



Interstate
BRIDGE
Replacement Program



IBR Program Progress

March 23, 2022

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IBR Program Progress

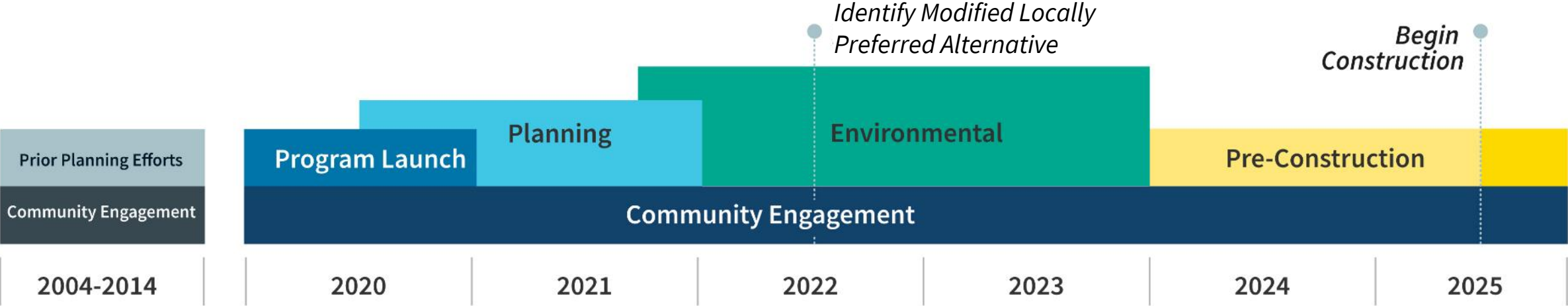
- ▶ Program Update
- ▶ Update on Process to Identify the Draft Modified Locally Preferred Alternative
- ▶ Update on Transit and Design Options Evaluation Process
- ▶ Next Steps

Program Update

Greg Johnson, Program Administrator

Ray Mabey, Assistant Program Administrator

Program Timeline



Recent Steering and Advisory Group Meetings

- ▶ **Steering and advisory groups are meeting regularly this spring to provide feedback on the major components that will go into the Modified LPA**
 - Community Advisory Group (2/24, 3/10, *upcoming: 3/24, 4/14, 4/28*)
 - Equity Advisory Group (2/21, 3/14, *upcoming: 4/4, 4/18*)
 - Executive Steering Group (3/17, *upcoming: 4/7, 4/21*)

Please note that details on past and upcoming meetings and events, including meeting materials and videos, are available on the [IBR Meetings & Events](#) page.

Recent Program Updates/Briefings

- ▶ **Tribal listening sessions**
- ▶ **Congressional offices:**
 - Senators Murray, Cantwell, Merkley, and Wyden
 - Representatives Blumenauer, Bonamici, DeFazio, Herrera Beutler, and Schraeder
- ▶ **USDOT leadership**
- ▶ **Oregon Transportation Commission**
- ▶ **Metro Council Work Sessions**
- ▶ **Freight Listening Session**
- ▶ **Equity Roundtable Event**
- ▶ **Local jurisdictions and elected officials:**
 - City of Ridgefield, Hillsboro City Council, Portland Freight Advisory Committee, Port of Umatilla, City of Woodland, Camas City Council, City of Beaverton, Metro Council, Washington County, and Clackamas County
- ▶ **Stakeholder engagement:**
 - Portland Metropolitan Assoc. of Realtors, Vancouver Sunrise Rotary, Seattle Chamber of Commerce, Clark College, CREDC I-5 Task Force, Washington Highway Users Federation, Greater Portland Inc., Oregon Business & Industry, and NW Carpenters

Federal Discretionary Grant Funding

- ▶ **The program is well positioned to be competitive for federal grant opportunities from the Infrastructure Investment and Jobs Act:**
 - On Jan. 14, President Biden referred to the Interstate Bridge as “one of the most significant bridges in the country.”
 - The FTA Capital Investment Grants (CIG) Program, along with the FHWA Competitive Bridge Investment Program and/or the USDOT National Infrastructure Project Assistance Program appear to be the best fit for IBR to apply.
- ▶ **IBR anticipates applying for federal grant funding in 2023:**
 - The program’s cost estimate and finance plan will be refined as additional detail on grant programs is known, and as program details are determined as part of the modified Locally Preferred Alternative.
 - Securing the local match (including state funding) is an important step to successfully secure federal grants, given the preference to be the “last dollar in.”

Toll Administrator Decision and Justification

- ▶ In early March, a decision was reached between the DOTs, with OTC concurrence, that ODOT should administer tolls on the I-5 bridge.
- ▶ This is an administrative decision regarding which agency will be responsible for toll collection and customer service, but does not set policy.
 - Both states will be involved in determining future policy and implementation of tolling for IBR, developed separately from Oregon Tolling.
- ▶ This decision was needed to allow ODOT to account for IBR in its upcoming process to seek tolling vendors.
- ▶ The customer experience, ease of use, and support in learning a new system were the primary drivers for the decision:
 - The proximity of the I-5 bridge to other Oregon facilities will allow for consistent communications about customer service, accounts, and payment options.



Tolling Implementation Commitments

- ▶ **IBR tolling will be implemented in a bi-state environment:**
 - Toll revenue collected on the bridge will be dedicated to the IBR facility, including construction, operations and maintenance, and collection and customer support associated with tolling.
 - Each state’s legislative requirements and framework for transportation policy and investments will be accounted for as the IBR tolling approach is developed.
 - *The Oregon Transportation Commission and the Washington Transportation Commission will jointly set rates, exemptions and discounts, including possible low-income discounts.*
 - The tolling system will be interoperable with other regional toll systems.
 - Oregon will continue to be responsible for the costs to set up the Oregon toll program. Additional costs required to implement tolls on IBR will be shared by both states.



