

## 3.5 Neighborhoods and Communities

This section summarizes the proposed IBR Program's benefits and impacts to neighborhoods and communities. Transportation infrastructure substantially influences neighborhoods and communities. Highways and transit connect people with their homes and daily destinations, while local streets and paths provide circulation for drivers, bicyclists, and pedestrians within their neighborhoods. New or modified transportation infrastructure can improve these connections, such as by improving commutes for nearby residents and increasing community investment. It can also negatively change a community's character, for example by displacing neighborhood resources and increasing noise levels for residents adjacent to the highway. Thoughtful planning and design of transportation infrastructure can increase benefits to surrounding communities and reduce negative impacts. The information in this section is based on the IBR Neighborhoods and Communities Technical Report (as listed in Appendix H).

The assessment of reasonably foreseeable effects in this section is based upon the geographic and temporal proximity parameters detailed in the Chapter 3 introduction.

### 3.5.1 Changes or New Information Since 2013

The Columbia River Crossing (CRC) Selected Alternative identified in the 2011 Record of Decision (ROD), as revised by the 2012 and 2013 re-evaluations, is referred to as the CRC Locally Preferred Alternative (LPA). Over the past 10+ years since the CRC LPA was identified, the physical environment near the Interstate Bridge community priorities, and regulations have changed, which necessitated design revisions and resulted in the proposed IBR Program Modified LPA (see Section 2.5.2). Evaluation of reasonably foreseeable effects associated with neighborhoods and communities has been updated in this Final SEIS to include:

- Updated demographic information, neighborhood characteristics, and community resources within the primary study area.
- Changes in land uses such as development at the Vancouver Waterfront, planned uses on Hayden Island, and recently constructed, altered, or removed buildings.
- Changes in the project footprint necessitated by changed conditions resulted in shifting the LRT alignment and modifying interchange designs.
- Updated analysis of the Modified LPA and design options, which were necessitated by changed conditions.
- Updated analysis of long-term and short-term reasonably foreseeable effects on Oregon and Washington neighborhoods resulting from the Modified LPA.

The reasonably foreseeable effects associated with the Modified LPA do not differ substantially from those of the CRC LPA. Both the CRC LPA and the Modified LPA would be consistent with neighborhood plans, both would reduce air pollutants compared to existing conditions, I-5 travel times and reliability would improve, and access to transit, bike, and pedestrian facilities would increase.

### 3.5.2 Existing Conditions

The IBR corridor includes a 5-mile segment of I-5 approximately between the SR 500 interchange in Washington and the I-5/Columbia Boulevard interchange in Oregon, as well as the Ruby Junction Light-Rail OMF in Gresham, Oregon.

## Primary Study Area Neighborhoods

The primary study area includes 15 neighborhoods in the cities of Portland, Gresham, and Vancouver (Figure 3.5-1).

- Portland
  - Bridgeton
  - East Columbia
  - Hayden Island
  - Kenton
- Gresham
  - Rockwood
- Vancouver
  - Arnada
  - Central Park
  - Columbia Way
  - Esther Short
  - Hough
  - Hudson’s Bay
  - Lincoln
  - Rose Village
  - Shumway
  - West Minnehaha

### Terms and Definitions

#### **Community resources and cohesion.**

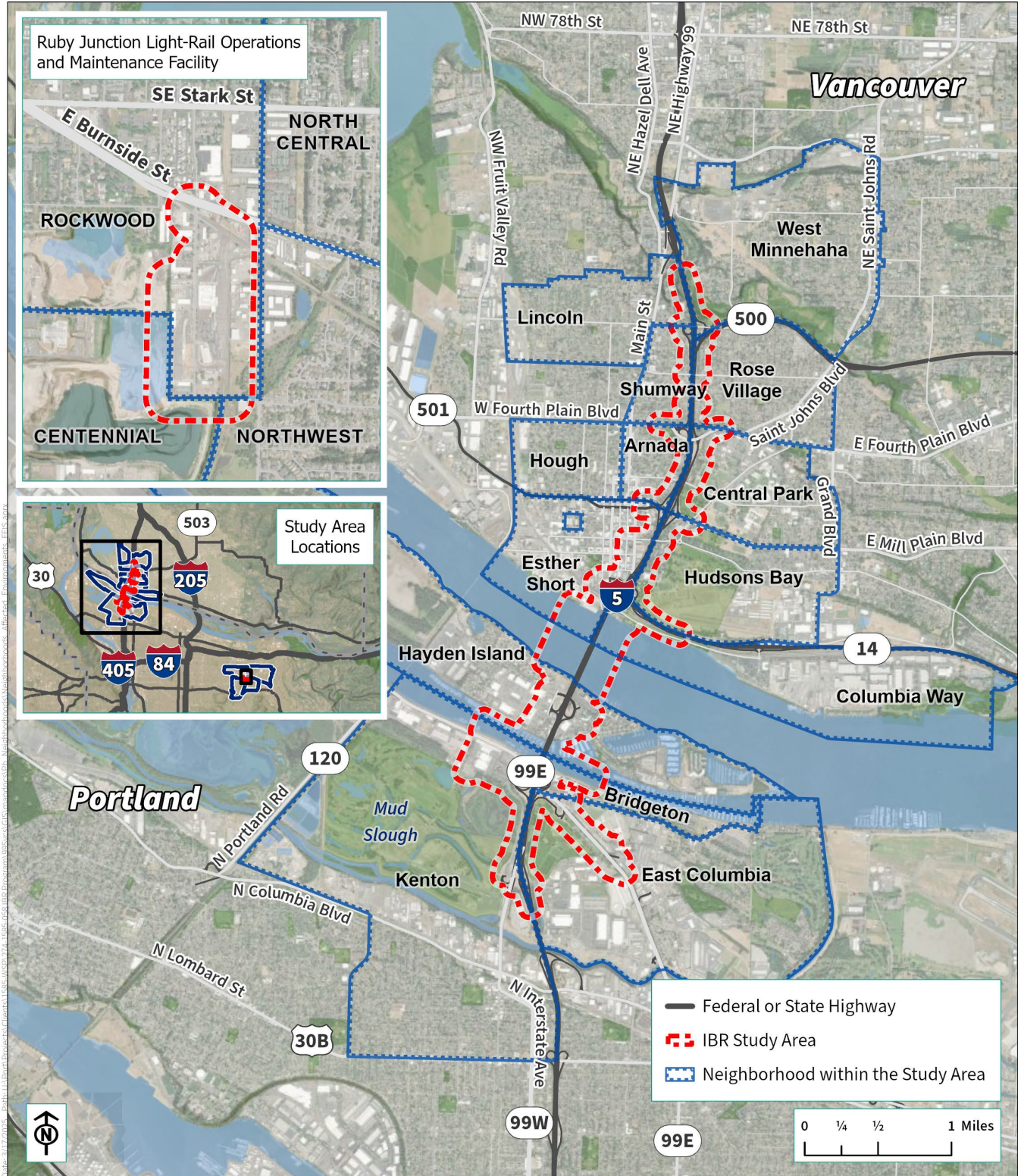
Community resources typically include educational, religious, health care, cultural, and recreational facilities. Community cohesion measures how well residents can connect with one another within their community. These connections can occur at gathering places such as schools, community centers, parks, or transit stations. High home ownership rates and active neighborhood associations also contribute to cohesion.

