Hillary Adam

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Parade) and civic gatherings
- (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes
- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy
- Ability to convey a sense of being in the center of the city, at the intersection of north and south, east and west

Commented [AH1]: Should we include other senses – noise, vibration, etc.

B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park and its existing trees
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

- Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade
- Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the Burnside Skate Park and local streetscape on the East side
- Attractive under-bridge design consideration, including lighting, materials and detailing

D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act and Universal Design concepts
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to surrounding local streets and pedestrian open spaces, and Eastbank Esplanade

2 Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's composition provide the perception of visual symmetry, balance, unity, and flow from key viewpoints, including:

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings

Commented [AH2]: This makes it seem like minimizing columns is a primary objective, whereas adequate sightlines may be the true objective. Columns are not inherently bad and they can be useful tools for defining spaces. Depending on how a space is programmed, more columns could be a good thing.

Commented [AH3]: Not sure what this means.

Commented [AH4]: This implies an inherent value in symmetry. Suggest removing symmetry and relying on "balance" to get to this issue.

- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark and destination within the city
- Balance the qualities of overall composition, openness and transparency (i.e., minimizing the massing) while conveying a sense of seismic stability and reliability
- Respect the past and context while presenting a "forward-thinking" design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that feel balanced among the various structural portions
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in bicycle and pedestrian safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
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- A wide range of complementary secondary design features (e.g., Operator's House, Multi-use path Connections, Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase
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Commented [AH5]: These first two bullets should be under C as these reflect more intangible qualities.

Commented [AH6]: This should be under B as it is a more tangible quality.

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, adjacent buildings, and utilities
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B. Long Term Costs: How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
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Magnus Bernhardt - No Changes

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Randy Gragg

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C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

Commented [RG1]: Complement or dynamically contrast

Commented [RG2]: These are pretty far away

Commented [RG3]: Complement or dynamically contrast

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Commented [RG4]: Not diminish the integrity

Commented [RG5]: Eastbank Esplanade?

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Commented [RG6]: Dynamism?
Symmetry would be both a challenge and too confining

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3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

Commented [RG7]: Reflect the best practices in technologies, materials, engineering and architectural design of this era and set a tone . . . .

Commented [RG8]: Add a bridge that will be distinct in the City of Bridges poster!

Commented [RG9]: Materials, Fabrication, design

Commented [RG10]: Tactile, human-scale detailing of features within close view/touch of pedestrians.

Commented [RG11]: I am against public art being in any way integrated in the bridge. Let the bridge be the bridge.

Commented [RG12]: I don't understand this

Commented [RG13]: I need examples to understand this beyond ADA

Commented [RG14]: Bridge option balance the forementioned goals while minimizing

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, buildings, and utilities
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Commented [RG15]: balance the forementioned goals, while

Chris Herring

EARTHQUAKE READY BURNSIDE BRIDGE

DRAFT Evaluation Criteria

Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - The cityscape, including downtown and the Eastside

    The city is changing extremely fast on the east side. All of the views and connection points that were around a few years ago are gone or shifted. It feels like a new downtown is growing on the east side, while the west side is falling into disrepair. I see the east side is a experimentation zone. It's a place where bold and unique design is expected.
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
  - I wouldn't think too much about obscuring the MODA center. It's not a visual icon. Just another arena. The convention center is lit well, with color changing lights. It one of the few interesting light shows in the city when they want it to be. US bank can be seen from everywhere. It's hard to obscure.
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Parade) and civic gatherings.

  Tied Arch is my favorite of all the bridge types for this spot over the river. I think it would be a fitting replacement for what has become a lifeless span.

  The current Burnside bridge is being overshadowed by the buildings above and freeways below on the east side. It should be the other way around. The bridge is a gateway that should feel powerful and grand. As the main corridor out of downtown when the power in an emergency goes out. It should be seen as beacon of hope, that draws people to it. Portland has very few iconic buildings.

  East: (The Technology side)

  The entry out of the cluster of buildings to the bridge from the east should be open and flat, leading you to a giant arch over the freeway depositing you on the river.

- As you know, the views aren't interesting until you get past the freeways to the water. The current space needs to be reimagined to fit this future Portland. It seems the trend of large buildings in the area is not going to slow down. Lets make this new conduit through the city an architectural art piece.

  Center: (open views)

  Flat and open.

  One of the reasons the Burnside is perfect for protesting and performance is because it's a large, flat open space. It allows people to visually connect to each other, the river and the city.

