterfront Park and Eastbank Esplanade

1c. Relation to Surroundings: How well does the option's scale and form complement and respond to the character of the surrounding neighborhoods, buildings, parks and historic districts/structures while being distinctive?

- **Measure 1c.1:** Qualitative assessment for how the bridge complements and responds to the character of the Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit) and the west bridgehead buildings and physical infrastructure shapes and scale. Measurement could include how well the option:
    - Complements existing building heights
    - Complements historic building styles
- **Measure 1c.2:** Qualitative assessment for how the bridge complements and responds to the character of the Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit), including the east bridgehead buildings and physical infrastructure shapes, scale, textures, and colors. Measurement could include how well the option:
    - Complements existing building heights
    - Complements modern building styles
- **Measure 1c.3:** Qualitative assessment for how the bridge complements and responds to the character, while being distinctive in its own right, of the Willamette River bridges north and south of Burnside Street. Measurement could include:
    - Distinctiveness of style compared to adjacent existing bridges

2. Overall Look and Feel of the Bridge

2a. Bridge Overall Look: How well does the option's overall form create a look of balance, unity, and flow from key viewpoints above, under, and away from the bridge?

- **Measure 2a.1:** Qualitative assessment for how the bridge form creates a look of balance, unity, and flow from viewpoints such as the Willamette River, the Tom McCall Waterfront Park, the Vera Katz Eastbank Esplanade, the I-5 / I-84 freeways, the east and west Burnside Bridgehead buildings, the downtown high-rise buildings, and the surrounding bridges. Measurement could include:
    - Same bridge type on each side of the movable span
    - Ability to avoid vertical obstruction within the middle span
    - Seamless structural flow between the major bridge components

2b. Bridge Form and Style: How well does the option acknowledge the historic and natural surroundings while presenting a seismically resilient, modern design that sets the tone for future development throughout its 100-year design life?

- **Measure 2b.1:** Quantitative assessment for how the option balances the desire for a minimized visual mass, especially in the river, while providing a sense of seismic stability and reliability. Measurement could include:
  - Volumetric comparison of mass for in-river piers and approach superstructures
  - Proximity of mass to river surface
- **Measure 2b.2:** Qualitative assessment for how the option reflects the best practices in modern technologies, engineering, and architectural design that represent the era in which the bridge is designed and constructed. Measurement could include:
  - Potential for exposing the movable bridge mechanism
  - Assessment of each type against a "modern" bridge aesthetic

2c. Flexible Design: How well does the option allow flexibility for engineering and architectural features in final design, as well as adaptability of the bridge for future user needs?

- **Measure 2c.1:** Qualitative assessment for how the option includes the potential for the bridge to serve as an identifiable beacon of safety, a landmark, and a destination within the city during the day and after dark. It also includes the opportunity for memorable, distinctive lighting for nighttime viewing while adhering to "dark skies" principles that minimize light directed at or reflecting into the river. Measurement could include:
  - How the structure's shape influences the skyline in daytime
  - How the structure's shape influences the skyline in nighttime (lighting)
- **Measure 2c.2:** Quantitative assessment for how well the option integrates with the natural environment. Measurement could include data from hydraulic analyses and environmental assessments:
  - Water surface elevation increases
  - Displacement of water storage during floods
  - Effect on birds, wildlife, fisheries and shoreline/shallow water habitat
  - Resiliency to increasing water levels due to climate change

3. Cost and Construction Impacts to Users

3a. Total Direct Project Cost: How well does the option minimize the Project's total cost?

- **Measure 3a.1:** Quantitative estimate of each option's total Project cost to plan, design, and construct the bridge, including the influence of site constructability challenges. The total Project cost includes permanent and temporary right of way acquisition costs, utility relocation and protection costs, pre-construction design phase costs, permitting and environmental mitigation costs, and construction inspection and engineering support costs. Measurement could include:
    - Cost ranges

3b. Long-term Costs: How well does the option minimize long-term costs and support future needs after construction?

