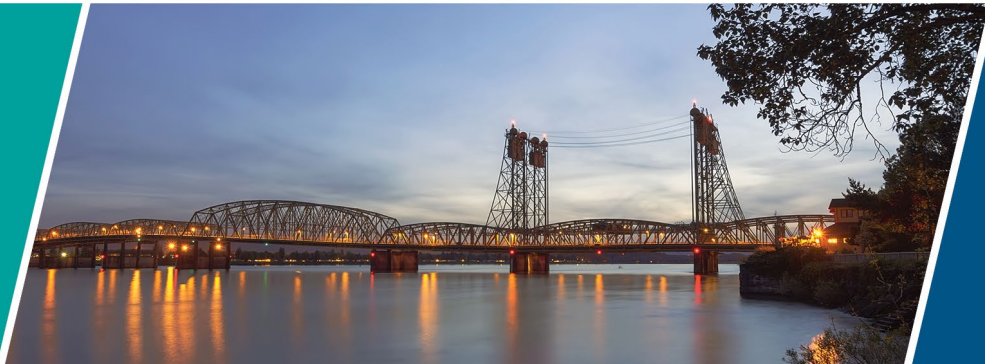




Considering
the importance
of our natural
environment



Acquisitions Technical Report

March 2026



Oregon

For Americans with Disabilities Act (ADA) or Civil Rights Title VI accommodations, translation/interpretation services, or more information call 503-731-4128, TTY 800-735-2900 or Oregon Relay Service 7-1-1.

Washington

Accommodation requests for people with disabilities in Washington can be made by contacting the Washington State Department of Transportation (WSDOT) ADA Affairs team at wsdotada@wsdot.wa.gov or by calling toll-free, 855-362-4ADA (4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Acquisitions Technical Report

CONTENTS

1.	PROGRAM OVERVIEW	1-1
1.1	Components of the Modified LPA.....	1-2
1.1.1	Interstate 5 Mainline	1-7
1.1.2	Portland Mainland and Hayden Island (Subarea A).....	1-12
1.1.3	Columbia River Bridges (Subarea B)	1-22
1.1.4	Downtown Vancouver (Subarea C).....	1-44
1.1.5	Upper Vancouver (Subarea D)	1-52
1.1.6	Transit Support Facilities	1-55
1.1.7	Transit Operating Characteristics	1-58
1.1.8	Tolling.....	1-62
1.1.9	Transportation System- and Demand-Management Measures	1-65
1.1.10	Off-Site Mitigation Sites.....	1-66
1.2	Modified LPA Construction	1-69
1.2.1	Construction Components, Packaging Plan, and Duration.....	1-69
1.2.2	Potential Staging Sites and Casting Yards.....	1-73
1.3	No-Build Alternative	1-74
2.	METHODS.....	2-1
2.1	Introduction	2-1
2.2	Study Area.....	2-2
2.3	Relevant Laws and Regulations	2-4
2.3.1	Federal	2-4
2.3.2	State.....	2-4
2.3.3	Local	2-5
2.4	Effects Guidelines	2-5
2.5	Data Collection Methods	2-6
2.5.1	Primary Data Sources.....	2-6
2.6	Analysis Methods.....	2-7
2.6.1	Step 1: Determine Right-of-Way Requirements.....	2-7
2.6.2	Step 2: Identify Ownership and Land Use of Parcels.....	2-7
2.6.3	Step 3: Verify Findings through Research and Field Investigation	2-7
2.6.4	Step 4: Assess Mitigation Potential	2-7
2.7	Coordination	2-8
3.	AFFECTED ENVIRONMENT	3-1
3.1	Introduction	3-1