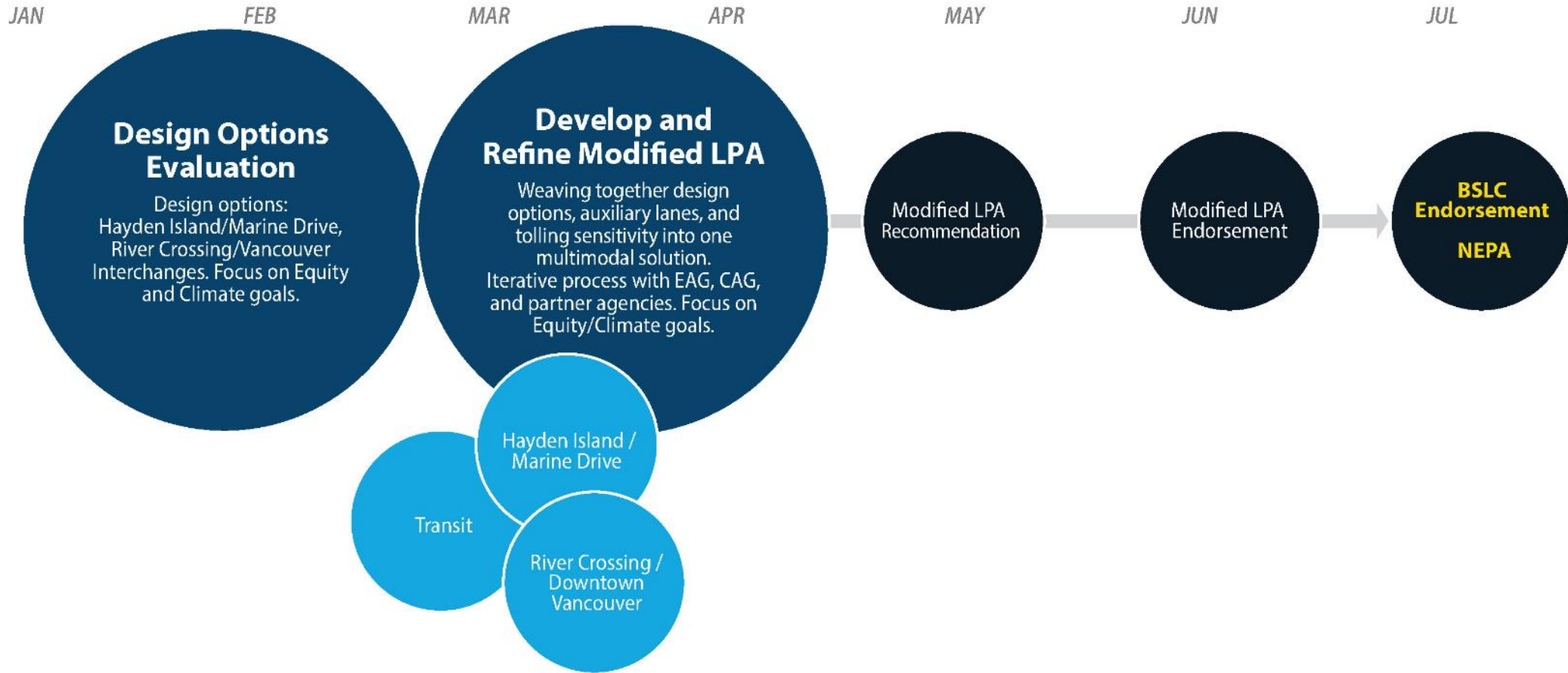
Questions and Feedback

Update on Process to Identify the Draft Modified Locally Preferred Alternative

Greg Johnson, Program Administrator

Frank Green, Assistant Program Administrator

Getting to the Draft Modified LPA



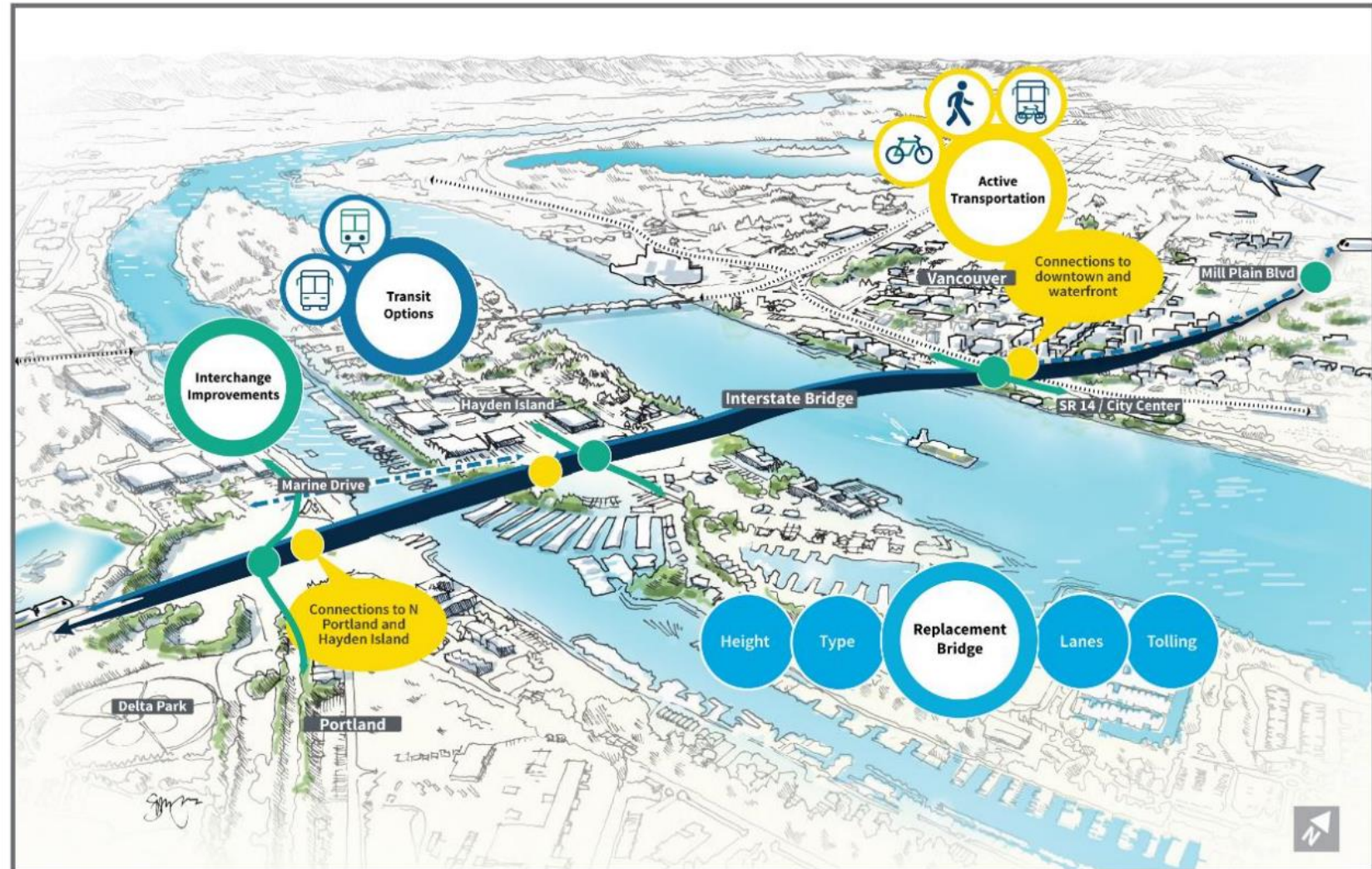
Identifying the Modified Locally Preferred Alternative