  I have both performed and protested on the Burnside over the years. In my opinion keeping it a quiet space, with large lookouts will satisfy most critics.

  West Side: (Organic serene side)

  This is the softer side of the city. Where the first thing you see from the bridge is the park. Because of the view it feels sweeter than the industrial east side. I like the openness of the bridge the way it is now. It's beautiful at night because you can see all the reflections on the water surface. Also, it has fantastic views of the park. I wouldn't change it too much.

  I would expand on the peacefulness by building in better viewing spots and finding ways to separate cyclists and pedestrians from the lights and traffic noise.

  If another arch is added to the west side, I would make it simple so it doesn't overpower the view of the park. Minimal street lighting and more artistic, color changing lights for a softer look.

- Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes

  The bike and pedestrians need to be separated for a couple of reasons. Mainly because the LED headlights are blinding. Headlights are so bright that drivers are blinding each other. Most times they can't see cyclists because they are lost in oncoming headlights.

  I think a barrier between drivers and everyone else would be the safest. It could also help keep the ambient light away from people enjoying the viewpoints.

- Ability to provide river overlooks for pedestrians to stop and enjoy

B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

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C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

- Ability to improve safety by minimizing columns, and creating adequate sight lines and clearances beneath the bridge structure

Fewer columns and more headroom under both sides of the bridge would be a welcome change from the older bridges. Most of them feel claustrophobic and they don't let much light underneath.

- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)

I would add access to power and maybe water for events. Large amounts of power is key to any site activation. Without power people are forced to bring in generators, which bring with them, Noise pollution, fuel consumption and exhaust. They also take up quite a lot of space.

- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade
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I would add dimmable Rrgbaw+uv lighting under the bridge because it's more versatile for events.

Hang points:

Weather they are used for art, speakers or acrobats, hang-points would be useful under a bridge for events. In 2019 we hung 150 glass paper airplanes under the Hawthorne bridge for the Portland Winter Light Festival. https://www.pdxwlf.com/flight It as a gargantuan feat to design and build clamps for the project. If we had hang-points built in projects like this and others would be much easier.

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Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's composition provide the perception of visual symmetry, balance, unity, and flow from key viewpoints, including:

Symmetry is important, but designing a bridge that anchors that two sides to the surroundings is more important. I like the idea of an asymmetrical bridge in the middle of the city because both sides of the river are completely unique.

Portlanders love the bridges. Everyone gets to choose a favorite because there is such a verity. My hope is to see the new bridge set the tone for the future. All of our bridges are over 100 years old. My guess is they won't last much longer before they all need to be replaced. I see this as a chance to connect the last 100 years to the next, and set the pace for all the bridges that follow.

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C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing

As I have said before. This is a chance to create something new. Artistic lighting design is essential. This new bridge should have.

1. Color changing lighting that can be used for events.
2. An overall flexible lighting plan for artistic lighting and street lights.
3. Each light should be on individual control so it can be used for events or holidays and events.
4. Artistic lighting that can be easily changed to emergency lighting. (That beacon of hope thing again). Chase patterns to guide traffic in a direction. As in: chase from west to east or whatever direction we need traffic to flow.

- Creation of a gateway and enhanced sense of arrival to and from each side of the river

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In 2010 I was living in Tokyo. One memory that has stuck with me is the Police stations. Each one was unique, and had a bit of a science fiction quality to them.

Designing a visually interesting operator house would could set a new standard for the next bridge that is designed. .

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Briam Kimura

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- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy

B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park and its existing trees
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

Commented [DSM1]: 1A. On Bridge: The beauty of Oregon is captured through its landscapes, beautiful vegetation, and the desire to get out and enjoy nature. This is emblematic in the built environment as well. The integration of Architecture and Landscape within the Portland built environment sets itself apart from other US cities. Should there be a section in this criteria that directs designers to design with nature in mind. The criteria states that the bridge deck should provide views of the beautiful landscape, bridges, and city skyline, but it might be equally important to state that the on-deck experience could be considered an extension of Waterfront Park. I think of spaces like the Highline where the deck offers a unique pedestrian parkland experience. Trees, plantings, human scale materials such as pavers and decking, along with rest areas and seating. From an environmental stance, this would help cut down on the heat island effect and also muffle vehicular noise. It also provides breakdown to the human scale that will visually make the bridge distance seem shorter.

