



Policy Group – Meeting 1
May 2, 2017

Agenda

- Introductions
- Charter
- Project Overview
- Alternatives Development
- Screening Process
- Outreach Summary
- Closing Remarks



Burnside Bridge

Policy Group Charter

Policy Group Purpose

- Review Feasibility Study Findings
- Represent Agency and Constituent's Interests



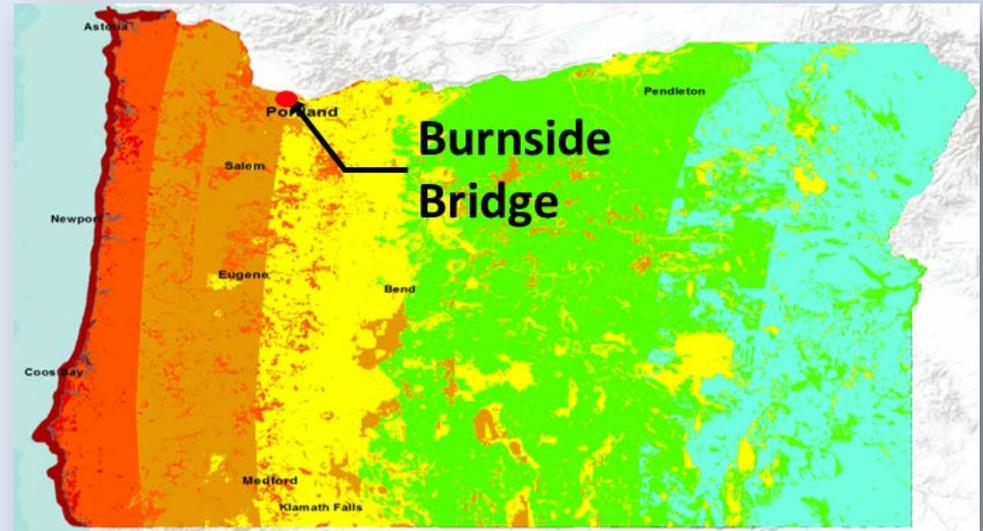
Expectations

- Provide Informed Feedback
- Attend Three Policy Group Meetings

Project Background

Regional Earthquake Risk

- 1 in 3 chance of Magnitude 8+ earthquake within 50 years
- Thousands of fatalities and injuries
- Billions in economic loss

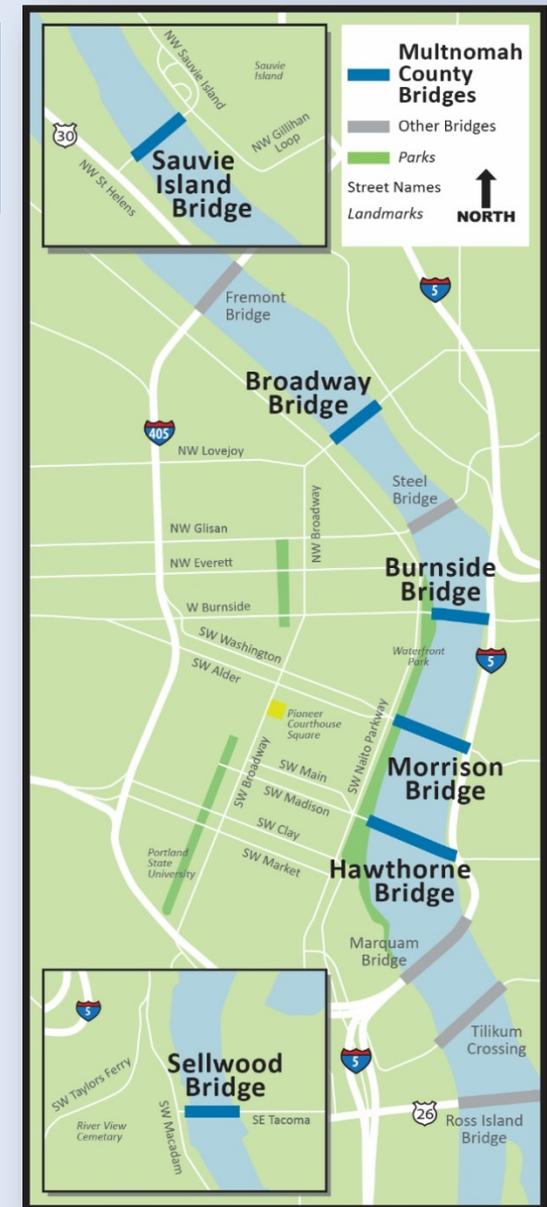


Source: *Oregon Resilience Plan (2013)*

Project Background

Earthquake Vulnerabilities

- Downtown bridges vulnerable to major earthquakes
- Board of County Commissioners adopted the Bridge CIP in 2015
- CIP identified the Burnside Bridge as its number one priority for seismic resiliency



Project Background

Burnside Bridge, over 90 years of Service

- 40,000 vehicles, 2,000 bicycles and pedestrians daily
- Three bus lines
- 300 openings a year
- Crosses Blue/Red Max Lines, 78k weekday riders
- Crosses Union Pacific Railroad mainline

