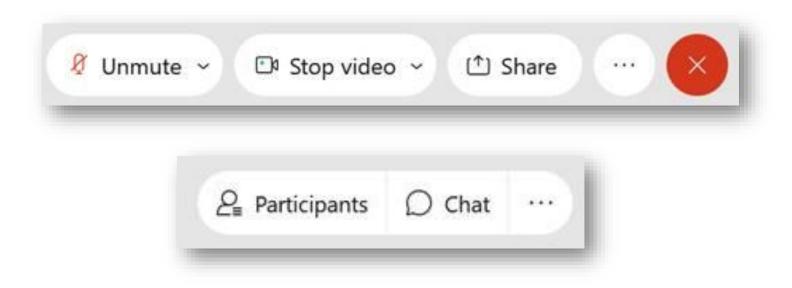


December 21, 2020

### **Meeting Protocols**



#### Using WebEx participation features



For WebEx tech support call or email Liz Stoppelmann: (916) 200-5123
Liz.Stoppelmann@hdrinc.com



### **Agenda**



- Welcome, Introductions & Housekeeping
- 2. Public Comment
- 3. Project Update
- 4. Review & Confirm Criteria Topics and Descriptions
- 5. Review & Confirm Range of Bridge Types
- 6. Public Outreach
- 7. Open Discussion
- 8. Next Steps





#### Introductions and Roll Call



#### **Community Task Force**

- Amy Rathfelder, Portland Business Alliance
- Art Graves, Multnomah County Bike and Pedestrian Citizen Advisory Committee
- Dennis Corwin, Portland Spirit
- Ed Wortman, Community Member
- Frederick Cooper, Laurelhurst Neighborhood Emergency Team and Laurelhurst Neighborhood Association
- Gabe Rahe, Burnside Skate Park
- Howie Bierbaum, Portland Saturday Market
- Jackie Tate, Community Member
- Jane Gordon, University of Oregon
- Jennifer Stein, Central City Concern
- Marie Dodds, AAA of Oregon
- Neil Jensen, Gresham Area Chamber of Commerce

- Paul Leitman, Oregon Walks
- Peter Englander, Old Town Community Association
- Peter Finley Fry, Central Eastside Industrial Council
- Sharon Wood Wortman, Community Member
- Stella Funk Butler, Coalition of Gresham Neighborhood Associations
- Susan Lindsay, Buckman Community Association
- Tesia Eisenberg, Mercy Corps
- William Burgel, Portland Freight Advisory Committee



### **Public Comment**







# **Bridge Type Selection Phase**



#### **Working Groups to support the CTF**

Urban Design	&
Aesthetics	

- Aesthetic / Urban Design insights per bridge type
- Recommendation on type selection evaluation criteria

Jan 2021

Bridge & Seismic

- Technical bridge design differentiators
- Seismic performance findings

**Early 2021** 

Constructability

- Construction methods and durations
- Range of potential impacts

Jan 2021

Natural Resources

• Impacts to natural resources

Mar 2021

Diversity, Equity & Inclusion

Bridge option impacts to DEI principles

Jan 2021

Multi-Modal

 Technical input on the bridge uses, typical sections, and connections to the existing multi- modal networks

Jan 2021

Historic/Cultural Resources

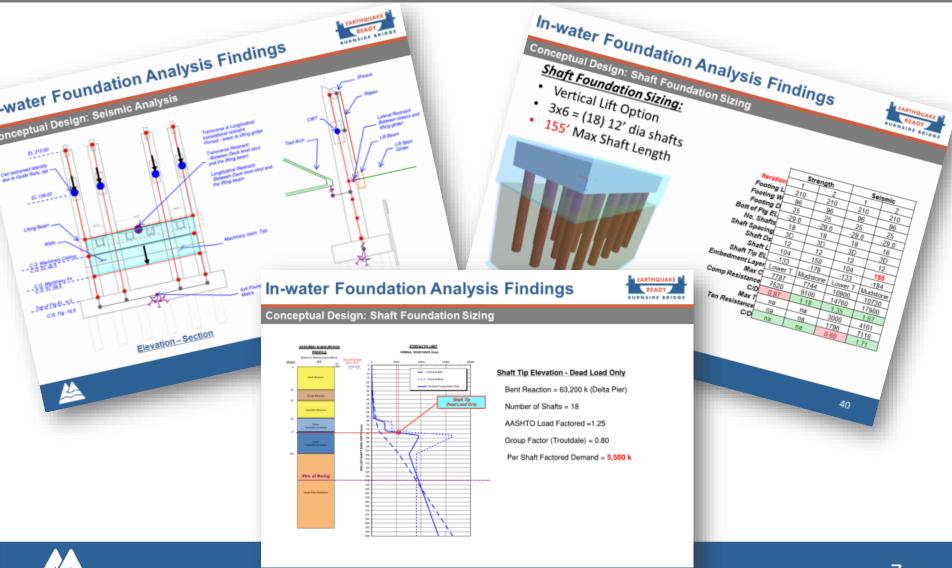
• Impacts to historic and cultural resources

