

3.5 Neighborhoods and Equity

This section summarizes the IBR Program's benefits and impacts to neighborhoods and the broadened view of equity priority 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 IBR Program defines **equity priority communities** as those who experience and/or have experienced discrimination and exclusion based on identity or status. The IBR Program provides a two-part definition for equity:

1. **Process equity** means that the IBR Program centers and prioritizes access, influence, and decision-making power for equity priority communities in establishing objectives, design, implementation, and evaluation of success.
2. **Outcome equity** is the result of successful process equity and is demonstrated by tangible transportation, community, and economic benefits for equity priority communities.

Together, process equity and outcome equity contribute to addressing harmful impacts and removing longstanding injustices experienced by equity priority communities.

The information in this section is based on the IBR Neighborhoods and Populations Technical Report and Equity Technical Report.

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 (CRC LPA). Over the past 10+ years since the CRC LPA was identified, the physical environment in the study area, community priorities, and regulations have changed, which necessitated design revisions and resulted in the IBR Modified LPA (see Section 2.5.2). Evaluation of potential impacts associated with neighborhoods and equity has been updated in this Draft SEIS to include:

Terms and Definitions

As defined by the IBR Program, **Equity priority communities** refer to populations who experience and/or have experienced discrimination and exclusion based on identity or status, including:

- Black, Indigenous, and People of Color
- Tribal Governments
- People with disabilities
- Communities with limited English proficiency
- Persons with lower incomes
- Houseless individuals and families
- Immigrants and refugees
- Young people (under 25 years of age)
- Older people (65 years or older)

Neighborhoods

- Updated demographic information, neighborhood characteristics, and community resources within the 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, short-term, direct, indirect, and cumulative effects on Oregon and Washington neighborhoods resulting from the Modified LPA.

Equity

- Prepared a new Equity Technical Report based on the IBR Program Equity Framework.
- Applied the Climate and Economic Justice Screening Tool (CEJIS 2023) to assist identifying equity priority populations.
- Incorporated directives from Presidential Executive Order (EO) 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (2021) and Presidential EO 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All (2023).
- Developed a public engagement plan that targets equity priority communities and evaluated benefits and burdens to these communities to support the U.S. Department of Transportation's Justice40 Initiative as part of Presidential EO 14008: Tackling the Climate Crisis at Home and Abroad (2021).
- Coordinated and engaged with the newly chartered Community Advisory Group and Equity Advisory Committee per the IBR Equity Framework and also updated public engagement efforts.
- Identified long-term, short-term, direct, indirect, and cumulative effects to equity communities resulting from the Modified LPA and design options.

IBR Equity Framework

The IBR Program is committed to centering equity by developing a shared understanding of what the Program seeks to achieve and how it will be achieved. IBR Equity Framework outlines the Program's approach and tools it will use to advance equity.

Table 3.5-1 compares the impacts and benefits to neighborhoods and equity between the CRC LPA and the IBR Modified LPA. While the CRC Final EIS evaluated neighborhoods, equity was not explicitly studied.

The impacts 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 have lower emissions for all Mobile Source Air Toxics and criteria pollutants than under existing conditions, I-5 travel times and reliability would improve, and access to transit, bike, and pedestrian facilities would increase. A detailed description of impacts and benefits to neighborhoods and equity from the IBR Modified LPA and associated design options follows.

Table 3.5-1. Comparison of CRC LPA Effects and IBR Modified LPA Effects on Neighborhoods and Equity

Technical Considerations	Technical Subgroup	CRC Effects Identified in the 2011 Final EIS	Modified LPA	Explanation of Differences
Displacements	Residential	59	43 for most design options. One design option that shifts I-5 west in downtown Vancouver would displace 33 residential units in the Esther Short neighborhood, resulting in 76 total residential displacements.	Modified LPA design changes would reduce residential property acquisition, except the I-5 westward shift design option, which would increase displacements compared to the CRC LPA. Key design changes include replacing the full interchange on Hayden Island with a partial interchange and moving the LRT alignment closer to I-5 (removing the proposed couplet in downtown Vancouver).
	Business	69	36 for most design options. One design option that shifts I-5 west in downtown Vancouver would displace three commercial businesses at the Regal City Center Complex, resulting in 39 total business displacements.	Commercial property acquisitions would also decrease due to the Modified LPA's smaller footprint.
Neighborhoods	Access to resources	<ul style="list-style-type: none"> Displacement of Hayden Island Safeway and bottle return. 	<ul style="list-style-type: none"> None identified. 	The Safeway grocery store (including a pharmacy and bottle return) closed after the CRC project was suspended. A new Target store, replacing some of these services, was constructed outside the Modified LPA footprint.
	Community cohesion	<ul style="list-style-type: none"> Improved cohesion with light-rail and transit-oriented development. Would result in residential and commercial displacements. 	<ul style="list-style-type: none"> Similar to the CRC LPA, but with fewer commercial displacements; residential displacements would be less than under the CRC LPA for all design options except the I-5 westward shift design option. 	Impacts of the CRC project and the Modified LPA for Hayden Island are similar and would affect community cohesion despite benefits from improved transit, bicycle, and pedestrian connections. Due to differences in design footprint, the

Interstate Bridge Replacement Program

Technical Considerations	Technical Subgroup	CRC Effects Identified in the 2011 Final EIS	Modified LPA	Explanation of Differences
		<ul style="list-style-type: none"> Reduced access to restaurants, wage-earning jobs on Hayden Island. 		CRC project would have caused more commercial displacements and, except for the I-5 westward shift design option, more residential displacements.
	Noise and vibration	<ul style="list-style-type: none"> 110 residential equivalent impacts after mitigation. 	<ul style="list-style-type: none"> 122 residential equivalent impacts after mitigation. 	Noise impacts would increase with the Modified LPA. Differences between CRC and the Modified LPA result from changes in highway footprint at the I-5/SR 500/39th Street Interchange and in Oregon, as well as changes in transit alignment and proximity of alignment to the direct fixation trackway in downtown Vancouver.
	Tolling	<ul style="list-style-type: none"> Tolling would increase overall household transportation costs and would require a higher share of income for low-income populations. Transponder mitigation for low-income populations would offset this impact. Tolls would reduce travel times and improve travel time reliability. 	<ul style="list-style-type: none"> Similar to CRC LPA. Toll rates and policies, including a possible low-income toll program, would be jointly set by the OTC and WSTC. Both commissions have supported the study of a low-income toll program, including how such a program could be implemented in each state. They will work together to determine how to approach this for the IBR Program. 	Although changes in external economic conditions over time (e.g., inflation) may have influenced household costs related to tolling, the effects would be similar between CRC and the Modified LPA.

Technical Considerations	Technical Subgroup	CRC Effects Identified in the 2011 Final EIS	Modified LPA	Explanation of Differences
Equity	High-capacity transit	N/A ^a	<ul style="list-style-type: none"> All equity priority communities would experience increased access to jobs and services via transit. Three equity priority communities are estimated to see greater increases in access than their counterparts. 	New analysis completed for the Modified LPA.
	Highway and driving improvements	N/A	<ul style="list-style-type: none"> 18% to 20% more jobs accessed during AM peak and 3% during midday (on average) for all equity priority communities living in the Program area. 	New analysis completed for the Modified LPA.
	Houseless populations	N/A	<ul style="list-style-type: none"> Residential displacement for those living within existing or to-be-acquired right of way. 	New analysis completed for the Modified LPA.
	Long-term displacement potential	N/A	<ul style="list-style-type: none"> Potential for increased costs of housing and other necessities due to improved amenities and livability, which in turn could lead to displacement of lower-income residents. 	New analysis completed for the Modified LPA.
	Tolling	N/A	<ul style="list-style-type: none"> New toll requires higher proportion of income for low-income drivers. Toll rates and policies, including a possible low-income toll program, would be jointly set by the OTC and WSTC. 	New analysis completed for the Modified LPA.

