EARTHQUAKE READY BURNSIDE BRIDGE

MultCo BPCAC
Briefing

Multnomah County
Transportation Division
Department of Community Services
November 10, 2021

Funding Context

EARTHQUAKE READY BURNSIDE BRIDGE

Must achieve an affordable Project to be viable

- Costs considerations have changed over the last year
  - Failure of the 2020 Regional Transportation Bond Measure which would have allocated $150 million to the project
  - High competition for funding of large infrastructure projects
  - Increasing labor and materials costs have emerged from the COVID-19 pandemic
- Despite funding challenges, the need for an earthquake ready bridge to serve the Portland region remains
- Seeking cost saving refinements to help ensure this project can be fully funded and built

Preferred Alternative Refinements

Approach to saving cost and refining PA

Guiding Principles

- Moving forward with recommended Long Span Replacement Alternative
- Ensure the Purpose and Need is met
  - Seismic resiliency
  - Emergency response and regional recovery
  - Long term transportation needs
- Maintain County's equity lens

Preferred Alternative Refinements

Revised Preferred Alternative Refinements	Why?	Cost Savings
1. Bridge width: Reduced by approx. 26 feet	• Cost savings	**$140 – 165M**
2. Vehicle Lanes: Reduced from 5 to 4 vehicular lanes (4 Lane configurations under consideration)	• Cost savings	
3. Bike / Ped Space: Reduced from 20’ to between 14’ - 17’	• Cost savings	
4. West Approach bridge type: Reduced to only Girder type	• Regulatory permitting • Cost savings	**$20 - 40M**
5. Movable span bridge type: Select either Lift or Bascule type	• Regulatory permitting • Community preference • Cost savings	**$25 - 35M**
6. East Span Bridge Type: Dismiss Truss (Tied Arch and Cable Stayed types advanced to Design Phase)	• Community preference	**TBD**

West Approach Bridge Type

Long-span Alternative

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“Three bridges in one”

Long-span Approach Options in the DEIS

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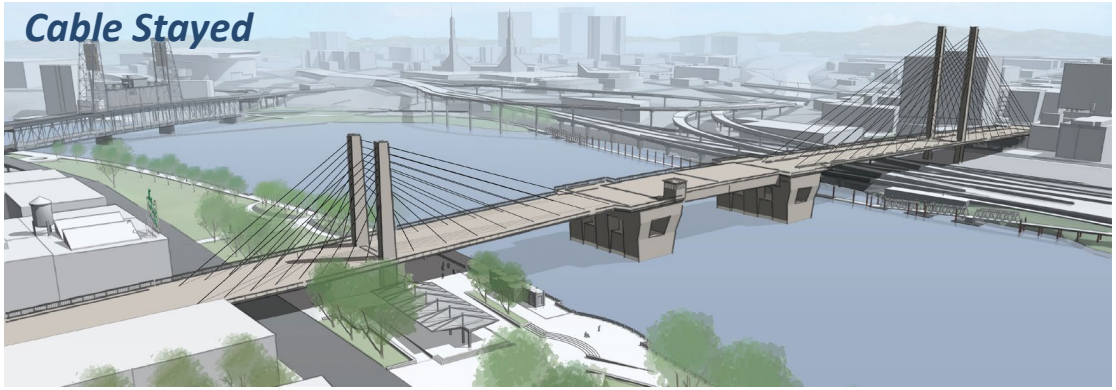
Replacement Long Span is the Recommended Preferred Alternative



West Approach Bridge Type

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Existing Girder Bridge

West Approach Bridge Type

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Recommendation: West Approach Girder for all Bridge Compositions

- Revised initial Girder concept to provide higher vertical clearance and more open views in Waterfront Park
- Meets permitting requirements and has least environmental impacts
- Provides highest cost savings of the options studied
- Has support from key stakeholder groups

Movable Span Bridge Type

Movable Span Bridge Type

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Looking NE from Waterfront Park

Existing Condition (Bascule)

Movable Span Bridge Type

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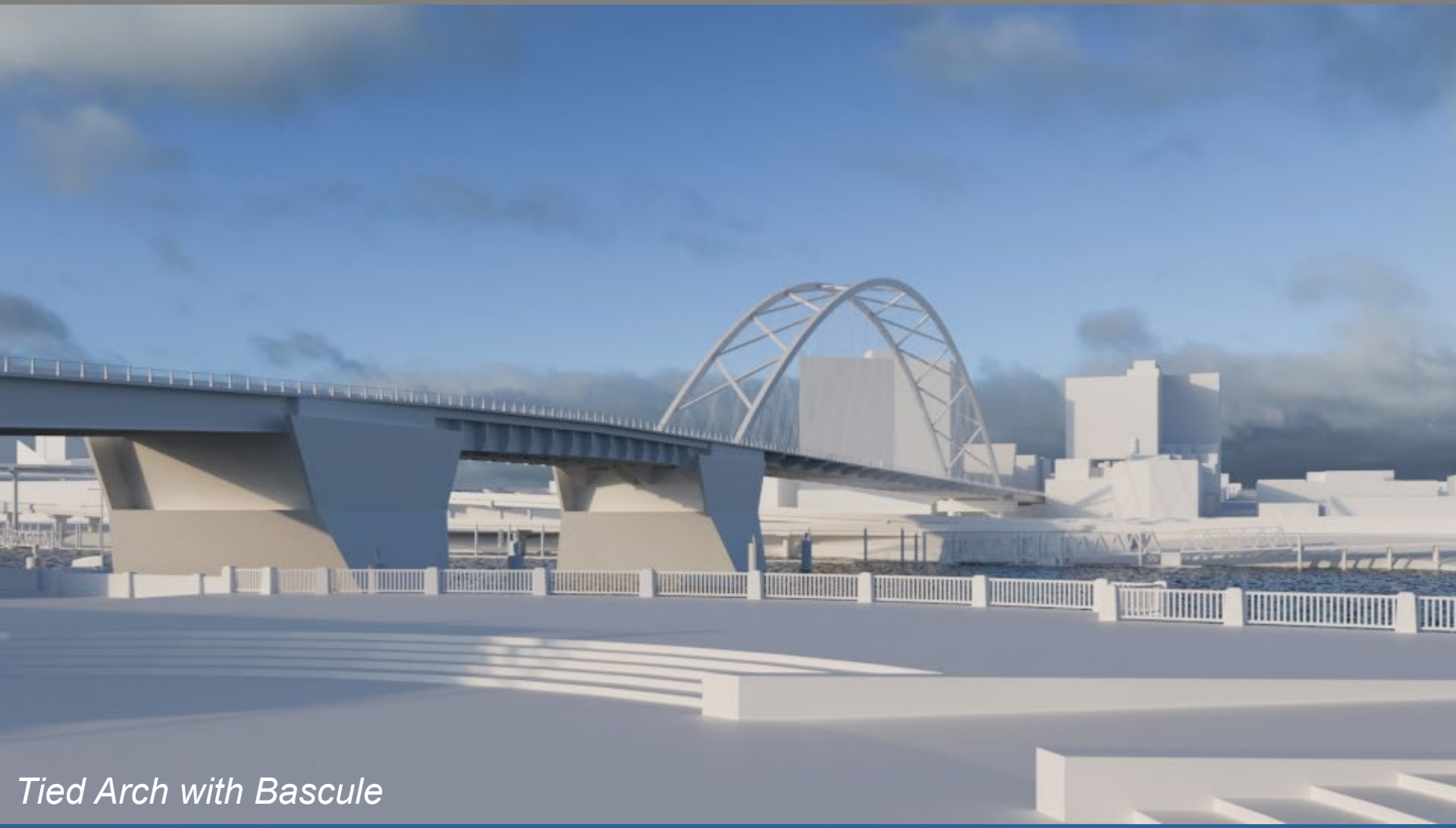
Looking NE from Waterfront Park *(preliminary concept)*