Jan 2021





#### **Bridge Seismic Working Group**

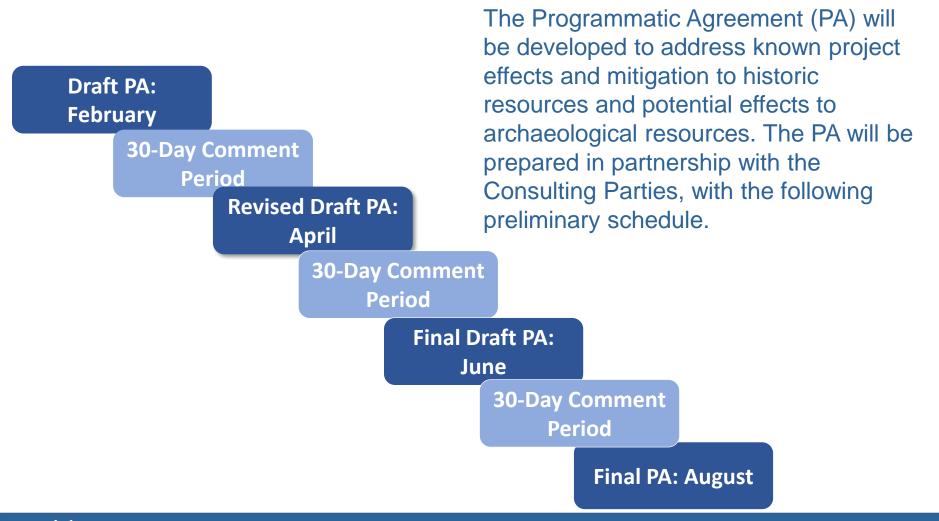








#### Historic and Cultural Resources – Formal Section 106 Process







#### **Historic and Cultural Resources – Exploring Potential Mitigation**

#### **Potential Mitigation Ideas**

- Adaptations to bridge design
- Incorporation of public art
- Use of historic bridge components in the new design or area
- Update Historic American Engineering Record (HAER)
- Oral history project
- Interpretive panels
- Support historic documentation efforts of local repositories
- Online encyclopedia submissions
- Creation of a museum exhibit
- Documentation of Willamette River crossings







#### Getting ready to publish the Draft Environmental Impact Statement in January 2021

#### **Technical Reports**

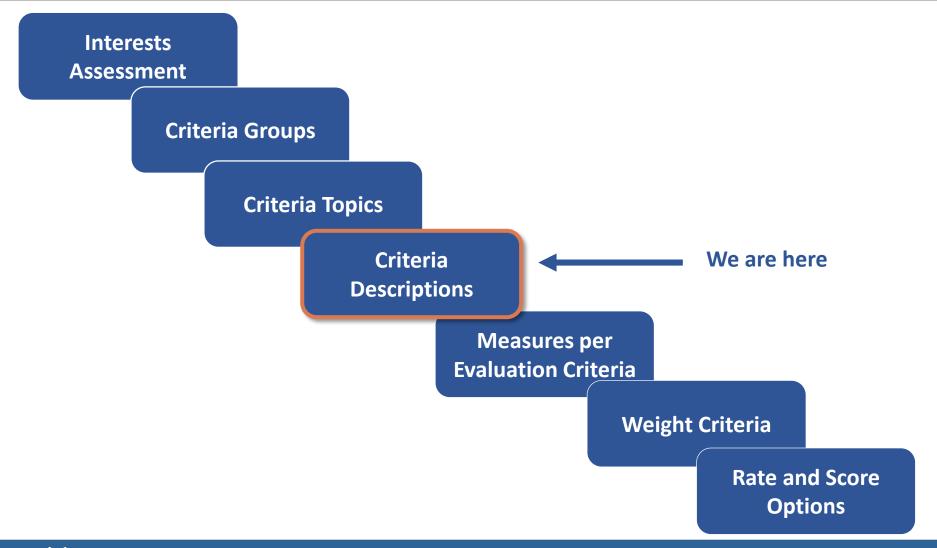
- Acquisitions and Relocations
- Air Quality
- Climate Change\*
- Economics
- Environmental Justice and Equity\*
- Floodplain and River Hydraulics
- Geology
- Hazardous Materials
- Health Impact Assessment\*
- Historic and Archaeological Resources
- Land Use
- Noise and Vibration

