EARTHQUAKE READY BURNSIDE BRIDGE

Community Design Advisory Group
Meeting #2

Multnomah County
Department of Community Services
Transportation Division

October 26, 2023

(All CDAG meetings are live-streamed, recorded and available to the public.)

Agenda

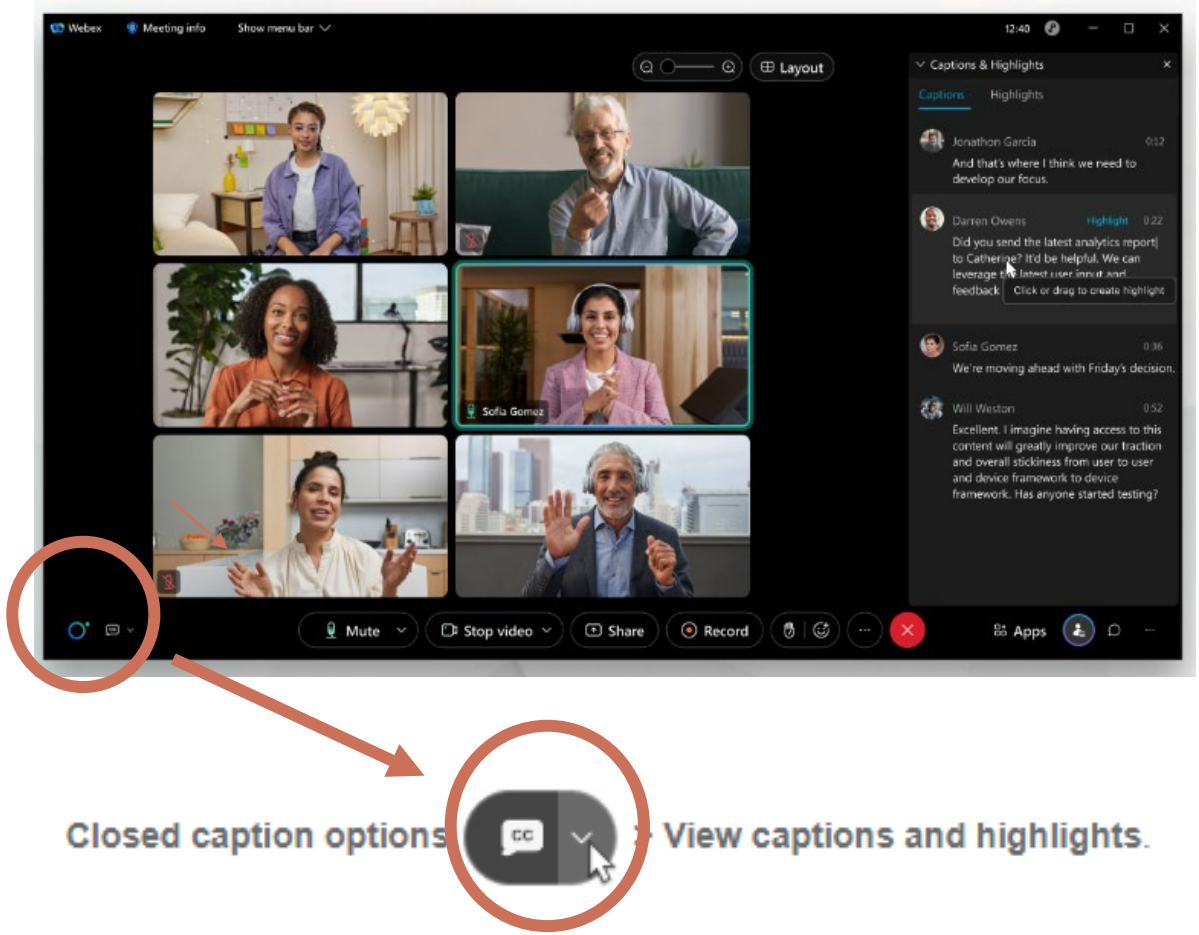
1. Welcome & Opening Remarks
2. Introductions & Housekeeping
3. Bridge Tour Reflections
4. Preferred Alternative Background
5. Preliminary Evaluation Criteria Review
6. Public Comment Period
7. Next Steps & Closing Remarks

Virtual Participation Tips

Closed captions in English are available in Webex and YouTube

1. In the bottom menu select "CC" or "closed captioning"
2. Select "view captioning and highlights"

Submit questions for response to burnsidebridge@multco.us



Public Input Instructions

Public comments are welcomed as part of each CDAG meeting and can be shared in several ways:

- **In-Person Verbal Comments:** Attend and comment in-person at Multnomah Building (Board Room, 1st Floor) - 501 SE Hawthorne Blvd, Portland, OR, 97214. Sign-up for comment at the sign-in table.
- **Virtual Verbal Comments:** Request link to provide virtual comments 24 hours before the meeting by sending an email with subject line "CDAG Comments" to: burnsidebridge@multco.us. A project team member will contact you with instructions.
- **Written Comments:** Send an email to be included in the groups meeting packet 48 hours before the meeting by sending an email with subject line "CDAG Comments" to: burnsidebridge@multco.us.

Housekeeping

Safety Briefing & Meeting Protocols

Safety

- Evacuation location: Parking lot on the SE corner of 6th and Hawthorne (cross at light at SE 7th Ave)
- Emergency exits
- Restrooms outside the door

Meeting Protocols

- Question or comment: raise your hand or turn your table tent on the short end
- Speak clearly and toward the microphones
- Limit multitasking, side conversations and noise that could be picked up by the microphones
- All meetings are live to the public and recorded

Housekeeping

Meeting Protocols

- **Be curious** and willing to learn.
- **Ask questions** to gain clarity and understanding.
- Express **preferences, interests, and outcomes** you wish to achieve.
- **Listen respectfully** to understand the needs and interests of others.
- Be **concise with comments and questions**.
- Focus on the **scope of the discussion**.
- **Attend all meetings** in a timely manner.
- Respect the **role of the facilitator** to guide the group process.
- Seek **common ground**.

Introductions & Roll Call

- **Aaron Whelton,** *Portland State University*
- **Anthony Jackson,** *Community Member*
- **Brian P. Kimura,** *Japanese American Museum of Oregon*
- **Carol Gosset,** *Oregon Museum of Science & Industry*
- **Chris Herring,** *Portland Winter Light Festival*
- **Erik Swenson,** *Portland Saturday Market*
- **Fred Cooper,** *Laurelhurst Neighborhood Association & Native American Youth and Family Center*
- **Gabe Rahe,** *Burnside Skatepark*
- **Guenevere Millius,** *Sunnyside Neighborhood Association*
- **Ian Sieren,** *Community Member*
- **Jackie Tate,** *Community Member*
- **Jason Halstead,** *Community Member*
- **Neil Jensen,** *Gresham Chamber of Commerce*
- **Paddy Tillett,** *Architect/Design Professional*
- **Patrick Sullivan,** *SERA Architects*
- **Robert Hastings,** *Willamette Light Brigade*
- **Sarah Lazzaro,** *Community Member*
- **Sharon Wood Wortman,** *Historian*
- **Ed Wortman,** *Community Member*
- **Susan Lindsay,** *Buckman Neighborhood Association*
- **Valerie Schiller,** *Multnomah County Bike/Ped Citizen Advisory Committee*
- **Todd DeNeffe,** *Central Eastside Industrial Council*

Introductions & Roll Call

- Name and pronouns
- Affiliation (if applicable)

Earthquake Ready Burnside Bridge Project (EQRB)

Sharon Daleo PBOT | CDAG October 26, 2023

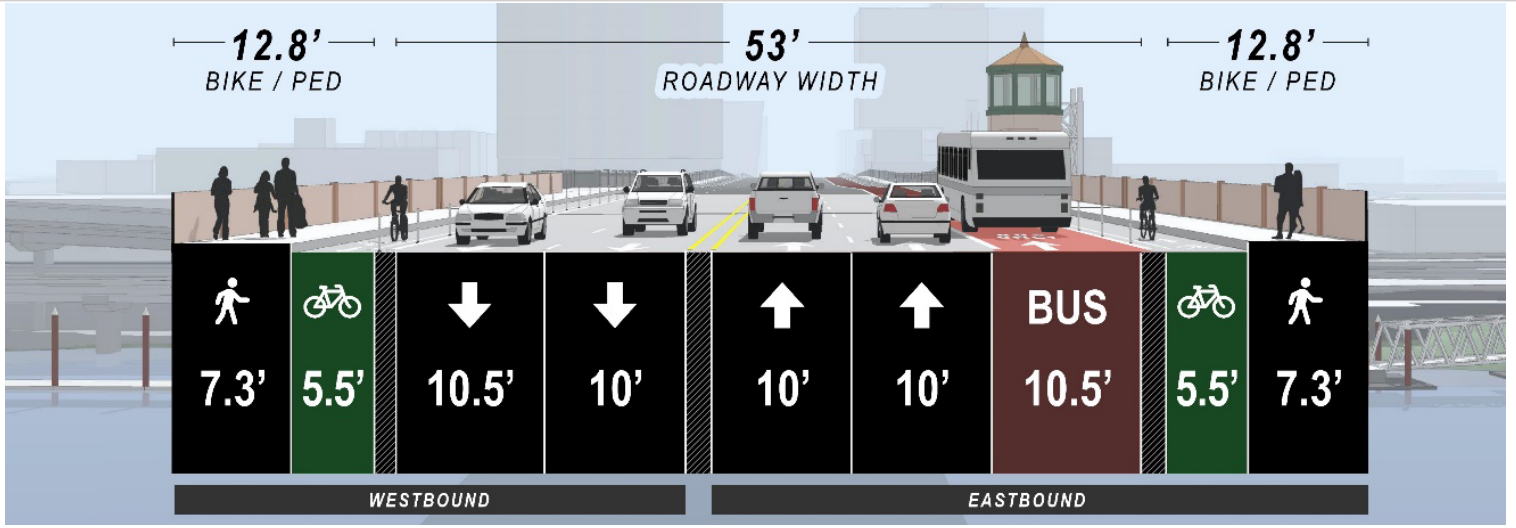
PBOT
PORTLAND BUREAU OF TRANSPORTATION

Agenda:

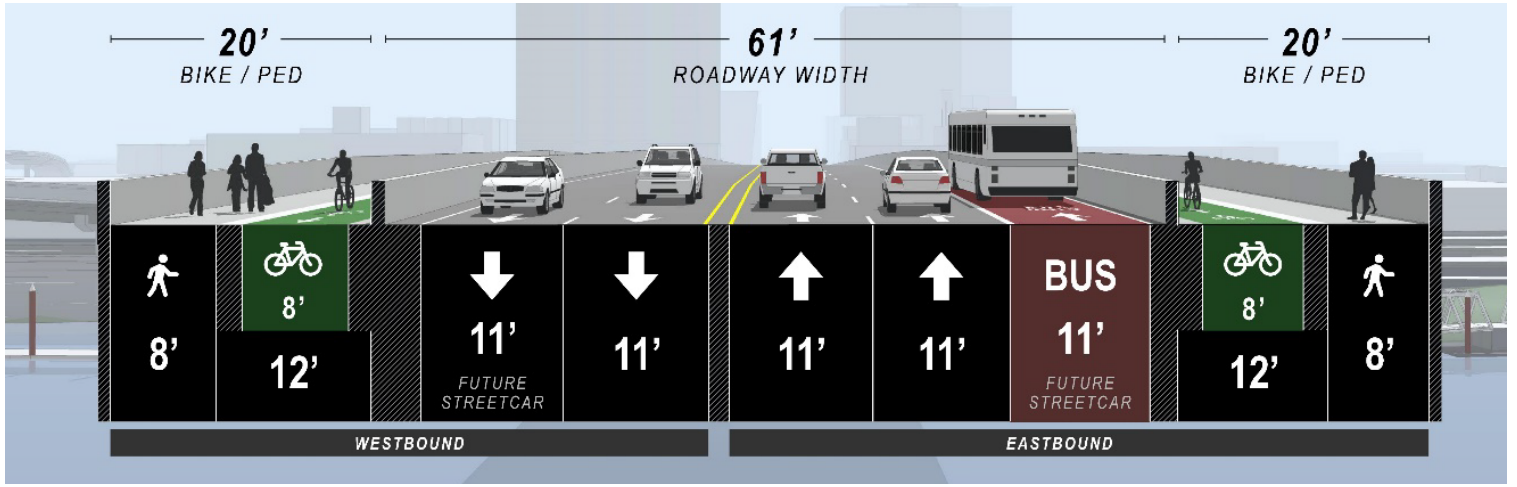
- **Traffic Configurations**
  - EIS
  - Cost-savings for SDEIS
  - Policy
- **City Role**
  - Jurisdictional Partner

EARTHQUAKE READY BURNSIDE BRIDGE PROJECT (EQRB)

