Interstate BRIDGE Replacement Program

IBR Program Update

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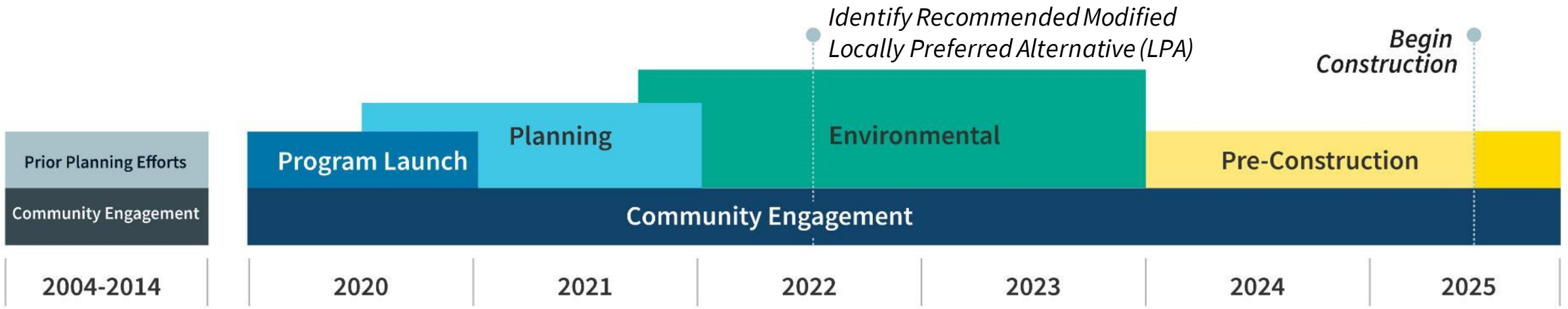
Interstate BRIDGE Replacement Program

Program Timeline



Interstate BRIDGE Replacement Program

Purpose and Need

Safety: Narrow lanes, no shoulders, poor sight distances, bridge lifts, and substandard ramp merging and diverging contribute to accidents.

Earthquake vulnerability:
In a major earthquake, the bridge would likely be significantly damaged, potentially beyond repair.

Impaired freight movement:
Congestion and bridge lifts slow down freight carrying goods along I-5, a critical economic trade route on the West Coast.

Inadequate bike &pedestrian paths:
Narrow shared-use paths, low railing heights, and lack of dedicated pathways impede safe travel.

Congestion: Over 143,000 vehicles crossed the Interstate Bridge each weekday in 2019, resulting in 7 to 10 hours of congestion during peak travel times.

Limited public transportation: Limited transit options and existing bus service can be unreliable due to traffic congestion and/or bridge lifts.

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Reusing past work and addressing regional changes

- **The program has been working to maximize past investment by updating and improving upon past work to account for changes since previous efforts.**
- **In the years since the previous planning efforts, the baseline conditions, regulatory and policy context, and community priorities have changed.**
  - The program worked with partners to identify the changes that need to be addressed in a solution.

Examples of these changes include:

- **Regional, state, and local equity policies and priorities**
- **Regional, state, and local climate goals and priorities**
- **Freight and Industrial activity**
- **Demographics along the I-5 corridor and nearby neighborhoods**
- **Expanded transit service in the corridor (i.e., VINE BRT and bus-on-shoulder on I-5 in Vancouver)**
- **Land use policies, planned development, and zoning changes**

Community Engagement

Community Engagement By the Numbers

29,000

Engagements!

Via online meetings, community briefings, listening sessions, surveys, newsletters, social media, and direct email comments.

Advisory Groups

Three advisory groups and working groups, reflective of our community, inform, shape the program, and build consensus.

Community Values

Established community values and priorities with the Community Advisory Group and community feedback.

Equity Framework

Developed with the Equity Advisory Group to outline the program's approach and the resources it will use to advance equity.

79 Virtual public meetings and events.

18,700 Responses collected from two community surveys.