3.2	Regional Conditions	3-1
3.2.1	Regional Land Use.....	3-1
3.2.2	Existing Land Uses in Study Area	3-1
3.2.3	Residential, Commercial, and Industrial Vacancy Rates	3-2
4.	LONG-TERM EFFECTS	4-1
4.1	Introduction	4-1
4.2	No-Build Alternative	4-4
4.3	Permanent Property Acquisitions and Easements	4-4
4.3.1	Oregon Mainland	4-4
4.3.2	Hayden Island.....	4-6
4.3.3	Ruby Junction Light-Rail OMF Expansion Area	4-9
4.3.4	Downtown Vancouver	4-10
4.3.5	Upper Vancouver	4-17
5.	TEMPORARY EFFECTS	5-1
5.1	Introduction	5-1
5.2	Temporary Construction Easements	5-2
5.2.1	Oregon Mainland	5-2
5.2.2	Hayden Island.....	5-2
5.2.3	Ruby Junction Light-Rail OMF Expansion Area in Gresham, Oregon.....	5-2
5.2.4	Downtown Vancouver	5-2
5.2.5	Upper Vancouver	5-3
6.	INDIRECT EFFECTS.....	6-1
7.	AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES.....	7-1
8.	PERMITS AND APPROVALS	8-1
8.1	Federal Permits	8-1
8.2	State Permits.....	8-1
8.3	Local Permits.....	8-1
9.	REFERENCES	9-1

FIGURES

Figure 1-1.	IBR Program Location Overview	1-2
Figure 1-2.	Modified LPA Components	1-6
Figure 1-3.	Modified LPA – Geographic Subareas.....	1-7
Figure 1-4.	Auxiliary Lane Configurations	1-9

Figure 1-5. Auxiliary Lane Configuration Footprint Differences 1-10

Figure 1-6. Portland Mainland and Hayden Island (Subarea A)..... 1-14

Figure 1-7. Levee Systems in Subarea A 1-15

Figure 1-8. Transit and Roadway Improvements in North Portland..... 1-16

Figure 1-9. Vehicle Circulation between Hayden Island and the Portland Mainland..... 1-20

Figure 1-10. Columbia River Bridges (Subarea B) 1-23

Figure 1-11. Bridge Foundation Concept 1-24

Figure 1-12. Existing Navigation Clearances of the Interstate Bridge 1-26

Figure 1-13. Navigation Clearances and Proposed Profile of the Modified LPA Columbia River
Bridges with a Double-Deck Fixed-Span Configuration 1-26

Figure 1-14. Conceptual Drawing of a Double-Deck Fixed-Span Configuration 1-27

Figure 1-15. Typical Cross Section of the Double-Deck Fixed-Span Configuration..... 1-28

Figure 1-16. Conceptual Drawings of Single-Level Fixed-Span Bridge Types 1-30

Figure 1-17. Typical Cross Section of the Single-Level Fixed-Span Configuration (Extradosed Type) 1-31

Figure 1-18. Typical Cross Section of the Single-Level Fixed-Span Configuration (Girder Type) 1-32

Figure 1-19. Conceptual Drawings of Single-Level Movable-Span Configurations in the Closed and
Open Positions 1-34

Figure 1-20. Typical Cross Section of the Single-Level Movable-Span Bridge Type..... 1-35

Figure 1-21. Bridge Configuration Footprint Comparison 1-37

Figure 1-22. Bridge Configuration Profile Comparison 1-38

Figure 1-23. Downtown Vancouver (Subarea C)..... 1-45

Figure 1-24. Modified LPA With C Street Ramps 1-47

Figure 1-25. Collector-Distributor Roadways..... 1-48

Figure 1-26. Typical Cross Section of the Collector-Distributor Roadways 1-49

Figure 1-27. Upper Vancouver (Subarea D) 1-53

Figure 1-28. Ruby Junction Light-Rail Operations and Maintenance Facility Study Area..... 1-56