Existing Cross Section



DEIS Cross Section



4-Lane Traffic Configurations

EARTHQUAKE READY BURNSIDE BRIDGE

Lane Configuration is a PBOT decision

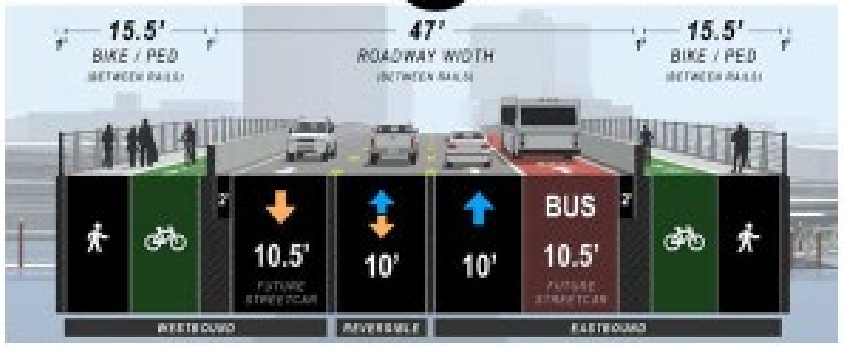
1

2 WB Lanes / 1 EB + 1 Bus Lane

2

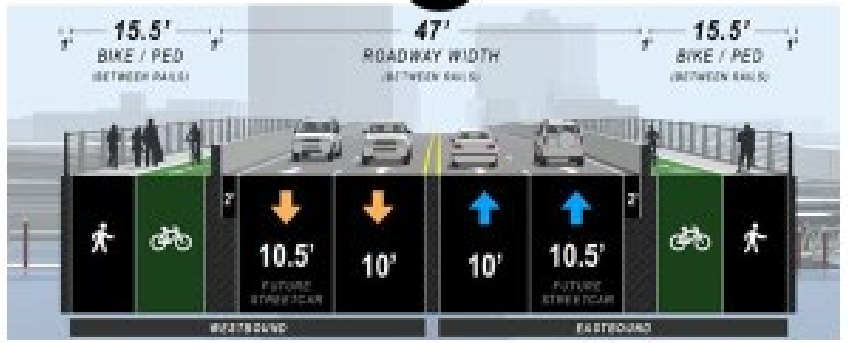
1 WB Lane / 2 EB + 1 Bus Lane

3



Reversible Lane

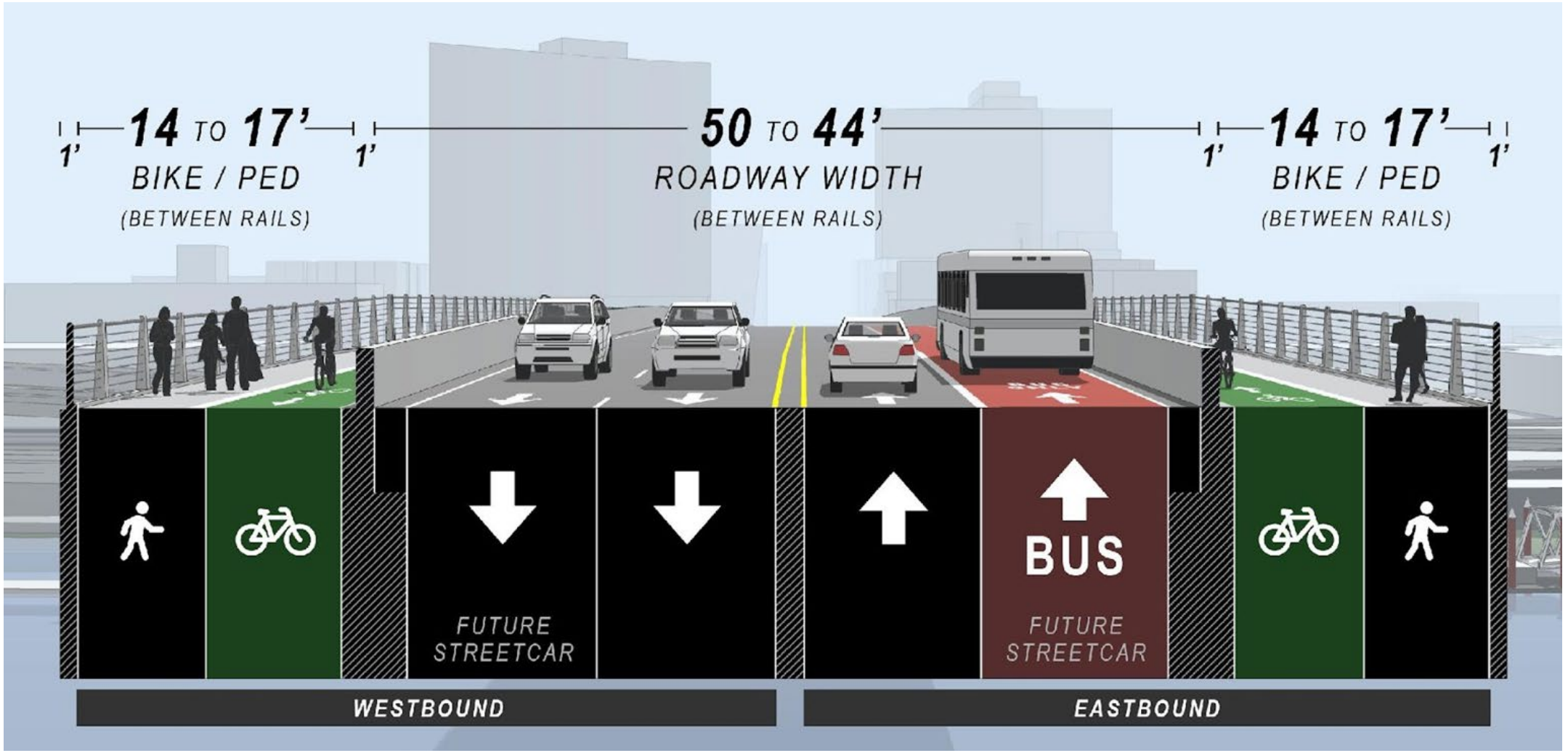
4



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

Locally Preferred Alternative

Typical Cross Section

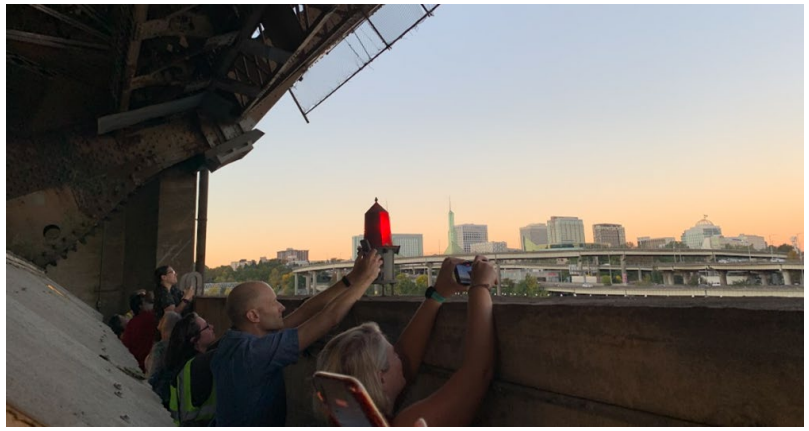


Q/A

City Project Manager
Brooke Jordan

Thank you.