Note: Residential Equivalent = used to equate the use of common outdoor areas to individual outdoor use areas for parks or other nonresidential household uses. The calculation includes the usage factor of the area, the number of uses, and the equation of users to residences.

^a The CRC project EIS did not identify, define, or evaluate impacts/burdens and opportunities to equity populations.

CRC = Columbia River Crossing; LPA = locally preferred alternative; LRT = light-rail transit; N/A = not applicable; OTC = Oregon Transportation Commission; WSTC = Washington State Transportation Commission

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 Maintenance Facility in Gresham, Oregon.

Neighborhoods

The 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

Data that help identify the overall neighborhood character and equity priority communities, which are detailed in the IBR Neighborhoods and Populations Technical Report, include:

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

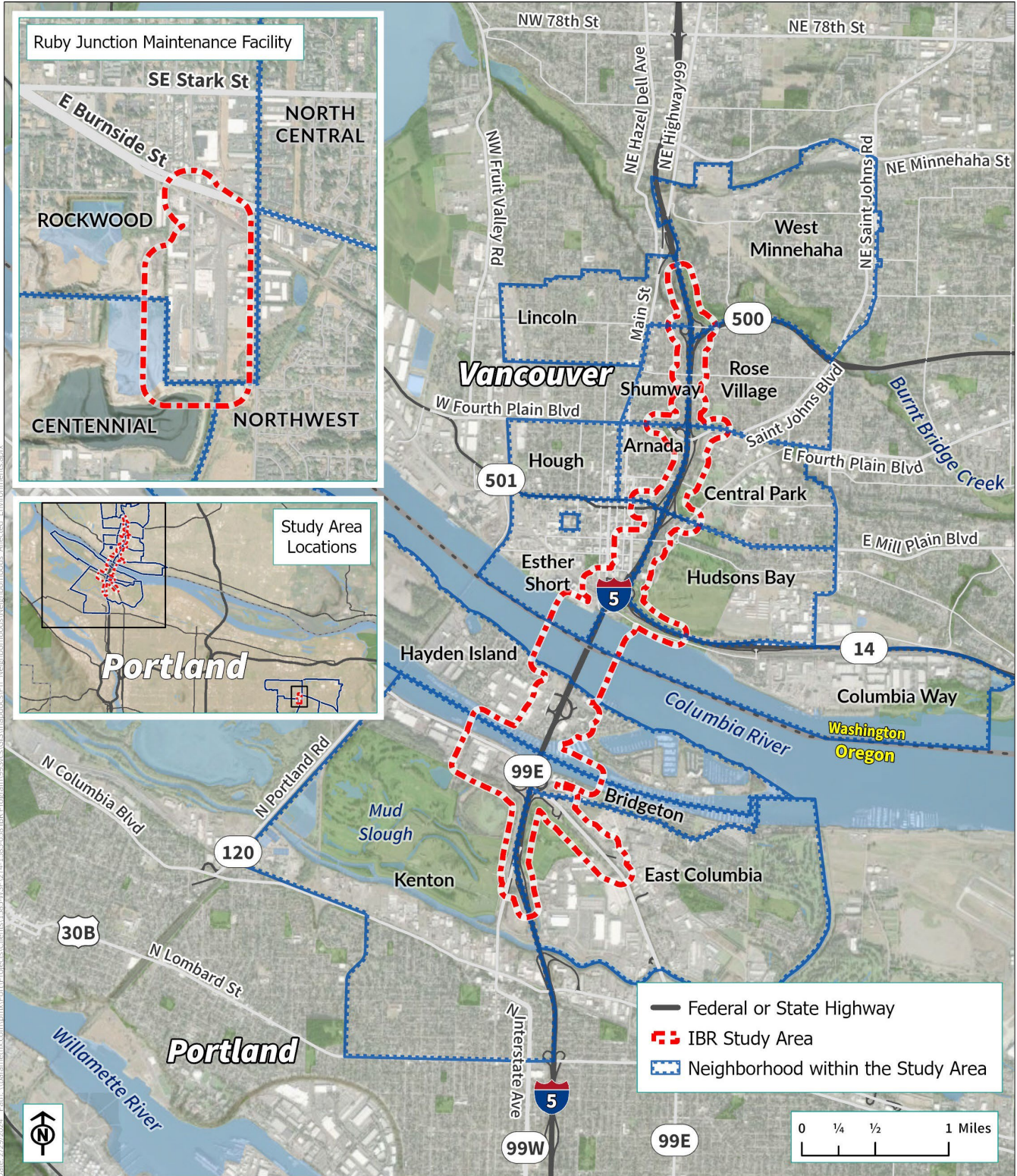
Analysts primarily used 2022 U.S. Census data for the analysis. Other data sources are provided in the footnotes to the tables in this section.

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.

Figure 3.5-1. Neighborhoods in the Study Area



Neighborhood Demographics

Each neighborhood has a unique character formed by its residents, community resources, businesses, and landmarks. Table 3.5-2 through Table 3.5-7 display the race/ethnicity, demographic, and age characteristics of 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 study area are summarized as follows:

People with disabilities. The disabled population rate varies across study area neighborhoods. The Esther Short neighborhood reports a 25% disability rate, likely due to the senior housing in the area. All other neighborhood disability rates fall between about 11% and 19% (see Table 3.5-5).

Older adults and children. The Columbia Way neighborhood has the largest rate of people over 65, with 38.6%; all other 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 3.5-6 and Table 3.5-7).

Car ownership. The neighborhoods vary in their reliance on automobile transportation. Thirty percent of households in the Esther Short neighborhood report not owning a car. The Hough neighborhood also shows relatively low rates of car ownership; 20% of the residents do not own a car. All other neighborhoods have a rate of households without a car between 2.1% and 16.5% (see Table 3.5-4 and Table 3.5-5).

The IBR Program is consulting with 10 federally recognized Indian Tribes. While there are no reservations within the IBR 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. However, tribal members living within the IBR study area are reflected in the U.S. Census data, but they are not specifically identified by tribal affiliation.