Figure 1-29. Expo Center Overnight LRV Facility 1-58

Figure 1-30. Toll Zone 1-64

Figure 1-31. Potential Compensatory Mitigation Sites 1-68

Figure 1-32. Preliminary Construction Packages 1-72

Figure 2-1. Study Area..... 2-3

TABLES

Table 1-1. Modified LPA Design Options 1-5

Table 1-2. Summary of Bridge Configurations 1-39

Table 1-3. Proposed TriMet and C-TRAN Bus Route Changes 1-61

Table 1-4. Preliminary Construction Packaging Plan	1-70
Table 3-1. Year-to-Date Median Home Prices	3-3
Table 3-2. Portland-Vancouver Area Multifamily Vacancy and Rental Rates.....	3-3
Table 3-3. Currently Available Residential Properties within the Study Area	3-4
Table 3-4. Currently Available Residential Rental Properties within the Study Area	3-4
Table 3-5. Office, Retail, and Industrial Vacancy Rates	3-6
Table 3-6. Gresham, Oregon Multifamily Vacancy and Rental Rates	3-9
Table 4-1. Summary of Permanent Property Acquisitions and Displacements.....	4-2
Table 4-2. Summary of Permanent Property Acquisitions and Displacements on the Oregon Mainland	4-4
Table 4-3. Summary of Permanent Property Acquisitions and Displacements on Eastern Hayden Island.....	4-6
Table 4-4. Summary of Permanent Property Acquisitions and Displacements on West Hayden Island...	4-8
Table 4-5. Summary of Permanent Property Acquisitions and Displacements at the Ruby Junction Light-Rail OMF Expansion Area in Gresham, Oregon	4-9
Table 4-6. Summary of Permanent Property Acquisitions and Displacements in Downtown Vancouver	4-11
Table 4-7. Summary of Permanent Property Acquisitions and Displacements for Waterfront Park and Rides in Downtown Vancouver.....	4-14
Table 4-8. Summary of Permanent Property Acquisitions and Displacements for the Evergreen Park and Ride in Downtown Vancouver	4-15
Table 4-9. Summary of Permanent Property Acquisitions and Displacements in Upper Vancouver.....	4-18
Table 4-10. Summary of Permanent Property Acquisitions and Displacements in Vancouver (including Downtown Vancouver and Upper Vancouver)	4-20
Table 5-1. Temporary Construction Easement Impact Summary.....	5-2
Table 7-1. Avoidance and Minimization Measures.....	7-1
Table 7-2. Mitigation Measures	7-1

APPENDICES

- A List of Property Acquisitions and Easements
- B Permanent and Temporary Property Impact Figures

ACRONYMS AND ABBREVIATIONS

Acronyms/Abbreviations	Definition
AASHTO	American Association of State Highway and Transportation Officials
BMP	best management practice
BRT	bus rapid transit
CADD	computer-aided design and drafting
CCFS	Columbia Corridor Flood Safety
C-D	collector-distributor
CRC	Columbia River Crossing
CTR	Commute Trip Reduction
C-TRAN	Clark County Public Transit Benefit Area Authority
DNR	Washington State Department of Natural Resources
DSL	Oregon Department of State Lands
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information System
I-5	Interstate 5
IBR	Interstate Bridge Replacement
LPA	Locally Preferred Alternative
LRT	light-rail transit
LRV	light-rail vehicle
MAX	Metropolitan Area Express
NAVD 88	North American Vertical Datum of 1988
NB	northbound
NEPA	National Environmental Policy Act
NW	northwest
ODOT	Oregon Department of Transportation
OMF	Operations and Maintenance Facility

Acronyms/Abbreviations	Definition
ORS	Oregon Revised Statutes
OTC	Oregon Transportation Commission
PMLS	Portland Metro Levee System
PNCD	Preliminary Navigation Clearance Determination
RMLS	Regional Multiple Listing Service
ROD	Record of Decision
RTC	Regional Transportation Council
RTP	Regional Transportation Plan
SEIS	Supplemental Environmental Impact Statement
SOV	single-occupancy vehicle
sq ft	square foot, square feet
SR	State Route
TPSS	traction power substation
TriMet	Tri-County Metropolitan Transportation District of Oregon
UFSWQD	Urban Flood Safety and Water Quality District
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USCG	U.S. Coast Guard
USDOT	U.S. Department of Transportation
VNHR	Vancouver National Historic Reserve
WSDOT	Washington State Department of Transportation
WSTC	Washington State Transportation Commission