► Key components of the Modified LPA:

- Transit Investments
- Hayden Island/Marine Drive Interchange
- Number of Auxiliary Lanes

► Other program area considerations:

- Bridge Crossing and Alignment
- Vancouver Interchanges
- All options assume replacement of North Portland Harbor Bridge. More work will be done to identify benefits and impacts.
- Active transportation improvements will be integrated into design options for all areas.



Steps to Get to the Modified LPA

- ▶ **The steering and advisory groups will continue to provide feedback on major components of the LPA in March/April, which will be considered in the decision-making process for identifying a Modified LPA alongside:**
 - Technical expertise
 - Partner agency feedback
 - Screening results
 - Traffic modeling data
 - Equity analysis
- ▶ **The program will identify a recommendation for a modified LPA that considers all inputs and information from partners, EAG, and CAG:**
 - Partner boards and councils will review the recommended Modified LPA beginning in May.
 - The program will summarize the outcome of boards and councils for ESG endorsement of the Modified LPA.
 - The consensus recommendation from ESG will be presented to the Bi-State Legislative Committee for endorsement.

Timeline to Identify Modified LPA

- ▶ **Late April/early May**
 - Identify Program recommendation for Modified LPA
- ▶ **Mid-May to mid-July**
 - Review and adoption of recommended Modified LPA by partner boards and councils
- ▶ **July**
 - Consensus recommendation from ESG
- ▶ **Late July (Proposed)**
 - Bi-State Legislative Committee consideration of Modified LPA
- ▶ **August 1**
 - Language included in WA supplemental transportation budget (awaiting Governor's signature):
 - *The Washington members of the joint Oregon-Washington legislative action committee shall report back to the Washington state legislature, by August 1, 2022, regarding the progress of the committee and its work to advance the project to build a new Interstate 5 bridge spanning the Columbia river. **The report must include a description of the locally preferred alternative ultimately identified as part of the Interstate Bridge replacement project.***

Beyond the Modified LPA

- ▶ **The Modified LPA identifies what to test through additional analysis**
- ▶ **Provides a starting point for more detailed discussions and decisions as part of the Supplemental Environmental Impact Statement process, which will identify:**
 - Additional details and recommendations on the overall bridge design.
 - How we've avoided and minimized impacts and considered any needed mitigation will be determined.
 - Ongoing opportunities to provide input and for community engagement as the program works through the detailed federal environmental process.



Questions and Feedback

Update on Transit and Design Options Evaluation Process

John Willis, IBR Deputy Program Manager

Shilpa Mallem, IBR Deputy Design Manager

Shawn Donaghy, C-TRAN CEO

JC Vannatta, TriMet Executive
Director of Public Affairs

What has changed for transit since 2013?

- ▶ C-TRAN has developed and begun implementation of the Vine BRT network.
- ▶ City of Vancouver has worked with C-TRAN to design robust station environments for the Vine system on Broadway and Washington in the Central Business District.
- ▶ The City of Vancouver has seen substantial growth in the Waterfront District as planned for in the Waterfront Development Plan.
- ▶ The population of the region is growing and diversifying. Since 2010, Clark County's population has grown by nearly 78,000 (76% of whom are people of color).

Considering Transit Investments

- ▶ The representative transit investment development process has been underway since this fall to better understand what type of transit investment would best serve the program corridor and the region.
- ▶ The process cast a wide net and included many inputs:
 - Technical analysis (16 measures).
 - A deeper understanding of what has changed both physically and in planning processes since the CRC program ended in 2013.
 - High-level conceptual design to better understand how investments might work within the built environment.
 - Feedback from partners, advisory groups, and community engagement.

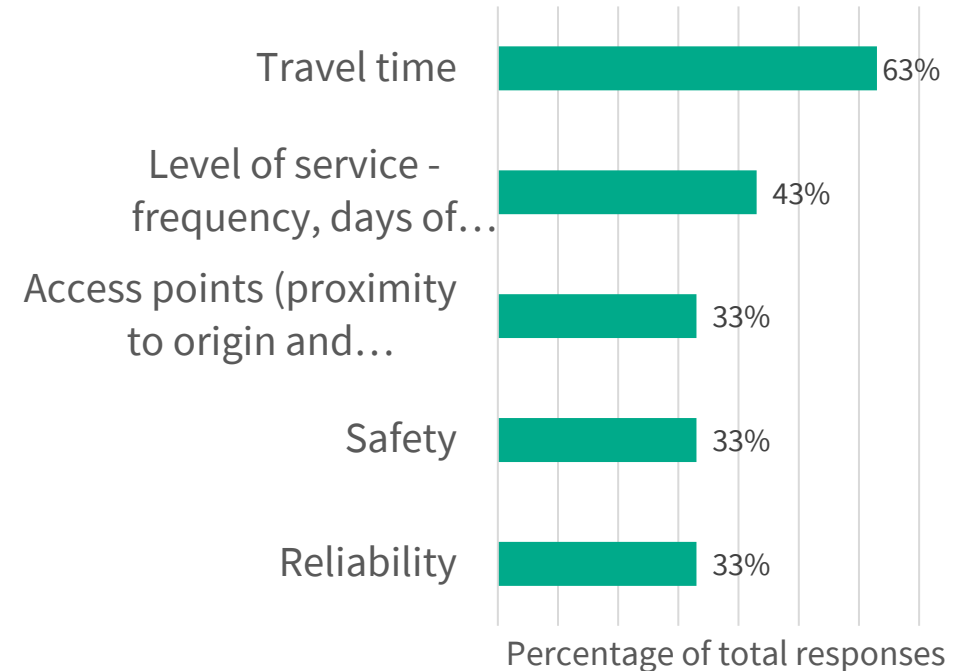
Community Engagement Feedback: Transit

► Key takeaways:

- Overall support for implementation of a high-capacity transit system, with noted interest in Light Rail specifically.
- Desire for greater connectivity from Clark County into Portland and the regional transit system.
- Expressed need for increased parking availability at park and rides to support transit use.
- Equity-priority communities expressed high interest in accessible and dependable transit options including:
 - *Desire for multiple transportation options that are efficient, reliable and user-friendly.*
 - *Support for infrastructure that promotes high-capacity transit and low-stress active transportation options.*

High-Capacity Transit Design Option Feedback: Survey

- ▶ Travel time ranked as most important transit priority.
- ▶ Majority would access transit by car via a park and ride location:
 - Oregon residents would be more likely to access transit via walking/biking or rolling.
- ▶ Youth placed a higher priority on cost to user when considering transit use.
- ▶ Highest preferences for potential transit stations located at or near:
 - Vancouver Waterfront
 - Clark College
 - Expo Center
 - Hayden Island
 - Vancouver Library (Evergreen)

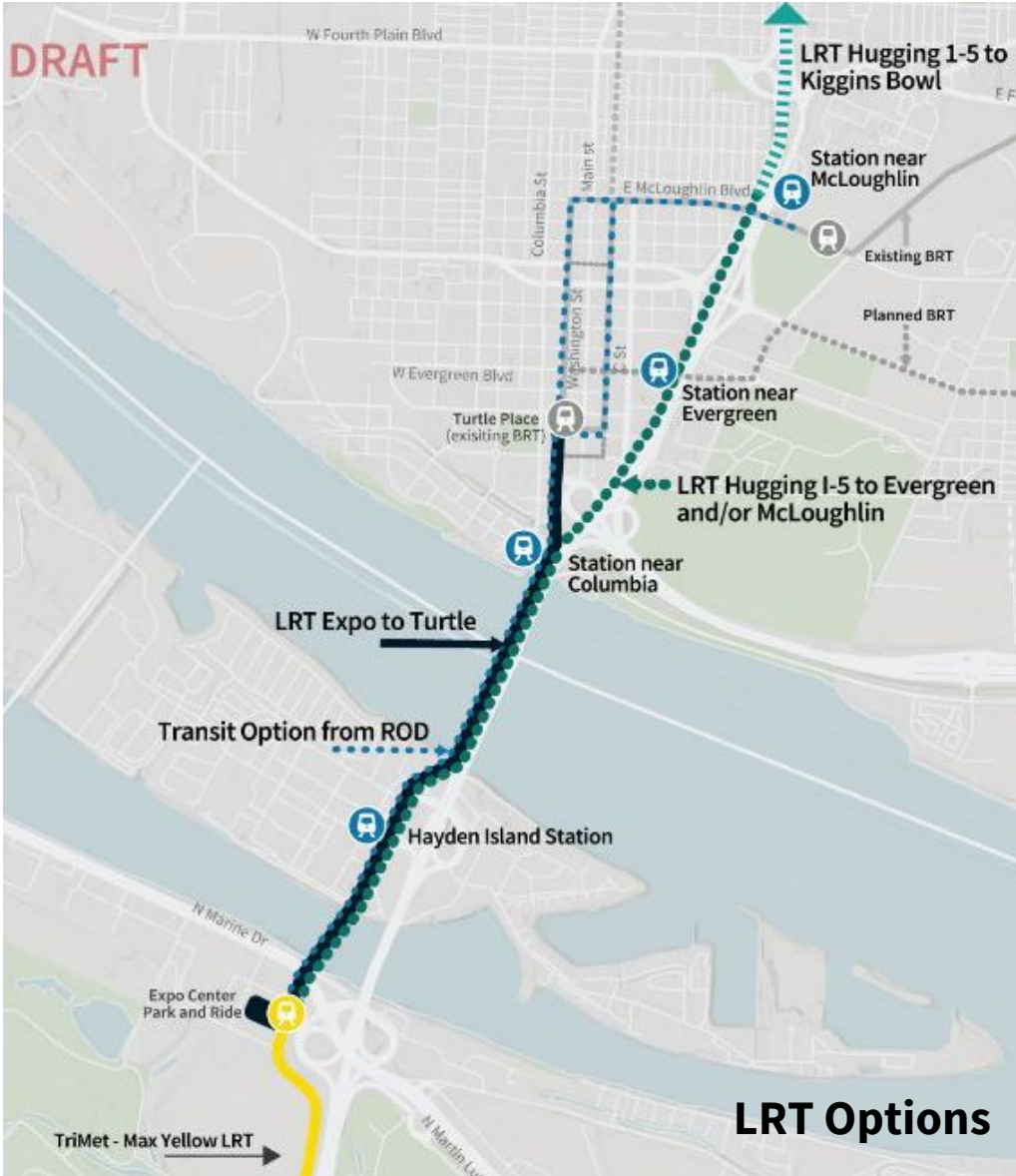


Representative Transit Investments

- ▶ A variety of representative options were identified to understand how possible project investments perform relative to each other:
 - 11 build options and 1 no-build option:
 - 1 bus on shoulder
 - 3 BRT
 - 6 LRT
 - 1 hybrid LRT/BRT