Burnside Bridge



Project Background

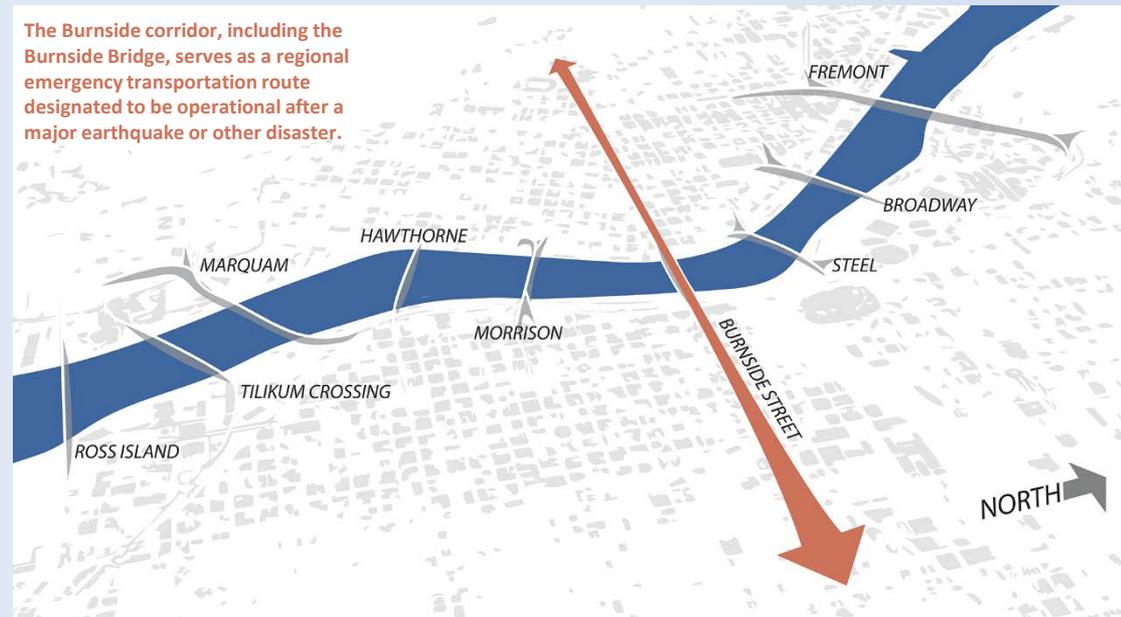
Burnside Street: Regional Lifeline Route

Over 17 miles long, Burnside Street connects Gresham to Washington County through downtown Portland

- Metro designated Burnside a Priority 1 route in the late 1990s
- City of Portland designated Burnside Street an evacuation route
- Only non-state owned Priority 1 route across the Willamette River
- ODOT is prioritizing investing in the I-205 corridor

Sources: Metro Regional Emergency Transportation Routes Report, 1996

Portland City-wide Evacuation Plan 2014;
(portlandoregon.gov/pbem/65295)



Project Overview



Burnside Bridge

- **Purpose:** To create a resilient lifeline crossing
- **Goal:** To recommend rehabilitation and/or replacement alternatives for further NEPA-phase analysis
- **Timing:** Study to be completed in Fall, 2018
- **Funding:** Needed for future phases

Project Overview

PROJECT PHASING



* Source: Multnomah County Willamette River Bridges Capital Improvement Plan (2015-2034)

Project Overview

Stakeholder Representative Group Members

- American Automobile Association (AAA)
- Buckman Community Association
- Burnside Skatepark
- Central City Concern
- Central Eastside Industrial Council (CEIC)
- Multnomah County Bike / Ped Advisory Committee member
- Neighborhood Emergency Teams (NETs)
- Old Town/ Chinatown Association
- Oregon Trucking Association (OTA)
- Portland Spirit
- Portland Saturday Market
- Sharon Wood Wortman (Historic Resources)
- The Street Trust (formerly BTA)
- University of Oregon School of Architecture student
- Willamette Riverkeeper

Project Overview

Senior Agency Staff Group Members

- Multnomah County
- Metro
- TriMet
- Portland Development Commission
- Oregon Department of Transportation (Region 1)
- City of Portland
- Portland Streetcar
- City of Gresham
- City of Beaverton
- Clackamas County
- Washington County
- Federal Highway Administration (Oregon)
- Oregon State Senator Taylor (District 21)
- Oregon State Representative Smith Warner (District 45)

Project Overview

Policy Group Members

- Multnomah County
- Metro
- TriMet
- Portland Development Commission
- Oregon Department of Transportation (Region 1)
- City of Portland
- City of Gresham
- City of Beaverton
- Clackamas County
- Washington County
- Federal Highway Administration (Oregon)
- U.S. Senator Merkley's office
- U.S. Senator Wyden's office
- U.S. Representative Blumenauer's office
- U.S. Representative Bonamici's office
- Oregon State Senator Taylor (District 21)
- Oregon State Representative Smith Warner (District 45)

Project Overview

Seismic Resiliency Committee Members

- Multnomah County Bridge
- ODOT Bridge
- FHWA Bridge
- WSDOT Bridge
- City of Portland – PBOT Bridge
- Portland State University
- HDR Engineering
- Parametrix
- Shannon and Wilson
- Hart Crowser
- Hardesty and Hanover