Tied Arch with Bascule

Movable Span Bridge Type

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Looking NE from Waterfront Park *(preliminary concept)*

Tied Arch with Lift

Movable Span Bridge Type

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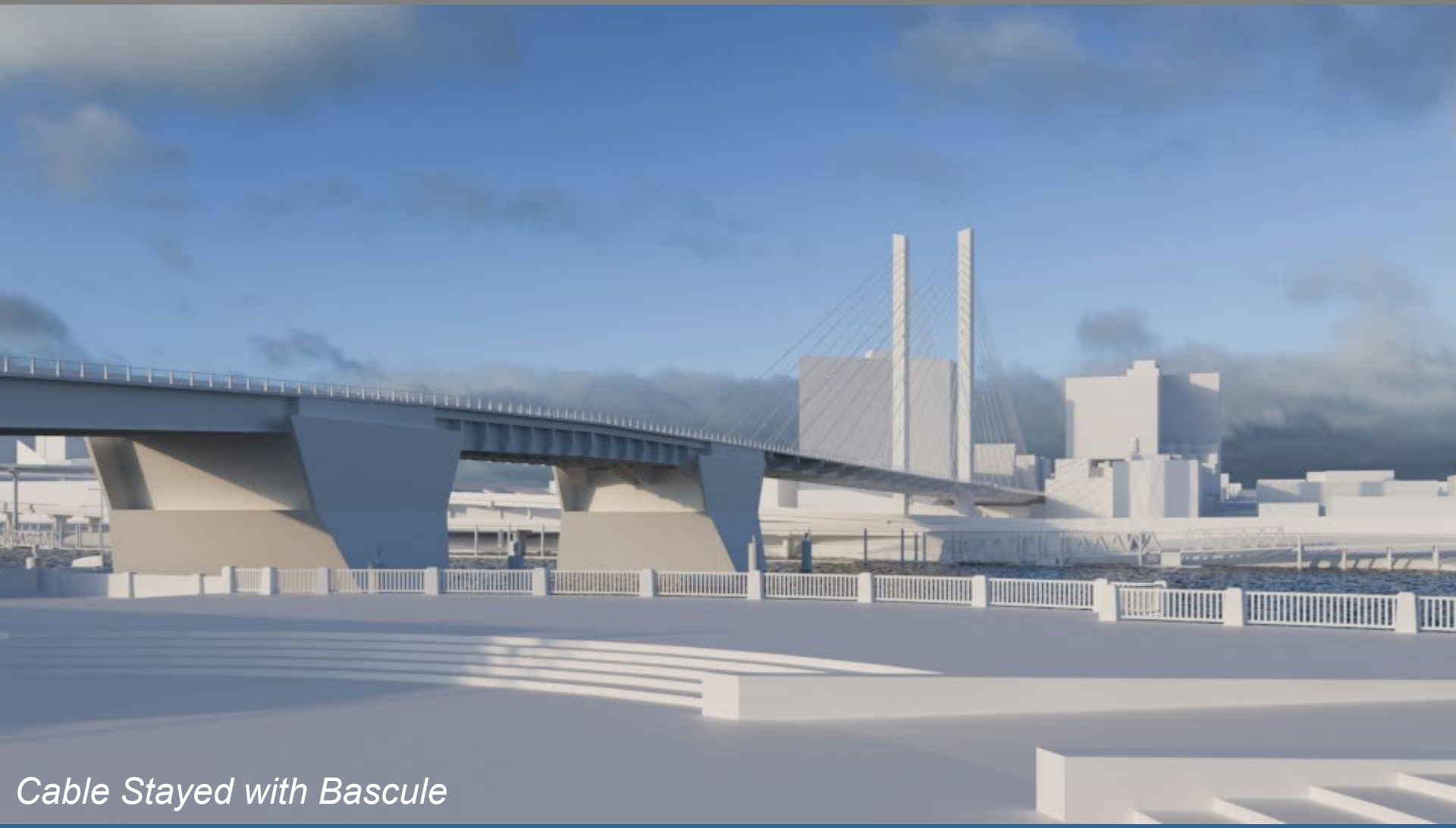
Looking NE from Waterfront Park *(preliminary concept)*



Cable Stayed with Bascule

Movable Span Bridge Type

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Looking NE from Waterfront Park *(preliminary concept)*