BURNSIDE BRIDGE TOURS

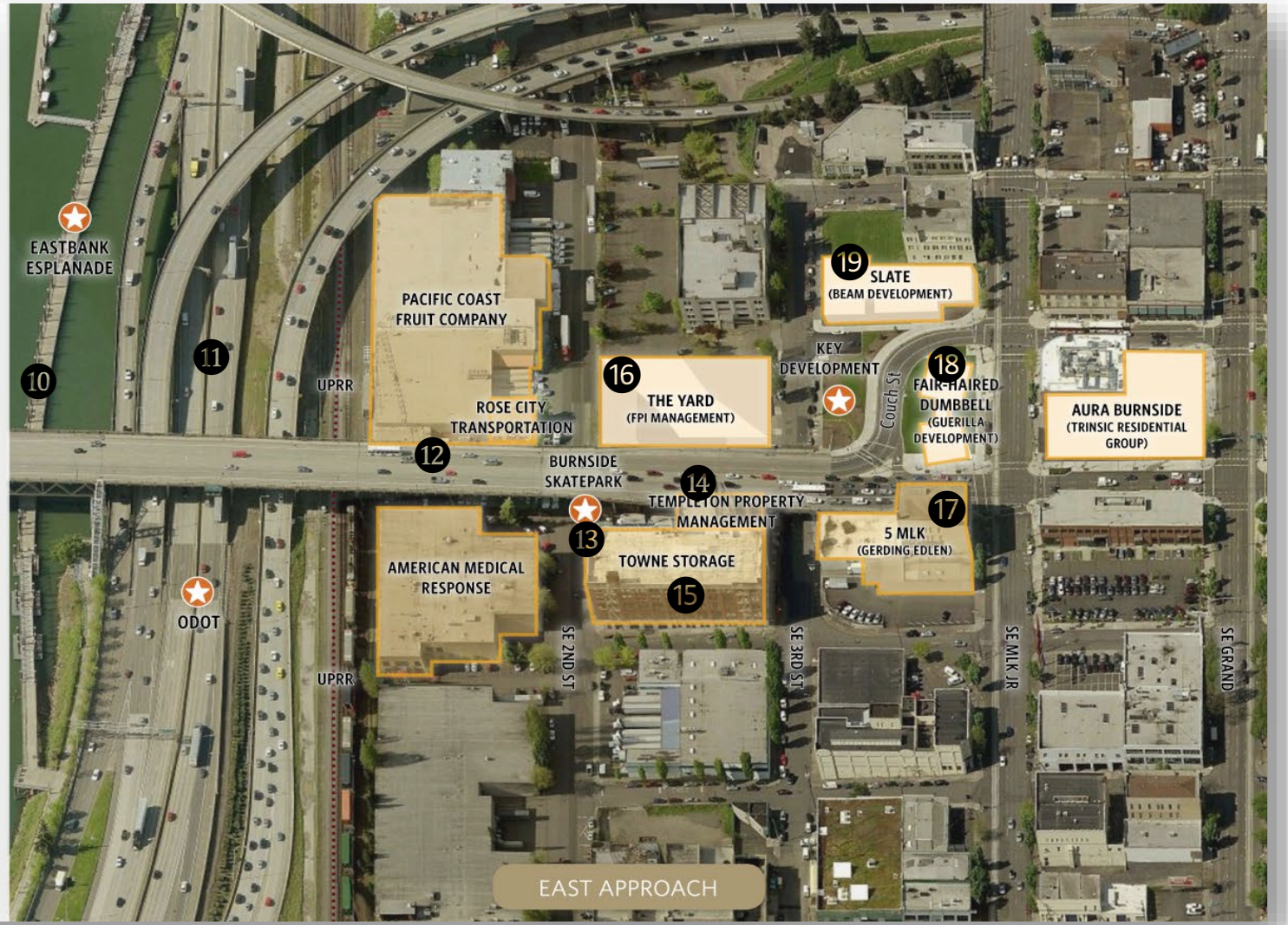


Bridge Tour Reflections

Project Area

West (Downtown) side

East side



Project Area

1. Existing West Bridgehead

Project Area

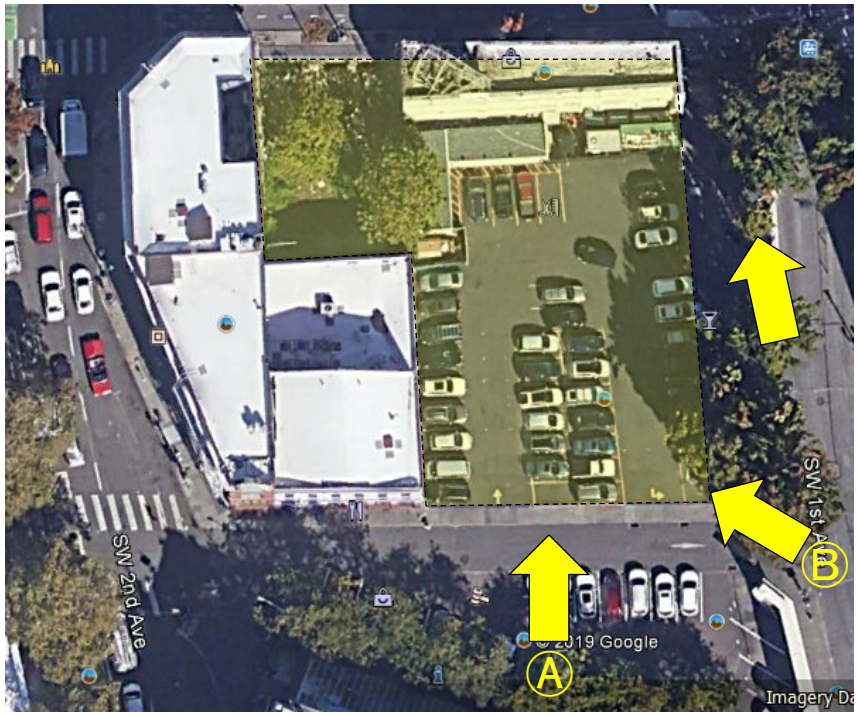
2. Portland Rescue Mission

Project Area

3. Portland Saturday Market (from Burnside Street facing south)

Project Area

3. Portland Saturday Market (parking area on SW Ankeny)



Project Area

4. Trimet – Skidmore Fountain Station

Project Area

5. University of Oregon Building (from Burnside Street)

Project Area

5. University of Oregon Building (view from below Burnside Street)

Project Area

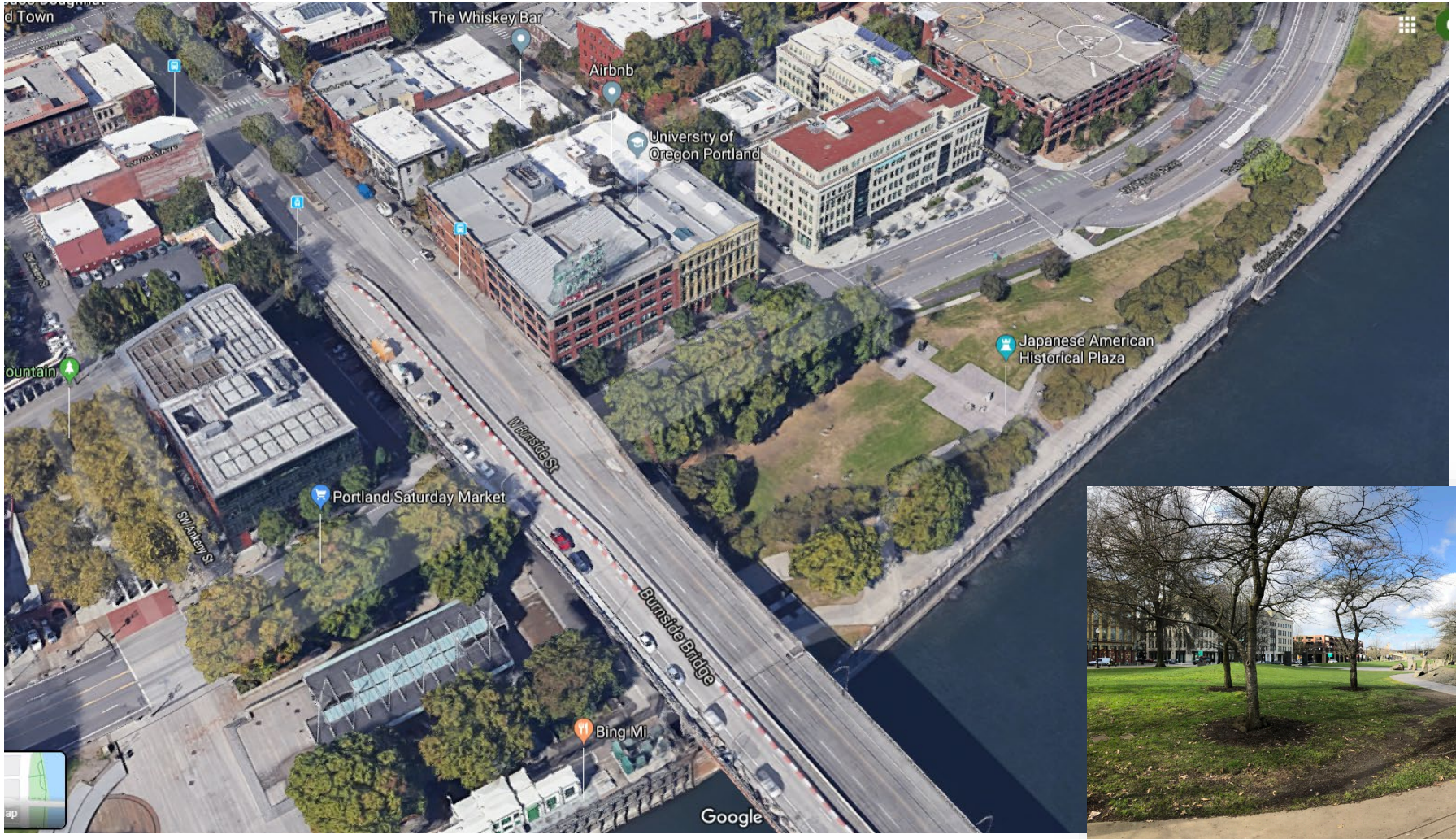
6. **Mercy Corps** (view from Burnside Bridge)