Table 3.5-2. Race/Ethnicity for Oregon Study Area Neighborhoods, Portland, and Multnomah County

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	2,373	76.5%	0.8%	2.1%	0.9%	0.4%	<0.1%	4.2%	15.0%
Bridgeton	701	69.4%	21.1%	1.9%	0.1%	<0.1%	0.0%	4.3%	3.1%
East Columbia	1,141	52.7%	16.8%	0.1%	16.2%	1.0%	0.0%	5.6%	7.7%
Kenton	7,626	67.6%	8.7%	0.6%	2.2%	0.9%	<0.1%	8.6%	11.4%
Rockwood	13,712	40.0%	7.5%	1.6%	6.4%	2.1%	<0.1%	3.6%	38.7%
Portland	650,380	69.5%	5.7%	0.6%	8.6%	0.6%	0.4%	4.8%	9.8%
Multnomah County	809,869	68.9%	5.2%	0.7%	7.7%	0.6%	0.4%	4.7%	11.8%

Source: U.S. Census Bureau 2022, Table B03002

Table 3.5-3. Race/Ethnicity for Washington Study Area Neighborhoods, Vancouver, and Clark County

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	3,839	69.5%	2.9%	0.4%	1.3%	3.3%	0.0%	8.8%	13.8%
Lincoln	4,029	79.9%	2.9%	0.2%	2.8%	<0.1%	0.1%	6.6%	7.4%
Shumway	1,094	79.3%	2.3%	0.4%	3.0%	2.3%	0.2%	7.0%	5.4%
Rose Village	5,780	55.3%	1.3%	0.6%	0.9%	2.4%	<0.1%	11.1%	28.5%
Hough	2,795	86.1%	1.8%	0.3%	1.5%	<0.1%	<0.1%	2.4%	7.9%
Arnada	991	74.4%	1.5%	1.8%	1.7%	0.2%	1.4%	12.0%	7.0%
Central Park	2,174	81.7%	6.0%	0.1%	1.5%	<0.1%	0.3%	1.5%	9.0%
Esther Short	2,821	75.9%	6.1%	2.1%	2.5%	0.7%	0.9%	3.8%	8.0%
Hudson's Bay	2,034	76.5%	0.2%	<0.1%	2.5%	<0.1%	<0.1%	11.5%	9.2%
Columbia Way	1,195	76.5%	1.1%	<0.1%	12.7%	<0.1%	<0.1%	2.1%	7.6%
Vancouver	182,792	70.0%	2.1%	0.3%	5.5%	1.5%	0.2%	5.7%	14.6%
Clark County	481,950	77.5%	1.7%	0.5%	4.7%	0.7%	0.2%	4.7%	10.0%

Source: U.S. Census Bureau 2022, Table B03002

Table 3.5-4. Demographic Characteristics for Oregon Study Area Neighborhoods, Portland, and Multnomah County

Study Area Neighborhood	Families below Poverty Level	Low-Income Population (<2x poverty level)	Disabled ^a	Large Families ^b	Owner-Occupied Housing	Home Value Index ^c	Housing Units with No Vehicle
Hayden Island	3.0%	14.8%	17.3%	7.2%	76.2%	\$315,632	4.0%
Bridgeton	0.1%	18.9%	11.0%	2.5%	44.8%	\$385,931	2.1%
E. Columbia	6.3%	10.9%	11.0%	7.9%	76.6%	\$425,977	3.0%
Kenton	5.7%	23.4%	10.8%	6.9%	71.1%	\$457,029	10.2%
Rockwood	21.5%	49.6%	13.5%	23.3%	40.9%	\$353,825 ^d	12.7%
Portland	7.7%	27.2%	11.9%	11.1%	53.1%	\$508,250	14.0%

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Study Area Neighborhood	Families below Poverty Level	Low-Income Population (<2x poverty level)	Disabled ^a	Large Families ^b	Owner-Occupied Housing	Home Value Index ^c	Housing Units with No Vehicle
Multnomah County	8.2%	28.3%	12.3%	12.3%	54.4%	\$474,991	12.9%

Source: U.S. Census Bureau 2022, 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 2021. <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 Rockwood neighborhood.

Table 3.5-5. Demographic Characteristics for Washington Study Area Neighborhoods, Vancouver, and Clark County

Study Area Neighborhood	Families below Poverty Level	Low-Income Population (<2x poverty level)	Disabled ^a	Large Families ^b	Owner-Occupied Housing	Home Value Index ^c	Housing Units with No Vehicle
West Minnehaha	3.9%	30.9%	13.3%	26.6%	60.1%	\$389,650	2.7%
Lincoln	8.6%	24.9%	14.3%	11.0%	58.7%	\$419,358	10.7%
Shumway	1.0%	24.9%	15.8%	5.7%	50.2%	\$394,907	13.4%
Rose Village	14.0%	37.7%	15.1%	19.0%	46.7%	\$316,998	8.7%
Hough	11.4%	30.2%	18.9%	12.2%	45.2%	\$408,568	20.1%
Arnada	10.1%	38.1%	14.8%	1.2%	28.6%	\$429,085	16.5%
Central Park	7.2%	25.8%	12.7%	15.8%	39.4%	\$331,351	10.2%
Esther Short	17.2%	50.6%	25.0%	6.3%	19.0%	\$348,447	31.0%
Hudson’s Bay	1.7%	29.4%	13.2%	8.1%	34.1%	\$353,304	9.9%
Columbia Way	0.1%	22.9%	15.4%	<0.1%	49.0%	\$353,935	8.2%
Vancouver	8.4%	30.3%	14.0%	14.1%	51.7%	\$402,113	7.0%
Clark County	6.0%	22.9%	12.1%	15.8%	67.1%	\$428,582	4.6%

Source: U.S. Census Bureau 2022, 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 2021. <https://www.zillow.com/research/data/>.

Table 3.5-6. Population Age for Oregon Study Area Neighborhoods, Portland, and Multnomah County

Study Area Neighborhood	Total Population	0 to 4 Years	5 to 17 Years	18 to 64 Years	65 and Older
Hayden Island	2,371	<0.1%	8.6%	63.3%	26.0%
Bridgeton	701	4.9%	12.2%	71.7%	11.7%
East Columbia	1,141	3.6%	15.5%	69.5%	11.1%
Kenton	7,626	6.6%	10.1%	75.4%	9.3%
Rockwood	13,712	8.9%	19.4%	64.6%	8.9%
Portland	650,380	4.9%	12.5%	69.4%	13.2%
Multnomah County	809,869	5.5%	13.4%	67.9%	13.5%

Source: U.S. Census Bureau 2022, Table B0101

Table 3.5-7. Population Age for Washington Study Area Neighborhoods, Vancouver, and Clark County

Study Area Neighborhood	Total Population	0 to 4 Years	5 to 17 Years	18 to 64 Years	65 and Older
West Minnehaha	3,839	8.6%	16.8%	61.4%	14.3%
Lincoln	4,029	7.2%	14.0%	64.5%	14.5%
Shumway	1,094	3.9%	9.6%	69.1%	16.6%
Rose Village	5,780	8.5%	17.5%	68.3%	6.5%
Hough	2,795	5.2%	11.0%	61.7%	22.2%
Arnada	991	4.9%	12.2%	71.7%	11.7%
Central Park	2,174	6.7%	10.7%	70.4%	12.2%
Esther Short	2,821	1.5%	2.9%	73.4%	21.4%
Hudson's Bay	2,034	4.2%	11.8%	65.0%	19.5%
Columbia Way	1,195	<0.1%	3.2%	60.7%	38.6%
Vancouver	182,792	6.6%	15.8%	61.5%	16.2%
Clark County	481,950	6.1%	17.9%	60.6%	15.4%

Source: U.S. Census Bureau 2022, 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 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 study area, neighborhood plans with goals 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.