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IBR Recommendation: Modified LPA

Hayden Island:
Partial Interchange

River Crossing Auxiliary Lanes:
1

Transit:
Light Rail to Evergreen near I-5

Variable Rate Tolling:
Yes

Visualization is intended as a high-level example for illustration purposes only and does not reflect property impacts or indicate that decisions on design options have been made.

Partial Interchange Summary

Hayden Island Drive local-only trips and Tomahawk Island Drive extension increase Hayden Island east-west connectivity

Smaller interchange leaves space for a comfortable pedestrian environment and opportunities for open space

Addresses safety and congestion by improving active transportation, adding shoulders, increasing lane widths and improving ramp merges

Benefits of Expanding LRT from Expo to Evergreen

4 Stations*

3,000+ Residents are within a half mile walk

26% BIPOC

41% Low-income

*Includes the existing Expo station and 3 new stations.

Equity - Jobs Accessible via Transit (% increase)*

68% General

73% BIPOC

59% Low-income

71% People w/ disabilities

*Increase in jobs accessible from the program area within a 45 minute midday transit ride. Percent increase determined by adding LRT Expo to Evergreen compared to 2045 No Build.

Climate - GHG Reduction*

36,000 metric tons/year or the equivalent of

7,000 homes' electricity for one year

OR

89,400,000 miles driven by gas powered car

*GHG reduction is an estimate calculated from the displacement (or avoidance) in the shift from cars to transit.

Strategies to Combat Climate Change

- Demand Management, including Variable Rate Tolling *(tolling will consider price reductions for low-income users and low-carbon vehicles)*
- Increase traffic operation efficiencies *(ramp metering and auxiliary lanes)*
- Mode shift from cars to active transportation and transit
- Low-carbon emission construction strategies

Overall Program Benefits

- **Roadway design improvements that improve safety and reliability—sufficient lane widths, safety shoulders, no bridge lifts, improved visibility**
  - Accommodates vehicle and freight widths, provides space for turning, and **space for driver comfort**
  - Faster **congestion recovery** from crashes, improved access for emergency vehicles, and a safe space for travelers recovering from an incident
  - Improved freight capacity at Marine Drive and Mill Plain interchanges
- **The addition of ramp-to-ramp connections (auxiliary lane):**
  - **Less diversion** to local streets by travelers avoiding freeway back-ups
  - **Fewer lane changes required**, reducing the number of conflict points between vehicles entering and exiting mainline I-5
  - Vehicles entering/exiting mainline I-5 through lanes have space to accelerate or decelerate, which **decreases rear end and sideswipe crashes**
  - Allows **space for vehicles to make on/off decisions** that are more challenging with closely spaced interchanges
  - **Travel time improvement**—northbound evening travel time 30% faster between Broadway Ave and SR-500 in 2045

Overall Program Benefits

- **Overall smaller program footprint with one ramp-to-ramp connection, partial Hayden Island interchange, and transit alignment adjacent to I-5**
  - Fewer anticipated property impacts, compared to other design options considered
- **Local access improvements for residents and visitors on Hayden Island**
  - More east-west connectivity across the Hayden Island
  - Ability to enter or exit Hayden island via a local access bridge, without use of the freeway
  - Smaller footprint provides space for a more comfortable active transportation environment and open space for future potential placemaking opportunities
  - Improved transit access with the addition of a light rail station on Hayden Island
- **Multimodal mobility improvements from variable rate tolling**
  - **Funds construction** and operations & maintenance of the facility
  - Manage congestion with fewer discretionary trips, resulting in a reduction in GHG emissions