- **Measure 3b.1:** Quantitative estimate for long-term costs to maintain the useful function of the bridge over its design life. The total Long-term cost includes the direct cost of bridge operations and inspections; the direct cost for routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc); the direct cost for bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc); and the potential direct cost to alter the bridge to support future needs (e.g., adding Streetcar equipment, systems, and armatures onto the bridge; adding more bicycle/pedestrian space; adjusting for future lane uses; etc). Measurement could include:
    - Cost ranges

3c. Construction Impacts: How well does the option minimize impacts to the traveling public and surrounding property owners and tenants during construction?

- **Measure 3c.1:** Quantitative assessment of impacts to bridge and adjacent transportation facility users. Measurement could include:
    - Duration existing bridge is out of service
    - Duration of impacts to freeway operations
    - Duration of transit detours
    - Duration of bicycle and pedestrian detours
- **Measure 3c.2:** Quantitative assessment impacts to adjacent properties as a result of construction activities. Measurements could include:
    - Total area of temporary and permanent right-of-way acquisition
    - Potential quantity and duration of disruptions to utility service (including UPRR and TriMet Max)

TOPICS FOR EVALUATION/DECISION-MAKING DURING THE FINAL DESIGN OR CONSTRUCTION PHASE:

While developing the draft criteria topics and measures, the CTF identified various topics that do not differentiate between the various bridge types and/or cannot be adequately evaluated with the level of design and information available during the Type Selection phase. These are listed in Tables 1 and 2 below with the recommendation that they be applied later during either the Project's Final Design or Construction phases.

Table 1: Potential criteria topics differed to a future phase due to a lack of differentiation.

Topic	Rational for Deferring to a later Phase	Description
Seismic Resilience	No differentiation between options	All bridge options satisfy the Project-specific Seismic Design Criteria
Bike / Ped / ADA and Transit users (Design Details)	No differentiation between options	Detailed design features to provide safe and convenient amenities for bicycle, pedestrian, and transit users. Such features could include the physical separation of modes; and the opportunity to provide river overlooks for users to stop and enjoy the adjacent scenery without excessive clutter that detracts from the bridge; include an intuitive ability to understand wayfinding; the addition of transit amenities such as lighted shelters and benches; safe lines of sight and adequate lighting on and approaching the bridge; and a reduction in noise and vibrations from vehicular traffic.
Pedestrian, bicycle, and ADA Connectivity	No differentiation between options	All bridge options provide the same Active Transportation connectivity to the west and east bridgeheads. This includes safe and accessible connections on and off the bridge from the West bridge deck to Waterfront Park, Naito Parkway, SW/NW 1st and SW/NW 2nd Avenues. As such, they equally preserve and enhance pedestrian, bicycle, and ADA connectivity and universal Design concepts.
Vera Katz Eastbank Esplanade	No differentiation between options	As part of the bridge design criteria, there will be no structural connection between the bridge and the Eastbank Esplanade access. Because of this

		separation, there is no dependency between the facilities and the bridge type selection criteria can be independent from the type decision for the Eastbank Esplanade access.
Burnside Skatepark	No differentiation between options	All bridge options span over the Burnside Skatepark in the same manner. As such, they equally preserve and enhance the integrity and functionality of the Burnside Skatepark.
Skidmore Fountain Max Station	No differentiation between options	All bridge options span over the Skidmore Fountain Max Station in the same manner. As such, they equally preserve and enhance the integrity and functionality of the Skidmore Fountain Max Station space.

Table 2: Potential criteria topics differed to a future phase due to a lack of information at this time.

Topic	Rational for Deferring to a later Phase	Description
Personal Safety	Insufficient level of detail at Type Selection Phase	Maintain a safe construction site; Implement design that minimizes risk of attempted suicide from the structure
Sustainable Design	Insufficient level of detail at Type Selection Phase	Potential sustainability design features to be considered in the Final Design phase include: Reduce waste; sustainable materials that minimize GHG emissions; and energy sustainability
Secondary design features (Operator's House, Multi-use path connections, Streetcar Elements, Bridge Overlooks, Stormwater facilities, etc.)	Insufficient level of detail at Type Selection Phase	Preliminary assumptions for each of these features have been included in the type selection concept. Final design details will be developed after the bridge type is selected.