Equity

For each equity priority community, Table 3.5-8 lists the percentage that population comprises in the Program area and the broader Portland-Vancouver metropolitan area.¹ People with disabilities, persons with lower incomes, and older adults make up a large share of the Program area population compared to the metropolitan area. Percentages of young people and immigrants and refugees are lower in the Program area than in the metropolitan area, while percentages of Black, Indigenous, and People of Color (BIPOC) and limited English proficiency populations are similar. Section 3.20, Environmental Justice, discusses existing conditions and potential long-term effects on low-income and minority populations.

Table 3.5-8. Percentage of Equity Priority Communities within the IBR Program Area and Portland-Vancouver Metropolitan Area

Community	Description	Percent Program Area Population	Percent Portland-Vancouver Metropolitan Area Population
Black, Indigenous, and People of Color	People selecting any race/ethnicity combination besides White/non-Hispanic on the census.	30%	31%
People with Disabilities	People living with a serious difficulty within four basic areas of functioning: hearing, vision, cognition, and ambulation.	15%	12%
Communities with Limited English Proficiency	People who indicate that they speak English less than very well.	6%	6%

¹ Because tribes are sovereign nations with members living throughout local communities across Oregon, Washington, reservations, the United States, and beyond, elements of equity for tribal governments are discussed separately from other equity priority communities, which can be evaluated, in part, with demographic data. Data for houseless individuals and families is not shown because the geographic area for which this data is available is too large to determine a count for the IBR Program area.

Community	Description	Percent Program Area Population	Percent Portland-Vancouver Metropolitan Area Population
Persons with Lower Incomes	People or households with income at or below 200% of the federal poverty level.	32%	24%
Immigrants and Refugees	People born outside of the United States (Foreign Born Population).	9%	13%
Young People	People under 25 years of age.	25%	29%
Older Adults	People 65 years of age or older.	18%	15%

Source: U.S. Census Bureau 2022, Tables B03002, S1810, C16001, C17002, DP02, Table B01001

The IBR Program is consulting with 10 federally recognized Indian Tribes. Tribal governments (federally recognized tribes) are sovereign nations as recognized by the U.S. Government, and consultation with federally recognized tribes occurs through a government-to-government consultation process that is separate and distinct from public and community outreach and comment. Because tribes are sovereign nations with members living throughout local communities, Oregon, Washington, reservations, the United States, and beyond, elements of equity for tribal governments are discussed separately from other equity priority communities, which can be evaluated, in part, with demographic data.

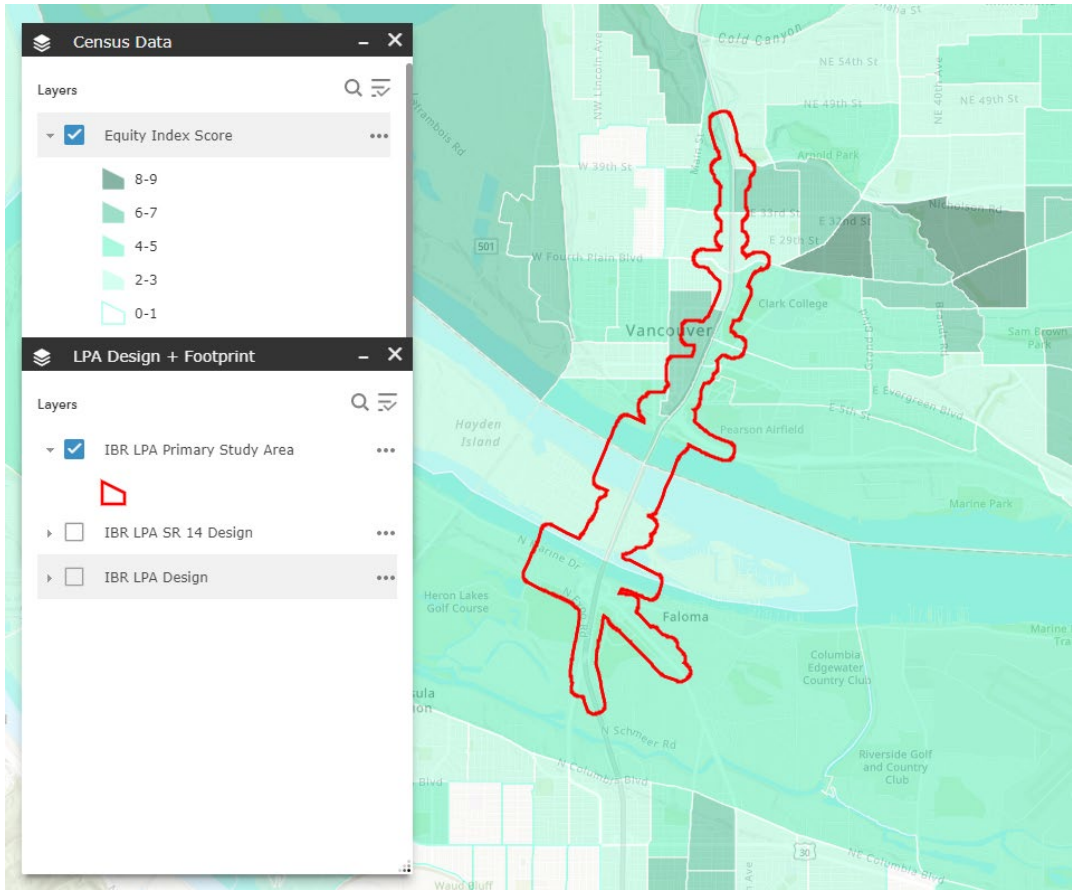
An equity index tool was developed to identify where equity priority communities live in the study area and the metropolitan region, with the exception of tribal governments (as noted above). The equity index assigns points to geographic areas (block groups or census tracts) in the study area that have an above-average percentage of equity priority populations compared to the metropolitan region. For example, 25% of the region's households are low-income according to census information (U.S. Census Bureau 2022), so a point was awarded to a study area block group if greater than 25% of households were low-income. Figure 3.5-2 shows a screenshot of this interactive web-based tool, showing that most equity priority communities are located in downtown Vancouver and east of the study area.

3.5.3 Engagement Activities and Consultation

Public Engagement Activities

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 Community Advisory Group, Equity Advisory Group, Community Benefits Advisory Group, and Executive Steering Group. The advisory groups are composed of regional community members, who were identified and appointed to represent a diverse 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. This process is documented in the IBR Community Engagement Report (IBR 2021) and is described in Appendix B.

Figure 3.5-2. Screenshot of IBR Equity Index



Government-to-Government Consultation

WSDOT, ODOT, FHWA, and FTA are committed to government-to-government 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 ensure that their input is incorporated into the decision-making process. Although tribal coordination and government-to-government tribal consultation is being undertaken as a distinct outreach effort, tribal involvement is also occurring concurrently with agency coordination and public involvement. The government-to-government consultation goals and process are documented in Appendix A, Agency and Tribal Coordination.

3.5.4 Long-Term Benefits and Effects

Table 3.5-9 summarizes the effects of the No-Build Alternative, Modified LPA, and design options on neighborhoods. Table 3.5-10 summarizes the effects of the No-Build Alternative, Modified LPA, and design options on equity. Detailed analyses of the effects are provided in the following sections.