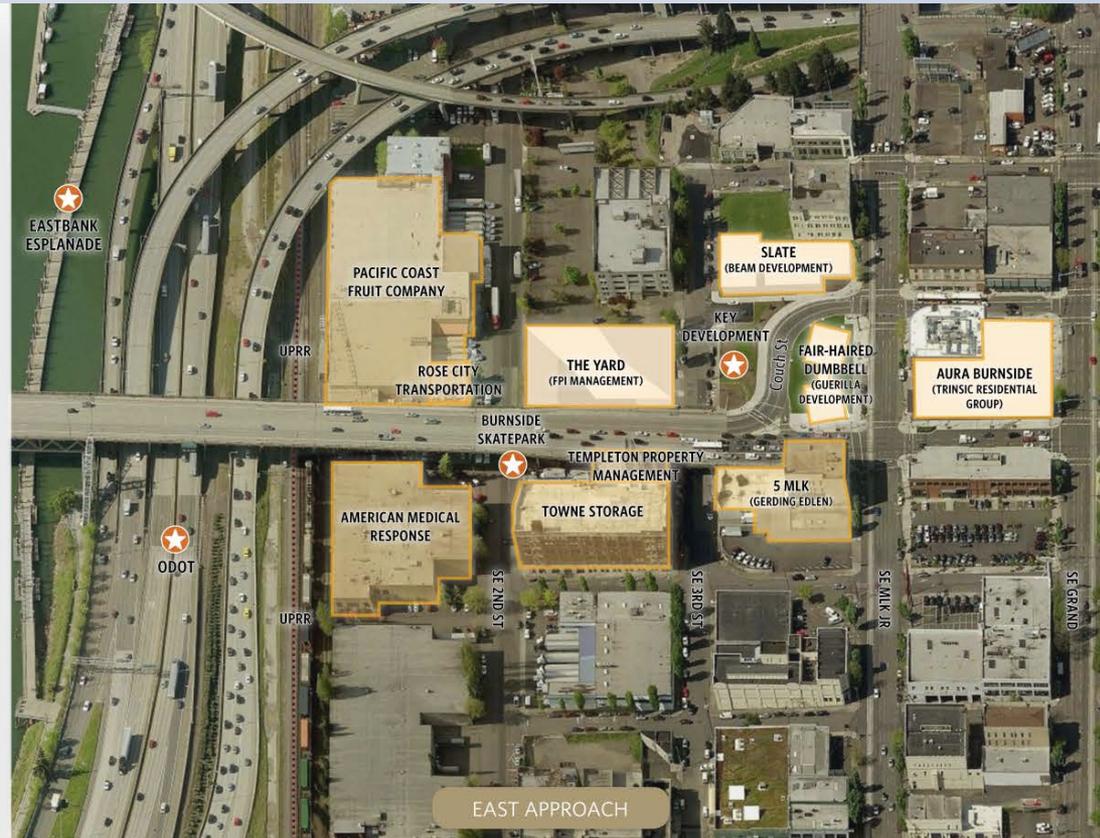
Project Overview



Comments on Animation

- Helps to show the magnitude of the event
- Animation can be frightening
- Should provide more information on what the project is focused on preventing
- Some of the wording is very technical, for example liquefaction
- Should add information at the end on how people can prepare for the earthquake

Project Context

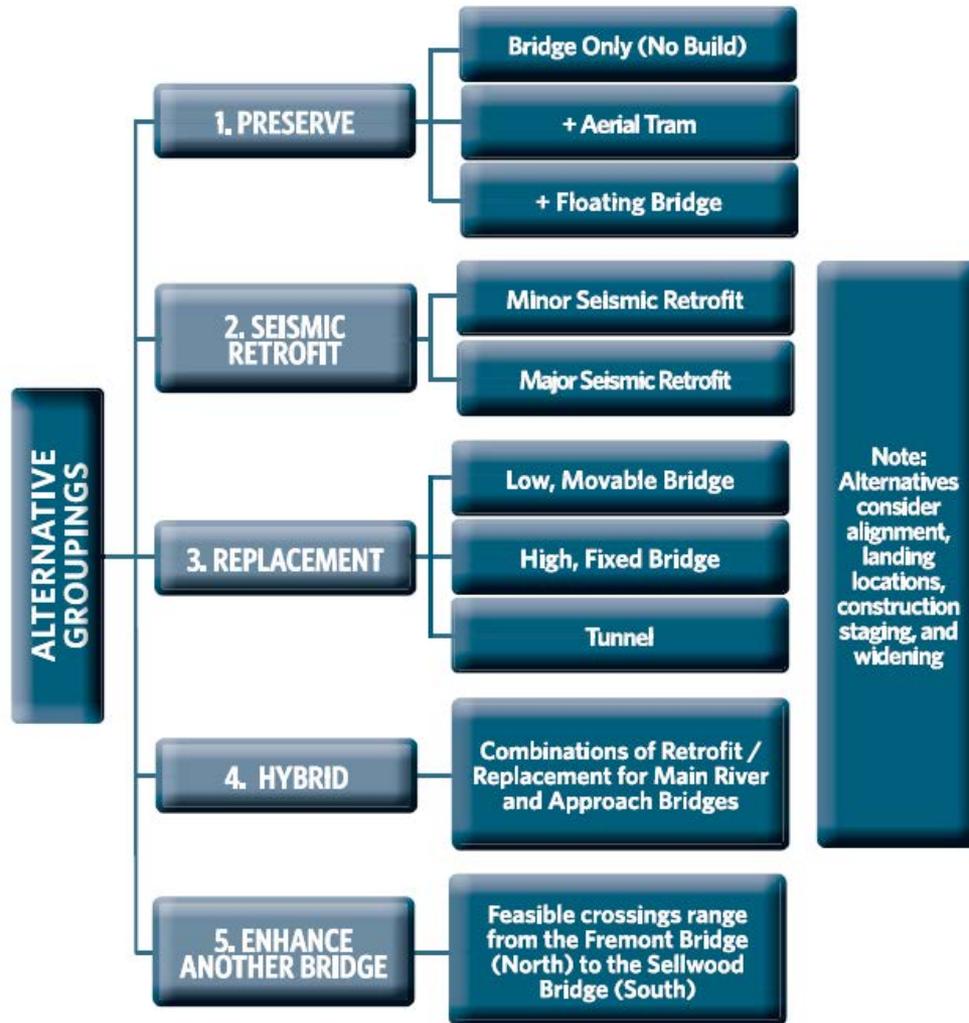


Alternatives Development



What Alternative Groupings create an earthquake-ready crossing?

Alternatives Development



What alternatives are being considered within each grouping?