Option B	Option C	Option D	Option E	Option F	Option G	Option H	Option I	Option J	Option L	Option M
2045 LPA	Bus on shoulder	Dedicated BRT - Extend Vine(s) BRT from Turtle Place to Expo	Dedicated BRT Connection - Kiggins Bowl to Expo on an I-5 Adjacent Dedicated Guideway	Dedicated BRT Connection - McLoughlin/I-5 to Expo in a Dedicated Guideway on the 2013 Transit Alignment	Hybrid Option - Extend Vine(s) BRT to Hayden Island, Extend MAX Yellow Line to Hayden Island	LRT Extension from Expo to Hayden Island to a Station with Terminus near Turtle Place	LRT Extension from Expo to a Terminus near McLoughlin/I-5 on an I-5 Adjacent Alignment (Center/West Side of I-5)	LRT Extension from Expo to a Terminus near Kiggins Bowl on an I-5 Adjacent Alignment (Center/West Side of I-5)	LRT Extension from Expo on an I-5 Adjacent Dedicated Guideway to a Terminus Near McLoughlin/I-5 with Waterfront Station	LRT Extension from Expo on an I-5 Adjacent Dedicated Guideway to a Terminus Near Evergreen/I-5 with Waterfront Station

Representative Transit Investments



Development of Transit Investment Measures

- ▶ The IBR team developed measures with project partners in order to better understand how the representative transit investments would perform relative to each other.
- ▶ Measures included:
 - Multiple measures of ridership demand in 2045:
 - *Includes river crossings by mode.*
 - *Ridership by time of day.*
 - *Mode of access:*
 - Walk access
 - Transfer from existing transit (bus/rail)
 - Park & Ride access
 - Access for equity priority communities
 - Relative costs:
 - *Capital costs*
 - *Operations and maintenance cost*
 - Potential impacts

Transit Trade Offs and Performance

- ▶ Model to identify trade offs to inform consideration of transit investments.
- ▶ Engage with CAG and EAG to get feedback on considerations such as transit access, connections, and priorities.
- ▶ Integrate transit options into the multimodal design options for screening.

EVALUATION MEASURE	
	Ridership
	Transit Boardings
	Corridor Transit Trips
	I-5 Columbia River crossings
	Station Mode of Access
	Park and Ride Demand
	Market Analysis
	Transit Travel Time
	Capital Costs
	Operating and Maintenance Cost
	Climate Resiliency
	Proximity to HCT for Equity Priority Communities
	Mobility for Equity Priority Communities
	Potential Property Impacts

Transit Equity Analysis

► Considerations to support equitable outcomes:

- Comparing station locations in terms of total population and equity priority communities within ½ mile walk.
- Identifying how different transit investments could improve access to jobs and services for equity priority communities.
- Analysis for specific neighborhoods identified by the IBR Equity Index.
- Potential property impacts of transit investments.
- Comparing results at different times of day and lengths of trip.

This feeds into design options screening and performance metrics to help shape the transit component of the modified LPA.

Transit Measures – Early Draft Findings

- ▶ All ‘build’ options significantly improve service over the ‘no-build’ option.
- ▶ There is substantial demand for cross river transit service.
- ▶ Capacity, both at the transit investment level and at the system level, are important considerations for selecting a preferred alternative.
 - LRT: Downtown Vancouver, Interstate Ave, Rose Quarter, Steel Bridge, Portland Transit Mall
 - BRT: Downtown Vancouver
 - Express Bus: Downtown Vancouver and the Portland Transit Mall
- ▶ A combination of Vine BRT, LRT, and express bus service will be needed to serve identified markets and demand.
- ▶ Transfers from other transit vehicles are the highest mode of access for all representative transit investments. This highlights the importance of conveniently connecting the C-TRAN and TriMet systems.
- ▶ When comparing the same representative alignment, LRT options have higher ridership than BRT options.

Transit Measures – Early Draft Findings

- ▶ Park & Ride demand is robust in all the representative investment scenarios, with the greatest demand attributed to those that provide the most convenient access from I-5.
- ▶ Options that include more stations serve more residents within walking distance, including BIPOC and low-income populations.
- ▶ All transit investments improve access to jobs, including BIPOC and low-income populations. LRT investments improve access to jobs to a greater degree than BRT investments alone.
- ▶ When comparing the same representative alignment, LRT options have a higher capital cost and a lower operating cost per rider than BRT options.

Next Steps for Transit Investment Options

- ▶ **Community Advisory Group**
 - Additional discussion and feedback on how transit investments align with community values and priorities.
- ▶ **Equity Advisory Group**
 - Additional discussion and feedback on how transit investments can support equity objectives.
- ▶ **Working to define the preferred transit investment for inclusion in the Modified LPA and further study in the SDEIS.**
- ▶ **Feedback on takeaways to inform winnowing:**
 - Mode
 - *BRT*
 - *LRT*
 - General Alignment
 - Other