Table 3.5-9. Summary of No-Build Alternative and Modified LPA Effects on Neighborhoods

1	2	3	4	5
No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration, One or Two Auxiliary Lanes, with or without C Street Ramps, Centered I-5, all Park-and-Ride Site Options	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Westward Shift, all Park-and-Ride Site Options	Modified LPA with Single-Level Fixed-Span Configuration, ^a One Auxiliary Lane, C Street Ramps, Centered I-5, all Park-and-Ride Site Options	Modified LPA with Single-Level Movable-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5, all Park-and-Ride Site Options
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Would not adversely affect community cohesion in neighborhoods, except for Hayden Island. Could increase cohesion in neighborhoods near the Community Connector. Would affect the Hayden Island neighborhood’s community cohesion, including displacement of floating homes and changes to views. Fourteen businesses would be displaced. However, neighborhood cohesion would be improved by a more continuous street system, improved pedestrian and bicycle facilities, and transit that increases connections for residents. Construction-related impacts such as traffic diversion noise, temporary reductions in air quality, and sidewalk disruptions. 	<ul style="list-style-type: none"> Similar to Column 2 but with additional residential displacements in the Esther Short neighborhood. 	<ul style="list-style-type: none"> Similar to Column 2. 	<ul style="list-style-type: none"> Similar to Column 3, except that 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.

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

Table 3.5-10. Summary of No-Build Alternative and Modified LPA Effects on Equity

1	2	3	4	5
<p>No-Build Alternative</p>	<p>Modified LPA with Double-Deck Fixed-Span Configuration One Auxiliary Lane, With or Without C Street Ramps, Centered I-5 or I-5 Westward Shift, all Park-and-Ride Site Options</p>	<p>Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, With or Without C Street Ramps, Centered I-5 or I-5 Westward Shift, all Park-and-Ride Site Options</p>	<p>Modified LPA with Single-Level Fixed-Span Configuration,^a One Auxiliary Lane, With or Without C Street Ramps, Centered I-5 or I-5 Westward Shift, all Park-and-Ride Site Options</p>	<p>Modified LPA with Single-Level Movable-Span Configuration, One Auxiliary Lane, With or Without C Street Ramps, Centered I-5 or I-5 Westward Shift, all Park-and-Ride Site Options</p>
<ul style="list-style-type: none"> Equity priority communities would not benefit from increased mobility and accessibility. Would avoid short- and long-term displacement of residents and businesses. Would avoid construction-related impacts such as traffic diversion, noise, temporary reductions in air quality, and cost burdens of tolling. 	<ul style="list-style-type: none"> Increased access to high-capacity transit, increased availability of active transportation, and highway and driving travel time reductions. The degree of benefits would vary by equity priority community. Increase in job access for all demographic groups due to faster travel times. Potential displacement of encampments of houseless populations, residential displacements, and additional transportation cost from tolling. There would be more residential displacements with the I-5 westward shift design option. Construction-related impacts such as traffic diversion, noise, temporary reductions in air quality, and cost burdens of tolling. Tolling would place a burden on low-income travelers. 	<ul style="list-style-type: none"> Similar to Column 2, but it would reduce delay and congestion on the Columbia River bridges to a greater extent, which would improve travel times for motorists, express bus riders, and emergency vehicles; slightly greater increase in jobs access for all demographic groups. 	<p>Similar to Column 2, except:</p> <ul style="list-style-type: none"> Users would experience a shorter distance to walk across the bridge. Users may feel safer due to the extra security of being visible to passing vehicles. 	<ul style="list-style-type: none"> Similar to Column 4, except that there may be travel delays for transit and active transportation users due to lifts of the movable span. This would reduce the level of benefit that the Modified LPA would provide to equity priority communities.

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

No-Build Alternative

Neighborhoods

Under the No-Build Alternative, there would be no Program-related change to existing neighborhoods, community facilities, or social resources. Neighborhoods in the 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 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.

Equity

The No-Build Alternative would not move the IBR Program toward its equity objectives. Equity priority communities would not benefit from increased mobility and accessibility resulting from construction of light-rail, active transportation facilities, or highway improvements.

In terms of potential burdens, the No-Build Alternative would avoid short- and long-term displacement of residents and businesses, as well as other construction-related impacts such as traffic diversion, noise, temporary reductions in air quality, and cost burdens of tolling. Above-average concentrations of equity priority communities were identified in each subarea where these impacts would occur.

Modified LPA

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

Neighborhoods

Oregon

Potential effects on neighborhoods from the Modified LPA were assessed using six questions defined by the IBR Program to evaluate impacts and benefits. Table 3.5-11 summarizes the questions and answers for each Oregon neighborhood in the study area.

The Modified LPA is not anticipated to adversely affect community cohesion in most neighborhoods, except for Hayden Island. In the Hayden Island neighborhood, the Modified LPA is anticipated to adversely affect the neighborhood's community cohesion, particularly among the floating home community, where there would be changes to views and displacements of some floating homes. Fifteen businesses, and the 159 jobs associated with them, would be displaced, many of which are restaurants that provide places for neighbors to meet. In addition, bridge openings associated with the single-level movable-span configuration would cause backups that would reduce reliability for all travel modes, similar to the No-Build Alternative, which would negatively affect neighborhood cohesion.

However, neighborhood cohesion on Hayden Island would be improved by a more continuous street system, improved pedestrian and bicycle facilities, and transit that increases connections for residents under the Modified LPA. This assessment is described in more detail in the Neighborhoods and Populations Technical Report.

Table 3.5-11. Overview of Potential 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 (loss of 1 acre of off-leash area)	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 ^a	Yes	N/A ^a

a This neighborhood does not have an approved neighborhood plan.

Washington

Table 3.5-12 summarizes the answers to the same set of questions for the study area neighborhoods in Vancouver. The Modified LPA is not anticipated to adversely affect community cohesion in these neighborhoods.

Table 3.5-12. Overview of Anticipated Effects on Vancouver Neighborhoods

Potential Effect Question	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	No	Impacts to Marshall Park through land acquisition	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

Potential Effect Question	Rose Village	Hough	Arnada	Central Park	Esther Short	Hudson's Bay	Columbia Way
Will the Program separate neighborhood residents from community resources?	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	No
Will the Program change community cohesion?	No	No	No	No	No	No	No
Is the Program consistent with existing neighborhood plan goals?	Yes	Yes	Yes	Yes	Yes	Yes	N/A ^a

a This neighborhood does not have an approved neighborhood plan.

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. Compared to the centered mainline, the I-5 Mainline 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 these units. 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 are not considered community resources, make up a small portion of overall commercial property in the neighborhood.

Three sites are being considered for the Waterfront Park and Ride. Depending on the site selected, there would be up to four parcels acquired, with up to one business displacement. The potential displacement of a single business at the Waterfront Park-and-Ride site would not affect neighborhood cohesion. Two sites are being considered for the Evergreen Park and Ride; depending on the site, up to five parcels would be acquired, with no businesses or residential units displaced. For a more detailed analysis, see the Neighborhoods and Populations Technical Report.

The Modified LPA design options would have differing effects on travel reliability, congestion, and neighborhood cohesion, depending on their specific design elements. The single-level fixed-span and single-level movable-span configurations would have a lower profile than the double-deck fixed-span configuration at the bridge landing in downtown Vancouver. The single-level configurations would provide more flexibility in potential locations for the Vancouver Waterfront Station compared to the double-deck fixed-span configuration.