Project Area

7. Waterfront Park / Ankeny Plaza

Project Area

8. Japanese American Memorial Plaza



Project Area

8. Japanese American Memorial Plaza

Project Area

9. Willamette River *(view looking northeast from Waterfront Park)*

Project Area

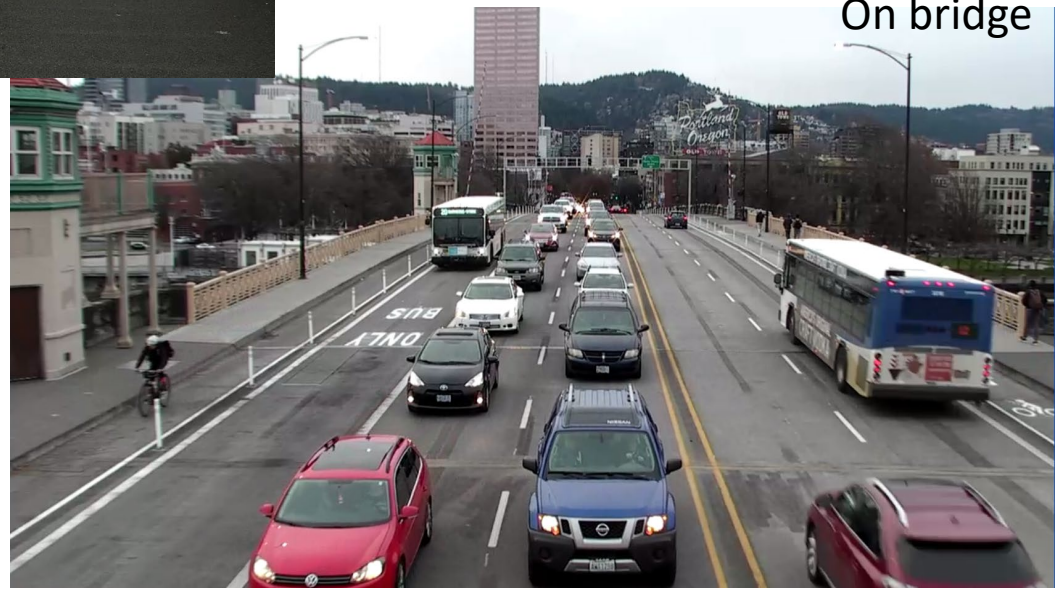
9. Willamette River *(views)*

Along south side of bridge

On bridge

Along north side of bridge

On bridge

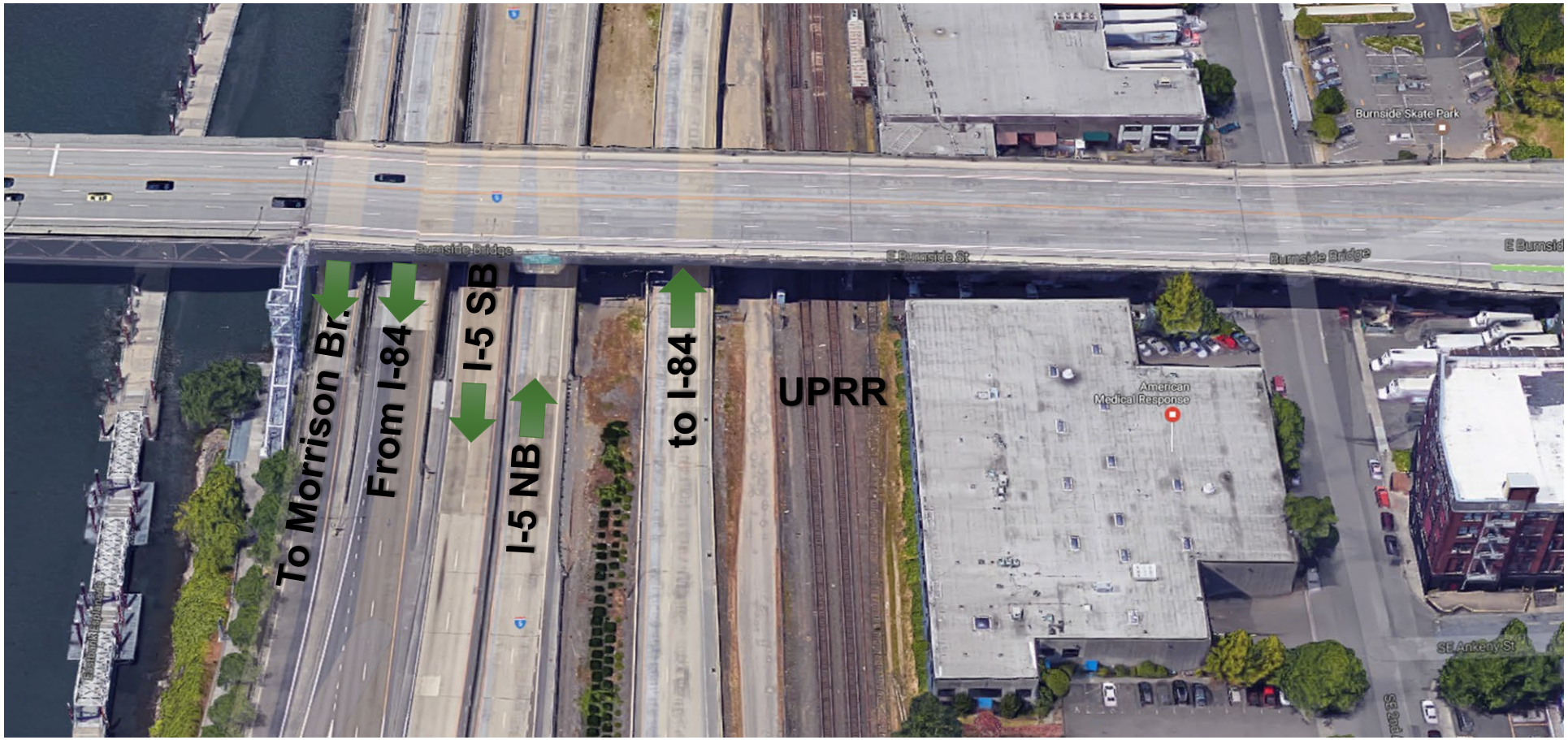


Project Area

10. Eastbank Esplanade

Project Area

11. I-5 and I-84 Freeway / Union Pacific Railroad *(aerial view)*

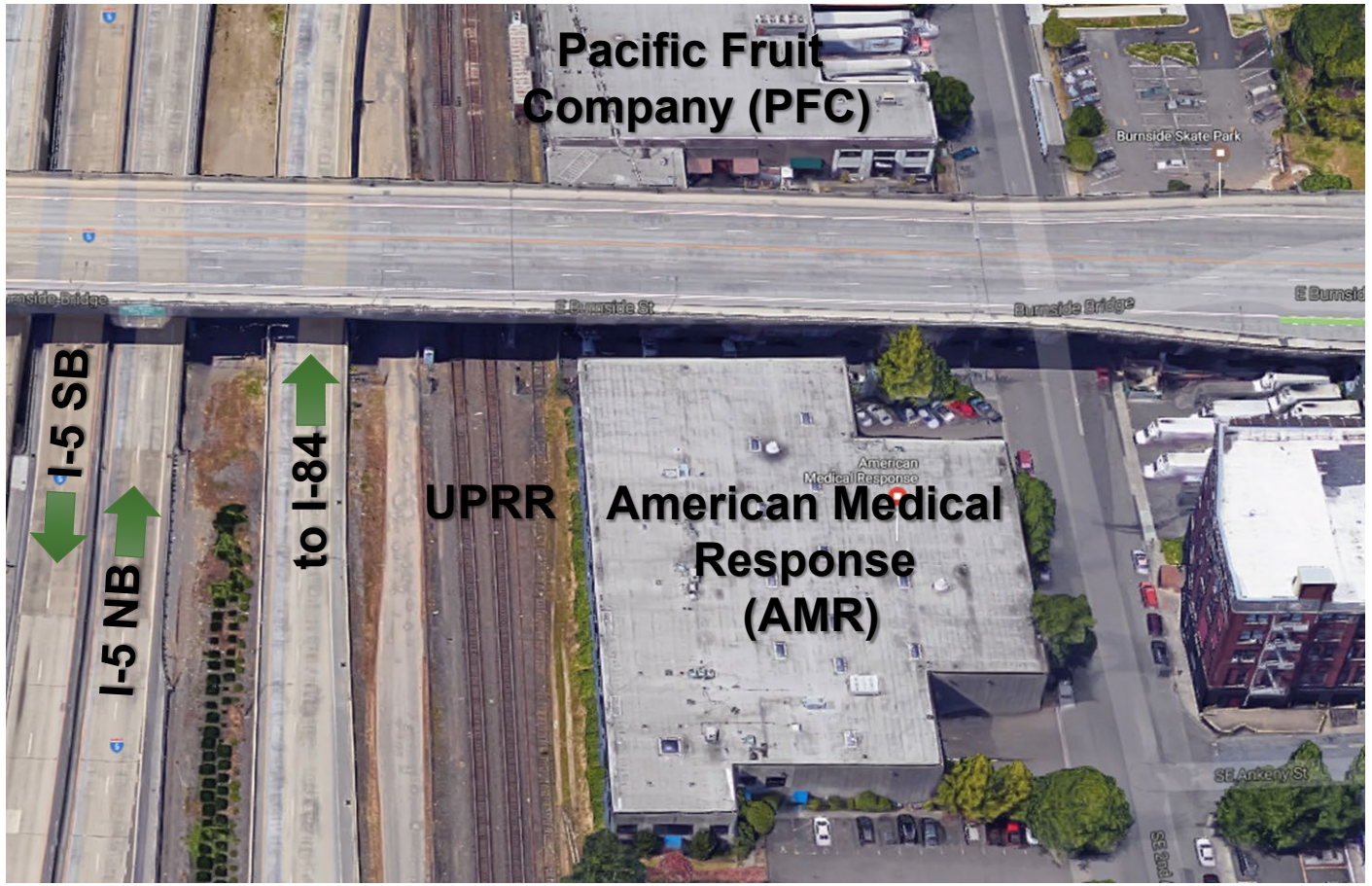


Project Area

11. I-5 and I-84 Freeway / Union Pacific Railroad *(freeway views)*

Project Area

12. American Medical Response & Pacific Coast Fruit *(aerial view)*



Project Area

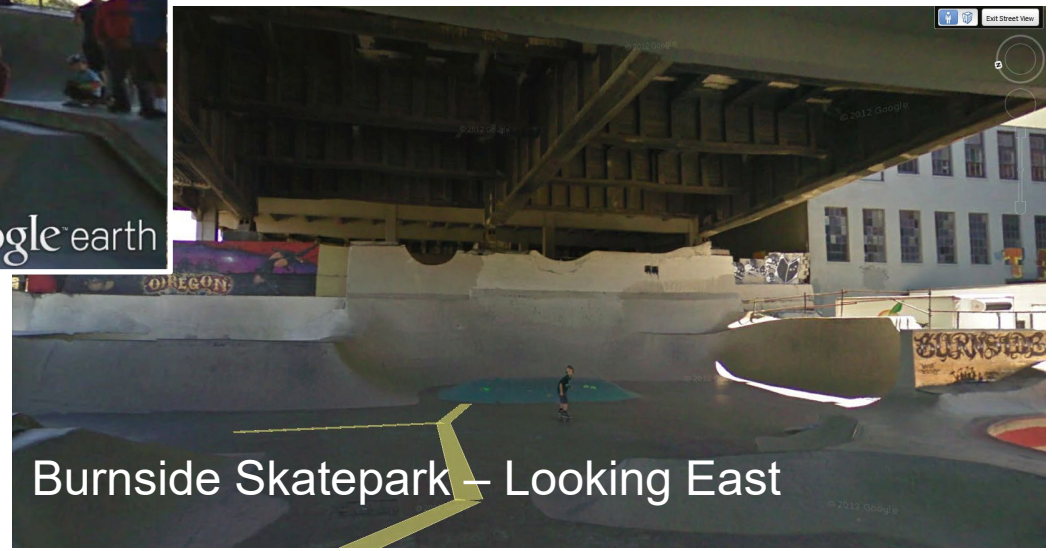
12. American Medical Response & Pacific Coast Fruit *(facing northwest)*