Cable Stayed with Lift

Movable Span Bridge Type

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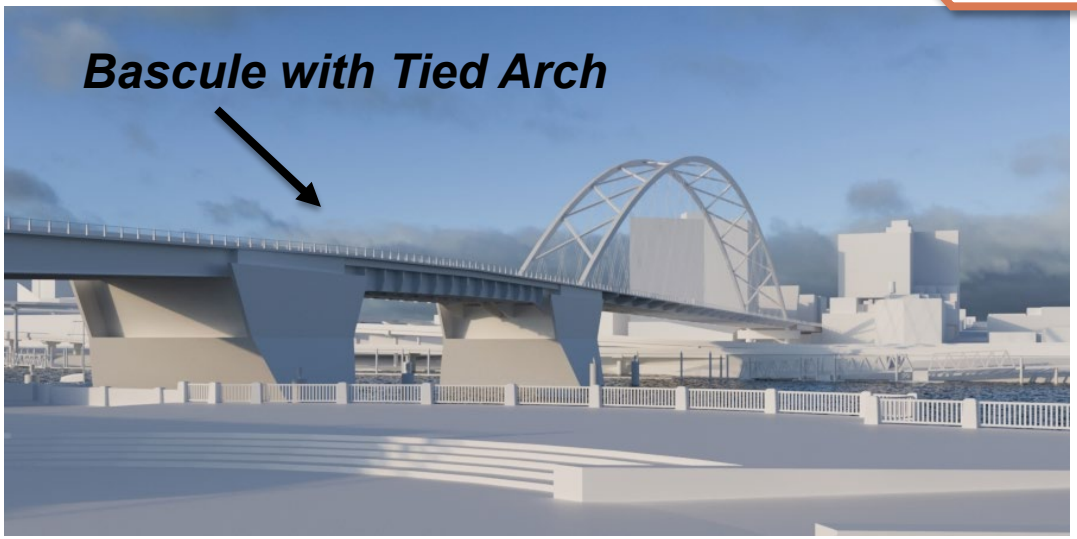
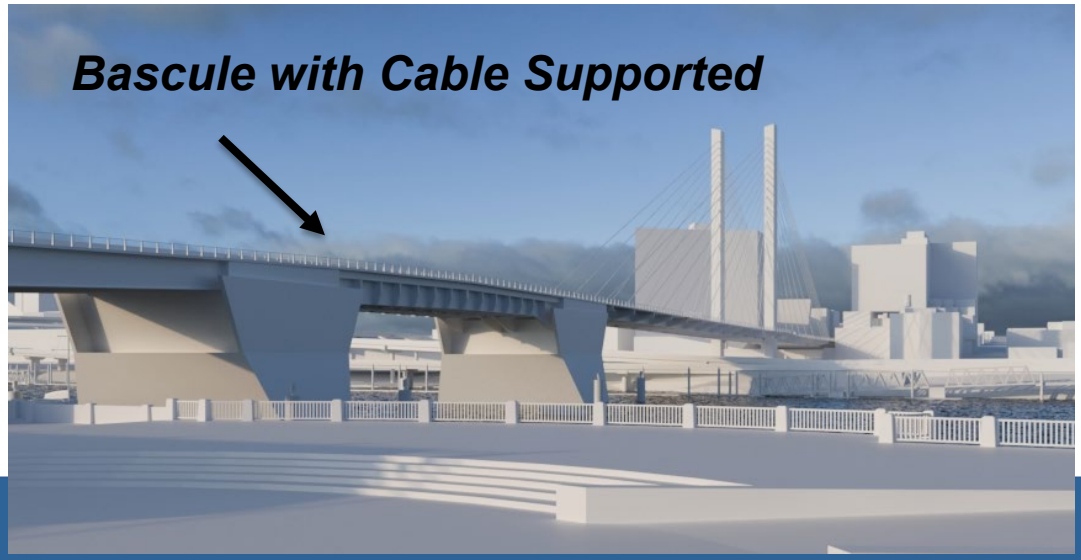
Recommendation: Bascule Movable Bridge

$25 - $35M Savings

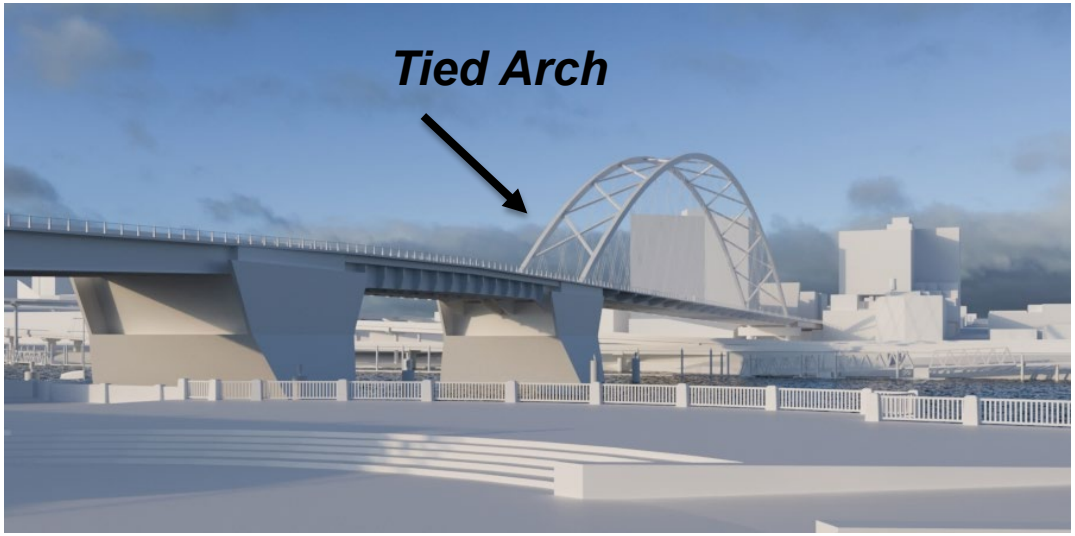
- Meets permitting requirements and has least environmental impacts
- Provides highest cost savings of the options studied
- Has support from key stakeholder groups