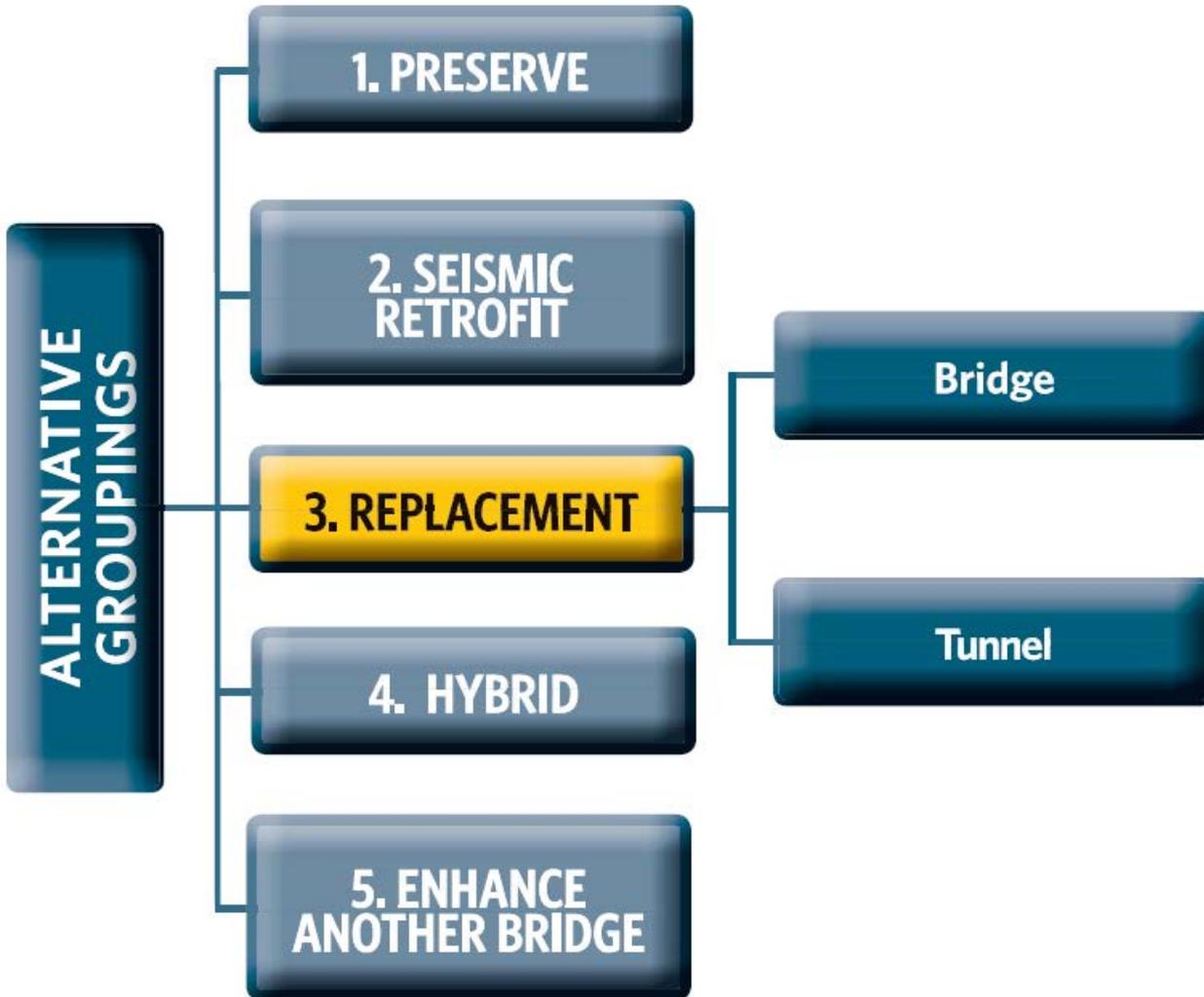
Low, Movable Bridge Replacement; Existing Alignment; Single Bridge

REPLACEMENT CROSSING ALTERNATIVES



(This is one of 100+ Design Options under consideration)

Alternatives Development



Key Questions:

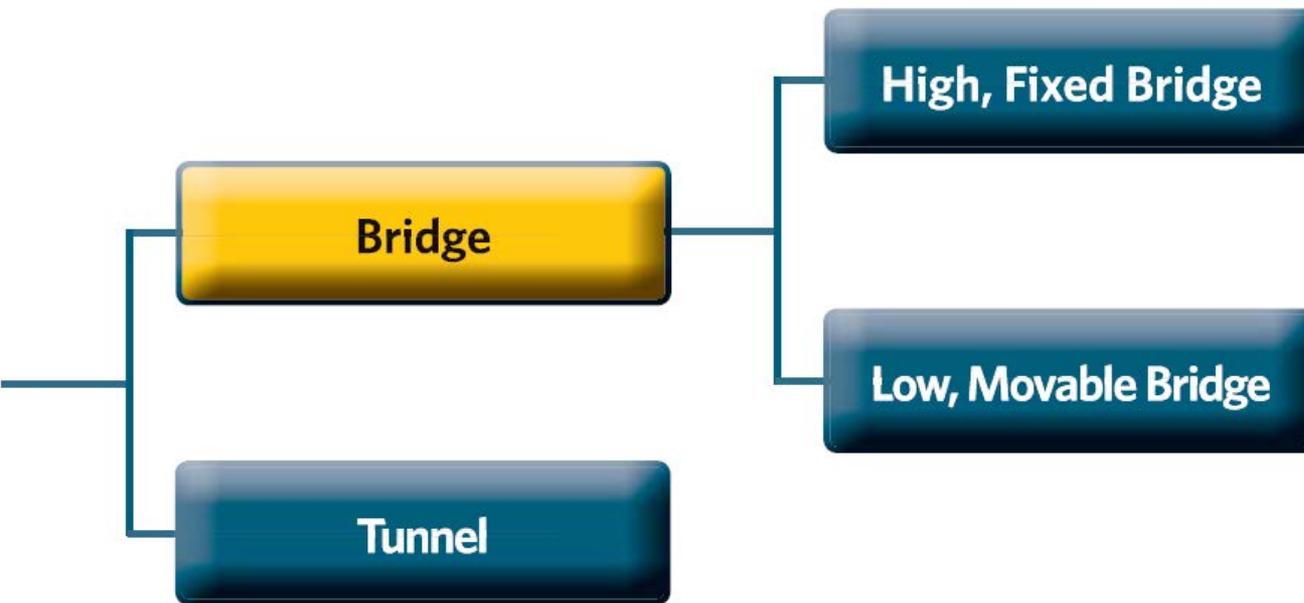
Q1. What are the bridge replacement options?