1. PROGRAM OVERVIEW

This technical report identifies, describes, and evaluates short-term and long-term effects on property resulting from the Interstate Bridge Replacement (IBR) Program. The construction and operation of the transportation infrastructure requires the permanent and temporary acquisition of property and property rights that include residential, business, and public spaces within the project footprint. The Modified Locally Preferred Alternative (LPA) would be designed to avoid and/or minimize these effects to the greatest extent possible. This report provides mitigation measures for potential impacts when avoidance is not feasible.

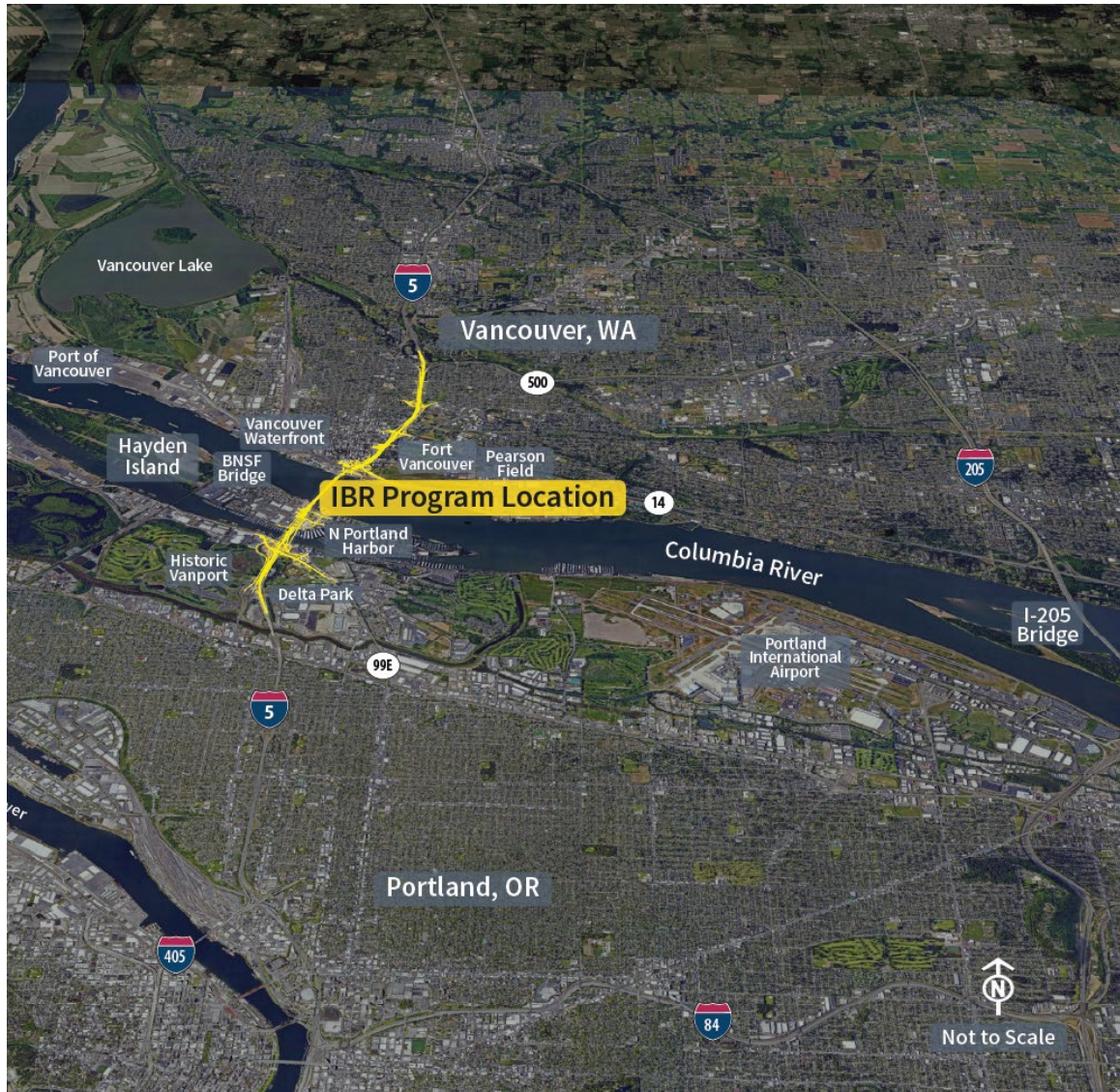
The purpose of this report is to satisfy applicable portions of the National Environmental Policy Act (NEPA) 42 United State Code (U.S.C.) 4321 “to promote efforts which will prevent or eliminate damage to the environment.” Information and potential environmental consequences to properties, businesses, and residences described in this technical report will be used to support the Final Supplemental Environmental Impact Statement (SEIS) for the IBR Program pursuant to 42 U.S.C. 4332.