Data that helps identify the overall neighborhood character, which is detailed in Section 2.6 of the IBR Neighborhoods and Communities Technical Report (as listed in Appendix H), includes:

- Total population.
- Household size.
- Neighborhood demographics compared to the city and county.
- Median assessed home value.
- Crime rate statistics.
- Inventory of community resources.
- Neighborhood cohesion.

Analysts primarily used American Community Survey 5-Year (2019-2023) data for the analysis (U.S. Census Bureau 2023). Other data sources are provided in the footnotes to the tables in this section.

Figure 3.5-1. Neighborhoods in the Primary Study Area



### Neighborhood Demographics

Each neighborhood has a unique character formed by its residents, community resources, businesses, and landmarks. Table 3.5-1 through Table 3.5-6 display the race/ethnicity, demographic, and age characteristics of primary study area neighborhoods in Oregon and Washington. For Oregon neighborhoods, data for Portland and Multnomah County are provided for comparison. For Washington neighborhoods, data for Vancouver and Clark County are provided for comparison. Several distinctions within the demographics of the primary study area are summarized as follows:66-6

The IBR Program is consulting with 10 federally recognized Indian Tribes. While there are no reservations within the IBR primary study area, these tribes are sovereign nations that have identified an interest in the Program and the project area. Enrollment data is held and managed by the tribes and therefore is not incorporated into this report. Tribal members living within the IBR primary study area are reflected in the U.S. Census data, but they are not specifically identified by tribal affiliation.

**People with disabilities.** The disabled population rate varies across primary study area neighborhoods. The Esther Short neighborhood reports a 27.35% disability rate, likely due to the senior housing in the area. All other neighborhood disability rates fall between about 101% and 189% (see Table 3.5-3. and Table 3.5-4).

**Older adults and children.** The Columbia Way neighborhood has the largest rate of people over 65, with 38.6%; all other primary study area neighborhoods have a rate between 6.5% and 26%. The Columbia Way neighborhood has the lowest percentage of children (age 18 or younger), at 3.2%, while the Rockwood neighborhood has the highest percentage of children, at 28.3% (see Table 3.5-5 and Table 3.5-6).

**Car ownership.** The neighborhoods vary in their reliance on automobile transportation. Thirty-one percent of households in the Esther Short neighborhood report that they do not own a car. The Hough neighborhood also shows relatively low rates of car ownership; 23.90% of the residents do not own a car. All other neighborhoods have a rate of households without a car between 0.42.1% and 16.75% (see Table 3.5-3. and Table 3.5-4).

Table 3.5-1. Race/Ethnicity for Oregon Primary Study Area Neighborhoods, Portland, and Multnomah County

Primary Study Area Neighborhood	Total Population	White Alone	Black or African American Alone	American Indian and Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Two or More Races	Hispanic or Latino Alone
Hayden Island	2,367	69.3%	0.9%	0.8%	1.7%	0.8%	0.5%	11.4%	14.8%
Bridgeton	1,072	68.5%	16.3%	0.7%	3.3%	<0.1%	0.9%	8.9%	3.1%
East Columbia	970	47.4%	5.8%	0.7%	21.9%	0.6%	0.0%	9.2%	14.4%
Kenton	7,825	66.7%	4.8%	0.4%	3.3%	1.9%	0.3%	6.8%	15.7%
Rockwood	13,586	41.4%	6.8%	0.2%	8.6%	1.0%	1.1%	4.6%	36.5%
Portland	642,715	67.0%	5.7%	0.4%	8.0%	0.5%	0.5%	6.5%	11.3%
Multnomah County	803,863	66.2%	5.4%	0.6%	7.4%	0.6%	0.5%	6.4%	13.1%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Table B03002

Table 3.5-2. Race/Ethnicity for Washington Primary Study Area Neighborhoods, Vancouver, and Clark County

Primary Study Area Neighborhood	Total Population	White Alone	Black or African American Alone	American Indian and Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Two or More Races	Hispanic or Latino Alone
W. Minnehaha	4,361	75.5%	1.5%	0.3%	0.7%	2.5%	0.1%	9.6%	9.9%
Lincoln	3,939	75.3%	3.0%	1.4%	2.0%	0.0%	0.0%	6.0%	12.3%
Shumway	1,177	79.9%	0.9%	2.9%	3.6%	0.0%	0.0%	5.0%	13.7%
Rose Village	6,313	51.8%	1.3%	0.2%	3.9%	2.3%	0.7%	7.2%	32.6%
Hough	2,924	84.4%	2.9%	0.2%	1.1%	0.0%	0.0%	9.6%	1.9%
Arnada	1,179	72.1%	3.3%	1.9%	4.7%	0.0%	1.1%	3.8%	13.1%
Central Park	2,643	61.6%	4.8%	0.0%	0.3%	0.0%	1.6%	3.4%	1.6%
Esther Short	3,590	75.2%	7.2%	1.6%	5.7%	0.0%	0.7%	5.9%	6.4%
Hudson’s Bay	2,319	75.8%	1.6%	0.5%	2.8%	0.0%	1.6%	9.2%	8.4%
Columbia Way	1,177	73.1%	0.0%	1.9%	10.4%	0.0%	0.0%	3.6%	11.0%
Vancouver	192,696	65.4%	3.0%	0.4%	5.2%	1.8%	0.5%	6.5%	17.2%
Clark County	510,516	73.5%	2.0%	0.3%	4.7%	0.8%	0.6%	6.1%	12.0%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Table B03002