- Parks and Recreation
- Public Services
- River Navigation
- Social and Neighborhood Resources
- Transportation
- Utilities
- Vegetation, Wildlife, and Aquatic Resources
- Visual and Aesthetic Resources
- Water Quality
- Wetlands and Waters





Evaluation Process - Steps in Getting to a Recommended Bridge Type







#### **Refined Criteria Topics for Review**

Human Experience & Bridge Surroundings	On-bridge Experience
	Below-bridge Experience
	Relation to Surroundings
	Pedestrian and Cyclist Connectivity
Overall Look & Feel of the Bridge	Bridge Overall Look
	Bridge Form and Style
	Flexible Design
Cost & Construction Impacts to Users	Total Project Cost
	Long Term Costs
	Construction Impacts





#### Refined Criteria Topics and Definitions for Review

#### 1. Human Experience & Bridge Surroundings

- **A. On-bridge Experience:** How well does the option provide benefits to people when they are on the bridge?
- **B. Below-bridge Experience:** How well does the option provide benefits to people when they are under the bridge (in areas such as parks, roads, the river)?
- **C. Relation to Surroundings:** How well does the option's scale and form complement the character of surrounding neighborhoods, buildings, parks and historic districts/structures while being distinctive?
- **D. Pedestrian and Cyclist Connectivity**: How well does the option ensure safe and accessible connections on and off the bridge for people walking, biking or with disabilities?

(Note: likely common to all options; not expected to be differentiating.)





#### Refined Criteria Topics and Definitions for Review

#### 2. Overall Look & Feel of the Bridge

- **A. Bridge Overall Look:** How well does the option's overall form create a look of balance, unity, and flow from key viewpoints above, under, and away from the bridge?
- **B. Bridge Form and Style:** How well does the option acknowledge the historic surroundings while presenting a seismically-resilient, modern design that sets the tone for future development throughout its 100-year design life?
- **C. Flexible Design:** How well does the option allow flexibility for engineering and architectural features in final design, as well as adaptability of the bridge for future user needs?





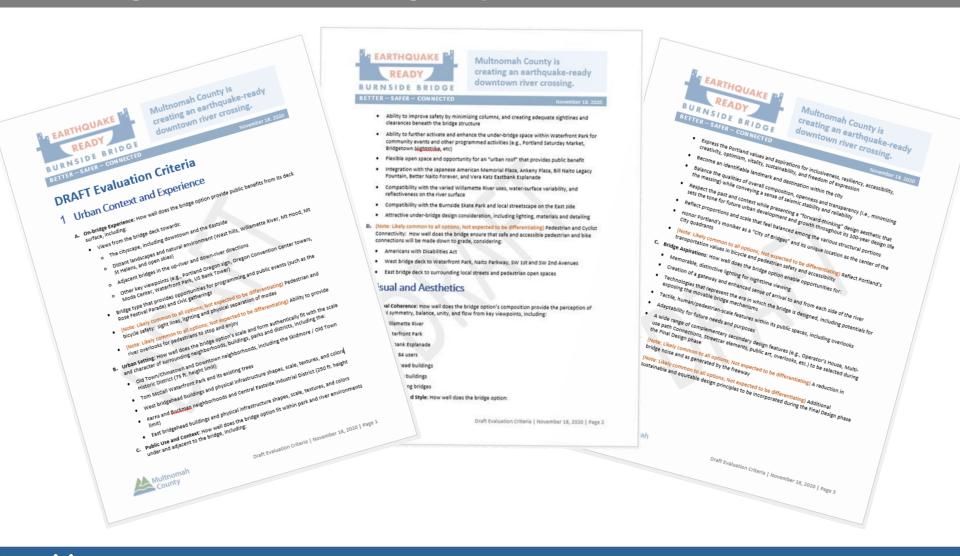
#### Refined Criteria Topics and Definitions for Review

- 3. Cost and Construction Impacts to Users
- A. Total Project Cost: How well does the option minimize the Project's total cost?
- **B. Long Term Costs:** How well does the option minimize long-term costs and support future needs after construction?
- **C. Construction Impacts:** How well does the option minimize impacts to the traveling public and surrounding property owners and tenants during construction?