The objectives of this report are to:

- Define the Program study area and the methods of data collection and evaluation used for the analysis (Chapter 2).
- Describe existing land uses and real estate market within the study area (Chapter 3).
- Discuss potential long-term, temporary, and indirect effects resulting from construction and operation of the Modified LPA in comparison to the No-Build Alternative (Chapters 4 through 6).
- Provide proposed avoidance and mitigation measures to help prevent, eliminate, or minimize environmental consequences from the Modified LPA (Chapter 7).

The IBR Program is a continuation of the previously suspended Columbia River Crossing (CRC) project with the same purpose to replace the aging Interstate Bridge across the Columbia River with a modern, seismically resilient multimodal structure. The proposed infrastructure improvements are located along a 5-mile stretch of the Interstate 5 (I-5) corridor that extends from approximately Victory Boulevard in Portland to State Route (SR) 500 in Vancouver, as shown in Figure 1-1.

Figure 1-1. IBR Program Location Overview



1.1 Components of the Modified LPA

The basic proposed components of the Modified LPA¹ include:

- A new pair of Columbia River bridges—one for northbound and one for southbound travel—built west of the existing bridge. The new bridges would each include three through lanes, safety shoulders, and one auxiliary lane in each direction. When all highway, transit, and active transportation would be moved to the new Columbia River bridges, the existing

¹ All transportation facilities would be designed to current AASHTO, WSDOT, and ODOT specifications.

Interstate Bridge (both spans) would be removed.² The primary navigation channel would be relocated approximately 500 feet south (measured by the channel centerline) of its existing location near the Vancouver shoreline.

- A 1.9-mile light-rail transit (LRT) extension of the current Metropolitan Area Express (MAX) Yellow Line from the Expo Center MAX Station in North Portland, where it currently ends, to a terminus near Evergreen Boulevard in Vancouver. Improvements would include new stations at Hayden Island, downtown Vancouver (Waterfront Station), and near Evergreen Boulevard (Evergreen Station), as well as reconstruction of the existing Expo Center MAX Station. The Tri-County Metropolitan Transportation District of Oregon (TriMet), which operates the MAX system, would also operate the Yellow Line extension.
- Associated LRT improvements such as traction power substations (TPSS),³ an overhead catenary system, signal and communications support facilities, an overnight light-rail vehicle (LRV) facility at the Expo Center, 19 new LRVs, and an expanded maintenance facility at TriMet's existing Ruby Junction Light-Rail Operations and Maintenance Facility (OMF).
- Connections to local bus transit service, including bus rapid transit (BRT) and express bus routes, in collaboration with the Clark County Public Transit Benefit Area Authority (C-TRAN), in addition to the proposed new LRT service.
- Shoulders on I-5 from Interstate Avenue/Victory Boulevard to SR 500/39th Street to accommodate express bus-on-shoulder service in each direction.
- Associated bus transit service improvements, including three additional bus bays for eight new zero-emission buses at the existing C-TRAN OMF (see Section 1.1.7, Transit Operating Characteristics, for more information about this service).
- Improvements to seven I-5 interchanges and I-5 mainline improvements between Interstate Avenue/ Victory Boulevard in Portland and SR 500/39th Street in Vancouver. Some adjacent local streets would be reconfigured to complement the new interchange designs and improve local east-west connections.
- Six new adjacent bridges across North Portland Harbor: one on the east side of the existing I-5 North Portland Harbor bridge and five on the west side or overlapping with the existing bridge (which would be removed). The bridges would carry (from west to east) LRT tracks, southbound I-5 off-ramp to Marine Drive, southbound I-5 mainline, northbound I-5 mainline, northbound I-5 on-ramp from Marine Drive, and an arterial bridge for local traffic to Hayden Island with a shared-use path for pedestrians and bicyclists.
- A variety of improvements for people who walk, bike, and roll throughout the study area, including a system of shared-use paths, bicycle lanes, sidewalks, enhanced wayfinding, and facility improvements to comply with the Americans with Disabilities Act. These are referred to in this document as "active transportation improvements."