Table 3.5-3. Demographic Characteristics for Oregon Primary Study Area Neighborhoods, Portland, and Multnomah County

Primary Study Area Neighborhood	Families below Poverty Level	Low-Income Population (<2x Poverty Level)	Disabled <sup>a</sup>	Large Families <sup>b</sup>	Owner-Occupied Housing	Home Value Index <sup>c</sup>	Housing Units with No Vehicle
Hayden Island	6.7%	30.4%	10.5%	3.0%	80.3%	\$306,846	8.5%
Bridgeton	15.7%	27.3%	11.6%	5.0%	57.0%	\$373,990	1.8%
E. Columbia	8.2%	21.3%	11.6%	9.0%	85.4%	\$441,748	3.0%
Kenton	6.5%	22.6%	9.8%	9.8%	66.9%	\$451,501	13.2%
Rockwood	22.5%	41.9%	17.9%	20.9%	42.7%	\$382,491 <sup>d</sup>	16.7%
Portland	7.1%	26.0%	13.2%	9.8%	52.8%	\$516,471	13.7%
Multnomah County	7.3%	26.6%	13.7%	11.1%	54.1%	\$485,658	12.7%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Tables B1702, C17002, S1810, B11016, B25044

- a Disability is defined by the existence of a physical, mental, or emotional condition lasting 6 months or more in household members 5 years of age and older that makes it difficult to perform activities including working and leaving home.
- b Large family means five or more people per family household.
- c Zillow Home Value Index, January 2024. <https://www.zillow.com/research/data/>.
- d Neighborhood-specific value unavailable for Rockwood. Reported home value is for ZIP code 97233, which includes Ruby Junction and much of the Rockwood neighborhood.

Table 3.5-4. Demographic Characteristics for Washington Primary Study Area Neighborhoods, Vancouver, and Clark County

Primary Study Area Neighborhood	Families below Poverty Level	Low-Income Population (<2x poverty level)	Disabled <sup>a</sup>	Large Families <sup>b</sup>	Owner-Occupied Housing	Home Value Index <sup>c</sup>	Housing Units with No Vehicle
West Minnehaha	0.9%	22.8%	15.0%	33.7%	62.6%	\$465,982	0.4%
Lincoln	12.4%	25.6%	14.4%	8.2%	60.1%	\$476,980	6.3%
Shumway	2.6%	21.0%	15.4%	10.0%	60.8%	\$458,853	8.8%
Rose Village	8.2%	34.2%	16.0%	18.7%	43.9%	\$366,811	5.6%
Hough	13.3%	36.8%	18.7%	7.3%	41.4%	\$462,071	23.9%
Arnada	10.0%	26.6%	13.8%	0.6%	39.1%	\$490,458	10.8%
Central Park	21.6%	56.3%	17.9%	9.2%	25.2%	\$388,342	8.3%
Esther Short	7.6%	37.7%	27.3%	1.5%	15.3%	\$397,237	31.0%
Hudson’s Bay	0.5%	23.4%	17.5%	0.0%	36.0%	\$411,189	7.7%
Columbia Way	1.0%	13.5%	16.7%	0.0%	51.5%	\$416,059	7.5%
Vancouver	7.5%	27.9%	15.1%	14.9%	49.9%	\$486,897	7.0%
Clark County	5.8%	21.7%	13.0%	16.4%	66.2%	\$523,789	4.7%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Tables B1702, C17002, S1810, B11016, B25044

- a Disability is defined by the existence of a physical, mental, or emotional condition lasting 6 months or more in household members 5 years of age and older, that makes it difficult to perform activities including working and leaving home.
- b Large family means five or more people per family household.
- c Zillow Home Value Index, January 2024. <https://www.zillow.com/research/data/>.

Table 3.5-5. Population Age for Oregon Primary Study Area Neighborhoods, Portland, and Multnomah County

Primary Study Area Neighborhood	Total Population	0 to 4 Years	5 to 17 Years	18 to 64 Years	65 and Older
Hayden Island	2,367	2.2%	8.1%	58.4%	31.3%
Bridgeton	1,072	2.1%	12.0%	59.9%	26.0%
East Columbia	970	2.9%	16.7%	63.1%	17.3%
Kenton	7,825	4.8%	19.5%	66.5%	9.2%
Rockwood	13,586	9.1%	23.9%	58.2%	8.8%
Portland	642,715	4.3%	16.7%	64.8%	14.2%
Multnomah County	803,863	4.7%	17.9%	63.0%	14.4%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Table B0101

Table 3.5-6. Population Age for Washington Primary Study Area Neighborhoods, Vancouver, and Clark County

Primary Study Area Neighborhood	Total Population	0 to 4 Years	5 to 17 Years	18 to 64 Years	65 and Older
West Minnehaha	4,361	5.0%	23.4%	57.6%	14.0%
Lincoln	3,939	5.8%	18.4%	58.8%	17.0%
Shumway	1,177	3.9%	14.4%	64.9%	16.8%
Rose Village	6,313	6.3%	23.7%	62.3%	7.7%
Hough	2,924	6.2%	19.6%	55.5%	18.7%
Arnada	1,179	4.6%	15.5%	66.8%	13.1%
Central Park	2,643	7.1%	20.5%	64.1%	8.3%
Esther Short	3,590	1.8%	4.6%	72.3%	21.3%
Hudson's Bay	2,319	5.2%	14.2%	63.3%	17.3%
Columbia Way	1,977	1.8%	7.0%	54.4%	36.8%
Vancouver	192,696	5.5%	21.4%	57.1%	16.0%
Clark County	510,516	5.7%	23.1%	54.9%	16.3%

Source: American Community Survey (2023) 5-Year Estimate Data (U.S. Census Bureau 2023), Table B0101

## Neighborhood Plans

Neighborhoods often define themselves and strengthen their identities through neighborhood plans, which are formally adopted by city-supported neighborhood associations. The Cities of Portland and Vancouver formally adopt these neighborhood plans as part of their respective comprehensive plans. All neighborhoods in the primary study area have an adopted plan except for the East Columbia, Rockwood in Gresham, and Columbia Way neighborhoods.