Urban Design and Aesthetics Working Group - Evaluation Criteria Recommendations









# **Discussion / Recommendation**







# Do you recommend these criteria topics?



#### **CTF** Recommendation



#### **Voting Procedure**



Thumb Up = Support Recommendation



Middle Thumb = I Can Live With Recommendation



Thumb Down = Do Not Support Recommendation





Long-span Alternative: "Three bridges in one"





**Long Span** 

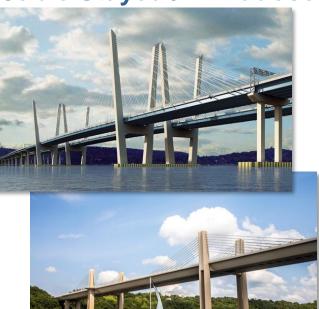
#### **Tied Arch**



**Truss** 



**Cable Stayed / Extradosed** 











**Movable Span** 

#### Lift



#### **Bascule**







**Tied Arch** 





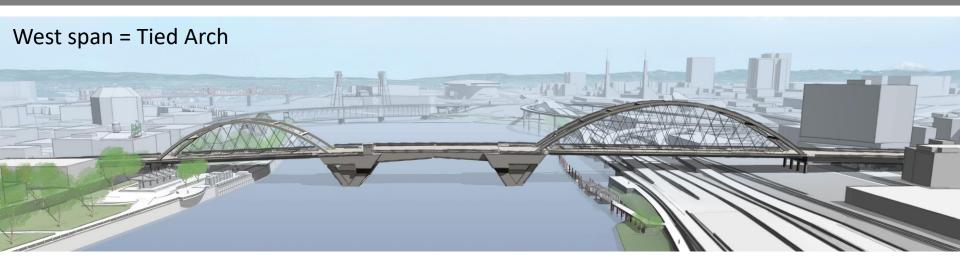


**Tied Arch Variations Lift Options Bascule Options** 





#### **Tied Arch + Bascule Variations**









#### **Tied Arch + Lift Variations**





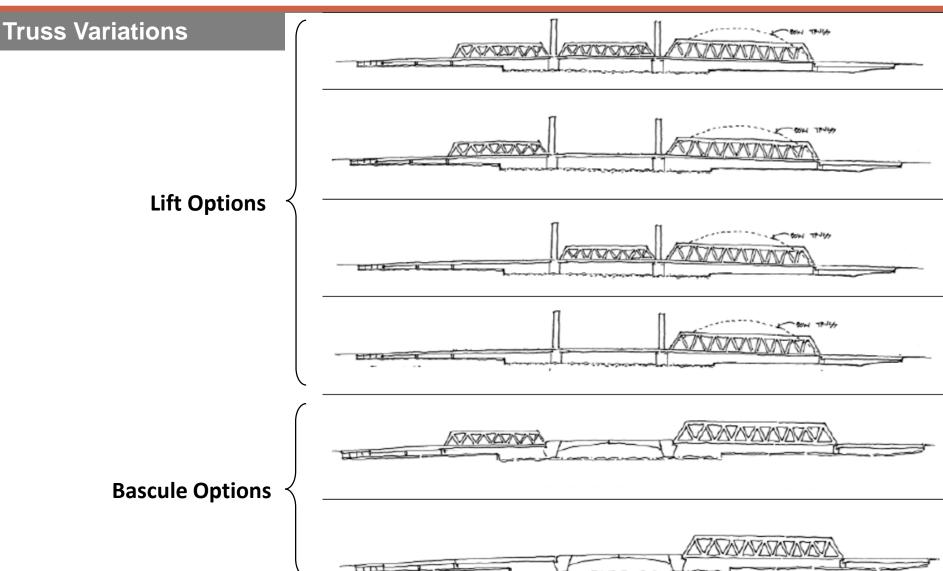