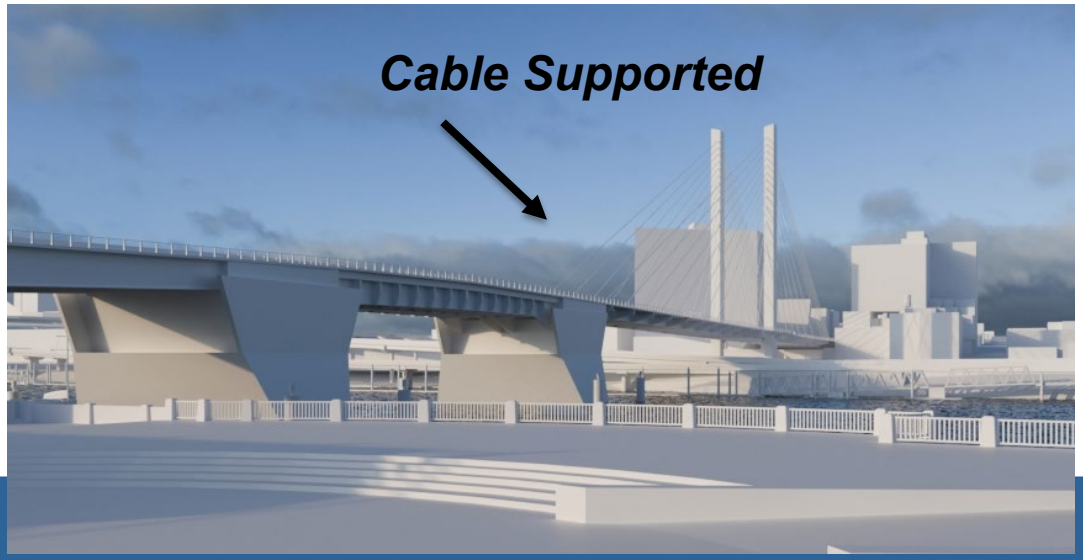




East Span Bridge Type

To be determined in
Final Design Phase





Bridge Width

Bridge Cross Section

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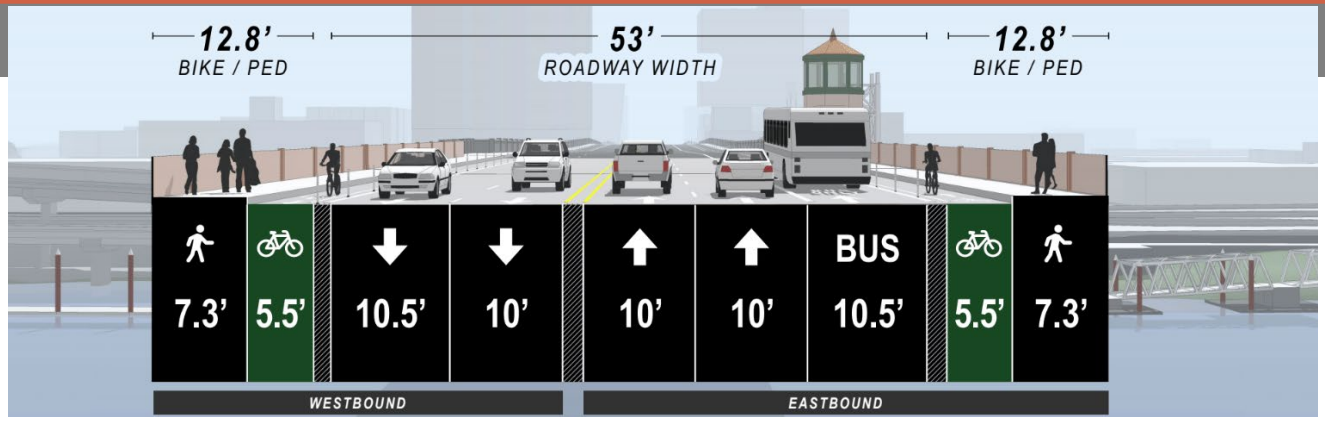
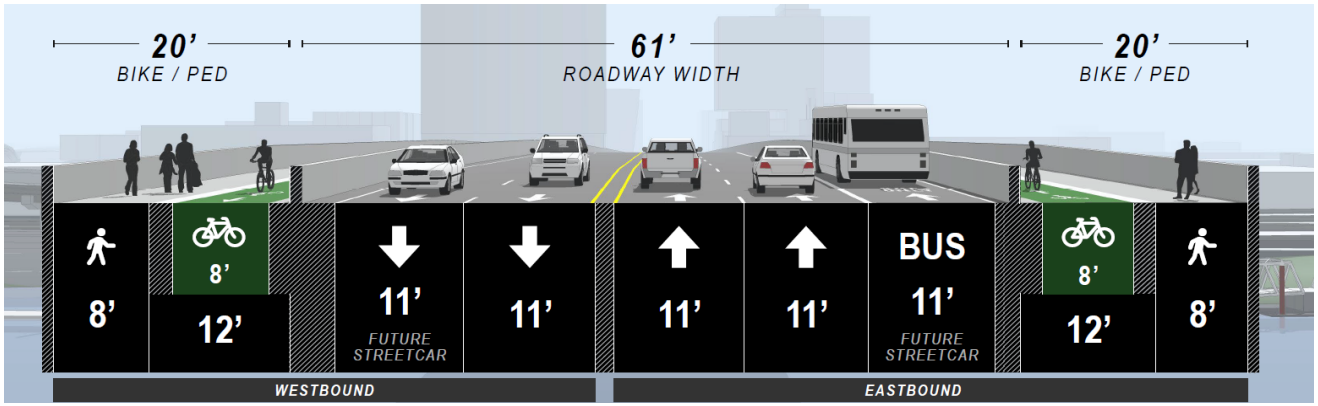
Narrower Bridge