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Overall Program Benefits

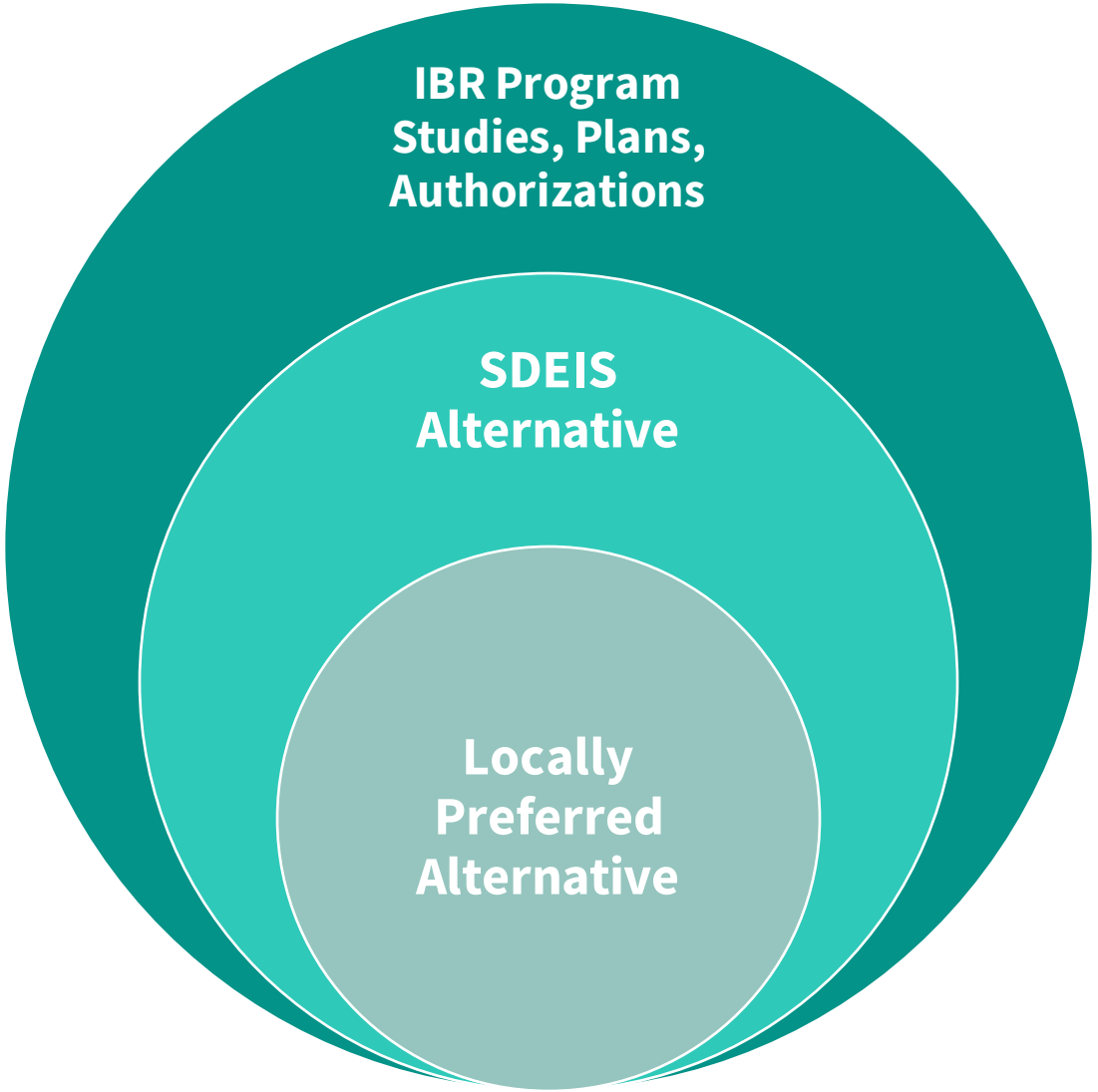
- **I-5 corridor earthquake resiliency with replacement of the bridge over the Columbia River, and the North Portland Harbor Bridge**
- **Increased mode choice outside of single occupancy vehicles, helping address state climate goals**
  - Light rail service connecting into existing systems in Vancouver that **maximizes trips** across the river with higher capacity of riders per trip
    - *Daily transit mode share is expected to increase 4% from No Build to 11% total, with even more during peak evening periods at 17% mode shift in 2045*
    - *Improved connectivity between light rail and bus rapid transit, plus additional access to key destinations such as downtown jobs and services*
  - Space for Bus on Shoulder, **improving reliability of express bus** by taking it out of general purpose lanes
  - Improved active transportation facilities that provide more comfort and **safety for those who walk, bike, or roll**

