Agenda

- Introductions
- Charter
- Project Overview
- Stakeholder Interests
- Alternatives Development
- Screening Process
- Closing Remarks
SRG Charter

SRG Purpose

• Input on Feasibility Study
• Identify Stakeholder Interests
• Provide Informed Feedback

Role and Expectations

• Attend Four SRG Meetings
• Act as Liaison to Organization
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)
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 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

- **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 PHASING

<table>
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<tr>
<th>Year</th>
<th>Phase</th>
<th>Funding</th>
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<tr>
<td>2016</td>
<td>Feasibility Study</td>
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<td>2016</td>
<td>Secure NEPA Funding</td>
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<td>2018</td>
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<td>2026-28</td>
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* Source: Multnomah County Willamette River Bridges Capital Improvement Plan (2015-2034)
What is a Feasibility Study?

- Planning Level Study
- Involves the community, agencies, elected officials and others
- Looks at a wide range of Willamette River crossing options
- Narrows those options by screening and evaluating them against technical, environmental, social and other considerations
- Results in a range of feasible crossing options for consideration during next project phase (NEPA)

What is the National Environmental Policy Act (NEPA)?

- Federal Regulation – Environmental Impact Statement
- Involves the community, agencies, elected officials and others
- Provides a detailed analysis of potential impacts and mitigation
- Results in the final design alternative
# Project Overview

## Project Initiation

<table>
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<tr>
<th>Milestones</th>
<th>Fall 2016</th>
<th>Winter 2016/17</th>
<th>Spring 2017</th>
<th>Summer 2017</th>
<th>Fall 2017</th>
<th>Winter 2017/18</th>
<th>Spring 2018</th>
<th>Summer/Fall 2018</th>
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<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Final Report</td>
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## Preliminary Alternatives Development

- Stakeholder Interviews
- Stakeholder Briefings #1
- Survey

## Alternatives Evaluation

- Stakeholder Briefings #2/Open House
- Open House

## Feasibility Report

- Alternative Evaluation Results
- Final Report

## Public Outreach Opportunities

- Stakeholder Briefings #1
- Survey
- Stakeholder Briefings #2/Open House
- Open House

## Committees

- Senior Agency Staff
- Stakeholder Representative Group
- Policy Group

## Other Outreach Efforts

- Project Identity & Key Messages
- Website, Factsheet, FAQs
- Videos/Animation
- Social Media & Targeted Community Presentations

## Earthquake Ready Burnside Bridge

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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
Senior Agency Staff 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)
- Oregon State Senator Taylor (District 21)
- Oregon State Representative Smith Warner (District 45)
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)
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
Stakeholder Interests

Project Setting
• Urban Environment
• Public Use Areas
• Multi-agency Involvement
• Bridge and River Users
• Natural Environment
• Economic Development

Stakeholder Interest
• What are your interests in the project?
Stakeholder Interests

What are your interests in the project?
What Alternative Groupings create an earthquake-ready crossing?
What alternatives are being considered within each grouping?

- **1. PRESERVE**
  - Bridge Only (No Build)
  - + Aerial Tram
  - + Floating Bridge

- **2. SEISMIC RETROFIT**
  - Minor Seismic Retrofit
  - Major Seismic Retrofit

- **3. REPLACEMENT**
  - Low, Movable Bridge
  - High, Fixed Bridge
  - Tunnel

- **4. HYBRID**
  - Combinations of Retrofit / Replacement for Main River and Approach Bridges

- **5. ENHANCE ANOTHER BRIDGE**
  - Feasible crossings range from the Fremont Bridge (North) to the Sellwood Bridge (South)

Note: Alternatives consider alignment, landing locations, construction staging, and widening.
Low, Movable Bridge Replacement; Existing Alignment; Single Bridge

(This is one of 100+ Design Options under consideration)
Key Questions:
Q1. What are the bridge replacement options?
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?
Key Questions:
Q1. Bridge
Q2. Low, movable bridge
Q3. North of Burnside Street
Q4. How many bridges are there?
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

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

(These are six of 100+ Design Options under consideration)
Are we missing any alternatives?
Alternatives Development

Multi-Step Process

AGENCY PASS/FAIL

PROBLEM STATEMENT SCREENING

COMPREHENSIVE EVALUATION

NEPA DOCUMENTATION
Problem Statement Screening

- Seismic Resiliency
- Emergency Response

Good/Fair/Fails

- Multi-modal Needs
- Emergency Plans
- Long-term function

Good/Fair/Poor

- Multi-Step Process
- AGENCY PASS/FAIL
- PROBLEM STATEMENT SCREENING
- COMPREHENSIVE EVALUATION
- NEPA DOCUMENTATION

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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
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<th>Screening Criteria</th>
<th>Definition</th>
<th>Rating</th>
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<tbody>
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<td>Does the crossing meet our Seismic Design Criteria?</td>
<td>Good</td>
<td>Fair</td>
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<tr>
<td>After an earthquake, does the crossing:</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>• Provide unobstructed access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Connect the lifeline route on either side of the river</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Address the capacity and congestion needs for first responders</td>
<td></td>
<td></td>
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Multi-Step Process

AGENCY PASS/FAIL

PROBLEM STATEMENT SCREENING

COMPREHENSIVE EVALUATION

PPR DOCUMENTATION
<table>
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<tr>
<th>Screening Criteria</th>
<th>Definition</th>
<th>Rating</th>
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<tbody>
<tr>
<td></td>
<td>After an earthquake, how well does the crossing provide access for:</td>
<td>Good</td>
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<tr>
<td></td>
<td>• Bike/Ped/ADA</td>
<td>Fair</td>
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<tr>
<td></td>
<td>• Passenger Vehicles (Bus, freight, cars)</td>
<td>Poor</td>
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<tr>
<td></td>
<td>• River users</td>
<td></td>
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<td></td>
<td>How consistent is the crossing with State, Regional &amp; Local Emergency Management Plans?</td>
<td>Good</td>
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<tr>
<td></td>
<td>In the long term, how successful will this crossing be in:</td>
<td>Fair</td>
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<tr>
<td></td>
<td>• Improving accommodations for all modes</td>
<td>Poor</td>
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<tr>
<td></td>
<td>• Reducing the level of maintenance required to achieve the design life</td>
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Closing Remarks

Next Steps

• Policy Group Meeting
• Screen Alternative Groupings
• Agency Technical Meetings
• Develop Draft Evaluation Criteria
• Stakeholder Briefings
• SRG Meeting #2 – July 2017
• Feedback – 2 weeks from this meeting
• Questions?
Thank You