In addition, the single-level bridges would provide more opportunities for connection to residences and development, helping to maintain or improve neighborhood cohesion. However, bridge openings associated with the single-level movable-span configuration could cause backups 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. These impacts would occur in an equity priority community.

Equity

This equity assessment looks at the distribution of benefits and burdens. Benefits from the Modified LPA to equity priority communities include increased access to high-capacity transit, increased availability of active transportation, and highway and driving travel time reductions. Burdens to equity priority communities include potential displacement of encampments of houseless populations, residential displacements, and the additional transportation cost from tolling.

The Modified LPA would benefit equity priority communities with increased mobility and accessibility choices—specifically, the high-capacity transit and active transportation program elements. These new transportation improvements would help address existing gaps for those who depend on modes other than automobile transportation. While all members of the local community would have access to 40% more jobs via improved mode choices compared to the No-Build Alternative, the high-capacity transit analysis did identify some disparities in terms of distribution of benefits (i.e., increased access to jobs) between equity priority communities living in the study area and their non-equity priority counterparts. Three demographic groups—people with disabilities, persons with lower incomes, and older adults—would likely see greater increases in access than their counterparts during either or both the morning peak and midday hours. BIPOC communities, those with limited English proficiency, immigrants and refugees, and young people would experience an increase in accessibility, but the increase would be less than for their demographic counterparts. To address these disparities, the Program is working closely with C-TRAN to optimize the transit network and create convenient bus connections from the Evergreen Station to surrounding racially diverse neighborhoods.

Distribution of Benefits

High-Capacity Transit

The equity analysis used demographic and jobs data to examine how the Modified LPA's light-rail alignment would affect transit riders' mobility. Specifically, the analysis estimated how many jobs (a proxy for access to both employment and services) would be within a 45-minute trip on the 2045 transit network. The 45-minute threshold is consistent with a similar analysis conducted by the Portland Bureau of Transportation (Portland Bureau of Transportation 2020).

The equity analysis found that the degree of transit access improvements would differ across equity priority communities and the general population. Based on where members of equity priority communities currently live, three equity priority groups (people with disabilities, persons with lower incomes, and older adults) are estimated to see greater increases in access to jobs and services during either or both the morning peak and midday hours compared to their counterparts. Based on where they currently live, four equity priority groups (BIPOC communities, limited English proficiency, immigrants and refugees, and young people) would experience an increase in accessibility, but the increase would be less than for the general population. Table 3.5-13 shows the transit access improvements expected for equity priority communities in the study area.

Terms and Definitions

Counterparts: Those who are not members of a particular equity priority community. For example, the counterpart to the BIPOC community is the White, non-Hispanic population.

Table 3.5-13. Transit Access Improvements for Equity Priority Residents: Percentage Increase in Jobs Access in a 45-Minute Trip

Equity Priority Community	Morning Peak Increase for Average Member of Community (e.g., BIPOC)	Morning Peak Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)	Midday Increase for Average Member of Community (e.g., BIPOC)	Midday Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)
Black, Indigenous, and People of Color (BIPOC)	85%	107%	55%	68%
People with Disabilities	111%	96%	66%	59%
Communities with Limited English Proficiency	67%	100%	43%	61%
Persons with Lower Incomes	100%	92%	60%	60%
Immigrants and Refugees	71%	101%	46%	61%
Young People (under 25)	74%	102%	47%	64%
Older Adults (65+)	131%	87%	83%	55%

Sources: Metro 2045 Regional Model; U.S. Census Bureau 2020, 2022

Notes:

“Counterpart” is defined as someone who is not considered a member of the corresponding equity priority community. For example, the counterpart to members of the BIPOC community are those whose race/ethnicity combination is White Non-Hispanic/Latino; the counterpart to people with disabilities is people who do not have a disability, and so on.

Due to overlap within equity priority communities (i.e., individuals who belong to more than one community), the total increase in jobs for all equity priority community members cannot be determined.

a Average access is calculated based on residential distribution of each demographic group and weighted accordingly.

Estimated access improvements are similar when comparing equity priority communities and the general public at the regional level (i.e., the average resident of the four-county region in each group would see similar increases in access to jobs reachable within a 45-minute transit ride).

Demographic characteristics of residents within a half-mile walk of a station are largely similar to the Program area as a whole, meaning the stations serve equity priority communities at a level expected given where they live in the Program area.

Active Transportation

Active transportation components of the Modified LPA would support the equity objective to “improve mobility, accessibility, and connectivity, especially for lower-income travelers, people with disabilities, and historically underserved communities that experience transportation barriers.” The facilities would provide new and safe connections for all people of all abilities and would improve the quality of existing connections.

Several of the Modified LPA design options would have different long-term effects on active transportation. Experiences could differ for the various age and ability levels, depending on grade, height, and distance of each option. The bridge configurations 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 the single-level movable-span configurations compared to the double-deck configuration. Blind and low-vision individuals could experience the greatest noise interference in their active transportation as they use sound to aid navigation.
- The single-level movable-span configuration would have a lower bridge height over the Columbia River than the double-deck fixed-span and single-level fixed-span configurations, which would decrease the length and steepness of the uphill and downhill grades for all users on the shared-use path.
- Some equity priority communities are more affected by discrimination and violence, and they might prefer the single-level fixed-span and single-level movable-span configurations 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 configuration, 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 configuration, 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 configuration 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.

These differences in the experiences of active transportation users could adversely affect equity priority communities more than the general population—in particular, BIPOC, low-income, and people with disabilities—due to their greater reliance on modes besides driving.

Highway and Driving Improvements

As shown in Table 3.5-14, the Program area analysis estimates that, due to reduced congestion, within a 45-minute commute each demographic group 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 drive) under the Modified LPA compared to the No-Build Alternative. This equates to an increase in access to about 180,000 to 197,000 jobs during the morning peak and 35,800 to 44,000 jobs during the midday.

As shown in Table 3.5-15, within the 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. Estimated increased access to jobs would be similar between equity priority communities and the general public.

The addition of a second auxiliary lane in each direction would have a slightly greater increase in jobs access for all demographic groups due to faster travel times within the corridor from less congestion.

Table 3.5-14. Driving Access Improvements for Equity Priority Community Residents in the Program Area: Percentage Increase in Jobs Access with the Modified LPA Compared to No-Build Alternative (45-minute Travel Time)

Equity Priority Community	Morning Peak: Increase for Average Member of Community (e.g., BIPOC) ^a	Morning Peak: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)	Midday: Increase for Average Member of Community (e.g., BIPOC)	Midday: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)
Black, Indigenous, and People of Color	19%	19%	3%	3%
People with Disabilities	19%	19%	3%	3%
Communities with Limited English Proficiency	20%	19%	3%	3%
Persons with Lower Incomes	20%	19%	3%	3%
Immigrants and Refugees	19%	19%	3%	3%
Young People (Under 25)	20%	19%	3%	3%
Older Adults (65+)	18%	19%	3%	3%

Sources: 2022 Metro, RTC, C-TRAN, TriMet, and IBR Analysis; 2020 Census (U.S. Census Bureau 2020); 2016-2020 American Community Survey (U.S. Census Bureau 2022).

a Average access is calculated based on residential distribution of each demographic group and weighted accordingly.

