

MEMORANDUM: OVERVIEW OF PROGRAM RECOMMENDATION FOR MODIFIED LOCALLY PREFERRED ALTERNATIVE

MAY 5, 2022

INTRODUCTION

The Interstate Bridge Replacement (IBR) program would replace the aging Interstate 5 (I-5) bridge across the Columbia River with a modern, seismically resilient, multimodal structure. Current planning work has defined the physical and contextual changes that have occurred in the program area since 2013 and builds upon previous planning efforts accomplished as part of the Columbia River Crossing (CRC) project. To address these changes, the IBR program, in coordination with program partners and the community, developed design options, desired outcomes, and transit investments, in order to identify a Modified Locally Preferred Alternative (LPA) to be further studied through a Supplemental Draft Environmental Impact Statement (SDEIS) in compliance with the National Environmental Policy Act (NEPA).

A Modified LPA identifies the foundational elements local partners agree should move forward for further evaluation, including potential benefits and impacts and formal public comment. Detailed evaluation of the IBR program’s Modified LPA will begin in fall 2022 and be documented in a SDEIS.

PROGRAM RECOMMENDATION FOR MODIFIED LPA

IBR Recommendation: Modified LPA

Hayden Island/
Marine Drive:
Partial Interchange

Transit:
**Light Rail to
Evergreen near
I-5**

River Crossing
Auxiliary Lanes:
1

Variable Rate
Tolling:
Yes



**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

The IBR program recommendation for the Modified LPA includes key components representing foundational transportation improvements: transit investments, interchange configuration for Hayden Island/Marine Drive, and the number of auxiliary lanes across the bridge. Additional considerations are also assumed to be part of the Modified LPA.

TRANSIT RECOMMENDATION:

- ▶ **Extend light rail from the Expo Center in Portland, Oregon north to a new station on Hayden Island, continuing across the Columbia River on the new I-5 bridge, following I-5 to multiple stations in the City of Vancouver, including a northern terminus at Evergreen Station in Vancouver, Washington.**

SUPPORTING RATIONALE:

The IBR program transit investment preference for light rail was developed in close coordination with our transit partners, C-TRAN and TriMet, and informed by extensive stakeholder and community input, and data. Community engagement shows widespread support for expanding transit and light rail transit, specifically.

A light rail transit extension of the MAX Yellow Line from Expo Center into Vancouver best integrates existing transit investments in the region – including C-TRAN’s Vine bus rapid transit network and express bus service. The Evergreen terminus via I-5 offers the best opportunity for merging the two metro area transit systems together. The I-5 alignment provides faster, safer, more reliable service and minimizes disruptions to downtown Vancouver.

TECHNICAL TAKEAWAYS:

- ▶ An LRT extension of the Max Yellow Line from Expo Center into Vancouver best integrates existing transit investment in the region including C-TRAN’s Vine and express bus current and future system.
- ▶ Capacity on LRT options allows the program to maximize trips.
- ▶ LRT provides more competitive travel time compared with trips that require a transfer at Expo.
- ▶ LRT investments improve access to jobs to a greater degree than BRT alone.
- ▶ LRT is more competitive for FTA discretionary funding.
- ▶ An Evergreen terminus has fewer potential property impacts and connects directly to the downtown library, the Historic Reserve, jobs, services, and amenities.
- ▶ An Evergreen terminus maximizes transfer opportunities given direct connections to several local routes as well as planned BRT routes

***COMMUNITY FEEDBACK:**

- ▶ Desire for greater connectivity from Clark County into Portland and the regional transit system.
- ▶ Support for High Capacity Transit options, with many preferring light rail or a combined light rail/bus rapid transit option.
- ▶ Strong support among residents in the entire region and solid majority support throughout Clark County for the concept of extending the MAX Yellow Line from Expo Station to Vancouver in a dedicated space across the new I-5 bridge.

- 79% of total community opinion survey respondents strongly or somewhat support light rail across the bridge, including 84% of Portland Metro Area respondents and 61% of Clark County respondents.
- ▶ Reliability and travel time of mode expressed as the most important transit priorities.
- ▶ Equity-priority communities expressed high interest in accessible and dependable transit options, including a desire for multiple transportation options that are efficient, reliable, and user-friendly and infrastructure that promotes high capacity transit.
- ▶ Highest preferences for transit stations located at (or near) Expo Center, Hayden Island, Vancouver Waterfront, Vancouver Library (Evergreen) and Clark College.