Neighborhood plans typically include goals, objectives, proposed comprehensive plan and zoning changes, and an implementation strategy. Within the primary study area, goals in neighborhood plans relevant to potential benefits and impacts of the IBR Program include:

- Minimize the adverse impacts of increased density; support density adjacent to transit.
- Preserve existing housing stock; preserve historic character.
- Reduce transportation-related noises and odor; mitigate I-5 noise.
- Reduce speeding within the neighborhood.
- Enhance and maintain on-street parking, including bike parking.
- Maintain adequate transit service; support development of light-rail.
- Improve bicycle and pedestrian facilities and connections.
- Protect the Columbia River from contaminants.

## Homeless Populations

Counts of homeless populations do not necessarily reflect the actual number of homeless people within the limits of the IBR primary study area, as these counts change over time due to the transient nature of homeless populations. For this reason, the number of homeless individuals and families living in the IBR Program

primary study area is not known. Multnomah and Clark Counties have Point-in-Time Count data that provides a census of the homeless population every two years; however, the geographic area for this data is too large to determine a count for the primary study area (Clark County’s figures are only available at the county level and Multnomah County’s street count areas include all of Portland and other portions of the county). Table 3.5-7 shows homeless population counts for these areas.

Table 3.5-7. Multnomah County Homeless Populations for Geographic Areas Containing the IBR Primary Study Area

Geographic Area	Homeless Population
Inner Northeast Portland	123 households
North Portland	226 households
Clark County	669 persons

Sources: Point-in-Time Counts for Multnomah County (Multnomah County Joint Office of Homeless Services 2022) and Clark County (Clark County Council for the Homeless 2024)

### 3.5.3 Engagement Activities and Consultation

Public involvement is important to data gathering, building trust, and developing viable solutions. Meaningful public involvement in the IBR Program included forming four advisory groups. The advisory groups are composed of regional community members, who were identified and appointed to represent a range of perspectives, as well as representatives from local agencies and community-at-large members. The IBR Program has been engaging with partner agencies, tribal governments, and community-based organizations since late 2020 and has been conducting more formal intentional community engagement since January 2021. The IBR Program conducted meetings with the advisory groups in September, October, and November of 2024 to discuss outreach strategies, public comment opportunities, and findings related to transportation, community, and environmental issues. Input from these advisory groups helped identify community resources, aspects of the Program important to neighborhood cohesion, and potential challenges to cohesion. Their feedback informed the analysis of neighborhoods and communities in the following ways:

- Identified themes related to transportation problems and community priorities and values.
  - Feedback regarding the transportation problems travelers experience with the current Interstate Bridge and the community priorities and values that should shape the Program helped to confirm that the previously identified Purpose and Need for replacing the Interstate Bridge remain valid. Congestion and travel reliability, safety, earthquake vulnerability, impaired freight movement, inadequate bicycle and pedestrian pathways, and limited public transportation were all reaffirmed as community concerns.
- Helped inform the development of the Modified LPA. Community outreach included an online survey with over 9,600 responses, 300+ listening session participants across multiple sessions, four community working groups, over two dozen public meetings and a community opinion survey. Participants provided input on the following topics relevant to neighborhoods and community cohesion:
  - Transit: Priorities expressed in community feedback included a desire for transit options that improve connectivity across the river and to the regional transit system, ease of access for a variety of users, and transit travel time/reliability. Specific feedback included support for high-capacity transit options; a desire for multiple transportation options that are efficient, reliable, and user-friendly; and preferences for transit stations located at (or near) Expo Center, Hayden Island, Vancouver Waterfront, Vancouver Library (Evergreen), and Clark College.

- Hayden Island improvements: The community expressed a desire to balance vehicle and freight access, with a preference for minimizing the footprint of I-5 over Hayden Island. Other community feedback included the need to accommodate active transportation safety and access. Washington residents expressed a preference for direct access to Hayden Island, while Oregon residents expressed a preference for island access via Marine Drive and a local access bridge.

Comments received on the Draft SEIS included feedback about the effects of the Modified LPA on neighborhoods and communities. Some of the comments reflected overall concerns regarding the duration and impacts of construction. There were also a number of specific comments regarding impacts to floating home communities on Hayden Island and impacts to the Esther Short neighborhood in Vancouver from the displacement of 33 residential units at the Normandy Apartments building under the I-5 Westward Shift design option. These comments have been responded to in Appendix S of the Final SEIS, and revisions have been made to the Final SEIS as needed to address the comments. Appendix B of the Final SEIS provides detailed information on public outreach activities throughout the duration of the IBR Program. Outreach and engagement with primary study area communities will continue to provide information on detailed design and construction planning and to confirm that impacts are minimized and mitigated to the greatest extent feasible.

WSDOT, ODOT, FHWA, and FTA are committed to consultation with tribes on projects that may affect tribal rights and resources. The IBR tribal consultation process is designed to encourage early and continued feedback from, and involvement by, tribes potentially affected by the IBR Program and to incorporate their input in the decision-making process. This process enables FHWA, FTA, the IBR Program team, and the consulting tribes to engage in an open and meaningful exchange of information about the decision-making process, and to consider tribal input during the decision-making process. Although tribal coordination and tribal consultation are being undertaken as a distinct outreach effort, tribal involvement is also occurring concurrently with agency coordination and public involvement. The consultation goals and process are documented in Appendix A, Agency and Tribal Coordination.