Commented [DSM2]: 1B. It would be beneficial to any designer to know the urban context that the bridge will connect. A diagram should be provided with footprint sizes and heights of the eastside and westside buildings that are in close proximity to the bridge.

Commented [DSM3]: 1C. Create a cleaner, safer, more inviting Skidmore Fountain Max Station. With the deck serving as a roof, there is an opportunity to rethink the station. It is not inviting and not a pleasant experience to wait under the deck. It's a rather uncomfortable experience waiting at the station.

- Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade
- Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the Burnside Skate Park and local streetscape on the East side
- Attractive under-bridge design consideration, including lighting, materials and detailing

D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to surrounding local streets and pedestrian open spaces

2 Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's composition provide the perception of visual symmetry, balance, unity, and flow from key viewpoints, including:

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings
- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark and destination within the city
- Balance the qualities of overall composition, openness and transparency (i.e., minimizing the massing) while conveying a sense of seismic stability and reliability
- Respect the past and context while presenting a "forward-thinking" design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that feel balanced among the various structural portions
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in bicycle and pedestrian safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
- Tactile, human/pedestrian-scale features within its public spaces, including overlooks
- Adaptability for future needs and purposes
- A wide range of complementary secondary design features (e.g., Operator's House, Multi-use path Connections, Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase
- (Note: Likely common to all options; Not expected to be differentiating) A reduction in bridge noise and as generated by the freeway
- (Note: Likely common to all options; Not expected to be differentiating) Additional sustainable and equitable design principles to be incorporated during the Final Design phase

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, buildings, and utilities
- Permanent and temporary right of way acquisition costs
- Utility relocation and protection costs
- Pre-construction design phase costs
- Permitting and environmental mitigation costs
- Construction inspection and engineering support costs

B. Long Term Costs: How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
- Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc)
- Direct costs for any necessary bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc)
- Direct cost for potential bridge use changes (e.g., Adding Streetcar operations onto the bridge; Adding more bicycle/pedestrian space; Adjusting for future lane uses; etc)

Lora Lillard

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Parade) and civic gatherings
- Intuitive ability to understand wayfinding, mode split, location of overlooks and connections without excessive clutter detracting from bridge design
- (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes
- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy

B. Adjacent Contexts and Public Uses: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

- Ability to improve safety by minimizing size, number, and visual interruption of columns, and creating comfortable sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance a continuous under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade

Commented [LL1]: This category seems more important than Urban Setting and more important than some of the views toward land.

- Intuitive and integrated connections to adjacent destinations Waterfront Park, Better Naito Forever, Eastbank Esplanade
- Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the Burnside Skate Park and local streetscape on the East side
- Attractive under-bridge design integration, including lighting, materials and detailing

~~B.~~C. **Urban Setting:** How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park and its existing trees
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Within the context of other bridges up- and down-river

~~C. **Public Use and Context:** How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:~~

- ~~Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure~~
- ~~Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)~~
- ~~Flexible open space and opportunity for an "urban roof" that provides public benefit~~
- ~~Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade~~
- ~~Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface~~
- ~~Compatibility with the Burnside Skate Park and local streetscape on the East side~~
- ~~Attractive under-bridge design consideration, including lighting, materials and detailing~~

Commented [LL2]: Do we mean accommodation and enhancement of? Compatibility sometimes means "visual" and I don't think it's the right word here.

Commented [LL3]: Same comment

Commented [LL4]: I would rather use the words "respond to", because "fit with" again implies that it match.

Nervous to use words like "compatible" and "fit", which may prohibit an out-of-the-box design of a beacon-like structure that could be visually stunning and still feel authentic and visually work within its context.

Commented [LL5]: This is a separate point than the other times that other bridges are mentioned.
This point recognizes that the bridges up- and down-river also set a context to respond to

D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to surrounding local streets and pedestrian open spaces

2 Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's composition provide the perception of visual ~~symmetry,~~ balance, unity, and flow from key viewpoints, including:

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings
- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark that serves as a beacon and destination within the city
- Balance the qualities of overall composition, openness and transparency (i.e., minimizing the massing) ~~while c~~
- Convey~~ing~~ a sense of seismic stability and reliability
- Reflect the distinctiveness of each side of the river, considering the qualities on land such as buildings, parks, infrastructure – as well as below water conditions that require distinct engineering solutions
- Respect the past and context while presenting a "forward-thinking" design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that feel balanced among the various structural portions

Commented [LL6]: This notion of a beacon may deserve its own bullet. How does the bridge option express its role as a beacon for post-disaster response, safety and hope?