Table 3.5-15. Driving Access Improvements for Equity Priority Community Residents in the Portland-Vancouver Metropolitan Area: Percentage Increase in Jobs Access with the Modified LPA Compared to No-Build Alternative (45-minute Travel Time)

Equity Priority Community	Morning Peak: Increase for Average Member of Community (e.g., BIPOC) ^a	Morning Peak: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)	Midday: Increase for Average Member of Community (e.g., BIPOC)	Midday: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)
Black, Indigenous, and People of Color	3%	4%	1%	1%
People with Disabilities	4%	3%	1%	1%
Communities with Limited English Proficiency	3%	4%	1%	1%
Persons with Lower Incomes	3%	3%	1%	1%
Immigrants and Refugees	3%	4%	1%	1%

Equity Priority Community	Morning Peak: Increase for Average Member of Community (e.g., BIPOC) ^a	Morning Peak: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)	Midday: Increase for Average Member of Community (e.g., BIPOC)	Midday: Increase for Average Counterpart (e.g., White Non-Hispanic/Latino)
Young People (Under 25)	4%	3%	1%	1%
Older Adults (65+)	4%	3%	1%	1%

Sources: Metro 2045 Regional Model; 2020 Census (U.S. Census Bureau 2020); 2016-2019 American Community Survey (U.S. Census Bureau 2022)

a Average access is calculated based on residential distribution of each demographic group and weighted accordingly.

Tribal Government Consultation

In addition to the benefits associated with increased transit options and improved highway and active transportation, the government-to-government consultation process is encouraging improved and timely communication between the IBR Program and tribes. This process enables tribal governments to understand the Program, ask questions, and participate in issue identification and solution strategies, which could lead to protection of culturally sensitive resources, increased input into the design of the Program, and avoidance, minimization, and mitigation measures of potential impacts to resources valued by tribal governments.

Community Benefits

The IBR Program’s Community Benefits Advisory Group is developing recommendations for community benefit efforts to achieve the greatest positive benefit to the communities in the Program area and broader region from the Program’s work, in alignment with the Program’s equity framework and community priorities. Recommendations from this advisory group will be shared with the larger community for input. This advisory group is collaborating with the Equity Advisory Group, Community Advisory Group, and the IBR Program to identify benefits that could be incorporated into the Final SEIS as mitigation strategies, construction contracts as design and construction specifications, or other documents as appropriate to ensure accountability for implementation of the community benefits.

Distribution of Burdens

Table 3.5-16 presents an analysis of the associated property impacts identified for each of the five geographic subareas and the specific equity priority communities affected by these property impacts. All subareas have high concentrations of multiple equity priority communities. The IBR Program has conducted outreach to potentially affected communities in each of these subareas and will continue to engage the community and consult with the Equity Advisory Group to identify and address potential impacts throughout the planning and design phases.

Table 3.5-16. Overview of Impacts to Equity Priority Communities in the Study Area

Study Area Subarea	Equity Priority Communities with Above-Average Representation ^a	Property Acquisitions and Displacements
Oregon Mainland	<ul style="list-style-type: none"> • BIPOC • Low-Income • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • 4 single-family homes displaced (3 floating homes, 1 on land). • 5 retail/service businesses displaced. • 20 partial parcel acquisitions.
Hayden Island	<ul style="list-style-type: none"> • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • 32 single-family homes displaced (all floating homes). • 15 retail/service businesses displaced. • 20 partial parcel acquisitions.
Downtown Vancouver	<ul style="list-style-type: none"> • Low-Income • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • 10 office/professional/healthcare businesses displaced. • 31 partial parcel acquisitions.
Upper Vancouver	<ul style="list-style-type: none"> • BIPOC • Limited English proficiency • Low-Income • Older Adults • Young People 	<ul style="list-style-type: none"> • 7 single-family homes displaced. • 33 multifamily units displaced (I-5 Mainline Westward Shift design option only). • 58 partial parcel acquisitions.
Ruby Junction	<ul style="list-style-type: none"> • BIPOC • Immigrants and Refugees • Low-Income • Young People 	<ul style="list-style-type: none"> • 3 retail/service businesses displaced.

Sources: U.S. Census Bureau 2020, 2022

^a Specific equity priority communities are listed where their percentage of the population is above average for the Portland-Vancouver metropolitan area in at least one census tract in that geographic area.

BIPOC = Black, Indigenous, and People of Color

Houseless Populations

The Modified LPA would likely displace houseless individuals and families staying in the study area during construction, including those living within existing or to-be-acquired right of way. While many experiencing houselessness either choose or are forced to relocate regularly, others remain in place for extended times when they have found a safe location with limited disturbances. Thus, the number of houseless people present in the study area who would be displaced at the time of construction is unknown. As design progresses and construction is scheduled, the IBR Program would continue to coordinate with local jurisdictions and aid organizations to determine potential impacts. Such impacts could include displacements of houseless individuals within the limits of construction; construction proximity impacts such as noise, vibration, and air pollution; and reduced access to food assistance and other resources as a result of construction-related closures or transit delays.

Tolling

The Modified LPA tolling program would place a burden on low-income travelers, who are disproportionately BIPOC. Toll rates and policies, including a possible low-income toll program, would be set jointly by the Oregon Transportation Commission and the Washington State Transportation Commission. Both commissions have supported the study of a low-income toll program, including how such a program could be implemented in each state. They would work together to determine how to approach this for the IBR Program.

3.5.5 Temporary Effects

No-Build Alternative

There would be no temporary effects to neighborhoods or equity priority communities under the No-Build Alternative.

Modified LPA

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

Neighborhoods

On-site Construction

Construction of the Modified LPA includes construction of the new bridges and removal of the existing Interstate Bridge. Neighborhoods in the study area would experience temporary effects from construction of the Modified LPA. These effects would generally increase with proximity to construction areas and could include:

- Noise and vibration
- Dust and emissions
- 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)

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. None of these temporary easements would adversely affect neighborhood cohesion or livability.

Off-Site Staging Areas and Casting Yards

Most neighborhoods in the 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 use of the Thunderbird Hotel site for staging because of its proximity to more densely populated areas. All neighborhoods in the 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. See the Neighborhoods and Populations Technical Reports for a discussion of temporary effects for each neighborhood in the study area.

Equity

Table 3.5-17 summarizes temporary, construction-related impacts to equity priority communities.

Table 3.5-17. Overview of Temporary Effects to Equity Priority Communities in the Study Area

Study Area Subarea	Equity Priority Communities with Above-Average Representation ^a	Construction-Related Impacts
Oregon Mainland	<ul style="list-style-type: none"> • BIPOC • Low-Income • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • Temporary increase in noise levels, reduced air quality (e.g., fugitive dust), and increase in truck traffic during construction, particularly in the areas immediately adjacent to I-5. • Temporary adverse effect on visual quality (e.g., construction equipment and activities blocking views, high-visibility signage, lighting during nighttime work). • Traffic detours and road closures. • Traffic spillovers in the Bridgeton, East Columbia, and Kenton neighborhoods.
Hayden Island	<ul style="list-style-type: none"> • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • Temporary increase in noise levels, reduced air quality (e.g., fugitive dust), and increase in truck traffic during construction, particularly in the areas immediately adjacent to I-5. • Residents living in floating homes and the mobile home park may be particularly susceptible to air emissions due to their proximity to both the highway and transit alignments. • Temporary effects on visual quality. • Traffic detours and road closures.
Downtown Vancouver	<ul style="list-style-type: none"> • Low-Income • People with Disabilities • Older Adults 	<ul style="list-style-type: none"> • Temporary increase in noise levels, reduced air quality (e.g., fugitive dust), and increase in truck traffic during construction, particularly in the areas immediately adjacent to I-5. • Temporary adverse effects on visual quality. • Traffic detours and road closures. • Temporary closures of east-west bicycle and pedestrian connections at SR 14, Evergreen Boulevard, and Mill Plain Boulevard.