### 3.5.4 Long-Term Benefits and Reasonably Foreseeable Effects

The geographic proximity and temporal scope described in the Chapter 3 introduction are used to assess long-term benefits and reasonably foreseeable effects to neighborhoods and communities.

Table 3.5-8 summarizes the effects of the No-Build Alternative, Modified LPA, and design options on neighborhoods. The design option combinations shown in columns 2 through 5 are those that would have differing effects on neighborhoods and communities; other combinations of design options would have similar effects as those described in columns 2 through 5. Detailed analyses of the effects are provided in the following sections.

Table 3.5-8. Summary of No-Build Alternative and Modified LPA Effects on Neighborhoods and Communities

<p><b>1</b></p> <p><b>No-Build Alternative</b></p>	<p><b>2: IBR Program Recommended Design Options</b></p> <p><b>Modified LPA with Single-Level Fixed-Span Bridge Configuration, <sup>a</sup> One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>	<p><b>3</b></p> <p><b>Modified LPA with <u>Double-Deck Fixed-Span Bridge Configuration</u>, One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>	<p><b>4</b></p> <p><b>Modified LPA with Single-Level Fixed-Span Bridge Configuration, One Auxiliary Lane, with C Street Ramps, <u>I-5 Westward Shift</u>, All Five Park and Rides</b></p>	<p><b>5</b></p> <p><b>Modified LPA with <u>Single-Level Movable-Span Bridge Configuration</u>, One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>
<ul style="list-style-type: none"> <li>No change to existing neighborhoods, community facilities, or social resources. Future development might not be fully consistent with goals that assume improved mobility and expanded transit access. Neighborhoods would not benefit from reduced congestion, improved mobility, and access to employment.</li> </ul>	<ul style="list-style-type: none"> <li>Would not adversely affect community cohesion in neighborhoods, except for Hayden Island. Could increase cohesion in neighborhoods near the Community Connector.</li> <li>Would affect the Hayden Island neighborhood’s community cohesion both positively and negatively. Negative impacts include displacement of 39 floating homes and 28 businesses and changes to views. Positive impacts would include a more continuous street system, improved pedestrian and bicycle facilities, and transit that would increase connections for residents.</li> </ul>	<ul style="list-style-type: none"> <li>Would not adversely affect community cohesion in neighborhoods, except for Hayden Island. Could increase cohesion in neighborhoods near the Community Connector.</li> <li>Would affect the Hayden Island neighborhood’s community cohesion both positively and negatively. Negative impacts include displacement of 39 floating homes and 28 businesses and changes to views. Positive impacts would include a more continuous street system, improved pedestrian and bicycle facilities, and transit that would increase connections for residents.</li> </ul>	<p>The I-5 Westward Shift design option would have impacts similar to those described in Column 2 for the Centered I-5 design option, except:</p> <ul style="list-style-type: none"> <li>There would be additional residential displacements in the Esther Short neighborhood. The shift would result in the full displacement of a multifamily property with 33 residential units.</li> </ul>	<p>The Single-Level Movable-Span bridge configuration design option would have impacts similar to those described in Column 2 for the Single-Level Fixed-Span design option, except:</p> <ul style="list-style-type: none"> <li>Bridge openings would cause backups. The backups would reduce reliability for all travel modes, similar to the No-Build Alternative, which would negatively affect neighborhood cohesion by impairing access to community facilities and encouraging cut-through traffic in neighborhoods.</li> </ul>

<p>1</p> <p><b>No-Build Alternative</b></p>	<p><b>2: IBR Program Recommended Design Options</b></p> <p><b>Modified LPA with Single-Level Fixed-Span Bridge Configuration, <sup>a</sup> One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>	<p>3</p> <p><b>Modified LPA with <u>Double-Deck Fixed-Span Bridge Configuration</u>, One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>	<p>4</p> <p><b>Modified LPA with Single-Level Fixed-Span Bridge Configuration, One Auxiliary Lane, with C Street Ramps, <u>I-5 Westward Shift</u>, All Five Park and Rides</b></p>	<p>5</p> <p><b>Modified LPA with <u>Single-Level Movable-Span Bridge Configuration</u>, One Auxiliary Lane, with C Street Ramps, Centered I-5, All Five Park and Rides</b></p>
	<ul style="list-style-type: none"> <li>• Would result in construction-related impacts such as traffic diversion, noise, temporary reductions in air quality, and sidewalk disruptions.</li> </ul>	<ul style="list-style-type: none"> <li>• Would result in construction-related impacts such as traffic diversion, noise, temporary reductions in air quality, and sidewalk disruptions.</li> </ul>		

Note: The underlined design options shown in columns 3 through 5 identify the specific effects on neighborhoods and communities for that particular design option compared to the Modified LPA with Recommended Design Options (column 2). For example, the effects of the I-5 Westward Shift (column 4) would occur with any other combination of the auxiliary lanes, C Street ramps, bridge configuration, and park and ride design options.

a The effects associated with the single-level fixed-span bridge configuration design option would be the same for all bridge type design options.

I-5 = Interstate 5; IBR = Interstate Bridge Replacement Program; LPA = Locally Preferred Alternative

## No-Build Alternative

Under the No-Build Alternative, there would be no Program-related change to existing neighborhoods, community facilities, or social resources. Neighborhoods in the primary study area would continue to develop according to local and regional plans, though their development might not be fully consistent with goals that assume improved mobility in the I-5 corridor and expanded transit access; for example, the goals of the Hayden Island Plan would likely not be realized without the construction of a high-capacity transit station on the island. Section 3.4, Land Use, contains more information on local land use plans. There would be no changes in noise or vibration levels or transportation patterns that would change community cohesion, but primary study area neighborhoods would not benefit from reduced congestion, improved mobility, or access to employment opportunities from increased transit connectivity and improved active transportation connections.

## Modified LPA

Most long-term effects on neighborhoods would not differ among the Modified LPA design options. Where differences would occur, they are described in the subsections below.