Alternatives Development

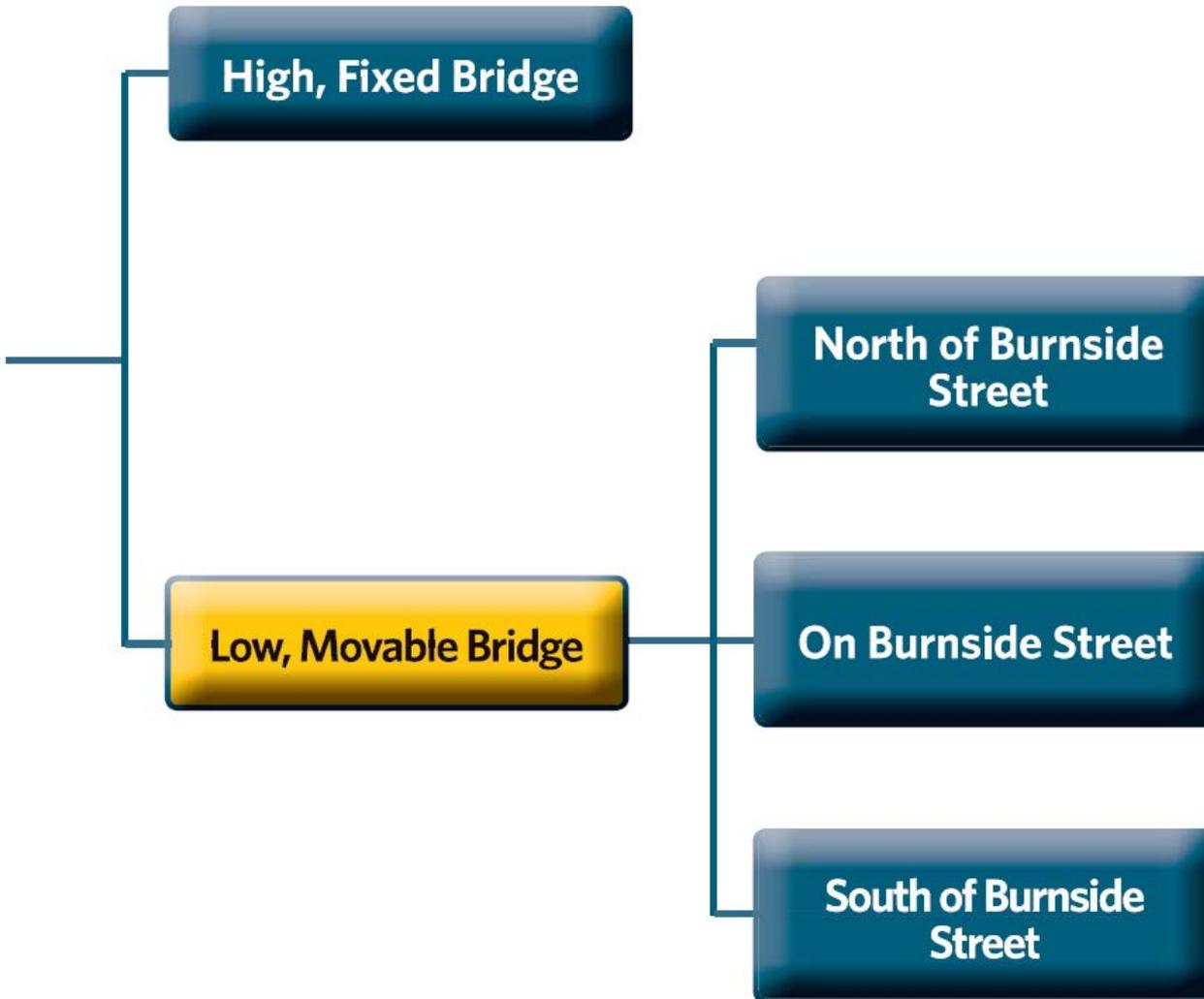
Key Questions:

Q1. Bridge

Q2. How high is the bridge?



Alternatives Development



Key Questions:

Q1. Bridge

Q2. Low, movable bridge

Q3. Where does the bridge cross the river?

Alternatives Development

Key Questions:

- Q1. Bridge
- Q2. Low, movable bridge
- Q3. North of Burnside Street
- Q4. How many bridges are there?