Commented [LL7]: I'm not stating this well. But we know that there are three parts to the bridge. So for the parts that are not movable: their sizes are due to fixed conditions on either side. How well is that expressed in the bridge design besides the differentiation of size between those two parts?

- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in bicycle and pedestrian safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
- Tactile, human/pedestrian-scale features within its public spaces, including overlooks and detailing in furnishings such as hand rails, cables, differentiation of pathways, signage, light fixtures, etc.
- Adaptability for future needs and purposes
- A wide range of complementary secondary design features (e.g., Operator's House, Multi-use path Connections, Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase that are cohesive with the overall bridge design
- (Note: Likely common to all options; Not expected to be differentiating) A reduction in bridge noise and as generated by the freeway
- (Note: Likely common to all options; Not expected to be differentiating) Additional sustainable and equitable design principles to be incorporated during the Final Design phase

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, buildings, and utilities
- Permanent and temporary right of way acquisition costs
- Utility relocation and protection costs
- Pre-construction design phase costs
- Permitting and environmental mitigation costs
- Construction inspection and engineering support costs

B. Long Term Costs: How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
- Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc)
- Direct costs for any necessary bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc)
- Direct cost for potential bridge use changes (e.g., Adding Streetcar operations onto the bridge; Adding more bicycle/pedestrian space; Adjusting for future lane uses; etc)

Patrick Sweeney

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience, from all parts of the bridge: How well does the bridge option provide public benefits ~~from its deck surface~~, including:

- Views from the bridge deck towards:
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Parade) and civic gatherings
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City's north, south, east, and west quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes
- Ability to accommodate growth of active transportation volumes in each direction
- Bridge lighting offers visual experience at night for people on the bridge
- Safety, security, reliability and convenience of elevators for elevator users (if elevator option moves forward)
- Safety, security, reliability and convenience of ramps for ramp users (if elevator option moves forward)
- Provide a memorable experience that attracts people to the bridge
- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy
- How is the bridge design integrated with the design of access ramps, structures or mechanisms on the east and west sides of river?

Commented [SP1]: The on-bridge experience is important from anywhere on the new structure, not just on the main three span lengths. This includes the approach ramps from NW 2nd and MLK as well as the ramp/stairs/elevator connections located on east and west sides of the river.

Commented [SP2]: Is this something that can be recognized while on the bridge? At the middle of the bridge?

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- Is the user experience on and off the bridge using ramps, structures, or mechanisms convenient and intuitive?

B. Off-Bridge Experience: How well does the bridge option respond to urban neighborhood, park and riparian environments under and adjacent to the east and west sides of the bridge, including:

- Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Respond to the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, Burnside Skatepark, and Vera Katz Eastbank Esplanade
- Compatibility with the varied Willamette River in-water uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the local streetscapes on the East and West sides of the bridge
- Attractive under-bridge design consideration, including lighting, materials and detailing

B.C. Urban Setting: How well does the bridge option's scale and form ~~authentically~~ respond to~~fit with~~ the scale and character of surrounding neighborhood transportation and land uses~~s~~, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park ~~and its existing trees~~
- Eastbank Esplanade
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

~~**C. Public Use and Context:** How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:~~

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- ~~Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure~~
- ~~Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)~~
- ~~Flexible open space and opportunity for an "urban roof" that provides public benefit~~
- ~~Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade~~
- ~~Compatibility with the varied Willamette River uses, water surface variability, and reflectiveness on the river surface~~
- ~~Compatibility with the Burnside Skate Park and local streetscape on the East side~~
- ~~Attractive under-bridge design consideration, including lighting, materials and detailing~~

D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to Eastbank Esplanade, surrounding local streets and pedestrian open spaces

Commented [SP3]: What are the pedestrian open spaces?