Project Area

13. Burnside Skatepark

Project Area

13. Burnside Skatepark

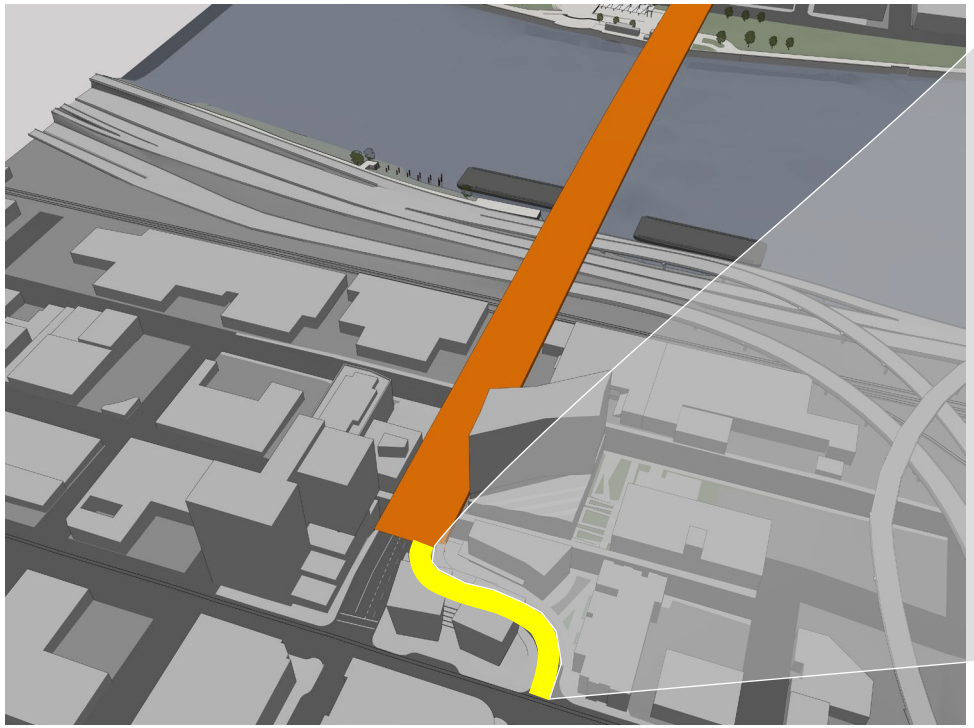


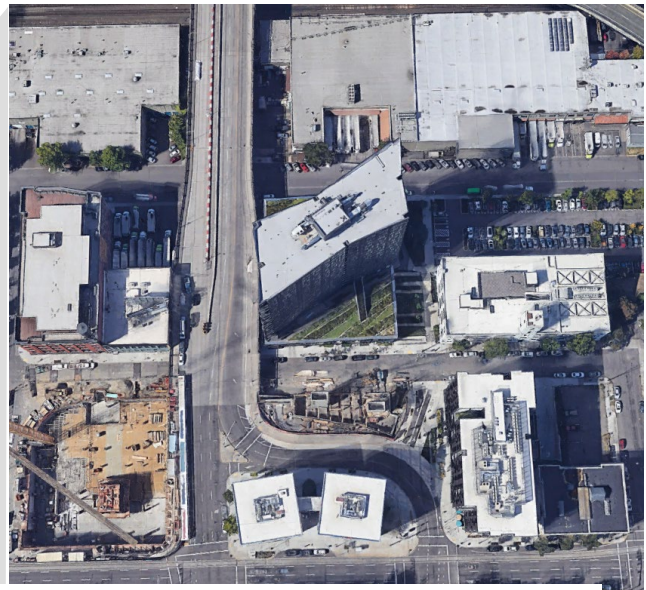
Project Area

14. East Bridgehead

Project Area

14. East Bridgehead

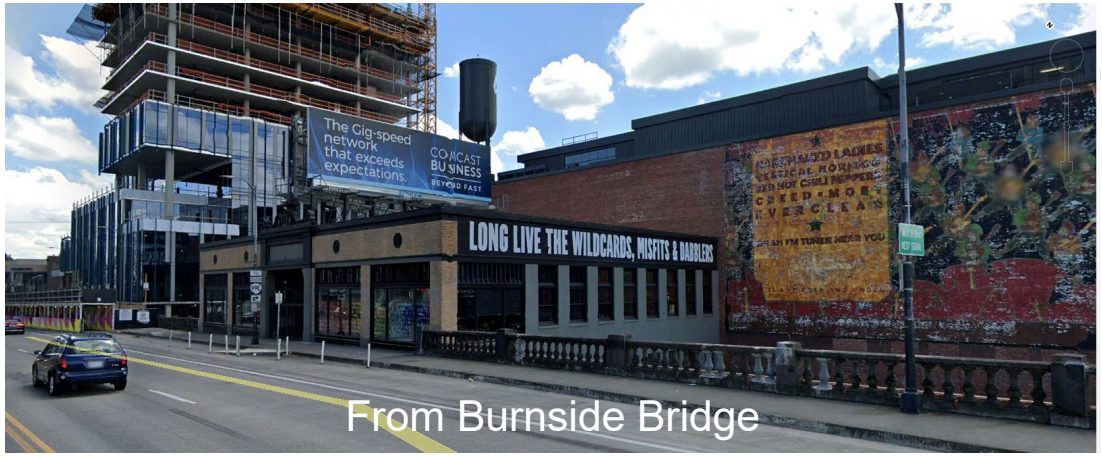




Existing NE Couch St. Approach

Project Area

15. Old Town Storage Building



From Burnside Bridge

SE 2nd and Ankeny

SE 3rd

SE 2nd

Project Area

16. The Yard Building

Project Area

17. 5 MLK Building

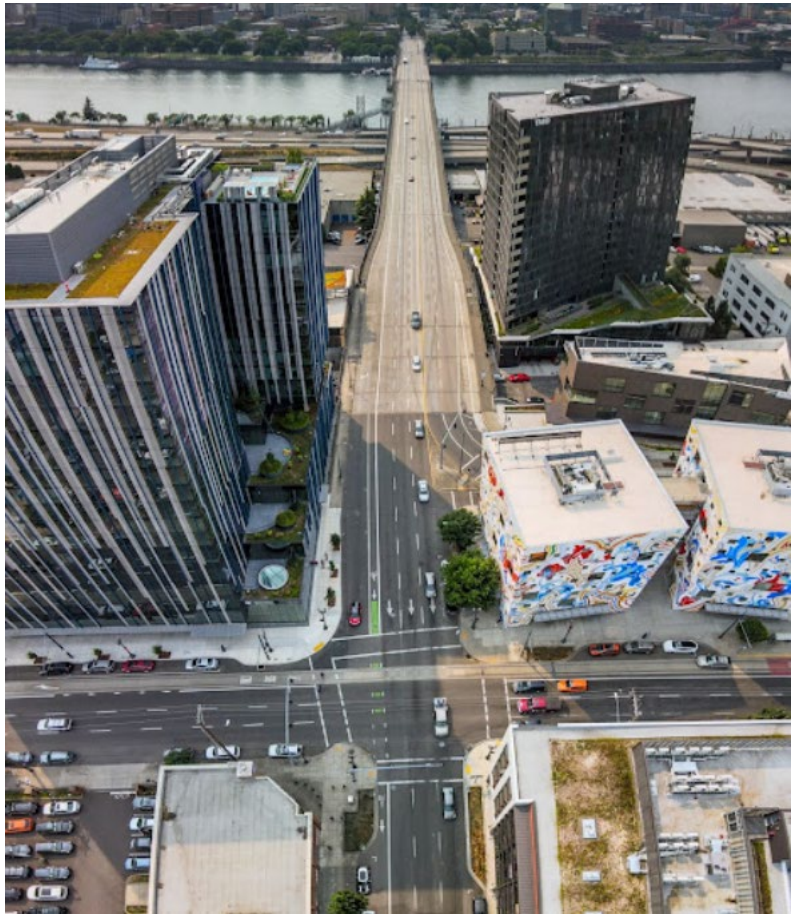


Image by Jonas Viehdorfer, 2022

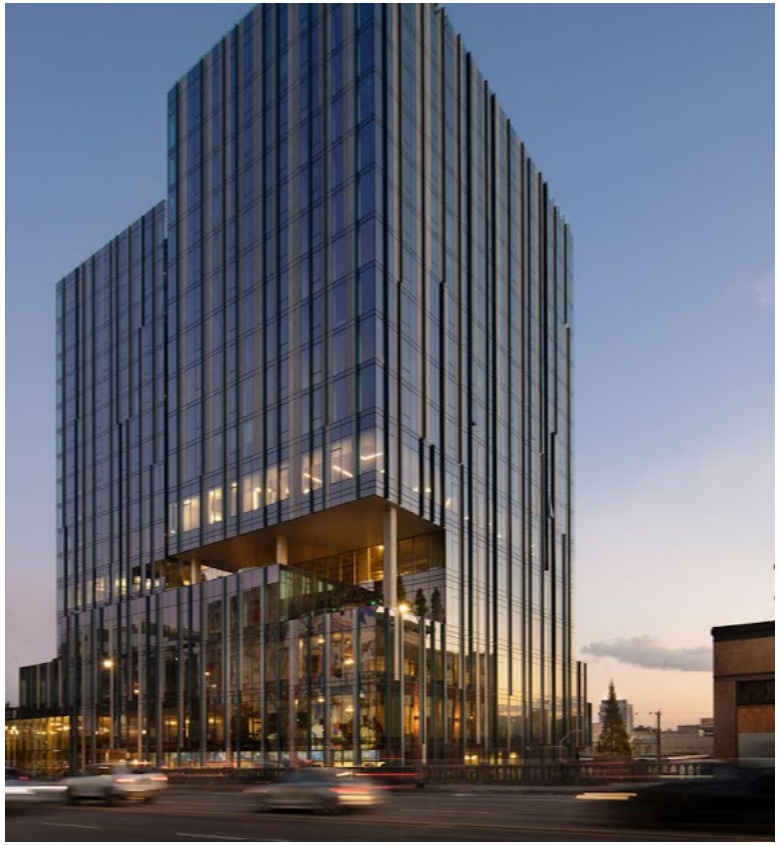
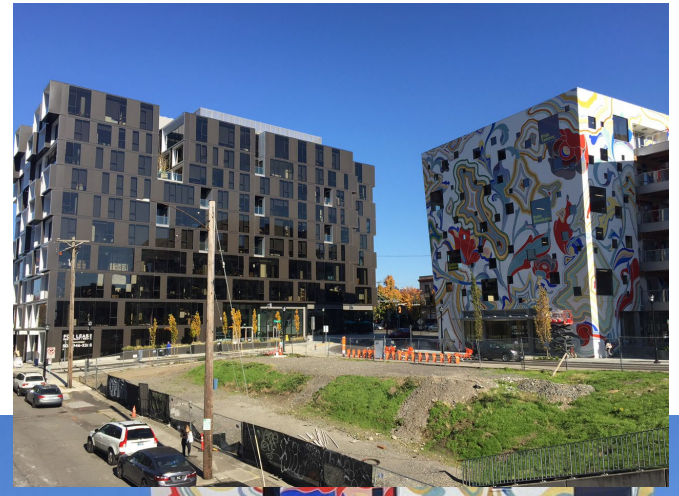
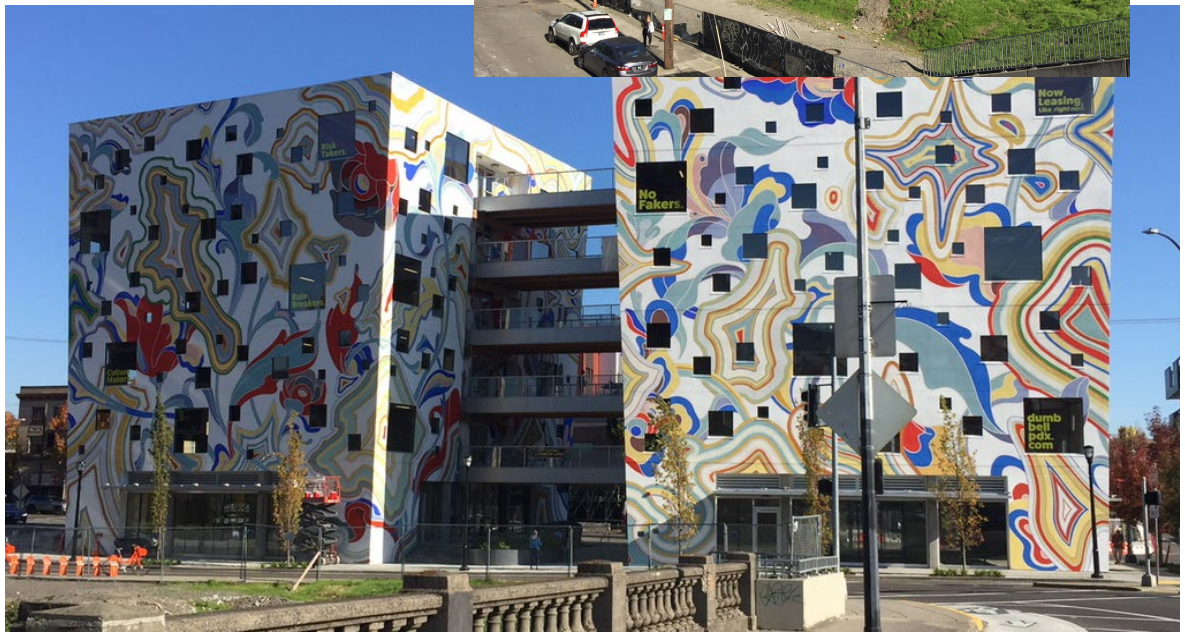