#### Truss



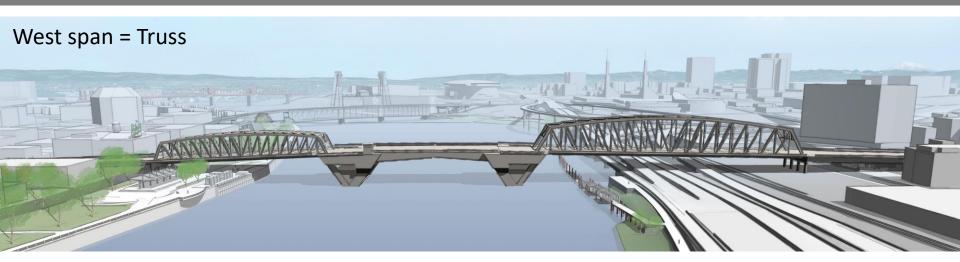


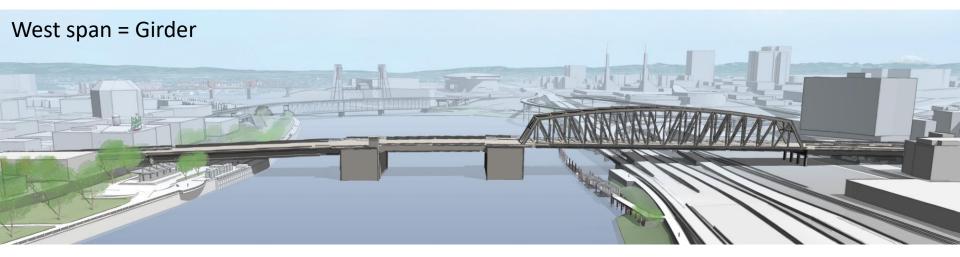






#### **Truss + Bascule Variations**







# Range of Feasible Bridge Types



#### **Truss + Lift Variations**

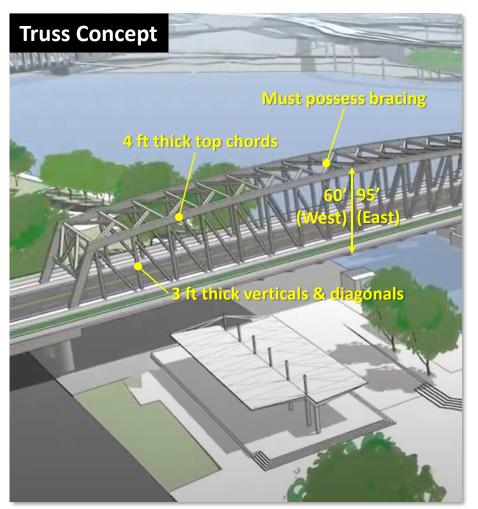


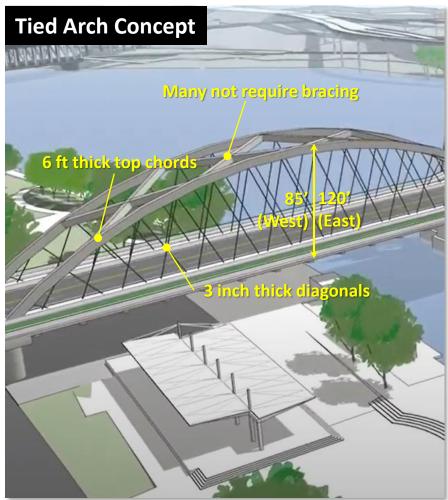






#### **Truss comparison with Tied Arch**







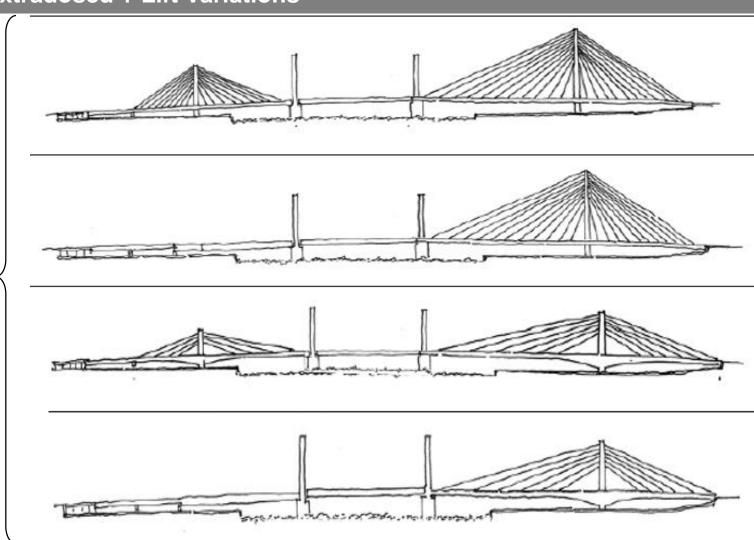


#### **Cable Stayed / Extradosed**





#### **Cable Stayed / Extradosed + Lift Variations**

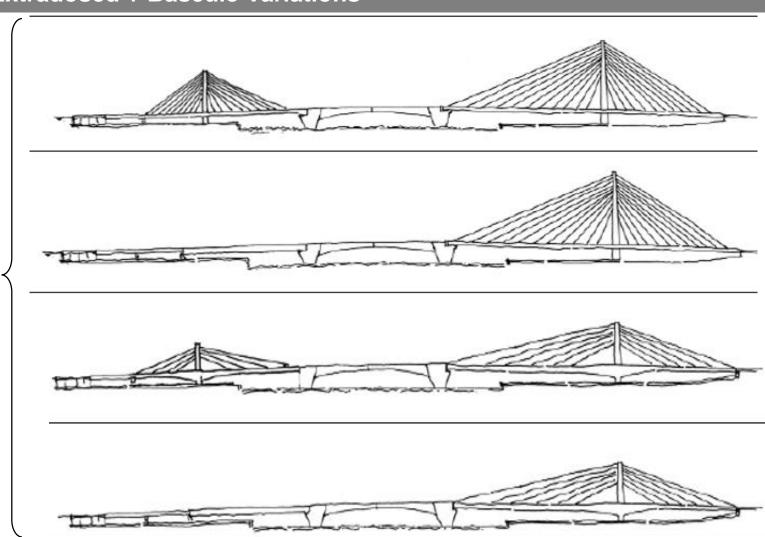


Lift Options





#### **Cable Stayed / Extradosed + Bascule Variations**



Bascule Options





#### Cable Stayed / Extradosed – Bascule Variations

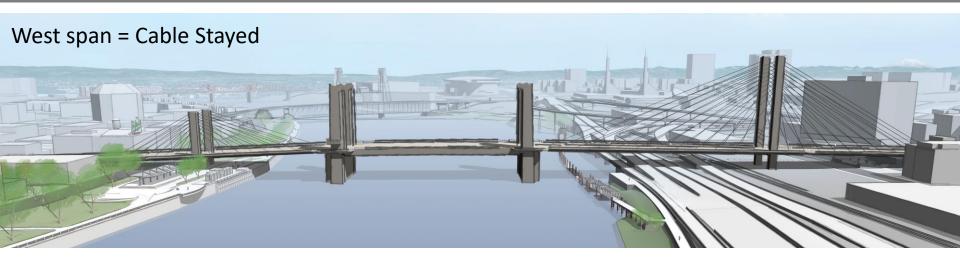


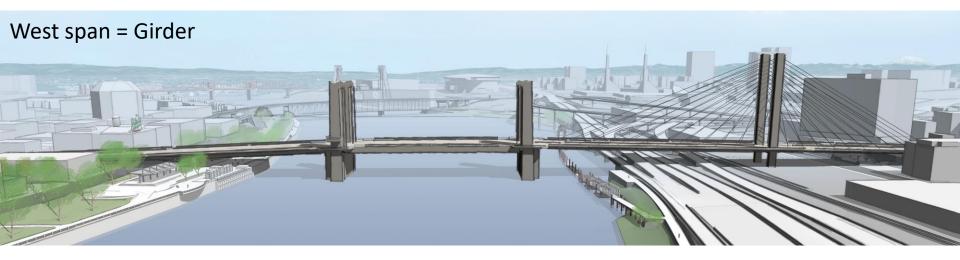