Single Bridge

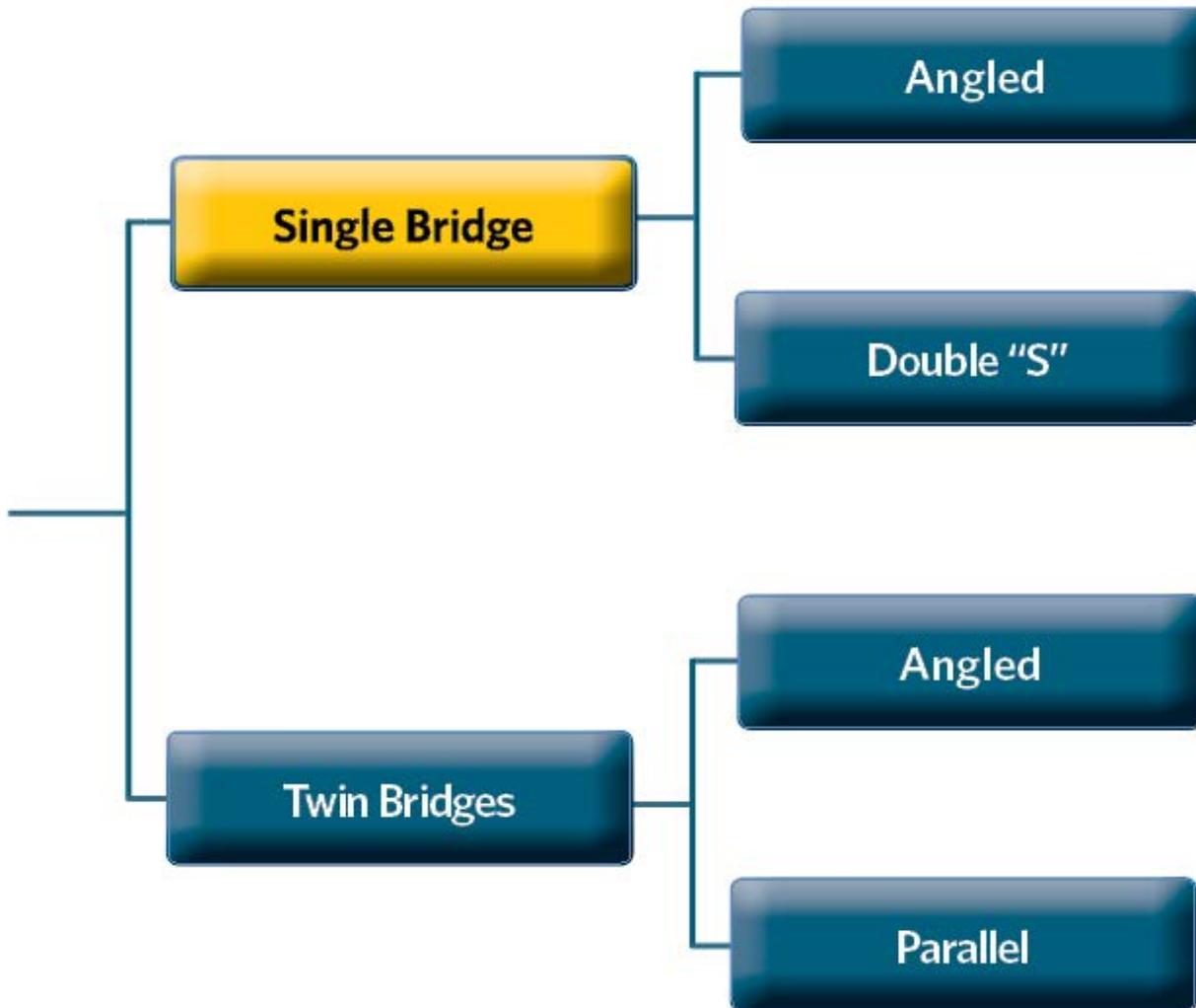
Twin Bridges

North of Burnside Street

On Burnside Street

South of Burnside Street

Alternatives Development



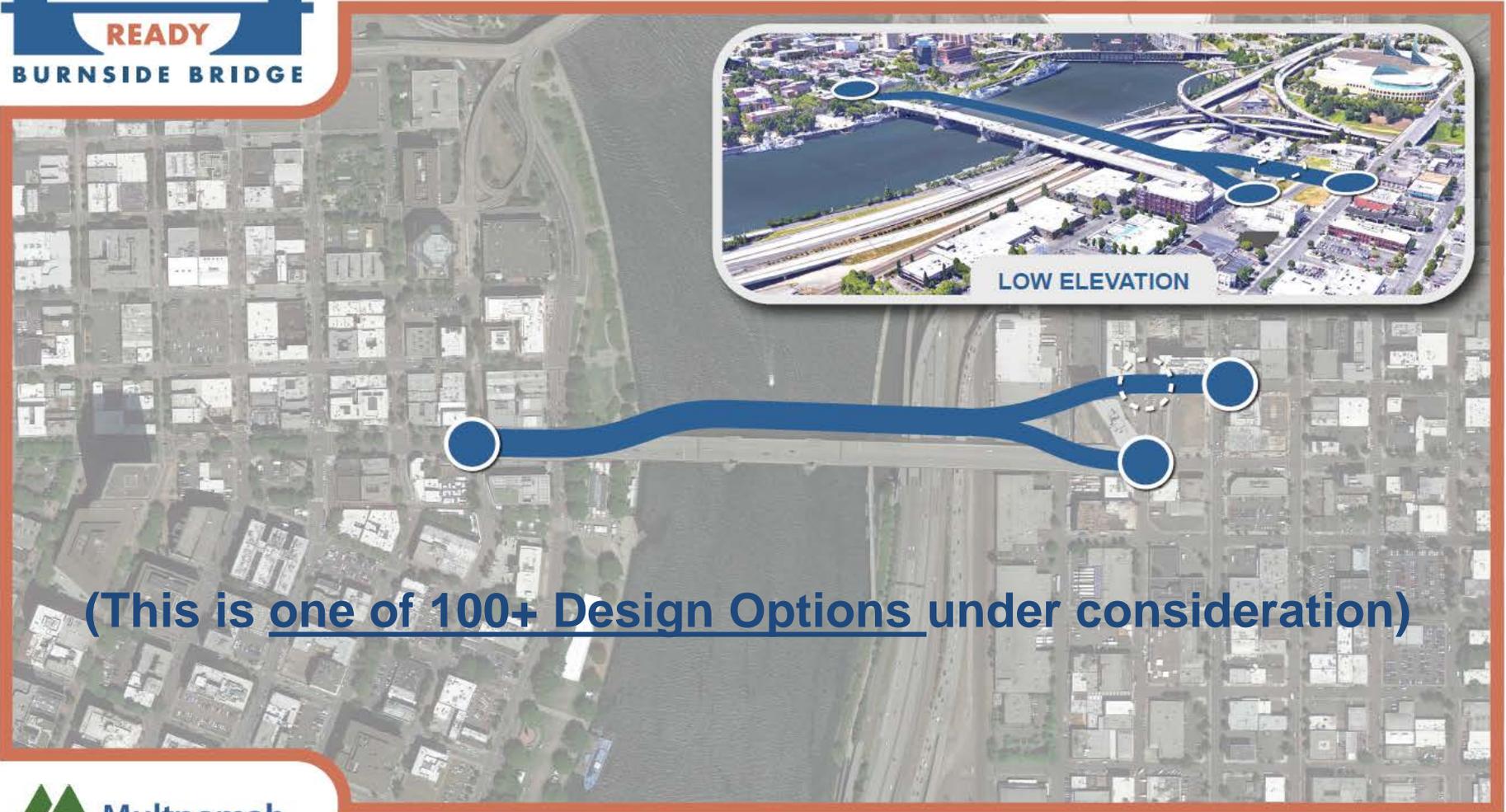
Key Questions:

- Q1. Bridge
- Q2. Low, movable bridge
- Q3. North of Burnside Street
- Q4. Single bridge
- Q5. **What is the roadway alignment shape?**

Low, Movable Bridge Replacement; North Alignment; Single Bridge; West Angled + East Couplet Alignment



REPLACEMENT CROSSING ALTERNATIVES



(This is one of 100+ Design Options under consideration)

Alternatives Development



 – Alternative illustration available.