Image by 5 MLK

Project Area

18. Fair-haired Dumbbell Building

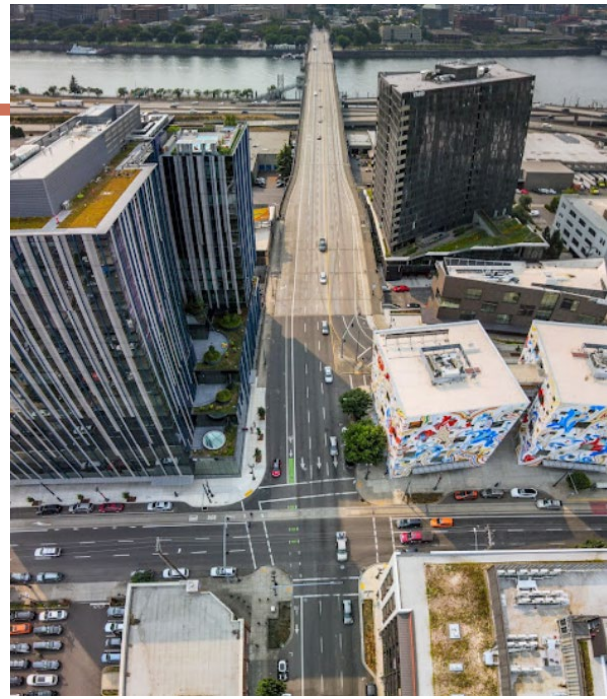




Project Area

19. Slate Building

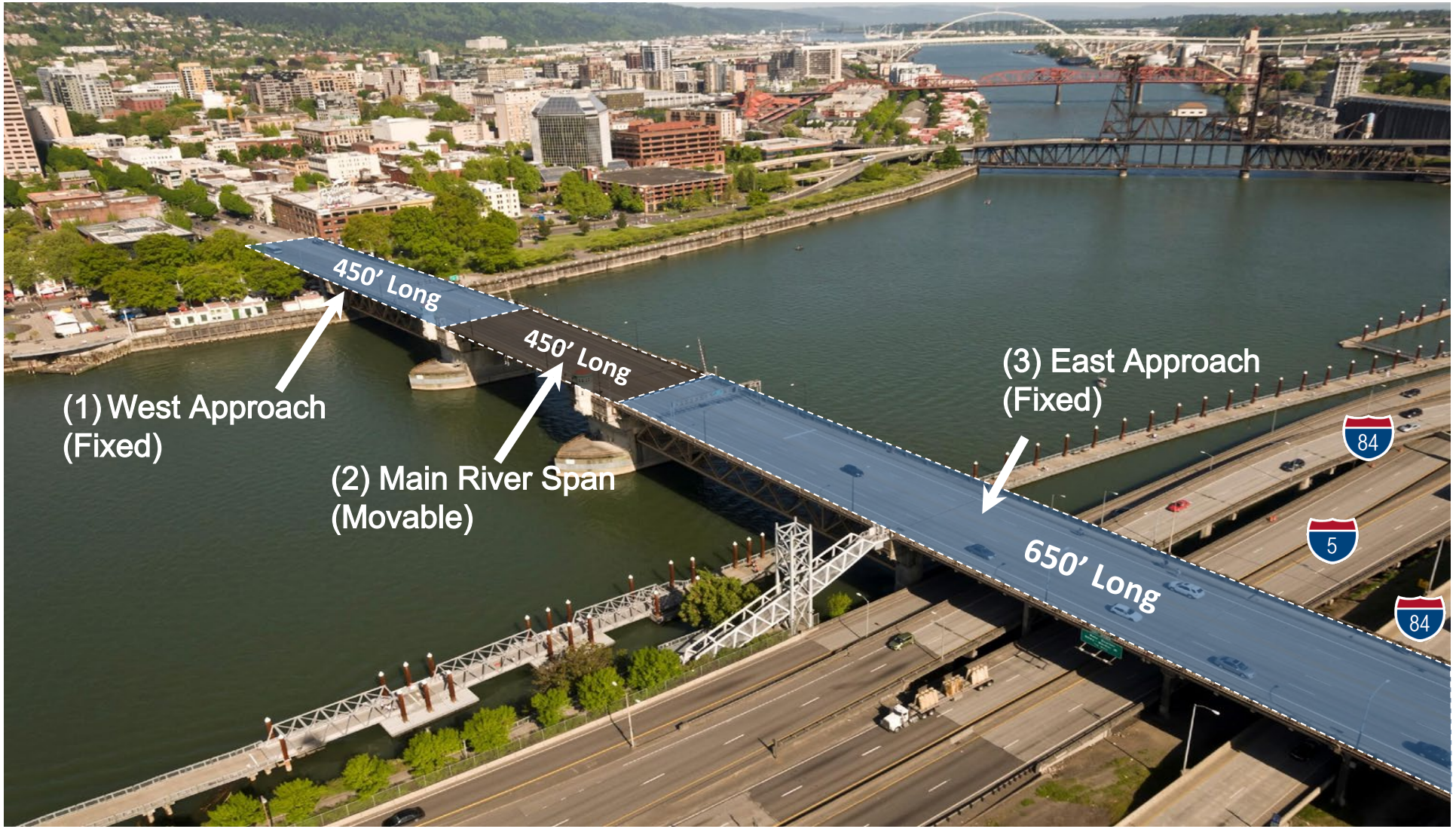
Project Area



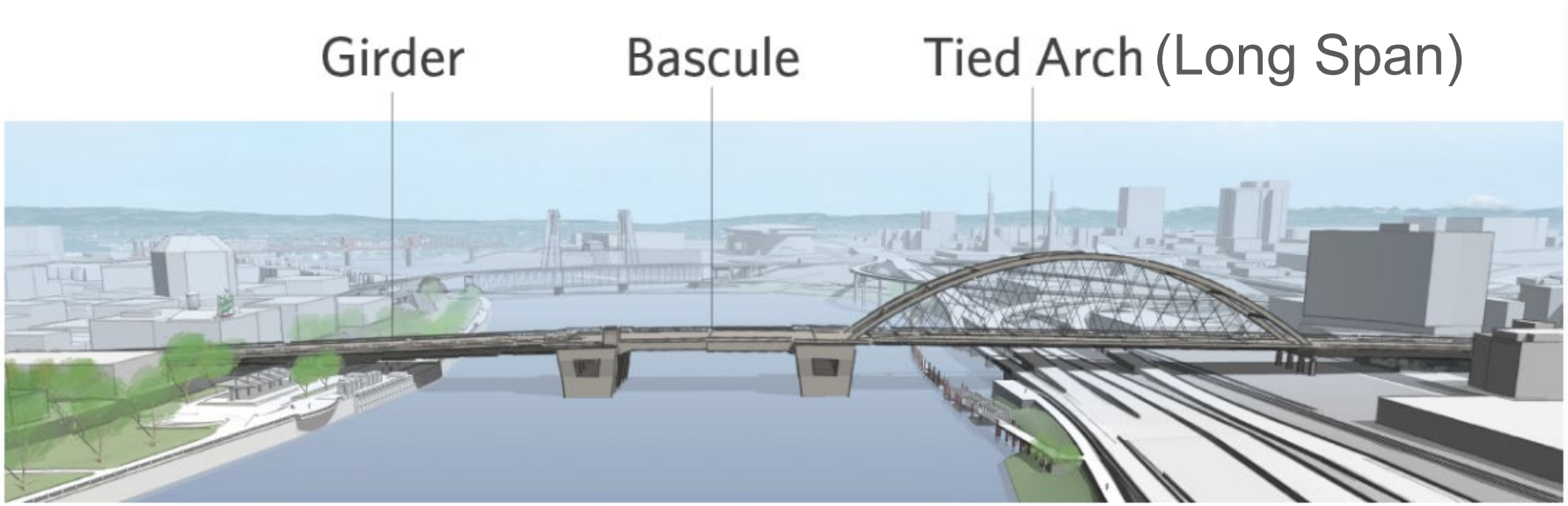
PREFERRED ALTERNATIVE

EARTHQUAKE READY BURNSIDE BRIDGE

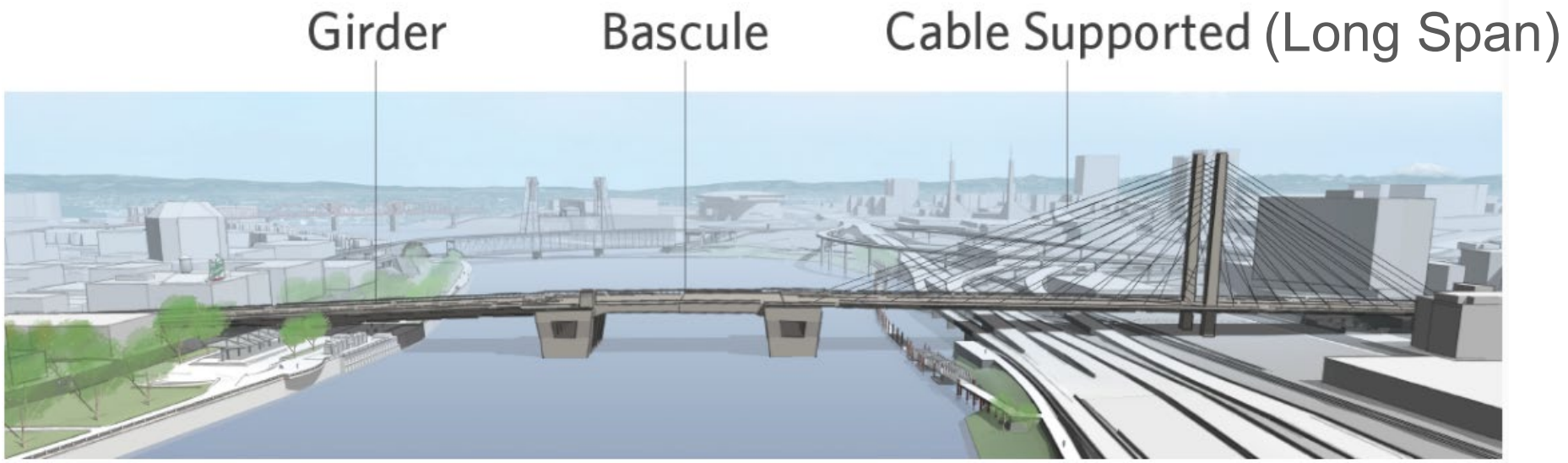
Preferred Alternative



Preferred Alternative



OR



Preferred Alternative

Bridge Types Considered for *West and East Approaches*

Tied Arch

Fremont Bridge

Cable Supported

Tilikum Bridge

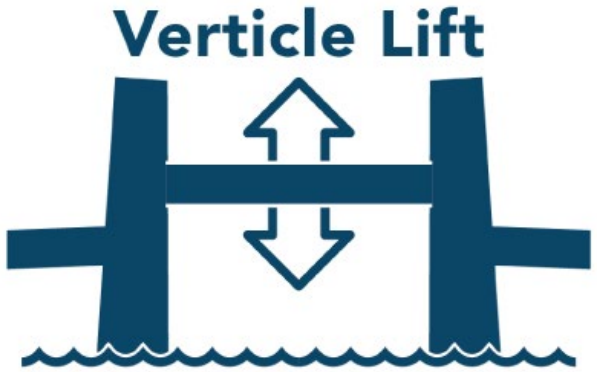
Truss

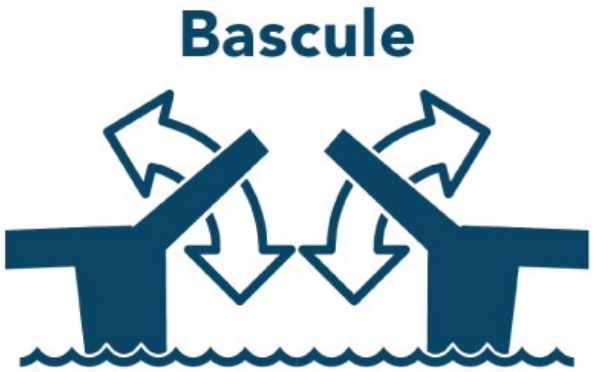
Hawthorne Bridge

Photo Credits: Tony Webster and TriMet

Preferred Alternative

Bridge Types Considered for *Movable Span*





Steel Bridge

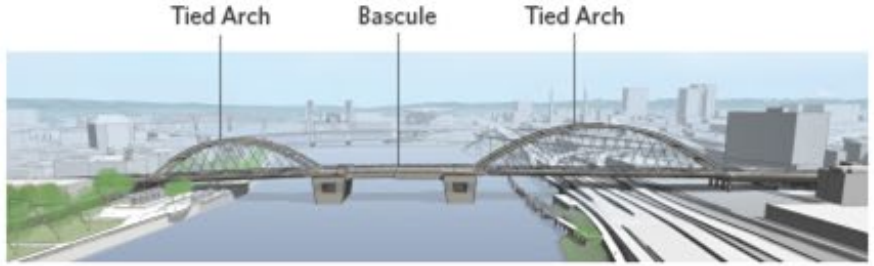
Burnside Bridge

Photo Credit: Chris Yunker

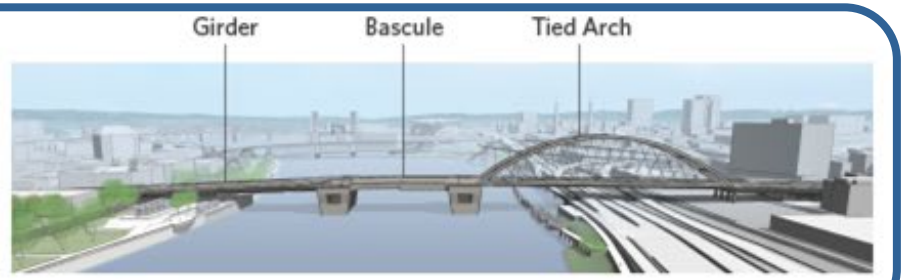
Bridge Types Considered

Option 1 – Tied Arch

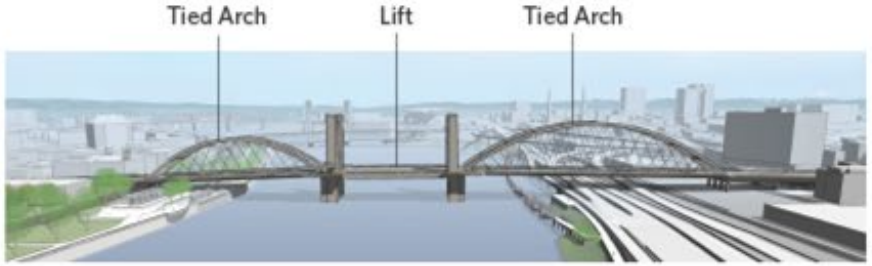
Option 1A
Tied Arch with Bascule



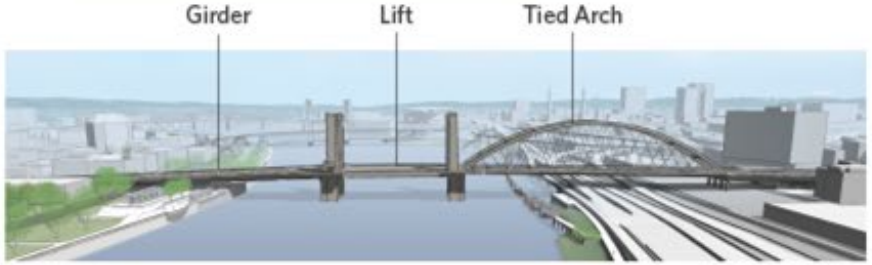
Option 1B
Tied Arch with Bascule and West Girder



Option 1C
Tied Arch with Lift



Option 1D
Tied Arch with Lift and West Girder

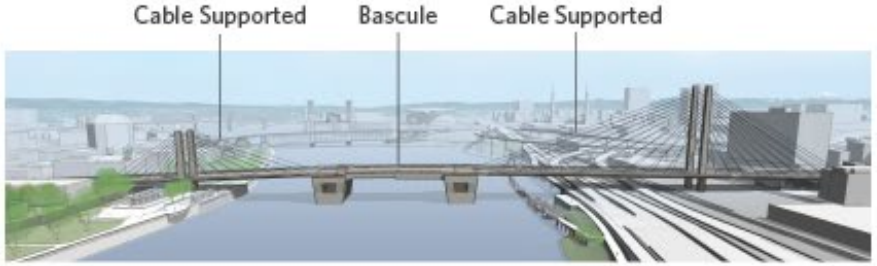


Images are diagrams only, not fully designed concepts

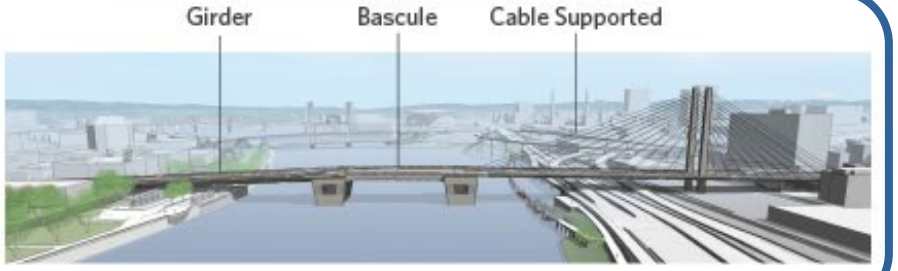
Bridge Types Considered

Option 2 – Cable Supported

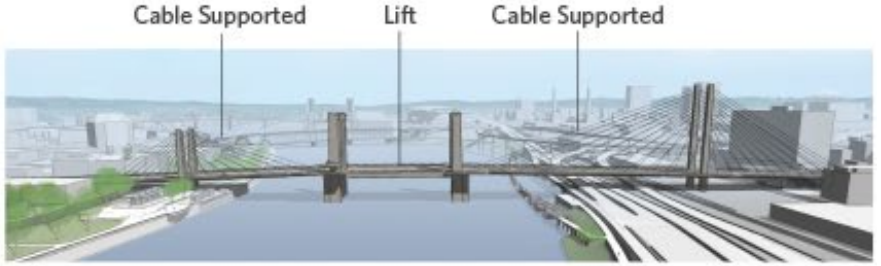
Option 2A
Cable Supported with Bascule



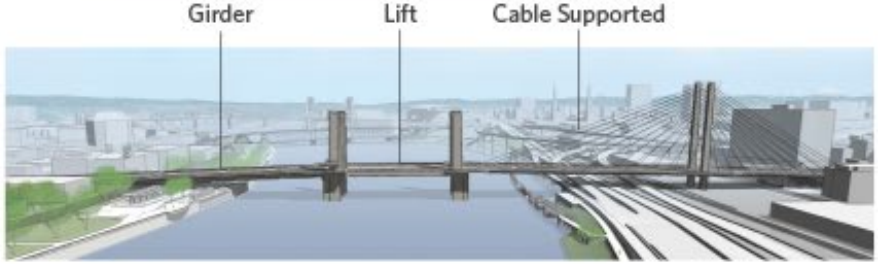
Option 2B
Cable Supported with Bascule and West Girder



Option 2C
Cable Supported with Lift



Option 2D
Cable Supported with Lift and West Girder

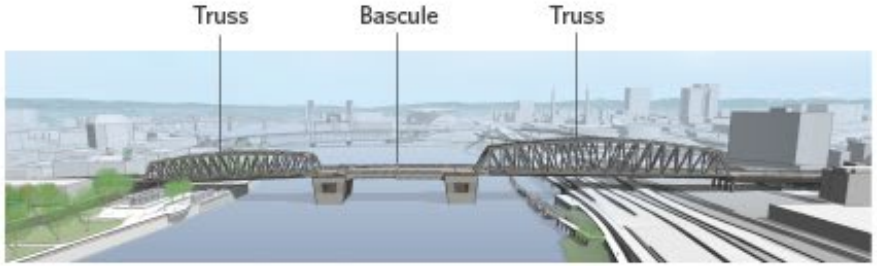


Images are diagrams only, not fully designed concepts

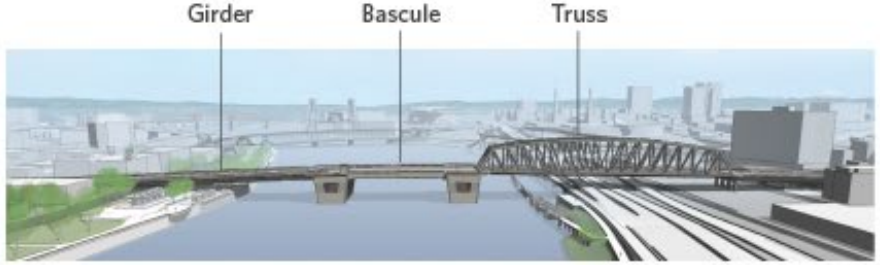
Bridge Types Considered

Option 3 – Truss

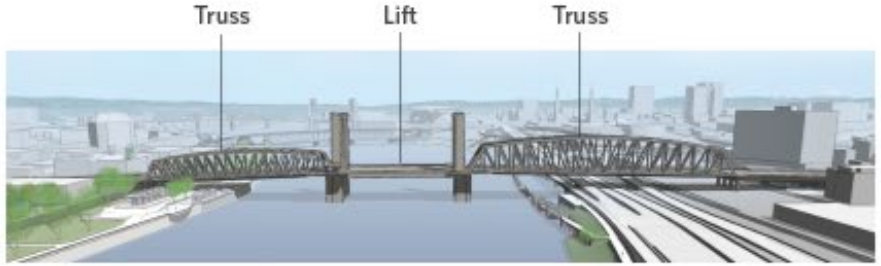
Option 3A
Truss with Bascule



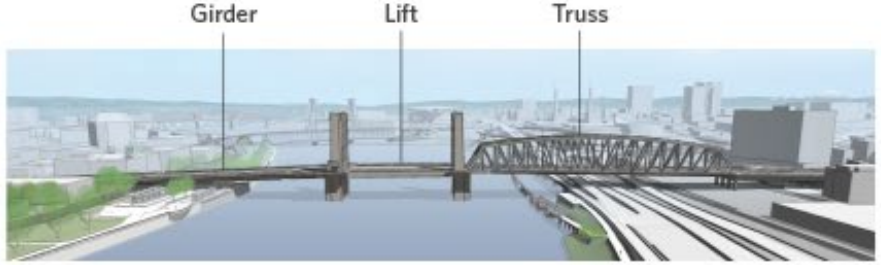
Option 3B
Truss with Bascule and West Girder