HAYDEN ISLAND/MARINE DRIVE CONFIGURATION RECOMMENDATION:

- ▶ **Construct a partial interchange at Hayden Island, and a full interchange at Marine Drive, designed to minimize impacts while making improvement to freight and workforce traffic and active transportation on Hayden Island and Marine Drive.**

SUPPORTING RATIONALE:

This option would provide an expanded interchange at Marine Drive combined with a partial Hayden Island interchange. Traffic on I-5 coming from the north would be able to access Hayden Island through direct ramps at Jantzen Drive. Traffic on I-5 accessing Hayden Island to/from the south would use an upgraded interchange at Marine Drive and an arterial bridge connection between Marine Drive and Hayden Island. Local streets would also be reconnected under I-5.

The recommendation for a partial interchange on Hayden Island recognizes the desire to balance vehicle and freight access with a preference expressed by the community to minimize the footprint over Hayden Island. It also provides the opportunity for improved active transportation and transit access.

TECHNICAL TAKEAWAYS:

- ▶ A partial interchange will create a smaller footprint over North Portland Harbor than a full interchange option with fewer floating home impacts.
- ▶ Smaller scale and complexity of I-5 over Hayden Island provides higher quality experience for active transportation and transit access on east-west streets.
- ▶ This option considers Hayden Island vehicle and freight access to/from Portland via local roads and I-5 ramps that cross under Marine Drive.
- ▶ This option considers Hayden Island vehicle and freight access to/from Vancouver via Jantzen Drive I-5 ramps.

***COMMUNITY FEEDBACK:**

- ▶ Prioritize the option with smallest footprint over Hayden Island.
- ▶ Consider freight needs, as well as active transportation safety and access.
- ▶ Prioritize congestion relief on I-5 near Hayden Island, safe intersections and road improvements, and convenient access to services, shopping, and restaurants.

- ▶ Washington residents preferred direct access to Hayden Island and Oregon residents preferred island access via Marine Drive and local access bridge.

AUXILIARY LANE RECOMMENDATION:

- ▶ **Include one auxiliary lane northbound and one auxiliary lane southbound between Marine Drive and Mill Plain Blvd to accommodate the safe movement of vehicles and freight.**

SUPPORTING RATIONALE:

The IBR program intends to maintain the three existing through traffic lanes in each direction to remain consistent with the existing system on either side of the bridge. Auxiliary lanes are ramp-to-ramp connections designed to give drivers space to merge safely when entering or exiting the roadway, reducing bottlenecks and optimizing traffic flow. The addition of auxiliary lanes can help optimize the three through lanes and allow for more efficient movement through the corridor – improving safety, helping to relieve congestion with better traffic flow, and reducing emissions from vehicles idling in congestion.

The program is committed to “right-sizing” the bridge replacement investment to best meet the needs of the region. The recommendation to study one auxiliary lane in each direction recognizes the desire to balance all of the regional needs and priorities, including safe, efficient, and reliable travel; as well as equity and climate goals. Additional analysis will be completed as part of the SDEIS process to confirm that one auxiliary lane can adequately address the Purpose and Need for the program and provide safe and effective traffic operations.

TECHNICAL TAKEAWAYS:

The addition of one auxiliary lane in each direction would provide a number of benefits compared to the 2045 No Build, including:

- ▶ Travel time improvements of 3 minutes (5% faster) SB AM between I-5/I-205 split and I-405, and 11 minutes (30% faster) NB PM between Broadway Ave and SR-500
- ▶ Congestion reduction:
 - reduces overall congestion during off-peak travel
 - reduces local street diversion
 - faster congestion recovery from incidents
- ▶ Mode shift: the daily transit share is expected to increase from 7% in the No Build to 11% in the build
- ▶ Fewer lane changes will be required (i.e. lane balance)
- ▶ Climate – GHG reduction is expected due to less congestion, as well as a reduction in VMT
- ▶ Safety improvements realized due to fewer sideswipe crashes and improved visibility

*COMMUNITY FEEDBACK:

- ▶ Support for the addition of auxiliary lanes consistently expressed
- ▶ Feedback received from advisory groups and surveys was mixed on the preference for the number of auxiliary lanes:
 - Prioritize the option that maximizes capacity and minimizes congestion