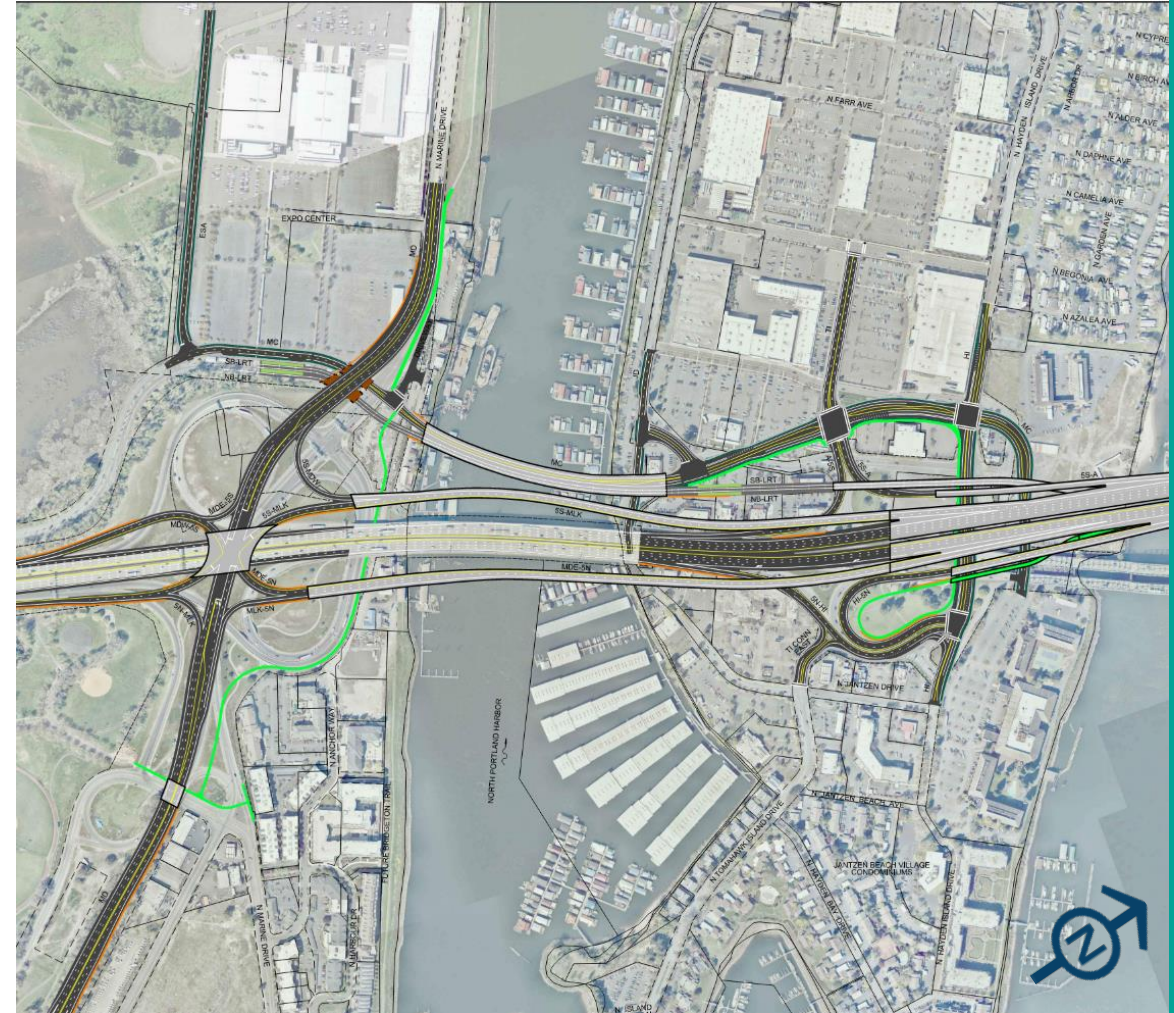
Hayden Island/Marine Drive

What has changed for Hayden Island/Marine Drive since 2013?

- ▶ Increased off-ramp traffic volumes for southbound Marine Drive exit.
- ▶ Changes in business development.
- ▶ Port of Portland marine terminal no longer planned for Hayden Island.
- ▶ Increased need to replace aging North Portland Harbor bridge.
- ▶ Proposed levee system improvements.

Hayden Island/Marine Drive Design Assumptions

- ▶ North Portland Harbor bridge replacement.
- ▶ Local auto access bridge between North Portland and Hayden Island.
- ▶ Local pedestrian/bicycle connections with shared use path.
- ▶ High-capacity Transit station on Hayden Island.



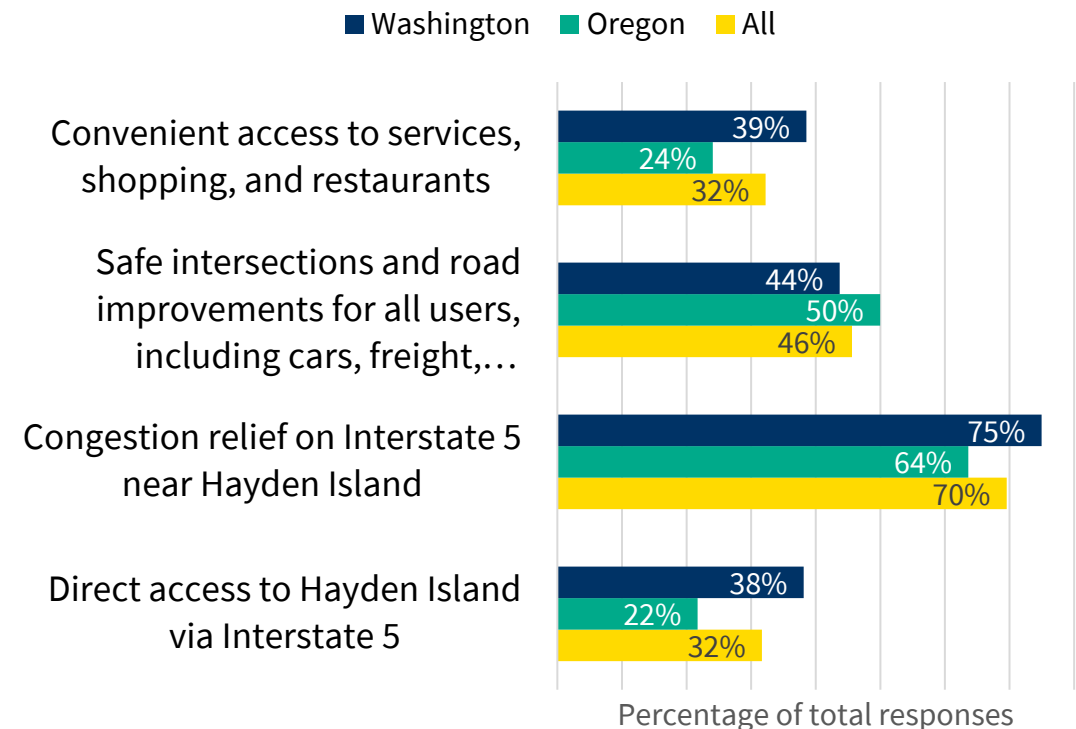
Hayden Island/Marine Drive Design Options

- ▶ **Overview of design and screening process:**
 - Identify changes since 2013
 - Develop concepts to address changes
 - Development of screening metrics
- ▶ **Design Options:**
 - 2013 Locally Preferred Alternative (LPA): Full interchange
 - **Option 1: Full interchange**
 - Option 2: Partial interchange
 - Option 3: Partial interchange
 - Option 4: No interchange
 - **Option 5: Partial interchange**

Hayden Island/Marine Drive Feedback: Survey

- ▶ Congestion relief and safety ranked as most important considerations.
- ▶ Mixed response regarding preference for how to access Hayden Island:
 - Washington residents more likely to prefer direct access from I-5.
 - Oregon residents more likely to prefer access via Marine Drive and arterial bridges from North Portland.
 - 1/3 of respondents indicated no preference.
- ▶ Dedicated lanes and safety signals for active transportation were the highest priority for those who walk/bike/roll.