Existing Cross Section

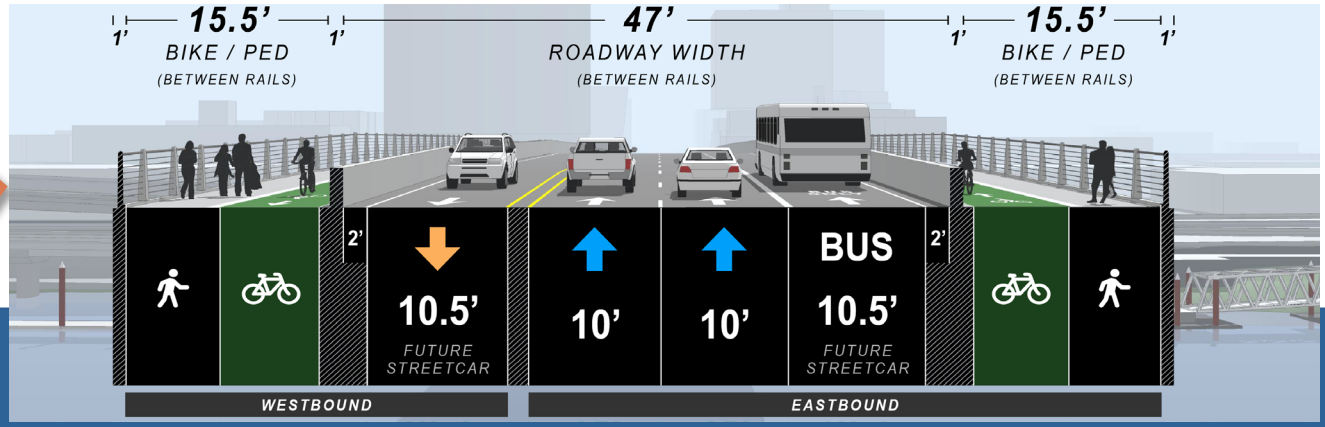


DEIS Cross Section



Refined Cross Section Under Analysis

$140 - $165M Savings



SDEIS Cross Section Options

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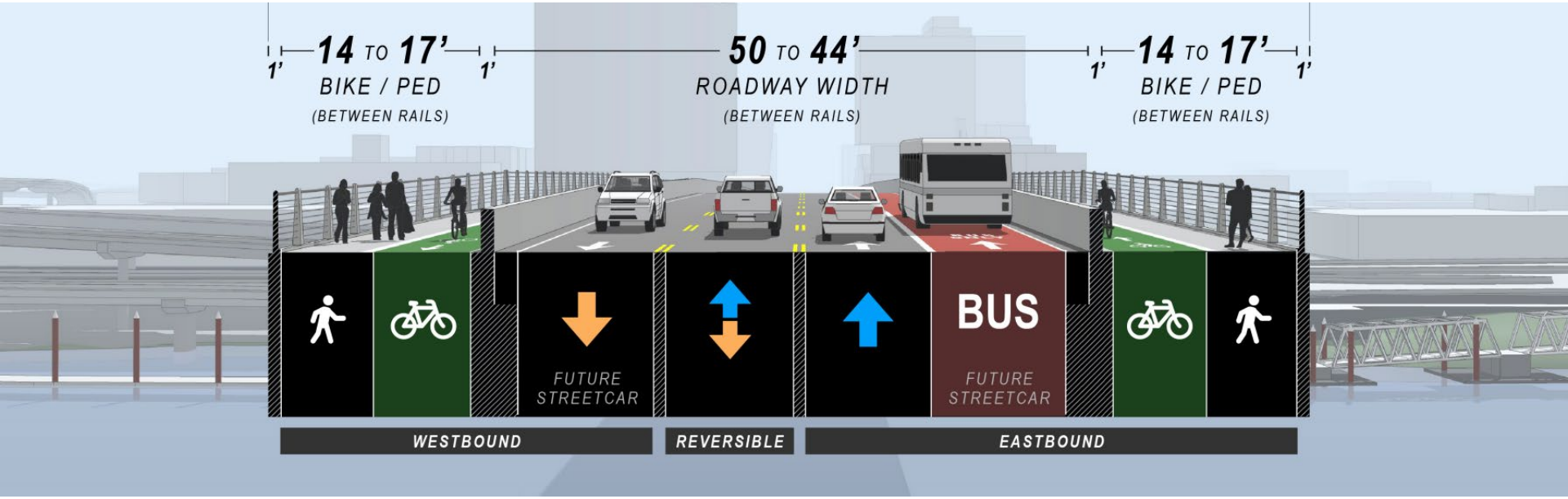
Re-allocating some vehicular width to bike/ped space



4-Lane Traffic Configurations

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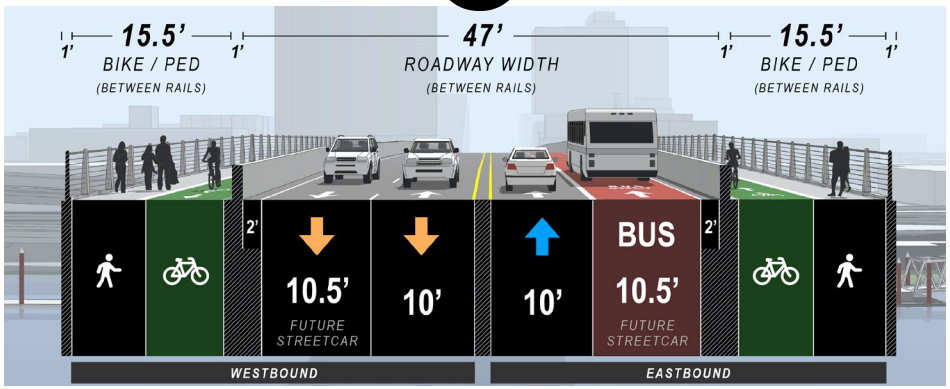
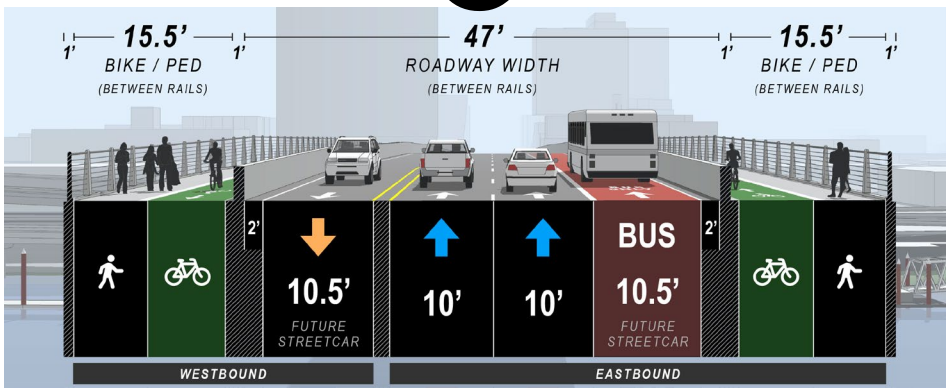
Lane Configuration is a PBOT decision

1



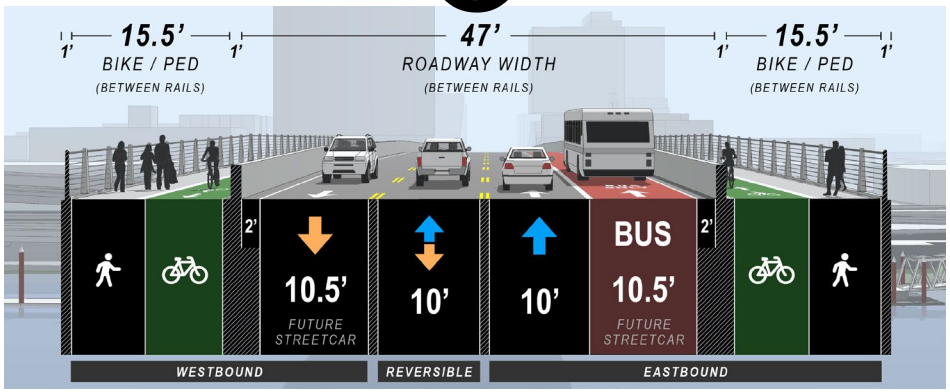
2 WB Lanes / 1 EB + 1 Bus Lane

2



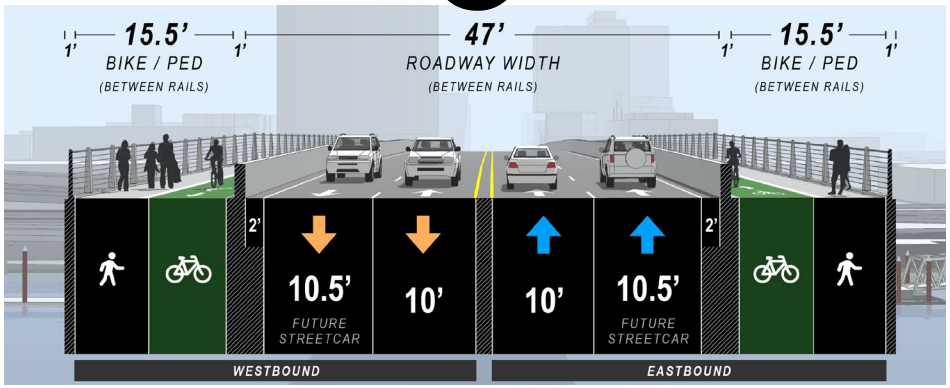
1 WB Lane / 2 EB + 1 Bus Lane

3



Reversible Lane

4



2 WB Lanes / 2 EB Lanes (Bus queue jump)

Notes: (1) Also analyzed impacts to adjacent bridges
(2) 15.5' bike/ped space shown; 14' to 17' bike/ped spaces under consideration