HIGH ELEVATION



LOW ELEVATION

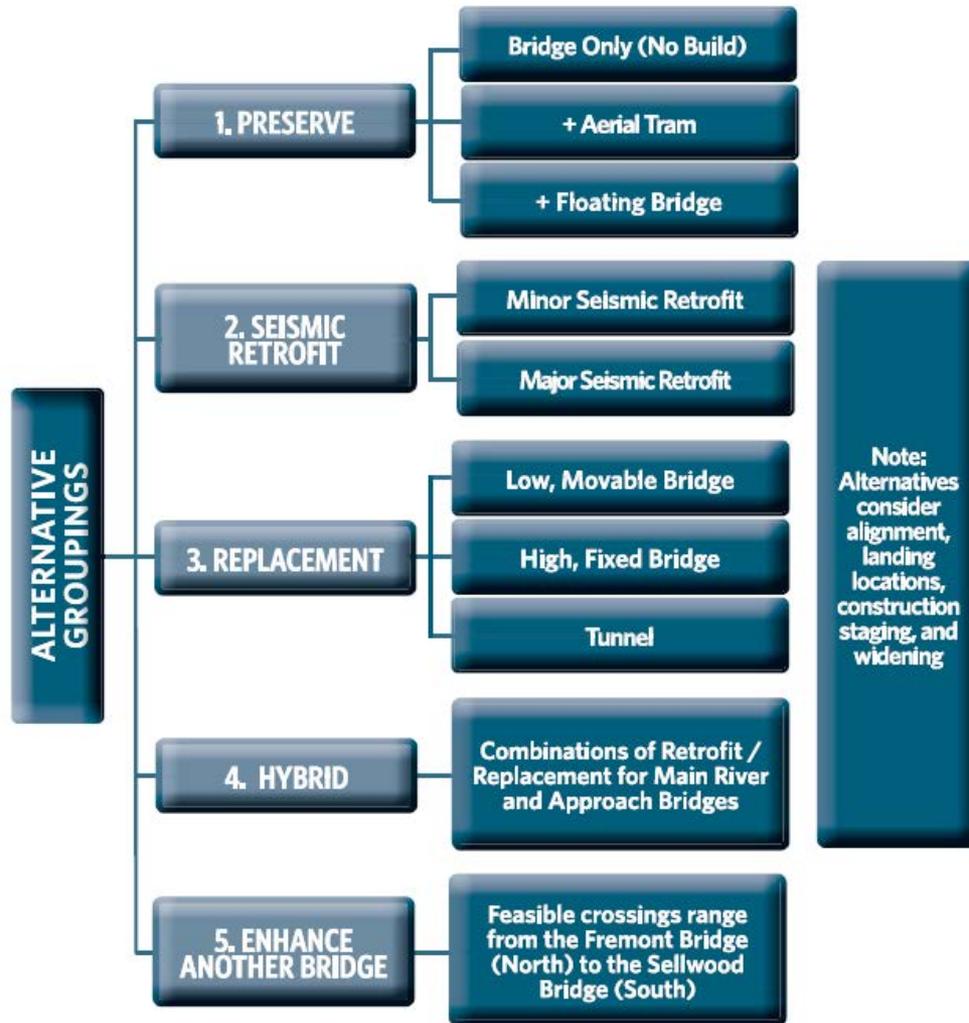


LOW ELEVATION



(These are six of 100+ Design Options under consideration)