When selecting my preference for how to access Hayden Island, what I care most about is:



Community Feedback: Hayden Island/Marine Drive

▶ Community Working Group:

- Generally supportive of Hayden Island full interchange options; strong opposition towards no interchange option.
- Concerns around construction impacts.

▶ Freight Community:

- Optimize freight movement, especially for high, wide, and heavy freight:
 - *Interest in truck-only lanes*
 - *Removal of height restrictions and bridge lifts*
 - *Freight connectivity, including on/off-ramp locations and east/west access to Terminal 6 in North Portland.*
- Interest in alignment and number of lanes.
- Concern that I-205 freight congestion may increase if the program doesn't adequately accommodate freight growth on I-5.

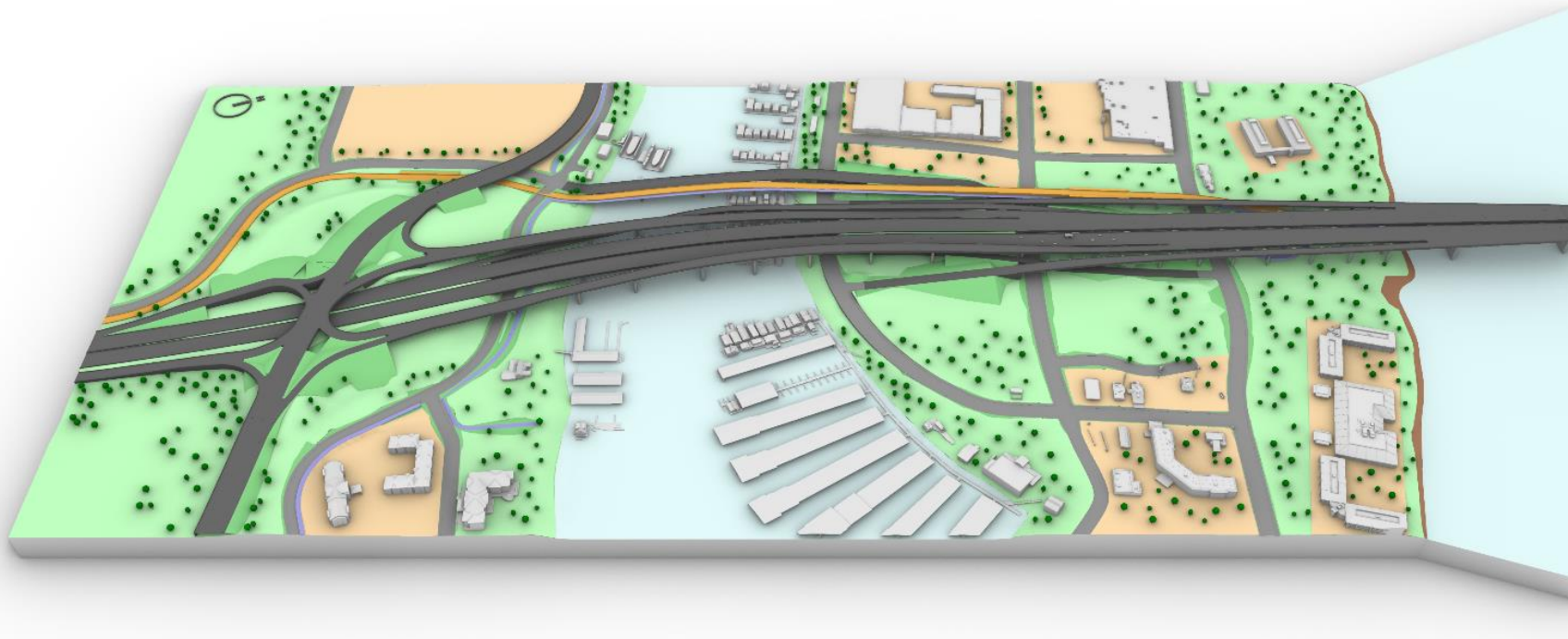
Narrowing Design Options

- ▶ Initial findings identified fatal flaws with Options 2, 3, and 4.
- ▶ Options 2 and 3 (partial interchange on Hayden Island) were found to be unable to serve the high traffic/freight volumes:
 - All Hayden Island traffic to and from I-5 South must use the Marine Drive interchange.
 - Options included loop ramps that were not able to handle the additional traffic from Hayden Island.
 - The option was also limited by multiple design issues including sight distance, ramp grades, and lane transitions.

Narrowing Design Options

- ▶ **Option 4 (no interchange on Hayden Island):**
 - All Hayden Island traffic must use the Marine Drive interchange to access I-5.
 - Substantial traffic/freight impacts on Marine Drive and ramp terminal intersections.
 - Marine Drive and the ramp terminals will not be able to safely accommodate the additional traffic from Hayden Island.