❸ Reversible Lane Option

EARTHQUAKE READY BURNSIDE BRIDGE

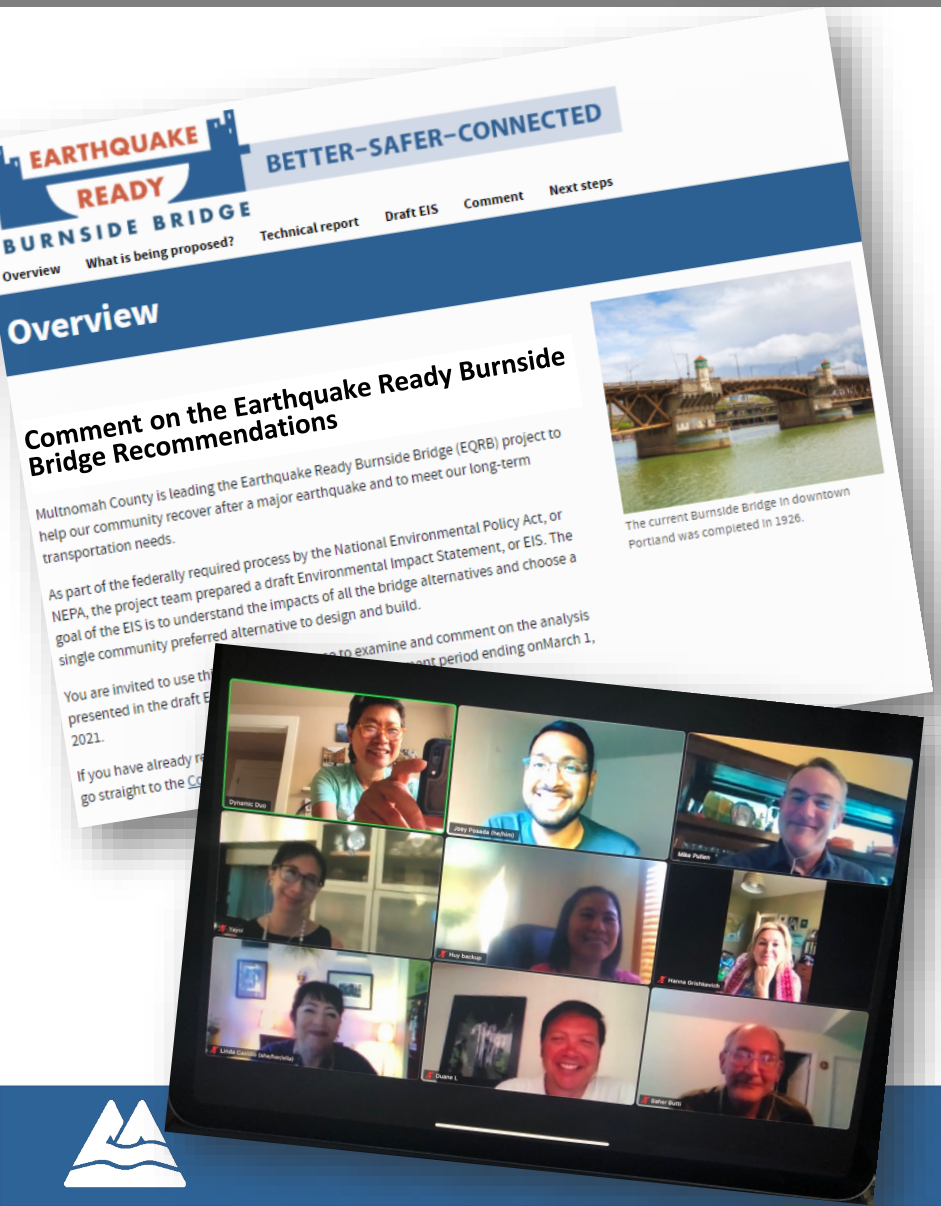
What we're studying …

- Lessons Learned from others
- Traffic operations and safety
- Entry treatments

Lions Gate Bridge, Vancouver, B.C.

Community Engagement

Mid-November to Mid-December 2021



Objective: Share revisions to the Preferred Alternative and seek community feedback.

Key Activities:

- Online Open House and Survey
- Virtual Briefings
- Video
- Webinar
- E-newsletters, news releases and social media
- Diverse outreach through the Community Engagement Liaisons program

Review range of options studied for connections to MAX and Esplanade

Connections to MAX & Esplanade

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Existing Conditions

North & South Stairs to Skidmore Max Station

Owner: Multnomah County

South Stairs to Eastbank Esplanade

Owner: City of Portland (built in 2001)