### *Oregon Neighborhoods*

Potential effects on neighborhoods from the Modified LPA were assessed using six questions defined by the IBR Program to evaluate impacts and benefits. Table 3.5-9 summarizes the questions and answers for each Oregon neighborhood in the primary study area.

The Modified LPA is not anticipated to adversely affect community cohesion in neighborhoods, except for Hayden Island. In the Hayden Island neighborhood, the Modified LPA would have both positive and negative effects on community cohesion. Many of the negative effects would be experienced by the floating home community on the south side of the island, where 39 floating homes would be displaced and the views of many of the remaining floating homes would change. Eight floating homes would also be displaced from the Kenton neighborhood. In addition, 28<sup>1</sup> businesses, and the 165 jobs associated with them, would be displaced on Hayden Island. These businesses are also located on the south side of the island, primarily west of I-5; many are restaurants that provide places for neighbors to meet as well as serving shoppers at the island's retail stores. See Section 3.4, Land Use and Economics, for information on the economic effects of these business closures. With the movable-span bridge configuration design option, bridge openings would cause backups from I-5 onto the island that would reduce reliability for all travel modes, similar to the No-Build Alternative, which would negatively affect neighborhood cohesion.

Although the Modified LPA would reduce community cohesion in the southern part of Hayden Island, it would improve cohesion in other ways for those residents and businesses that would not be displaced. The Modified LPA would create a more continuous street system, improved pedestrian and bicycle facilities, and transit that increases connections for residents, both within the island and to destinations north and south. These changes would facilitate the development of a mixed-use, transit-oriented community on the island, as envisioned in the City of Portland's Hayden Island Plan. See Section 4.3 of the Neighborhoods and Communities Technical Report and Section 4.3 of the Land Use Technical Report (as listed in Appendix H), for more detail.

Tolling of the new Columbia River bridges could result in economic burdens for households in primary study area neighborhoods, along with other users of the bridges. Additional discussion of the economic effects of tolling is provided in Section 3.4 and Section 4.6 of the Economics Technical Report (as listed in Appendix H).

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<sup>1</sup> This total does not include two cell-phone towers and one billboard that would be displaced on Hayden Island.

Table 3.5-9. Overview of Anticipated Effects on Oregon Neighborhoods

Potential Effect Question	Hayden Island	Bridgeton	East Columbia	Kenton	Rockwood
Will the Program displace people or community resources, including businesses?	Residential and business displacement	Business displacement	Impacts to Delta Park	Residential and business displacement	Business displacement
Will the Program create direct or indirect impacts to social services by displacing them?	No	No	No	No	No
Will the Program separate neighborhood residents from community resources?	No	No	No	No	No
Will the Program change travel such that it will affect access to community resources?	No	No	No	No	No
Will the Program change community cohesion?	Yes, positively and negatively	No	No	No	No
Is the Program consistent with existing neighborhood plan goals?	Yes	Yes	N/A <sup>a</sup>	Yes	N/A <sup>a</sup>

<sup>a</sup> This neighborhood does not have an approved neighborhood plan.

N/A = not applicable

### **Washington Neighborhoods**

Table 3.5-10 summarizes the answers to the same set of questions for the primary study area neighborhoods in Vancouver. The Modified LPA is not anticipated to adversely affect community cohesion in these neighborhoods.

The Modified LPA would require the acquisition of a portion of Marshall Park in the Central Park neighborhood for a retaining wall along I-5. The retaining wall would displace horseshoe pits, landscaping, and trees that serve as a buffer between the community center and I-5; the current community center and senior center would remain.

In the Esther Short neighborhood, potential new transit-oriented development would add to cohesion in ways similar to those for Hayden Island. New housing and commercial services, particularly around light-rail transit stations, would give residents the opportunity to walk, bicycle, or take transit to services close to their homes, therefore providing more chances for residents to interact with one another and use community resources. Similar to the Hayden Island neighborhood, these changes would not occur under the No-Build Alternative, making it inconsistent with current planning for the area.

Table 3.5-10. Overview of Anticipated Effects on Vancouver Neighborhoods

Potential Effect Question	West Minnehaha	Lincoln	Shumway	Rose Village	Hough	Arnada	Central Park	Esther Short	Hudson's Bay	Columbia Way
Will the Program displace people or community resources, including businesses?	No	No	Residential displacements	No	No	No	Impacts to Marshall Park	Business displacements Residential displacements (design options)	No	No
Will the Program create direct or indirect impacts to social services by displacing them?	No	No	No	No	No	No	No	No	No	No
Will the Program separate neighborhood residents from community resources?	No	No	No	No	No	No	No	No	No	No
Will the Program change travel such that it will affect access to community resources?	No	No	No	No	No	No	Yes (without C Street Ramps)	Yes (without C Street Ramps)	No	No
Will the Program change community cohesion?	No	No	No	No	No	No	No	Yes (without C Street Ramps)	No	No
Is the Program consistent with existing neighborhood plan goals?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Compared to the centered mainline, the I-5 Westward Shift design option would require two additional property acquisitions: the Normandy Apartments, where 33 residential units would be displaced, and the Regal City Center complex, where three businesses would be displaced. This is a notable effect, especially for those living in the Normandy Apartments. However, these displacements are not anticipated to substantially alter neighborhood cohesion because the Normandy Apartments are located at the edge of the neighborhood in an otherwise nonresidential area. Moreover, the displaced businesses, which do not provide community services, make up a small portion of overall commercial property in the neighborhood.

Over time, there could be an increased risk of residential displacement in areas where the Modified LPA improves access and movements within the neighborhood(s) and potential development follows, which may lead to increased housing costs. An analysis conducted in 2019 for the City of Vancouver, as part of a plan for any potential displacements or relocations, identified downtown Vancouver, the Meadow Homes neighborhood, and the Maplewood neighborhood as particularly susceptible to neighborhood change and residential displacement (City of Vancouver n.d.). While Meadow Homes and Maplewood are not in the primary study area, they are a short distance east. Any new developments will be planned and constructed consistent with local requirements.