Study Area Subarea	Equity Priority Communities with Above-Average Representation ^a	Construction-Related Impacts
Upper Vancouver	<ul style="list-style-type: none"> • BIPOC • Limited English proficiency • Low-Income • Older Adults • Young People 	<ul style="list-style-type: none"> • Temporary increase in noise levels, reduced air quality (e.g., fugitive dust), and increase in truck traffic during construction, particularly in the areas immediately adjacent to I-5. • Temporary adverse effects on visual quality. • Traffic detours and road closures. • Temporary closures of east-west bicycle and pedestrian connections at McLoughlin Boulevard, Fourth Plain Boulevard, 29th Street, and 33rd Street. • Traffic spillovers in the Minnehaha, Rose Village, Central Park, Hudson’s Bay, and Columbia Way neighborhoods.
Ruby Junction	<ul style="list-style-type: none"> • BIPOC • Immigrants and Refugees • Low-Income • Young People 	<ul style="list-style-type: none"> • Temporary increase in noise levels, reduced air quality (e.g., fugitive dust), and increase in truck traffic during construction. • Temporary adverse effects on visual quality. • Traffic detours and road closures.

Sources: U.S. Census Bureau 2020, 2022

^a Specific equity priority communities are listed where their percentage of the population is above average for the Portland-Vancouver metropolitan area in at least one census tract in that geographic area.

BIPOC = Black, Indigenous, and People of Color

3.5.6 Indirect Effects

Neighborhoods

As described in Section 3.4.1, the Modified LPA would have the indirect effect of facilitating growth within the study area compared to No-Build Alternative by providing new light-rail service and reducing traffic congestion for general-purpose and transit vehicles. The greatest potential effects on growth would be in proposed station areas, particularly in the Hayden Island and Esther Short neighborhoods, which have the greatest potential to support transit-oriented development. Such development is anticipated and encouraged in the adopted plans for these neighborhoods. Under the No-Build Alternative, light-rail would not be extended to Vancouver, and transit-oriented development would not occur. The Hayden Island neighborhood would have the greatest potential to experience indirect effects from the Modified LPA because transit-oriented development is planned to replace some of the dispersed, auto-oriented shopping centers that exist today. Creating a less auto-oriented environment for residents to travel between home and their services would provide more opportunities for residents to interact with one another and easily access potential new community resources. Similarly, if smaller-scale commercial services were to develop close to housing and transit, residents would be encouraged to use services provided in their neighborhood rather than leaving the island to access the same services.

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.

Although increased development density and intensity in these neighborhoods would be consistent with existing planning and zoning, these could still result in negative indirect effects, including increased noise, additional traffic on local streets, greater demand for public services, and changes in visual character.

Equity

Over time, there would be an increased risk of residential displacement in areas where the Modified LPA improves neighborhood amenities and livability, potentially increasing housing costs to unaffordable levels for lower-income residents. An analysis conducted in 2019 for the City of Vancouver as part of an anti-displacement plan identified downtown Vancouver, the Meadow Homes neighborhood, and the Maplewood neighborhood as particularly vulnerable to neighborhood change and residential displacement (City of Vancouver n.d.). Downtown Vancouver is home to high concentrations of BIPOC residents, low-income households, people with disabilities, and seniors. While Meadow Homes and Maplewood are not in the Program area, they are a short distance east and are also home to a large concentration of equity priority communities. These neighborhoods may be indirectly affected if development in nearby areas facilitated by the Modified LPA improvements leads to increased housing costs.

3.5.7 Potential Avoidance, Minimization, and Mitigation Measures

Long-Term Effects

Regulatory Mitigation

- Comply with the Uniform Relocation Act. When displacement cannot be avoided, federal and state regulations require property to be purchased at fair market value and all displaced residents to be provided with replacement housing and relocation assistance. Federal regulations, such as the Uniform Relocation Act, and state statutes determine the standards and procedures for providing such replacement housing, based on the characteristics of individual households. Relocation benefit packages usually include replacement housing for owners and renters, moving costs, and assistance in locating replacement housing. Relocation benefits for businesses can include moving costs, site search expenses, and business reestablishment expenses.

Program-Specific Mitigation

Specific mitigation for effects on neighborhoods includes:

- The Modified LPA is anticipated to have an overall neutral effect on visual quality in study area neighborhoods. The IBR Program would work with residents and community members to understand impacts and avoid, minimize, or mitigate those impacts.
- The IBR Program would avoid and minimize impacts to community resources and neighborhood cohesion wherever feasible. Strategies to minimize impacts to neighborhood cohesion could include providing additional community gathering spaces such as pedestrian and bicycle facilities.

Specific mitigation for effects on equity includes:

- Work with residents and community members to understand impacts and avoid, minimize, or mitigate those impacts.
- Develop a package of community benefits, which may be captured in a variety of documents, including contract specifications, environmental documents, a potential workforce agreement and either a community benefits plan or report. Community benefits are likely to include a variety of investments and strategies to ensure workforce and contracting equity, enhance the local community, and offset burdens associated with construction and operation.

Temporary Effects

Regulatory Mitigation

Required measures to minimize construction impacts, such as construction best management practices, would also reduce impacts to neighborhoods and equity priority communities. These measures are used to address construction effects such as temporary easements, noise, dust, emissions from construction vehicles, and visual clutter. Best management practices applicable to the potential impacts described above in Section 3.5.5 are discussed in Section 3.3, Acquisitions and Displacements; Section 3.9, Visual Quality; Section 3.10, Air Quality; and Section 3.11, Noise and Vibration.

Program-Specific Mitigation

- Where feasible, implement nighttime construction schedules and shield nighttime lighting.
- Hold community meetings before construction starts to inform residents of the construction timeline, relevant staging plans, ramp and road closures, and detour plans.
- Use temporary signage, including variable message signs, to inform drivers of traffic delays because of construction or heavy equipment entering or leaving the highway.
- Provide signs for local business assistance alerting customers of continued operation and a hotline for construction information.
- Conduct regional outreach activities to provide information on construction-related impacts and detours that include communications to businesses, agencies, and community-based organizations within the greater Portland and Vancouver area. Traffic advisories and updates would be made available to the public to help make travel choices.
- Place communication and signage for temporary routes for pedestrians and biking well in advance of the detour areas. Wayfinding signage would be accessible, consistent, thorough, and maintained.
- Coordinate with affected property owners to minimize potential impacts to structures and access points during construction.
- Coordinate with local jurisdictions and other organizations offering services to people experiencing unsheltered homelessness in areas directly affected by construction activities. Services would be provided in advance of construction and could include harm reduction, access to health services, and emergency shelter or alternate housing options.
- Restore removed landscaping on properties following construction or as otherwise agreed within the property rights process.
- Pay property owners in exchange for the use of their property during construction.