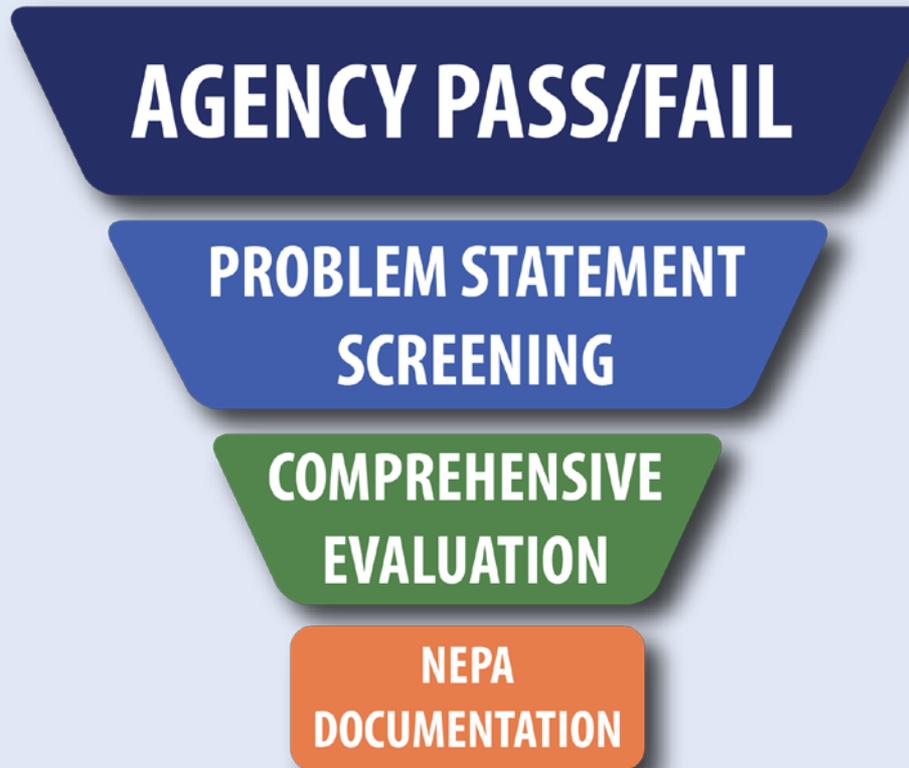
Alternatives Development



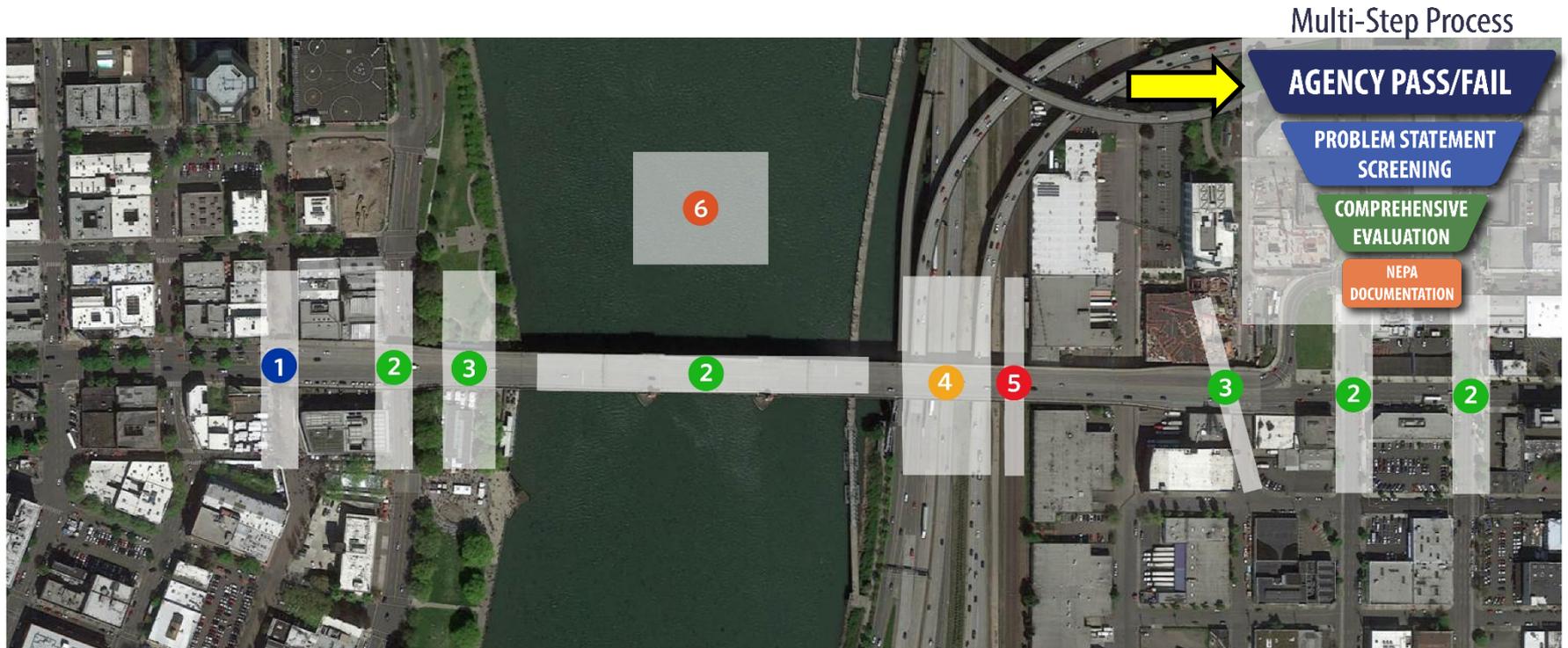
Are we missing any alternatives?

Alternatives Development

Multi-Step Process



Agency Technical Pass / Fail Criteria



TRIMET 1 TriMet Lightrail Service

OREGON DEPARTMENT OF TRANSPORTATION 4 Oregon Department of Transportation Highway Facilities (I-5 and I-84)

6 U.S. Coast Guard / River Navigation

CITY OF PORTLAND, OREGON 2 City of Portland Roadway (Naito Pkwy, NE/SE MLK, NE/SE Grand)
3 City of Portland Combined Sewer Overflow

UNION PACIFIC 5 Union Pacific Railroad Mainline

Problem Statement Screening

Good/Fair/Fails



Seismic
Resiliency



Emergency
Response

Good/Fair/Poor



Multi-modal
Needs



Emergency
Plans



Long-term
function

Multi-Step Process

AGENCY PASS/FAIL

PROBLEM STATEMENT
SCREENING

COMPREHENSIVE
EVALUATION

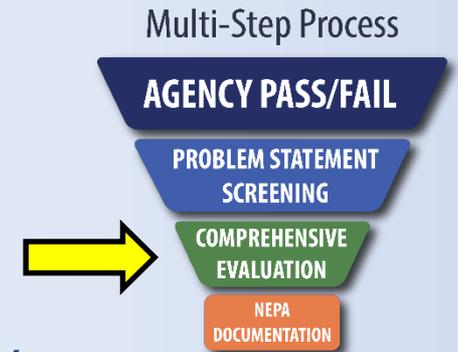
NEPA
DOCUMENTATION



Comprehensive Evaluation

Example of Future Evaluation Topics

- Social Elements
- Recreation
- Land Use
- Right of Way Impacts
- Historical/Cultural Resources
- Natural Environment
- Equity and Diversity
- Sustainability
- Congestion/Traffic Operations
- Economic Development
- Construction Impacts
- Multi-modal



What We Have Heard

Senior Agency Staff Group

- Support for the project and its purpose.
- Project benefits include regional connectivity, multi-use and emergency response.
- TriMet is considering improvements to the Steel Bridge, including seismic resiliency.
- How are we considering construction methods and costs during this phase?
- How long are we assuming river traffic will be impacted by the earthquake?
- The process should not eliminate alternatives too early.

What We Have Heard

Senior Agency Staff Group (continued)

- The need for at least one seismically resilient downtown bridge is vital.
- What clearances are we considering for high-bridge options?
- Are we maintaining vertical clearance requirements over freeways?
- Are we looking at other available plans broader than emergency response plans?
- The project should be aligned with established regional priorities.

What We Have Heard

Stakeholder Representative Group

- Support for the project and its purpose.
- Concern the project will take a long time to implement.
 - What is the interim plan?
 - Can the project happen sooner?
- How will the bridge support post-earthquake recovery demands?
 - Support large trucks.
 - Allow large cargo ships.
 - Who and what modes get priority on the bridge after an event?
- There should be more than one crossing usable after event.
 - In addition to Burnside Bridge, can there be temporary bridges available or other bridges?
 - Can stairs be provided for pedestrian access to the Tilikum Crossing?

What We Have Heard

Stakeholder Representative Group (continued)

- How do we accommodate the project needs and still maintain the historical integrity of the bridge?
- What will happen to the skate park?
- Are pedestrian uses considered in the Pass/ Fail criteria?
- pontoons were noted as missing from the draft list of alternatives.
- Concern that weighting the screening criteria will diminish the importance of multi-modal access relative to seismic safety.

What We Have Heard

Stakeholder Briefings

- Kerns Neighborhood Association
 - Multnomah County Bike/ Ped Advisory Group
 - Buckman Community Association
 - Office of Emergency Management Lunch and Learn
-
- Surprise that the downtown bridges are not all up to seismic code
 - Interest in complete range of options being considered, including things such as ferries
 - This is a priority for our region and can the project be completed faster
 - Concerns that fixing or replacing the bridge will remove the skateboard park
 - Bicyclists want improved facilities on Burnside Bridge
 - Project communications should include emergency preparedness information
 - Questions on how people can stay informed and when they can provide input
 - Input on evaluation criteria

Closing Remarks

Next Steps

- Screen Alternative Groupings
- Agency Technical Meetings
- Develop Draft Evaluation Criteria
- Stakeholder Briefings
- Senior Agency Staff and Stakeholder Representative Meetings #2
- Policy Meeting #2 – August 2017
- Feedback – 2 weeks from this meeting
- Questions?

Closing Remarks

Thank You