The Modified LPA design options would have differing effects on travel reliability, congestion, and neighborhood cohesion. The single-level fixed-span and movable-span bridge configuration design options would have a lower profile than the double-deck fixed-span bridge configuration design option at the bridge landing in downtown Vancouver. The single-level bridge configuration design options would provide more flexibility in potential locations for the Vancouver Waterfront Station compared to the double-deck fixed-span bridge configuration design option. However, bridge openings associated with the single-level movable-span bridge configuration design option would cause backups on I-5 that would reduce reliability for all travel modes, similar to the No-Build Alternative. These backups could spill into neighborhood streets, limiting circulation within the neighborhood, impeding access to community facilities, and thereby negatively affecting neighborhood cohesion.

The design option eliminating the C Street ramps would redirect traffic from downtown Vancouver to the Mill Plain Boulevard interchange. This would result in additional traffic delay at intersections near the Mill Plain Boulevard interchange, which could reduce neighborhood cohesion in the Esther Short neighborhood by substantially increasing travel delay for residents and people accessing the neighborhood.

The Modified LPA would provide parking capacity to accommodate 1,270 vehicles at up to five designated park and rides in Vancouver along the LRT alignment located near the Waterfront and Evergreen LRT stations. Parking capacity would be provided for 570 vehicles near the Waterfront Station and for 700 vehicles near the Evergreen Station. The Modified LPA includes up to three park and rides near the Waterfront Station. Eight parcels would be acquired and eight businesses would be displaced, all in the Esther Short neighborhood, to develop these park and rides. The displacement of these businesses for park and rides would not reduce neighborhood cohesion. The Modified LPA includes up to two park and rides near the Evergreen Station; five parcels would be acquired and no businesses or residential units would be displaced. For a more detailed analysis, see the Section 4.4 of the Neighborhoods and Communities Technical Report (as listed in Appendix H).

Tolling of the new Columbia River bridges could result in economic burdens for households in primary study area neighborhoods, along with other users of the bridges. Additional discussion of the economic effects of tolling is provided in Section 3.4 and the Economics Technical Report (as listed in Appendix H).

### ***Homeless Populations***

Construction of the Modified LPA would also likely affect homeless individuals and families living in the IBR Program area during construction. Those living within existing or to-be-acquired right of way would be required to move, and those living nearby could experience construction effects such as noise, vibration, and

pollution. Because homeless populations are transient, data limitations on the numbers and locations of homeless populations make it difficult to determine the degree of impact; however, the IBR Program would coordinate with local jurisdictions to determine whether homeless persons living in the primary study area will be affected by construction activities. The IBR Program would coordinate with local jurisdiction and other organizations offering services to homeless populations to discuss appropriate actions to minimize such effects.

### ***Community Benefits from the Modified LPA***

Benefits to primary study area communities from the Modified LPA include increased access to high-capacity transit, increased availability of active transportation, and highway and driving travel time reductions. The Modified LPA would provide communities with increased mobility and accessibility choices—in particular, the high-capacity transit and active transportation program elements. These new transportation improvements would help address existing gaps in the transit and active transportation network for those who depend on modes other than automobile transportation. Improvements to the highway would also benefit those who drive to work or to access services.

### ***Active Transportation***

Active transportation components of the Modified LPA would provide new and safe connections for people of all abilities and would improve the quality of existing connections. Experiences could differ by age and ability level, depending on the grade, height, and distance of the active transportation facilities. The bridge configuration design options would have the following different impacts on active transportation:

- People walking, bicycling, or rolling on the shared-use path would be more exposed to noise from highway vehicles on the single-level fixed-span and single-level movable-span bridge configuration design options compared to the double-deck bridge configuration design option. Blind and low-vision individuals could experience the greatest noise interference, as they use sound to aid navigation.
- The single-level bridge configuration design options would have a lower bridge height over the Columbia River than the double-deck bridge configuration design option, which would decrease the length and steepness of the uphill and downhill grades for all users on the shared-use path.
- Some users might prefer the single-level fixed-span and single-level movable-span bridge configuration design options because they provide visibility to active transportation users from passing vehicles, thereby potentially providing an increased sense of security. In comparison, with the double-deck fixed-span bridge configuration design option, active transportation users would travel on the lower bridge deck and would not be visible from passing vehicles on the upper decks.
- With the single-level movable-span bridge configuration design option, active transportation users could experience additional travel delays when bridge openings occurred. These delays would be similar to the No-Build Alternative. However, fewer bridge openings are anticipated with the Modified LPA single-level movable-span bridge configuration design option because it would have increased vertical navigation clearance in the closed position that would allow more vessels to travel under the bridge in the closed position compared to the existing Interstate Bridge.

### ***Highway and Driving Improvements***

Due to reduced congestion under the Modified LPA, primary study area residents would be able to reach an average of 18% to 20% more jobs during the morning peak and an average of about 3% more jobs during the midday within a 45-minute commute compared to the No-Build Alternative. In other words, they would be able to drive farther within the same period of time, thereby increasing the number of jobs to which they could commute. This increase in access equates to about 180,000 to 197,000 jobs during the morning peak and 35,800 to 44,000 jobs during the midday. Across the entire Portland-Vancouver metropolitan area,

average access improvements from the Modified LPA would be 3% to 4% (an additional 30,000 to 37,000 jobs) during the morning peak and about 1% (an additional 11,400 to 13,700 jobs) during the midday compared to the No-Build Alternative. The Modified LPA with the two auxiliary lane design option would have a slightly greater increase in jobs access for all demographic groups due to faster travel times within the corridor from less congestion.

### 3.5.5 Temporary Reasonably Foreseeable Effects

The geographic proximity and temporal scope described in the Chapter 3 introduction are used to assess temporary reasonably foreseeable effects to neighborhoods and communities.

#### No-Build Alternative

There would be no reasonably foreseeable temporary effects to neighborhoods and communities under the No-Build Alternative.

#### Modified LPA

The reasonably foreseeable temporary effects on neighborhoods and communities would not differ among the Modified LPA design options.