Connection to Eastbank Esplanade

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Range of options studied

1. Ramp from bridge
2. On-bridge signalized crossing or under bridge crossing
3. Stairway + Elevator

Connection to Eastbank Esplanade

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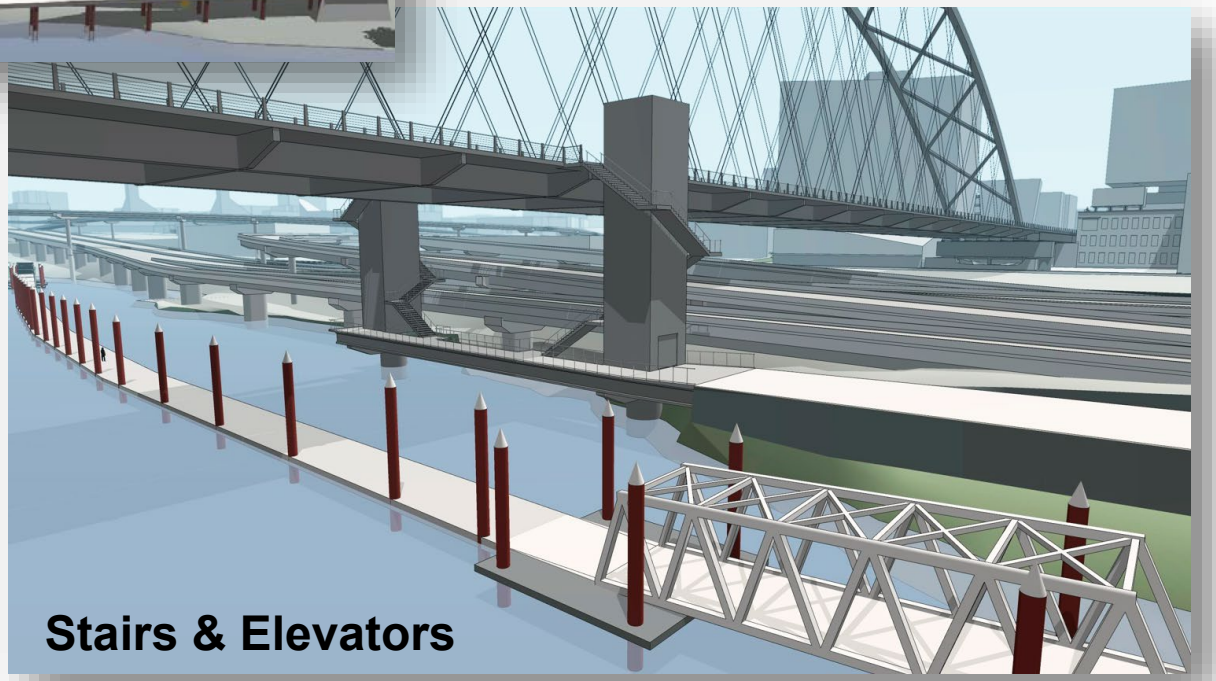
Examples: Range of options studied to Esplanade



Connection to Eastbank Esplanade

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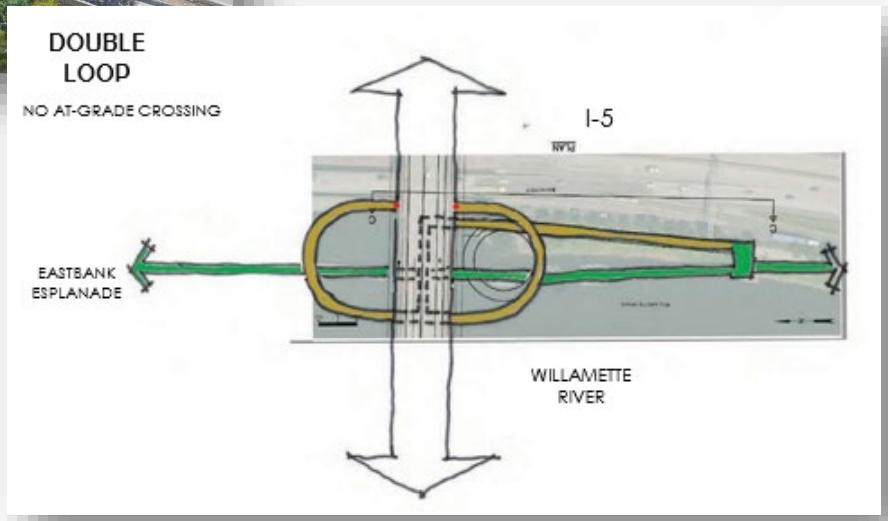
Preliminary concepts from PBOT and Human Access Project



Connection to Skidmore MAX Station

EARTHQUAKE READY BURNSIDE BRIDGE

Options Studied

1. Switchback ramp along bridge
2. On-bridge signalized crossing
3. Stairs + Elevators
4. Sidewalk Improvements

Connection to Skidmore MAX Station

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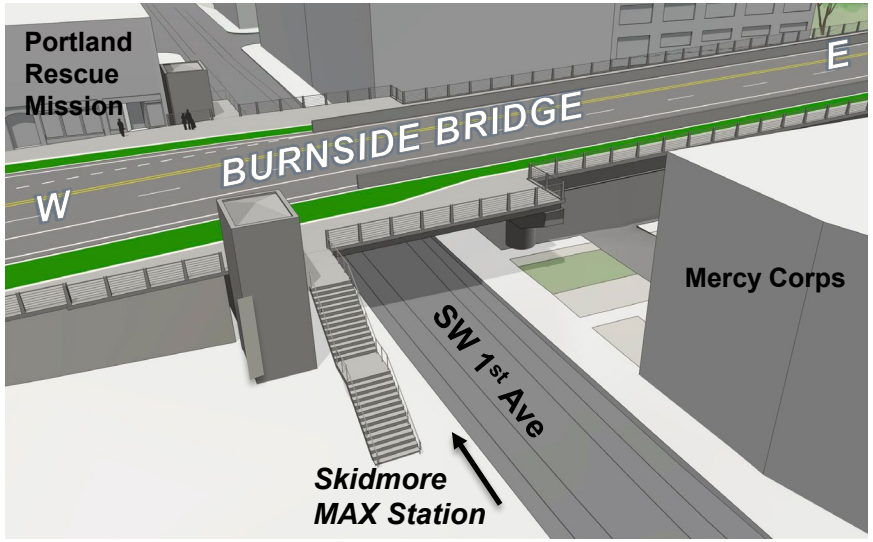
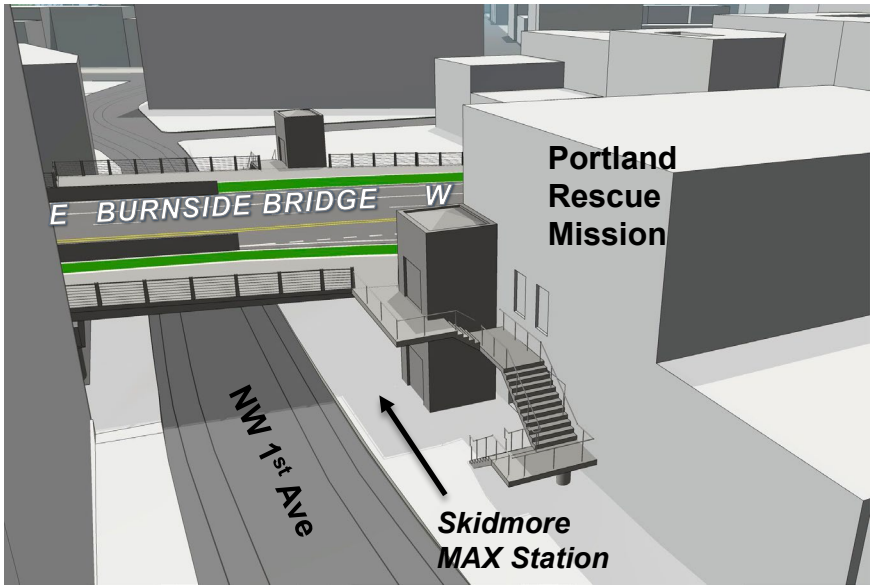
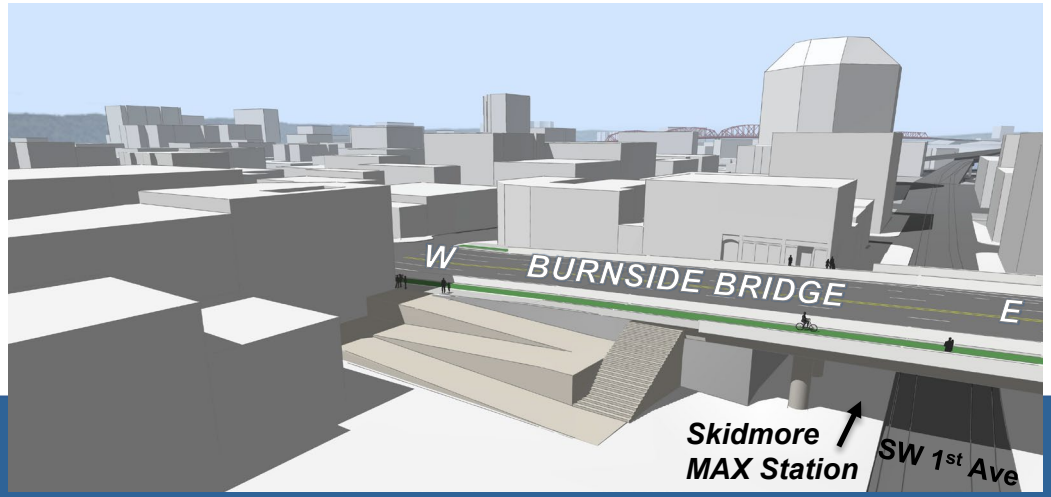
Examples: Range of options studied on the west side