2 Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's overall composition, including access ramps, structures or mechanisms on the east and west sides of river, provide the perception of visual symmetry, balance, unity, and flow from key viewpoints, including:

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings
- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark and destination within the city during the day
- Become an identifiable landmark and destination within the city during the night
- Balance the qualities of overall composition, openness and transparency ~~(i.e., minimizing the massing)~~ while conveying a sense of seismic stability and reliability
- Respect the past and context while presenting a ~~"forward-thinking"~~ design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that ~~feel~~ balance~~d among~~ the various structural portions
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City's north, south, east, and west ~~City~~ quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in active transportation mobility, convenience, reliability, ~~bicycle and pedestrian~~ safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Seamless and integrated design of access ramps, structures or mechanisms necessary for active transportation users on the east and west sides of river
- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival and departure to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
- Tactile, human/pedestrian-scale features within its public spaces, including overlooks
- Adaptability for future needs and purposes
- A wide range of complementary ~~secondary~~ design features (e.g., Operator's House, ~~Multi-use path Connections,~~ Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase
- (Note: Likely common to all options; Not expected to be differentiating) A reduction in bridge noise and as generated by the freeway
- (Note: Likely common to all options; Not expected to be differentiating) Additional sustainable and equitable design principles to be incorporated during the Final Design phase

Commented [SP4]: Too subjective and leads the reader to a conclusion. This is a bridge with concrete and steel. There will be massive structural elements throughout the design

Commented [SP5]: Too subjective and leads the reader to a conclusion.

Commented [SP6]: Is this something that can be recognized while looking at the bridge from afar?

Commented [SP7]: These are not secondary – they are all design details that contribute to the whole composition.

Commented [SP8]: Multi-use path connections are not secondary design features. City of Portland policy prioritizes active transportation above other modes.

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, shoreline and shallow water habitat, buildings, and utilities
- Permanent and temporary right of way acquisition costs
- Utility relocation and protection costs
- Pre-construction design phase costs
- Permitting and environmental mitigation costs
- Construction inspection and engineering support costs

B. Long Term Costs: How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
- Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, daily elevator cabs/elevator landing and waiting areas cleaning, weekly/monthly elevator repair and maintenance, etc)
- Direct costs for any necessary bridge (and elevator systems) repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc)
- Direct cost for potential bridge use changes (e.g., Adding Streetcar operations onto the bridge; Adding more bicycle/pedestrian space; Adjusting for future lane uses; etc)

Paddy Tillett

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Parade) and civic gatherings
- (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes
- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy

B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park and its existing trees
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

- Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade
- Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the Burnside Skate Park and local streetscape on the East side
- Attractive under-bridge design consideration, including lighting, materials and detailing
- Visually open connectivity of space beneath the bridge with river

Commented [DSM1]: Suggested by Tillett

D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to surrounding local streets and pedestrian open spaces

2 Visual and Aesthetics

A. Visual Coherence: How well does the bridge option's composition provide the perception of visual symmetry (Symmetry may not be relevant in many issues), balance, unity, and flow from key viewpoints, including:

Commented [DSM2]: Suggested by Tillett

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings

- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark and destination within the city by day and after dark
- Balance the qualities of overall composition, openness and transparency (i.e., minimizing the massing) while conveying a sense of seismic stability and reliability
- Respect the past and context while presenting a "forward-thinking" design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that feel balanced among the various structural portions
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in bicycle and pedestrian safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
- Tactile, human/pedestrian-scale features within its public spaces, including overlooks
- Adaptability for future needs and purposes
- A wide range of complementary secondary design features (e.g., Operator's House, Multi-use path Connections, Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase
- (Note: Likely common to all options; Not expected to be differentiating) A reduction in bridge noise and as generated by the freeway
- (Note: Likely common to all options; Not expected to be differentiating) Additional sustainable and equitable design principles to be incorporated during the Final Design phase

Commented [DSM3]: Suggested by Tillett

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, buildings, and utilities
- Permanent and temporary right of way acquisition costs
- Utility relocation and protection costs
- Pre-construction design phase costs
- Permitting and environmental mitigation costs
- Construction inspection and engineering support costs

B. Long Term Costs: How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
- Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc)
- Direct costs for any necessary bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc)
- Direct cost for potential bridge use changes (e.g., Adding Streetcar operations onto the bridge; Adding more bicycle/pedestrian space; Adjusting for future lane uses; etc)

Dave Todd

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - 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
  - Other key viewpoints (e.g., Portland Oregon sign, Oregon Convention Center towers, Moda Center, Waterfront Park, US Bank Tower)
- Bridge type that provides opportunities for programming and public events (such as the Rose Festival Grand Floral Parade) and civic gatherings
- (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and bicycle safety: sight lines, lighting and physical separation of modes
- (Note: Likely common to all options; Not expected to be differentiating) Ability to provide river overlooks for pedestrians to stop and enjoy