#### *On-site Construction*

Construction of the Modified LPA includes construction of new bridges and removal of the existing Interstate Bridge. Section 2.3, Modified LPA Construction, of the Final SEIS describes how construction of the IBR Program will be sequenced as timing and construction duration is dependent on the component of the Modified LPA being constructed. Neighborhoods in the primary study area would experience temporary effects from construction of the Modified LPA. These reasonably foreseeable effects would generally increase with proximity to construction areas and could include:

- Temporary increases in noise levels, reduced air quality (e.g., fugitive dust, vehicle exhaust), and increase in truck traffic during construction, particularly in the areas immediately adjacent to I-5.
- Temporary adverse effects on visual quality (e.g., construction equipment and activities blocking views, high-visibility signage, lighting during nighttime work).
- Traffic delays, detours, and traffic spillover into neighborhoods.
- Property easements for temporary construction staging areas.
- Sidewalk disruptions and closures (which could impede access and mobility for disabled persons).
- Detours and delays for bicyclists and pedestrians as a result of narrower temporary routes and out-of-direction travel.
- Detours and delays for floating home residents in the vicinity of the North Portland Harbor bridge who travel to and from their homes by boat.

Neighborhoods near the construction activity, such as Hayden Island and Esther Short, would experience some of these effects over several years. Neighborhoods farther from the bridge construction could expect to experience effects over a shorter duration. Roadway and transit construction effects in other areas would cause traffic disruption and noise intermittently for several months.

Section 3.3, Property Acquisitions and Displacements, details the temporary easements that would be required to reconstruct sidewalks, build retaining walls, and other types of roadway features. Activities within

these easements could have the types of effects described above, such as noise, dust, detours, visual effects, and sidewalk disruptions, which could temporarily affect neighborhood cohesion and livability.

### ***Off-Site Staging Areas and Casting Yards***

Most neighborhoods in the primary study area would not have temporary construction staging areas nearby. However, the Hayden Island neighborhood would experience temporary increases in noise levels, congestion on local roads, and reduced visual quality from the proposed use of the Thunderbird Hotel site for staging because of its proximity to more densely populated areas. All neighborhoods in the primary study area could experience temporary noise and increases in truck traffic during construction, particularly in areas adjacent to I-5. Given that the potential construction duration could be up to 15 years, neighborhood quality and cohesion could be adversely affected during construction for portions of neighborhoods adjacent to the corridor. However, construction effects in most neighborhoods are likely to be intermittent and temporary, since work would occur in different portions of the corridor at different times. Section 2.3, Modified LPA Construction, of the Final SEIS describes how construction of the proposed IBR Program will be sequenced as timing and construction duration is dependent on the component of the Modified LPA being constructed. See Chapter 5 of the Neighborhoods and Communities Technical Reports (as listed in Appendix H) for a discussion of temporary effects for each neighborhood in the primary study area.

## **3.5.6 Intentionally Left Blank**

## **3.5.7 Avoidance, Minimization, and Mitigation Measures**

Table 3.5-11 lists temporary and long-term avoidance and minimization measures. Table 3.5-12 lists temporary mitigation measures. No long-term mitigation measures within control of the IBR Program were identified.

Avoidance, minimization, and mitigation measures for property acquisitions and displacements, visual quality, and air quality that could potentially affect neighborhoods and communities are described in Section 3.3, Section 3.9, and Section 3.10, respectively, and are not included in the tables below.

Table 3.5-11. Avoidance and Minimization Measures

Temporary or Long-Term	Impact Type	Avoidance and Minimization Measure
Temporary	In-water activities near floating home communities during construction	For floating home communities, ODOT will implement no-wake zones, including appropriate signage for waterborne construction vessels.
Temporary	Highway ramp and local street closures, detours, changes in access to businesses and neighborhoods during construction	ODOT and WSDOT will hold community meetings and provide information to businesses, agencies, and community-based organizations within the greater Portland and Vancouver area before construction starts to inform residents of the construction timeline, relevant staging plans, ramp and road closures, and detour plans. ODOT and WSDOT will make traffic advisories and updates available to the public to help make travel choices, and a hotline will be provided for construction information.
Long-Term	New tolling implemented	Toll rates and policies implemented on the existing Interstate Bridge (pre-completion tolling) and the replacement Columbia River bridges under the Modified LPA (long-term tolling) will be jointly set by the OTC and the WSTC. At the direction of the commissions, all toll scenarios under consideration for the IBR Program assume a low-income discount. Formal action will be needed by the commissions in order to implement rates and policies, including discounts and exemptions. This will occur after the completion of tolling studies following the NEPA Record of Decision.

LPA = Locally Preferred Alternative; NEPA = National Environmental Policy Act; ODOT = Oregon Department of Transportation; WSDOT = Washington State Department of Transportation; WSTC = Washington State Transportation Commission

Table 3.5-12. Mitigation Measures

Temporary or Long-Term	Impact Type	Mitigation Measure
Temporary	Disruption to vehicular traffic during construction	ODOT and WSDOT will use temporary signage, including variable message signs, to inform drivers of construction impacts or heavy equipment entering or leaving the roadway.
Temporary	Disruption to business operations during construction	ODOT and WSDOT will provide signs for local businesses impacted by construction to alert customers of their continued operation.
Temporary	Changes in active transportation routes and access during construction	ODOT and WSDOT will place communication and signage for temporary routes for pedestrians and biking. Efforts will be made for wayfinding signage to be accessible, consistent, thorough, and maintained.

## Interstate Bridge Replacement Program

Temporary or Long-Term	Impact Type	Mitigation Measure
Temporary	Displacement of people camping or occupying public rights-of-way during construction	ODOT and WSDOT will coordinate with local jurisdictions and other organizations to determine whether homeless persons living in the study area will be affected by construction activities and ensure that appropriate services are offered to people experiencing unsheltered homelessness in areas directly affected by construction activities.
Temporary	Removal of landscaping during construction	ODOT and WSDOT will restore removed landscaping on properties following construction or as otherwise agreed within the property rights process, consistent with local requirements.

ODOT = Oregon Department of Transportation; WSDOT = Washington State Department of Transportation