Responding to what we've heard from the community

- **Supports community feedback prioritizing congestion relief on I-5 near Hayden Island, smaller footprint on the island, freight needs addressed, and convenient access to services**
  - Washington residents indicated a desire to maintain direct access to the island, while Oregon residents did not express an access preference
- **Desire for transit options that improve connectivity across the river with an emphasis on ease of access for a variety of users**
  - Travel time and reliability identified as important transit priorities
  - 79% of total community opinion survey respondents strongly or somewhat support extending the MAX Yellow Line from Expo Station to Vancouver
- **Support for the addition of auxiliary lanes to address safety and improve reliability while considering environmental and property impacts**
  - 74% to 85% of total community opinion respondents strongly or somewhat supported the addition of one or two ramp-to-ramp connections

Next Steps – How They Fit Together

- **Program requires numerous studies, plans, analyses, authorizations, etc.**
- **Supplemental Draft Environmental Impact Statement (SDEIS) is a study where benefits and impacts of the Modified Locally Preferred Alternative will be evaluated for public review and comment.**
  - A Locally Preferred Alternative (LPA) identifies the foundational elements of the alternative to be studied in the SDEIS process.



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Additional Program Work

- **Additional studies of impacts and benefits in the environmental process**
  - Traffic modeling to understand more detail around safety improvements, likely reduction in crashes, vehicle miles traveled, mode shift, and overall operations
  - Reviewing other environmental impacts including, right of way, cultural and historical, biological, GHG emissions
  - Detailed capital and operations & maintenance costs of program improvements
- **Additional tolling details such as reviewing possible rates, exemptions and discounts, and revenue generation**
- **Improvements to additional interchanges within the corridor**
- **Optimizations to the preferred transit investment and transit network**
  - Improve access to transit by looking at transfers, walking access, and Park and Rides
  - Identify how transit operations can be improved to increase capacity by looking at frequency, complementary services, and connections

Timeline

- **This summer**
  - Gather feedback from program partner boards, councils, and commissions regarding recommended Modified LPA
  - Executive Steering Group consider adoption of Modified LPA recommendation
  - Bi-state Legislative Committee consider and respond to Modified LPA
- **Fall 2022**
  - Begin Supplemental Draft Environmental Impact Statement process
  - Update conceptual finance plan

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Costs and Funding

- **$90 Million in combined funding has been dedicated by both states for program development, with $45 million from each**
- **The program identified a conceptual cost estimate as a preliminary range of $3.2 to $4.8 billion.**
  - Cost estimates will be updated this fall, after the Modified LPA is identified.
- **The program is pursuing a variety of funding sources including state, federal, and tolling sources.**
  - The Move Ahead Washington transportation package allocates $1 billion for Washington's share of funding needed to complete the program
  - IBR anticipates applying for federal grant funding beginning in 2023.
  - The FTA Capital Investment Grants (CIG) Program, along with the Competitive Bridge Investment Program and/or the National Infrastructure Project Assistance Program appear to be the best fit for IBR to apply.

Variable Rate Tolling

- IBR program and ODOT toll program are separate but related efforts
- Tolling objectives include revenue generation, managing congestion, and improving multimodal mobility in the corridor
- Expected to vary by time of day, and day of week based on a set schedule so the cost is predictable for the traveler.
- The program is committed to recommending an equitable tolling system informed by national best practices for tolling in urban areas
  - Oregon Transportation Commission and the Washington State Transportation Commission will determine exemptions and discounts
- Soonest tolling could begin on Interstate Bridge is in late 2025/early 2026

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Questions?

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