#### "Balanced" Cable Stayed / Extradosed – Lift Variations

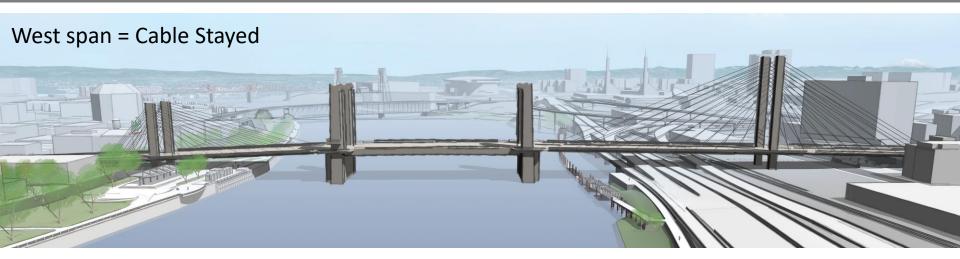


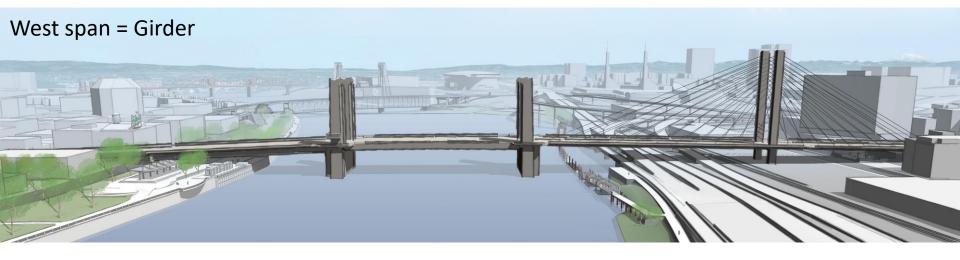






## "Unbalanced" Cable Stayed / Extradosed – Lift Variations









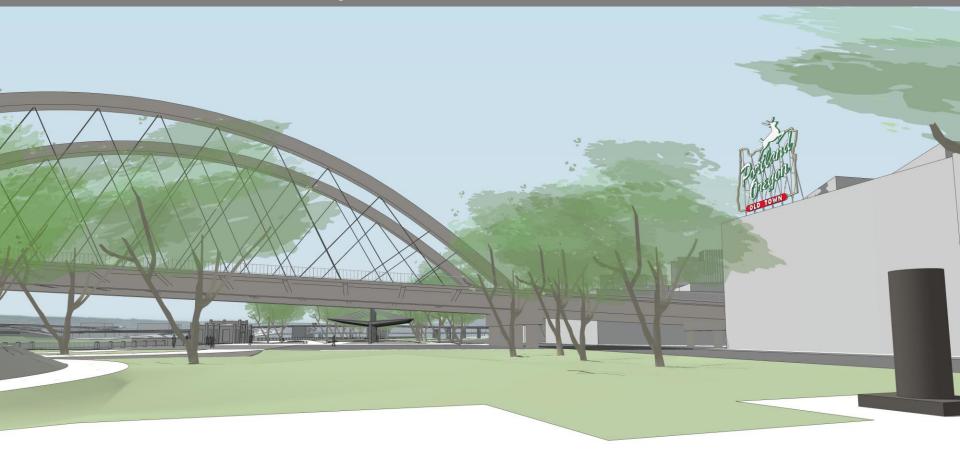
**Waterfront Park: Existing Condition** 







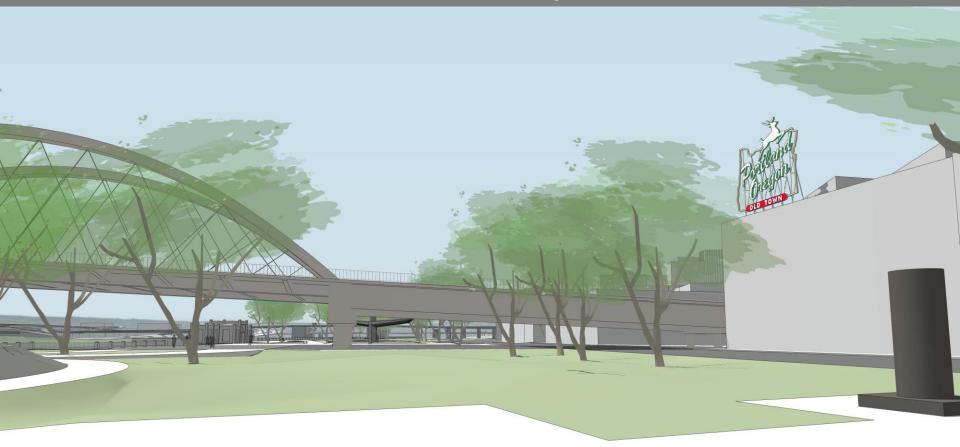
**Waterfront Park: Tied Arch Option** 







Waterfront Park: "Shorter" Tied Arch + Girder Option







Waterfront Park: "Balanced" Cable Stayed Option







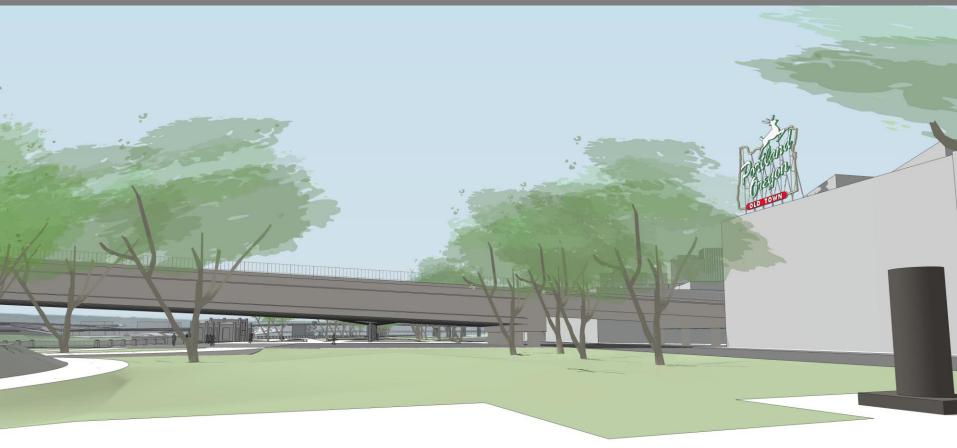
Waterfront Park: "Unbalanced" Cable Stayed Option







Waterfront Park: "Longer" Girder Option







Waterfront Park: "Shorter" Girder Option







## **Waterfront Park: Range of Options**





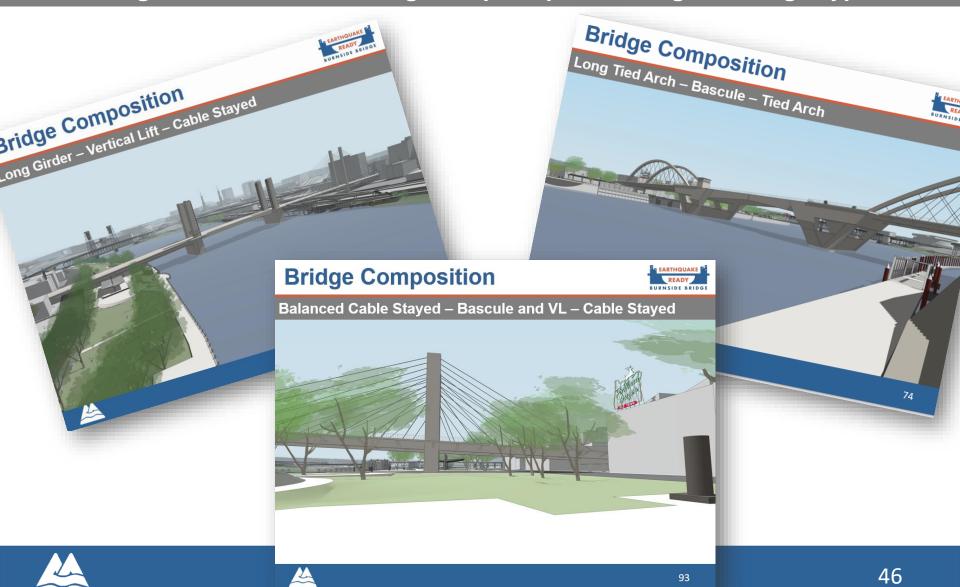