Stairs & Elevators





Ramp



Connection to Skidmore MAX Station

EARTHQUAKE READY BURNSIDE BRIDGE

Examples: Range of options studied on the west side

Sidewalk upgrades to improve routes from bridge to nearest bus/MAX stops on west side

Connection to Skidmore MAX Station

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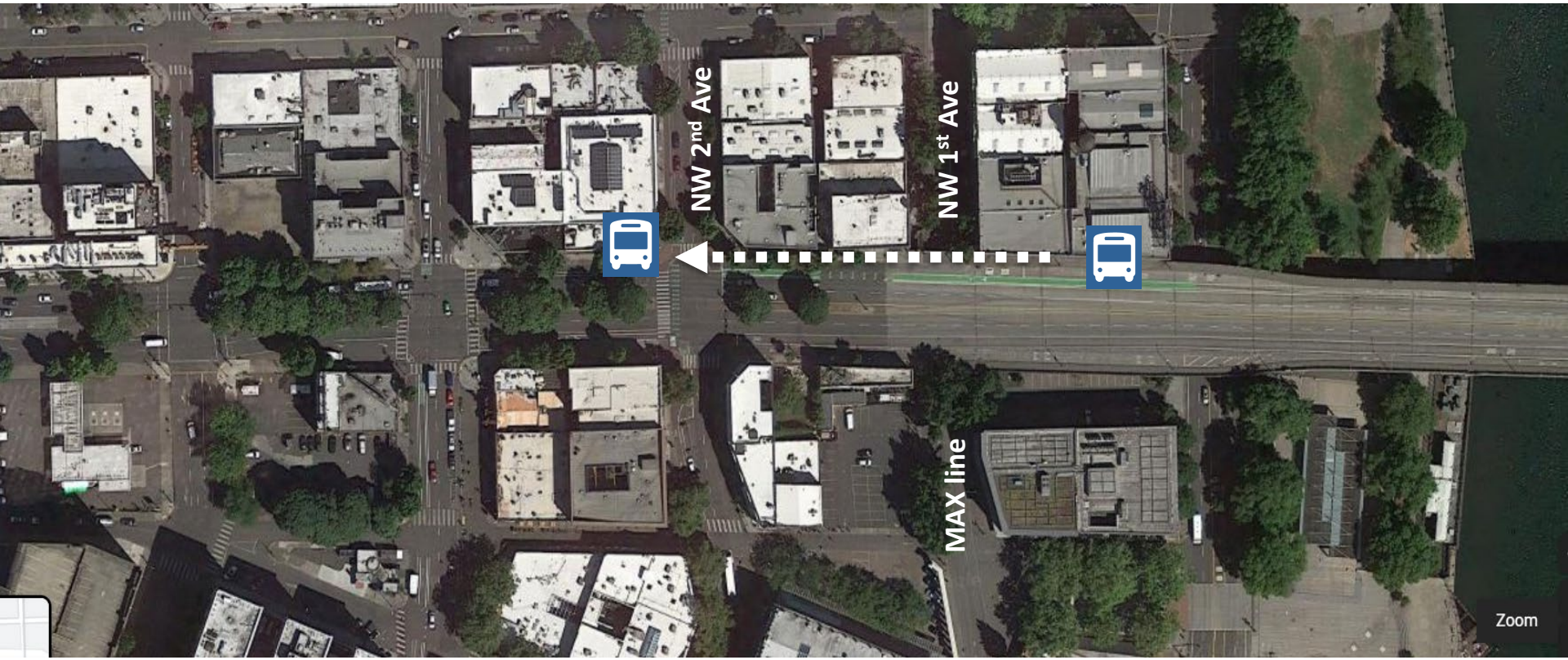
New Consideration

- Potential west approach bus stop relocation to NW 2nd Avenue
- Potential change in level of service to Skidmore Max Station



Decision will be made during Final Design phase

Next Steps

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ENVIRONMENTAL REVIEW PHASE

- **November / December 2021 –** Share and seek community feedback on proposed refinements to the Preferred Alternative (PA)
- **January 2022 CTF Meeting –** Share community feedback and confirm PA refinements for Policy Group approval
- **January PG Meeting 2022 –** Share community and CTF feedback and seek Policy Group approval and Mult Co BCC Revised PA adoption
- **March / April 2022 –** Publication of Supplemental Draft EIS and **public comment period**
- **September 2022 –** Final EIS and Record of Decision

FINAL DESIGN PHASE

- **Mid-2022 to 2025**
- Includes decision on connection to Eastbank Esplanade and Skidmore MAX

Closing Remarks

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Thank you!