Option 3C
Truss with Lift



Option 3D
Truss with Lift and West Girder



Not Advanced

Images are diagrams only, not fully designed concepts

Preferred Alternative

Girder - Decision Rationale

Basis of Preferred Alt:

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

Preferred Alternative

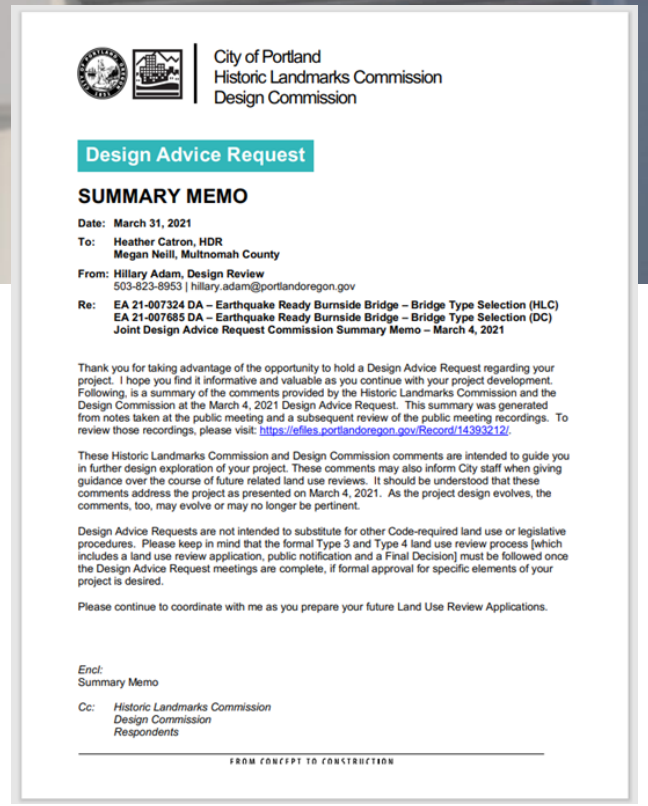
Girder - Permitting Requirements

National Parks Service / FHWA (Section 106 / Section 4(f) Requirements):

- Above deck elements in the West Approach create an **Adverse Effect on the Skidmore / Old Town Historic District that is avoided with a girder concept**

Historic Landmarks Commission / Design Commission:

- Due to visual impacts to historic districts, Girder-styled west approach option **best meets zoning code and historic guidelines**
- **Preference for "observable asymmetry"** due to distinct differences in urban fabric on west and east sides



City of Portland
Historic Landmarks Commission
Design Commission

Design Advice Request

SUMMARY MEMO

Date: March 31, 2021

To: Heather Catron, HDR
Megan Neill, Multnomah County

From: Hillary Adam, Design Review
503-823-8953 | hillary.adam@portlandoregon.gov

Re: EA 21-007324 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (HLC)
EA 21-007685 DA – Earthquake Ready Burnside Bridge – Bridge Type Selection (DC)
Joint Design Advice Request Commission Summary Memo – March 4, 2021

Thank you for taking advantage of the opportunity to hold a Design Advice Request regarding your project. I hope you find it informative and valuable as you continue with your project development. Following, is a summary of the comments provided by the Historic Landmarks Commission and the Design Commission at the March 4, 2021 Design Advice Request. This summary was generated from notes taken at the public meeting and a subsequent review of the public meeting recordings. To review those recordings, please visit: https://efiles.portlandoregon.gov/Record/14393212/.

These Historic Landmarks Commission and Design Commission comments are intended to guide you in further design exploration of your project. These comments may also inform City staff when giving guidance over the course of future related land use reviews. It should be understood that these comments address the project as presented on March 4, 2021. As the project design evolves, the comments, too, may evolve or may no longer be pertinent.

Design Advice Requests are not intended to substitute for other Code-required land use or legislative procedures. Please keep in mind that the formal Type 3 and Type 4 land use review process [which includes a land use review application, public notification and a Final Decision] must be followed once the Design Advice Request meetings are complete, if formal approval for specific elements of your project is desired.

Please continue to coordinate with me as you prepare your future Land Use Review Applications.

Encl:
Summary Memo

Cc: *Historic Landmarks Commission*
Design Commission
Respondents

FROM CONCEPT TO CONSTRUCTION

Preferred Alternative

Girder - Public Response

Support: 68% **Neutral: 24%** **Do Not Support: 8%**

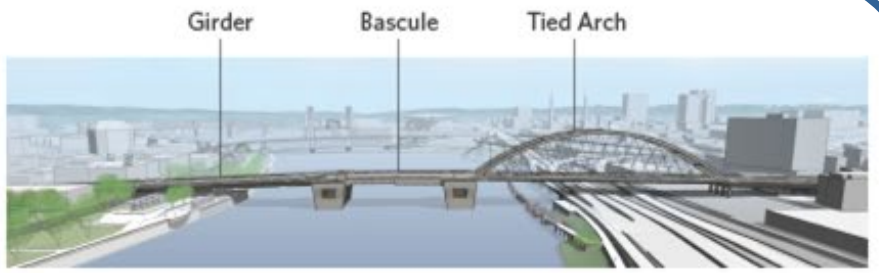
What we heard:

- Strong support for how girder option preserves views
- Support for girder to save cost
- Support for girder to retain similar look and feel of current bridge

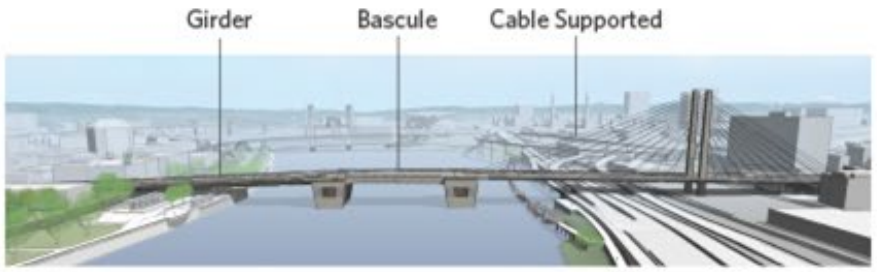
Preferred Alternative

Bascule

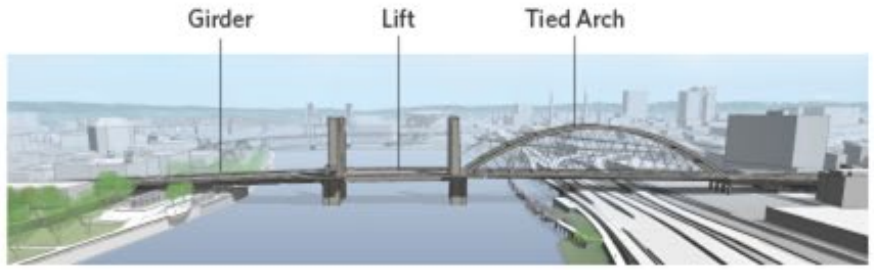
Option 1B
Tied Arch with Bascule and West Girder



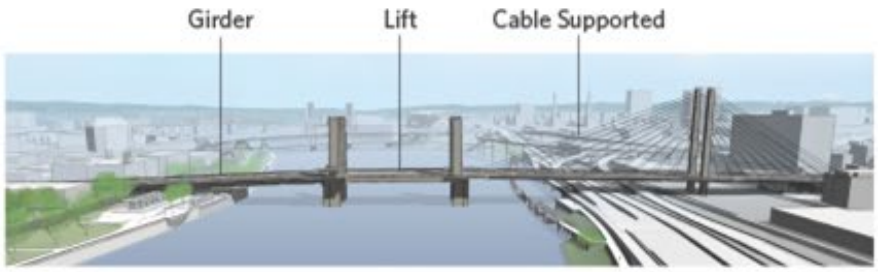
Option 2B
Cable Supported with Bascule and West Girder



Option 1D
Tied Arch with Lift and West Girder



Option 2D
Cable Supported with Lift and West Girder



Images are diagrams only, not fully designed concepts

Preferred Alternative

Basis of Preferred Alt:

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

Preferred Alternative

Bascule - Public Response

Support: 80% **Neutral: 17%** **Do Not Support: 3%**

What we heard:

- Strong preference for bascule design over vertical lift
- Strong interest in preserving open views
- Interest in saving project costs

Preferred Alternative

Replacement Long-span Bridge

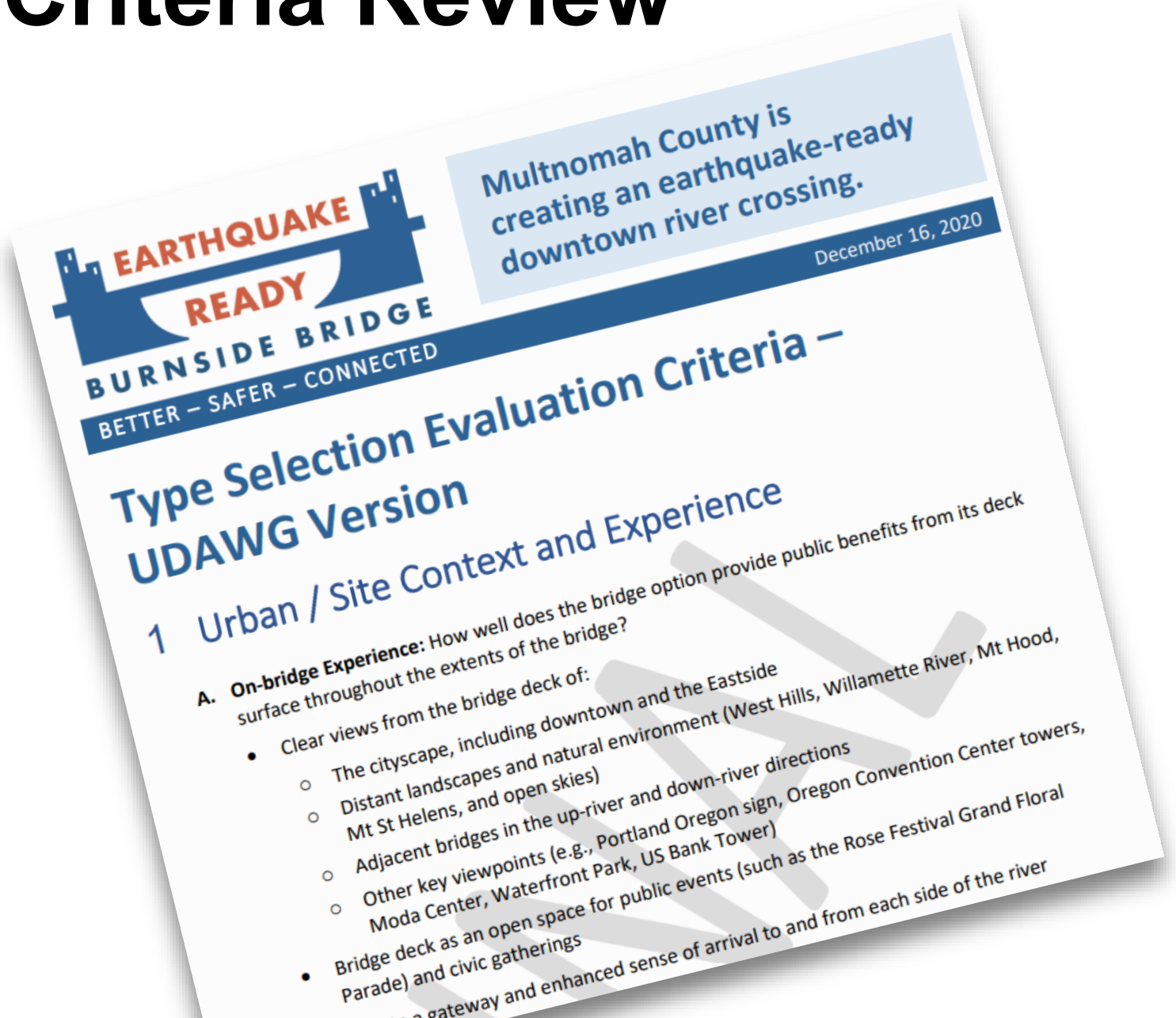
with Tied Arch for eastside long span

with Cable Supported for eastside long span

Draft Evaluation Criteria Review

EARTHQUAKE READY BURNSIDE BRIDGE

Draft Criteria Review



EARTHQUAKE READY BURNSIDE BRIDGE

BETTER – SAFER – CONNECTED

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

December 16, 2020

Type Selection Evaluation Criteria – UDAWG Version

1 Urban / Site Context and Experience

A. **On-bridge Experience:** How well does the bridge option provide public benefits from its deck surface throughout the extents of the bridge?