B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

- Old Town/Chinatown and Downtown neighborhoods, including the Skidmore / Old Town Historic District (75 ft. height limit)
- Tom McCall Waterfront Park and its existing trees
- West bridgehead buildings and physical infrastructure shapes, scale, textures, and colors
- Kerns and Buckman neighborhoods and Central Eastside Industrial District (250 ft. height limit)
- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

C. Public Use and Context: How well does the bridge option fit within park and river environments under and adjacent to the bridge, including:

Commented [DSM1]: Overall, the criteria are very comprehensive and thorough. The list is well-separated into distinct and cohesive categories and topics. Questions in general probe distinct dimensions of the topic and category. There are some exceptions to this which are the subjects of the several comments that follow.
The criteria list is large, with 54 explicit measurements cataloged and at least two more (and as many as 10) implicit in the descriptions. Given multiple bridge options to consider, the assessment burden on respondents will be considerable. This is unavoidable lest the evaluation become simplistic, but it places a need for clarity on the criteria development effort. This draft represents an exceptionally good stage in the work to meet that need, one that is especially commendable considering the multiple contributors and voices represented.

Commented [DSM2]: The second bullet under **1 Urban Context and Experience A. On-bridge Experience** should read: "Bridge type that provides opportunities … (such as the Rose Festival Grand Floral Parade) …". The Grand Floral is one of three Rose Festival parades, the others being the Starlight and the Junior parades.

- Ability to improve safety by minimizing columns, and creating adequate sightlines and clearances beneath the bridge structure
- Ability to further activate and enhance the under-bridge space within Waterfront Park for community events and other programmed activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc)
- Flexible open space and opportunity for an "urban roof" that provides public benefit
- Integration with the Japanese American Memorial Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, and Vera Katz Eastbank Esplanade
- Compatibility with the varied Willamette River uses, water-surface variability, and reflectiveness on the river surface
- Compatibility with the Burnside Skate Park and local streetscape on the East side

D. Attractive under-bridge design consideration, including lighting, materials and detailing (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

- Americans with Disabilities Act
- West bridge deck to Waterfront Park, Naito Parkway, SW 1st and SW 2nd Avenues
- East bridge deck to surrounding local streets and pedestrian open spaces

2 Visual and Aesthetics

A. **Visual Coherence:** How well does the bridge option's composition provide the perception of visual symmetry balance, unity, and flow from key viewpoints, including:

- Willamette River
- Waterfront Park
- Eastbank Esplanade
- I-5 / I-84 users
- Bridgehead buildings
- High-rise buildings
- Surrounding bridges

B. **Bridge Form and Style:** How well does the bridge option:

Commented [DSM3]: The third-from-last bullet under **1 Urban Context and Experience C. Public Use and Context**, "Compatibility with the varied … " lists three distinct characteristics in two very different dimensions: "varied Willamette River uses"; "water-surface variability"; and "reflectiveness on the river surface".

- "Water-surface variability" is ambiguous, in that it could be interpreted as *surface texture*, e.g., wavelets or chop, mirror-smoothness, boils, boat wakes, floating debris, etc., or as *water level*, e.g., high tide, low tide, ebbing or flooding tide, high runoff conditions, drought conditions, etc.
- A *surface texture* interpretation of "water-surface variability" would be highly correlated with "reflectiveness on the river surface", adding little to the measurement.
- The "water-surface variability" as *surface texture* and "reflectiveness" characteristics also have little prima-facie relationship with the other **Public Use and Context** items.
- The "water-surface variability" as *water level* characteristic could measure a useful dimension related to public use and context, one that is distinct from "varied Willamette River uses" while contributing to understanding of "Compatibility with … ".

Commented [DSM4]: The first bullet under **2 Visual and Aesthetics B. Bridge Form and Style**, "Express the Portland values and aspirations for …" lists multiple (8) dimensions. In this case, the nature of those dimensions does possibly make a composite assessment feasible, although there might be argument that consideration of each category could result in very widely differing assessments among them.