- Both travel time and environmental impacts are important from an equity standpoint
- Prioritize the option that is most environmentally friendly, including a reduction in GHG
- Combined with transit considerations, one auxiliary lane is appropriate
- Two auxiliary lanes meet community values of congestion and safety issues
- Clark County residents were more likely to select the two auxiliary lane option
- Oregon residents were split between one and two auxiliary lane options

ADDITIONAL CONSIDERATIONS

Assumptions that are expected to be included in the recommendation for the Modified LPA:

- ▶ **Replace the current I-5 bridge** over the Columbia River with a seismically sound bridge.
- ▶ **Replace the North Portland Harbor Bridge** with a seismically sound crossing.
- ▶ The construction of **three through lanes** northbound and southbound throughout the BIA (Bridge Influence Area).
- ▶ Include **active transportation and multi-modal facilities** that adhere to universal design principles and facilitate safety and comfort for all ages and abilities. This includes creating exceptional regional and bi-state multi-use trail facilities and transit connection within the Bridge Influence Area (BIA).
- ▶ Study **improvements of other interchanges** within the BIA.
- ▶ Implement a **variable rate toll** on motorists using the river crossing, with a recommendation to the Oregon and Washington State Transportation Commission to consider a low-income toll program, including exemptions and discounts.
- ▶ Establish a **GHG reduction target** relative to regional transportation and land use impacts, and to develop and evaluate design solutions that contribute to achieving program, regional, and state-wide climate goals.
- ▶ Evaluate program design options according to their impact on equity priority areas including developing a **Community Benefits Agreement**.

Additionally, in response to partner feedback, the IBR program is developing a list of commitments that will accompany the Modified LPA. The commitments are operational details and secondary design elements that support the design concepts outlined in the Modified LPA.

**Community feedback synthesizes what the program has heard from targeted community engagement efforts to gather feedback around design options. This engagement has included a variety of tools, including an online community survey with over 9,600 responses, over 300 listening session participants across multiple sessions, four Community Working Groups, and over two dozen public meetings of the program's steering and advisory groups between October 2021 and May 2022. A community opinion survey was also conducted in April 2022 to gather additional input.*

NEXT STEPS

All eight partner agencies and the program's Executive Steering Group will be asked to consider the Modified LPA, with the goal of receiving approval by the end of July 2022. An update on progress, including the detail of the Modified LPA, is due from the Washington members of the bi-state legislative committee to the Washington State Legislature by August 1, 2022.

Adoption of a Modified LPA demonstrates regional consensus to move forward into the next phase of work to further study and refine the corridor-wide program alternative. The adoption of the Modified LPA by local agencies does not represent a formal decision by the federal agencies leading the NEPA process or any federal funding commitment. Other elements and investments may enhance the Modified LPA and will be identified as the IBR program continues to gather input from advisory groups and partner agencies, and further analyze the Modified LPA in the SDEIS process. Elements such as additional transit improvements (i.e. transit stations, park and rides, bus route changes, and potential expansion of an LRT maintenance facility) and river crossing structure type and alignment are anticipated to be determined in the next phase of the program.

The next phase of work will analyze benefits and impacts of the of the Modified LPA and will be shared with the public for review and comment as part of the SDEIS process. Refinements will be made in response to partner, public, and Tribal engagement, as well as additional design analysis. After the Modified LPA is refined to address public comments, the combined Supplemental Final Environmental Impact Statement and Amended Record of Decision will be published. The goal is to begin construction by late 2025.

IBR MODIFIED LPA BRIEFING PACKET PURPOSE AND OVERVIEW

The *IBR Modified Locally Preferred Alternative Briefing Packet* was created as supporting documentation that reflects a compilation of the work completed by the IBR program team and program partners in support of identifying a program recommendation for a Modified LPA. Design options and transit investments were screened against criteria to evaluate their ability to meet the program's Purpose and Need statement and desired outcomes, including equity and climate objectives. The *IBR Modified Locally Preferred Alternative Briefing Packet* provides an overview of the work that has gone into developing the program's Modified LPA recommendation, including: climate and equity frameworks, design concepts and investments; screening results and modeling data; and input and feedback from partner agencies, program advisory groups, and the community.