- Clear views from the bridge deck of:
  - 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 deck as an open space for public events (such as the Rose Festival Grand Floral Parade) and civic gatherings
- [illegible] gateway and enhanced sense of arrival to and from each side of the river

Draft Criteria Review

1. Urban / Site Context and Experience

A) On-bridge Experience

B) Below Bridge Experience

C) Urban Context with Surroundings

D) Pedestrian and Cyclist Connectivity

2. Visual and Aesthetics of the Bridge

A) Bridge Visual Coherence

B) Bridge Form and Style

C) Bridge Aspirations and Design Flexibility

3. Cost and Construction Impacts to Users

A) Total Project Cost

B) Long Term Costs

C) Construction Impacts

Draft Criteria Review

Urban / Site Context and Experience

1C. Urban Context with Surroundings: How well does the bridge option's **scale and form** respond to the scale and **character of surrounding neighborhoods**, buildings, parks, and historic districts while being distinctive?

Surroundings include:

- 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, scale, textures, and colors**
- 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**
- **Other bridges** up-river and down-river

Draft Criteria Review

Urban / Site Context and Experience

1B. Below-bridge Experience: How well does the bridge option respond to **public spaces, transportation, and land uses** within parks and natural environments under or adjacent to the bridge?

- Column locations that improve **personal safety** by providing adequate **sightlines and clearances** below the bridge
- Ability to further **activate and enhance the under-bridge space** within Waterfront Park for community events and other activities (e.g., Portland Saturday Market, Bridgetown Nightstrike, etc), including lighting, materials, and detailing
- Maximize the **open space and vertical clearance** to create an “urban roof” that enhances the under-bridge experience

Draft Criteria Review

Urban / Site Context and Experience

1B. Below-bridge Experience: How well does the bridge option respond to **public spaces, transportation, and land uses** within parks and natural environments under or adjacent to the bridge?

- Preserve the **integrity of park features** such as the Japanese American Historical Plaza, Ankeny Plaza, Bill Naito Legacy Fountain, Better Naito Forever, Vera Katz Eastbank Esplanade, Burnside Skatepark, and Tom McCall Waterfront Park and its existing trees
- Ability to enhance the **under-bridge space** at Skidmore Fountain Max Station, including lighting, materials, and detailing
- Visually open **connectivity with the river** in the space beneath the bridge

Draft Criteria Review

Urban / Site Context and Experience

1A. On-bridge Experience: How well does the bridge option provide **public benefits from its deck surface** throughout the extents of the bridge?

- Clear **views from the bridge deck** of: the cityscape, distant landscapes and natural environment, adjacent bridges up-river and down-river, and other key viewpoints (Portland Oregon sign, convention center towers, Moda Center, Waterfront park, US Bank Tower, etc)
- Bridge deck as **an open space for public events** (such as Rose Festival Grand Floral Parade) and civic gatherings
- Create a **gateway** and **enhanced sense of arrival** to and from each side of the river

Draft Criteria Review

Urban / Site Context and Experience

1A. On-bridge Experience: How well does the bridge option provide **public benefits from its deck surface** throughout the extents of the bridge?

These related elements are likely common to all options; not expected to differentiate one bridge type from another:

- Intuitive ability to understand **wayfinding**, mode split, location of **overlooks** and connections without excessive clutter that detracts from the bridge design
- Ability to provide river overlooks for users to **stop and enjoy** the adjacent scenery

Draft Criteria Review

Urban / Site Context and Experience

These related elements are likely common to all options; not expected to differentiate one bridge type from another:

1D. Pedestrian and Cyclist Connectivity: How well does the bridge ensure that safe and accessible pedestrian and bike connections will be made down to grade?

- This considers the:
  - Americans with Disabilities Act and Universal Design concepts
  - West bridge deck to Waterfront Park, Naito Parkway, SW/NW 1st and 2nd Avenues
  - East bridge deck to surrounding local streets and pedestrian open spaces, and the Vera Katz Eastbank

Draft Criteria Review

Visual and Aesthetics of the Bridge

2A. Bridge Visual Coherence: How well does the bridge option's composition create **visual balance, unity, and flow** from key viewpoints above, along, under, and away from the bridge?

This includes viewpoints from the:

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

Draft Criteria Review

Visual and Aesthetics of the Bridge

2B. Bridge Form and Style: How well does the bridge option **acknowledge the historic surroundings** while presenting a seismically-resilient, **contemporary design aesthetic** that sets the tone for future urban development and growth throughout its 100-year design life?

This includes the bridge's ability to:

- Balance the qualities of **openness and transparency** (i.e., minimizing the massing) while conveying a sense of seismic stability and reliability
- Ensure overall design **coherence of fixed and movable bridge spans**; reflecting proportions and scale that feel balanced amongst the various structural elements
- Reflect the **distinctive setting of each side of the river,** considering buildings, parks and infrastructure
- Reflect **best practices** in technologies, materials, engineering, and architectural design **that represent the era** in which the bridge is designed and constructed, including potentials for exposing/expressing the movable bridge mechanisms

Draft Criteria Review

Visual and Aesthetics of the Bridge

2B. Bridge Form and Style: How well does the bridge option **acknowledge the historic surroundings** while presenting a seismically-resilient, **contemporary design aesthetic** that sets the tone for future urban development and growth throughout its 100-year design life?

This includes the bridge's ability to:

- Honor Portland's moniker as a **"City of Bridges"** and the bridge's unique location at the center of the City quadrants
- Provide opportunity for memorable, **distinctive lighting** for nighttime viewing while **adhering to "dark skies" principles**
- Ensure the bridge pier's **massing and scale is proportional to the river**; minimizing its overall "touch" and impact in light of its location in the bend of the river

Draft Criteria Review

Visual and Aesthetics of the Bridge

2B. Bridge Form and Style: How well does the bridge option **acknowledge the historic surroundings** while presenting a seismically-resilient, **contemporary design aesthetic** that sets the tone for future urban development and growth throughout its 100-year design life?

This related element is common to all options; not expected to differentiate one bridge type from another:

- Reflect Portland's transportation values of **bicycle and pedestrian safety and accessibility**

Draft Criteria Review

Visual and Aesthetics of the Bridge

2C. Bridge Aspirations and Design Flexibility: How well does the bridge option allow **flexibility** for engineering and architectural features, as well as **adaptability** of the bridge **for future user needs**?

This includes the bridge's potential to:

- Express **Portland values and aspirations** for inclusiveness, resiliency, accessibility, creative expression, vitality, and sustainability
- Become an **identifiable beacon of safety; a landmark and destination** within the city during the day and after dark
- Convey a sense of being in **the center of the city,** at the intersection of north and south, east and west quadrants

Draft Criteria Review

Visual and Aesthetics of the Bridge

2C. Bridge Aspirations and Design Flexibility: How well does the bridge option allow flexibility for engineering and architectural features, as well as adaptability of the bridge for future user needs?

This includes the bridge's potential to:

- Provide tactile, **human-scale features** with close proximity of pedestrian views and touch, including overlooks
- Enable a wide range of **complementary secondary design features** that are cohesive with the overall bridge design (e.g., operator's house, multi-use path connections, streetcar elements, overlooks, etc.)
- Accommodate varied river uses and water-level changes
- Minimize **effects on natural resources** such as wildlife, fisheries, and shoreline / shallow-water habitat

Draft Criteria Review

Visual and Aesthetics of the Bridge

2C. Bridge Aspirations and Design Flexibility: How well does the bridge option allow flexibility for engineering and architectural features, as well as adaptability of the bridge for future user needs?

These related elements that are likely common to all options; not expected to be differentiating one bridge type from another:

- Reduce **noise impacts** to bridge users generated by on-bridge and adjacent freeway traffic
- Implement **sustainable and equitable design principles** during the Final Design phase

Draft Criteria Review

Cost and Construction Impacts to Users

3A. Total Project Cost: How well does the bridge option minimize the Project's total direct cost?

This includes:

- Construction costs, including the influence of constructability over and around existing transportation infrastructure, the Willamette River, adjacent 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

Draft Criteria Review

Cost and Construction Impacts to Users

3B. Long Term Costs: How well does the bridge option support post-construction needs while minimizing long-term costs?

This includes reducing the:

- Direct cost of bridge operations and inspections
- Direct cost for routine maintenance and rehabilitation improvements (e.g., movable bridge repairs, deck wearing surface rehabilitation, re-painting, lighting maintenance, structural upgrades, etc)
- Direct costs for 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 equipment, systems, and armatures onto the bridge; adding more bicycle/pedestrian space; adjusting for future lane uses; etc)

Draft Criteria Review

Cost and Construction Impacts to Users

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

This includes, during construction, minimizing:

- Detour durations for bridge users
- Detour durations for bicyclists and pedestrians using Waterfront Park and the Vera Katz Eastbank Esplanade
- Temporary property impacts
- Utility service disruptions

PUBLIC COMMENT

Public Comment

- State your first and last name
- Speak clearly and concisely
- Limit your comment to three minutes

If you have questions that you would like a response to, please submit them to burnsidebridge@multco.us

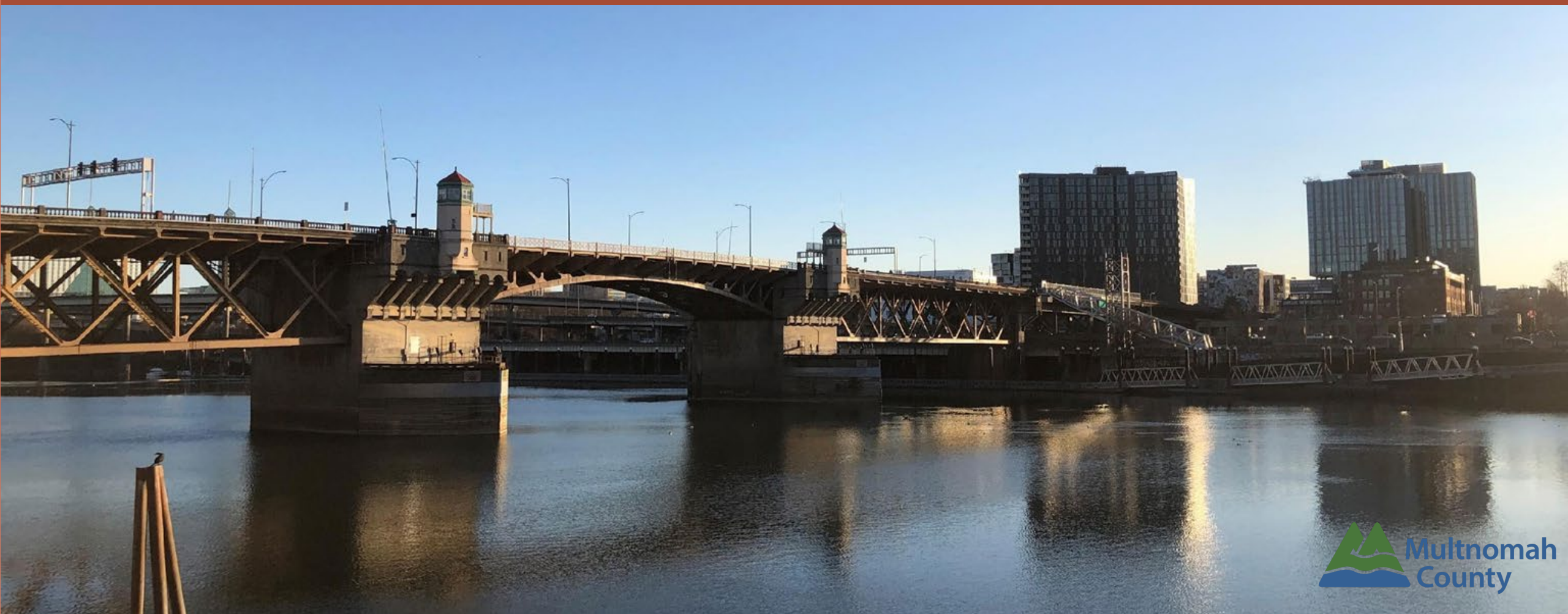
Next Steps & Closing Remarks

- **Upcoming CDAG Meetings:**
  - Thursday, November 16, 6-8 p.m. (in-person)
  - Additional Meeting (as needed): December or January, TBD
- **Homework**
  - Criteria Review - come to next meeting with ideas about criteria refinements
  - Reminder: Complete the Advisory Board Training video by the next meeting

EARTHQUAKE READY

BURNSIDE BRIDGE

Thank you!



Multnomah County