- Express the Portland values and aspirations for inclusiveness, resiliency, accessibility, creativity, optimism, vitality, sustainability, and freedom of expression
- Become an identifiable landmark and destination within the city
- Balance the qualities of overall composition, openness and transparency (i.e., minimizing the massing) while conveying a sense of seismic stability and reliability
- Respect the past and context while presenting a "forward-thinking" design aesthetic that sets the tone for future urban development and growth throughout its 100-year design life
- Reflect proportions and scale that feel balanced among the various structural portions
- Honor Portland's moniker as a "City of Bridges" and its unique location as the center of the City quadrants
- (Note: Likely common to all options; Not expected to be differentiating) Reflect Portland's transportation values in bicycle and pedestrian safety and accessibility

C. Bridge Aspirations: How well does the bridge option enable opportunities for:

- Memorable, distinctive lighting for nighttime viewing
- Creation of a gateway and enhanced sense of arrival to and from each side of the river
- Technologies that represent the era in which the bridge is designed, including potentials for exposing the movable bridge mechanisms
- Tactile, human/pedestrian-scale features within its public spaces, including overlooks
- Adaptability for future needs and purposes
- A wide range of complementary secondary design features (e.g., Operator's House, Multi-use path Connections, Streetcar elements, public art, overlooks, etc.) to be selected during the Final Design phase
- (Note: Likely common to all options; Not expected to be differentiating) A reduction in bridge noise and as generated by the freeway
- (Note: Likely common to all options; Not expected to be differentiating) Additional sustainable and equitable design principles to be incorporated during the Final Design phase

3 Cost

A. Total Project Cost: How well does the bridge option minimize the total direct Project Cost, including:

Commented [DSM5]: The next to last bullet under **2 Visual and Aesthetics B. Bridge Form and Style**, "Honor Portland's moniker … and its unique location" covers two distinct dimensions that could easily generate diverse assessments if evaluated separately.

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, buildings, and utilities
- Permanent and temporary right of way acquisition costs
- Utility relocation and protection costs
- Pre-construction design phase costs
- Permitting and environmental mitigation costs
- Construction inspection and engineering support costs

B. **Long Term Costs:** How well does the bridge option support future inspection operations, minimize long-term maintenance costs, and support future adaptability costs, including:

- Direct cost of bridge operations and inspections
- Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc)
- Direct costs for any necessary bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc)
- Direct cost for potential bridge use changes (e.g., Adding Streetcar operations onto the bridge; Adding more bicycle/pedestrian space; Adjusting for future lane uses; etc)

Commented [DSM6]: Topic **B. Long Term Costs** under category **3 Cost** has three distinct metrics within the topic statement. Each has at least one assessment bullet in the collection. It would increase clarity to repackage this topic as:

B. Long Term Costs: How well does the bridge option optimize post-construction costs, including:

- Support cost-effectiveness of future inspections and operations:
  - Direct cost of bridge operations
  - Direct cost of bridge inspections
- Minimize long-term maintenance costs:
  - Direct cost for anticipated, routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting, maintenance, structural upgrades, etc.)
  - Direct costs for any necessary bridge repairs following major events (e.g., major earthquake, major flood, vessel collisions, civic unrest, fires, etc.)
- Support cost-feasibility of future adaptability:
  - Direct cost for potential bridge use changes (e.g., adding streetcar operations onto the bridge; adding more bicycle/pedestrian space; adjusting for future lane uses, etc.)

Tate White

EARTHQUAKE READY BURNSIDE BRIDGE

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

BETTER – SAFER – CONNECTED November 18, 2020

DRAFT Evaluation Criteria

1 Urban Context and Experience

A. On-bridge Experience: How well does the bridge option provide public benefits from its deck surface, including:

- Views from the bridge deck towards:
  - The cityscape, including downtown and the Eastside
  - Distant landscapes and natural environment (West hills, Forest Park, Willamette River, Mt Hood, Mt St Helens, and open skies)
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B. Urban Setting: How well does the bridge option's scale and form authentically fit with the scale and character of surrounding neighborhoods, buildings, parks and districts, including the:

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- East bridgehead buildings and physical infrastructure shapes, scale, textures, and colors

Commented [WT1]: I guess I don't understand how this is not expected to be a differentiating variable. For example, we've discussed different lighting opportunities on towers with a lift bridge and each type seems to have different impacts on sight lines on the bridge and whether structure can provide further separation from vehicles.

C. Public Use and Context: How well does the bridge option fit within ~~park~~ public spaces and river environments under and adjacent to the bridge, including:

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D. (Note: Likely common to all options; Not expected to be differentiating) Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade, considering:

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Commented [WT2]: Because you are talking about streets and the skate park as well. Public Space seems a more appropriate, broader term here to think about them as a network of connected public spaces.

- Surrounding bridges

B. Bridge Form and Style: How well does the bridge option:

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Bill Will - No Changes

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