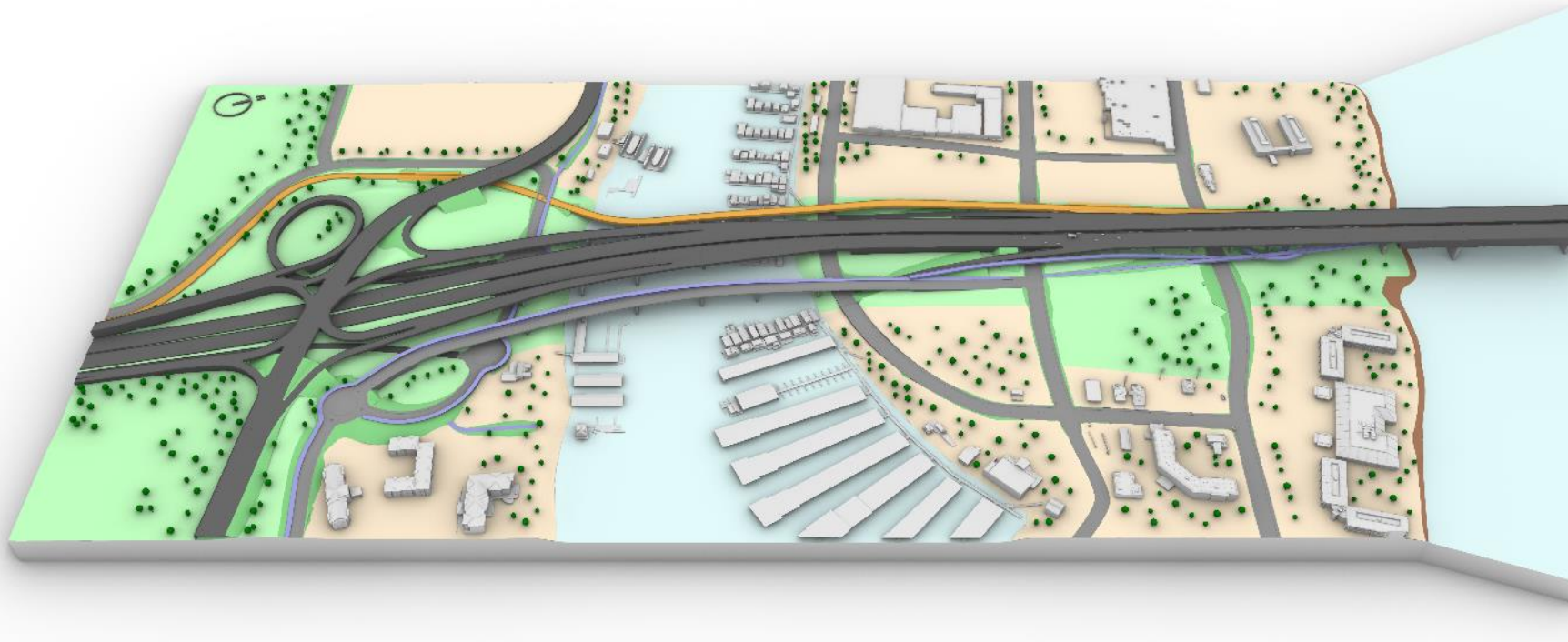
Option 1: Full Interchange



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.

- ▶ Full I-5 access on Hayden Island.
- ▶ Local east-west island circulation provided on Tomahawk Island Drive extension.
- ▶ Smallest Hayden Island footprint of full interchange options.
- ▶ Provides option for most direct shared use path.
- ▶ Bridgeton and Kenton local access provided by arterial bridge on west.
- ▶ Direct freeway access to/from Hayden Island.

Option 5: Partial Hayden Island Interchange



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.

- ▶ Expanded interchange at Marine Drive combined with partial Hayden Island interchange.
- ▶ Ramps to/from south connect to arterial below Marine Drive (Pier 99 St).
- ▶ Traffic destined to Hayden Island avoids Marine Drive.
- ▶ Partial interchange on Hayden Island similar to Design Options 2 and 3.
- ▶ East arterial bridge with closer connection to Bridgeton.
- ▶ Additional route option for Bridgeton to southbound I-5.

Hayden Island/Marine Drive: Draft Findings

- ▶ **Options 1 (full) and 5 (partial) performed the best out of all Design Options.**
- ▶ **They:**
 - Have similar freight/vehicle traffic performance on Marine Drive, including ramp terminal intersections.
 - Are compatible with river crossings options 1 and 3.
 - Are compatible with all transit investments currently under consideration.

Next Steps for Hayden Island Design Options

- ▶ **Initial screening shows Options 1 (full) and 5 (partial) are the best-performing options:**
 - Similar traffic performance on Marine Drive including ramp terminal intersections.
 - Tradeoff of ramp footprint on Hayden Island versus Delta Park vicinity.
 - Tradeoff of direct access to Hayden Island versus footprint on Hayden Island.
- ▶ **Additional screening will be completed to identify the program's recommendation for the Modified LPA:**
 - This will be informed by additional input from partner agencies and advisory groups on how these options align with values and priorities.



Questions and Feedback



Next Steps

Greg Johnson, Program Administrator

Next Steps

- ▶ Working to identify the preferred components for inclusion in the Modified LPA and further study in the Supplemental Draft EIS.
- ▶ The following will be considered in the decision-making process for identifying the program's recommendation for the Modified LPA:
 - Technical expertise
 - Partner agency feedback
 - Screening results
 - Traffic modeling data
 - Equity analysis
 - Advisory group and community feedback

Near Term Timeline

- ▶ **March / April**
 - Ongoing feedback from advisory groups on key LPA components.
- ▶ **Late April / Early May**
 - Identify program recommendation on Modified LPA components.
- ▶ **May - July**
 - Review and endorsement of the recommended Modified LPA by boards, councils, and commissions.
- ▶ **July**
 - Consensus recommendation from ESG.
- ▶ **Late July (Proposed)**
 - Bi-State Legislative Committee consideration of Modified LPA.

Timeline Beyond Summer 2022

- ▶ Continued engagement and outreach as the program moves into the federal environmental review process.
- ▶ Fall 2022
 - Updates to the conceptual finance plan in preparation for the 2023 legislative session.
 - *We know transportation projects of this size require multiple funding sources including federal, state, and tolling revenue.*
- ▶ Ongoing through late 2023
 - Additional analysis as part of the NEPA process with the Final Supplemental EIS estimated to be published late next year.
- ▶ Ongoing through mid-2024
 - Additional development of design details such as bridge type, active transportation facilities, transit details, etc.



Questions or Guidance?

- ▶ Frequency and timing of meetings and information needed to support Bi-State Legislative Committee consideration of Modified LPA?
 - Next bi-state meeting?
- ▶ Additional information needed to support August 1st legislative milestone identified in WA supplemental transportation budget?



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Thank you!

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