**Urban Design & Aesthetics Working Group – Input on Range of Bridge Types** 





**Long Span** 

#### **Tied Arch**

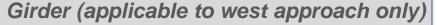


**Truss** 



**Cable Stayed / Extradosed** 











**Movable Span** 

## Lift



## **Bascule**









# **Discussion / Recommendation**







# Is this the right range of bridge types to move forward?



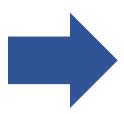
## **CTF** Recommendation



## **Voting Procedure**



Thumb Up = Support Recommendation



Middle Thumb = I Can Live With Recommendation



Thumb Down = Do Not Support Recommendation







# Community Outreach January/February 2021



## Outreach: Bridge Type Selection





**Objective:** Gather input on range of bridge types and evaluation topics

## **Key Activities:**

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



## Outreach: Draft Environmental Impact Statement





**Objective:** Share findings of the environmental analysis and allow for public review and comment on the DEIS

## **Key Activities:**

- Briefings
- Online open house
- In-person hearing
- Voicemail
- E-newsletters, news releases and social media



## **Next Steps**



## **Upcoming CTF Meetings**

## January 25:

Refine criteria and measures

#### March 1:

- Review community input on range of bridge types and evaluation criteria topics
- Weight criteria

#### March 22:

Review and discuss evaluation screening results

## April 5:

Work towards bridge type recommendation

## April 26:

Make bridge type recommendation for community review

#### • June 21:

Review community feedback and make final recommendation to Policy Group







# **Open Discussion**



# **Closing Remarks**



Thank you!