² For purposes of this report, the existing I-5 bridges over the Columbia River are referred to as the "Interstate Bridge." The new replacement I-5 bridges over the Columbia River are referred to as the "Columbia River bridges."

³ Each TPSS would be approximately 75 feet by 50 feet, including parking and access areas.

- Variable-rate tolling, including signage and equipment, for motorists using the river crossing as a demand-management and financing tool.

In addition to the basic components described above, the Modified LPA includes five sets of design options. The design options are related to (1) the number of auxiliary lanes; (2) the bridge configuration; (3) the presence of the C Street ramps; (4) the I-5 alignment in downtown Vancouver; and (5) the park and rides. The Recommended Design Options are identified with bold text and an asterisk in Table 1-1.

- **Auxiliary Lanes.** Options for one or two auxiliary lanes. Auxiliary lanes are ramp-to-ramp connections on the highway that improve interchange safety by providing drivers with more space and time to merge, diverge, and weave at highway access points.
 - The one auxiliary lane design option would extend across the Columbia River bridges between the Marine Drive interchange and the Mill Plain Boulevard interchange.
 - The two auxiliary lane design option would extend a second auxiliary lane in each direction of I-5 in addition to the one auxiliary lane included in the Modified LPA. The second auxiliary lane would also extend across the Columbia River bridges in addition to and in combination with the existing auxiliary lanes from approximately Interstate Avenue/Victory Boulevard to SR 500/39th Street.
- **Bridge Configurations.** Three bridge configurations are under consideration.
 - Double-deck fixed-span bridges: 116 feet of vertical navigation clearance over the primary navigation channel.
 - Single-level fixed-span bridges: 116 feet of vertical navigation clearance over the primary navigation channel.
 - Single-level movable-span bridges: with the movable spans over the primary navigation channel: 178 feet of vertical navigation clearance in the open position and 90 feet in the closed position (the north barge channel would have 99 feet of vertical navigation clearance and the south barge channel would have 90 feet of vertical navigation clearance).
- **C Street Ramps.** Options that retain or eliminate the existing C Street ramps in downtown Vancouver.
- **I-5 Alignment in Downtown Vancouver.** Options that maintain the I-5 mainline at its current location or shift the I-5 mainline up to 40 feet westward in downtown Vancouver between the SR 14 interchange and Mill Plain Boulevard interchange.
- **Park and Rides.** Options to provide parking capacity to accommodate 1,270 vehicles at designated park and rides near the Waterfront Station and Evergreen Station to serve LRT riders.

Table 1-1. Modified LPA Design Options

Modified LPA Component	Design Options
Auxiliary lanes	<ul style="list-style-type: none"> • One auxiliary lane in each direction on the new Columbia River bridges and nearby sections of I-5* • Two auxiliary lanes in each direction of I-5 would extend across the Columbia River bridges in addition to and in combination with existing auxiliary lanes from approximately Interstate Avenue/Victory Boulevard to SR 500/39th Street
Bridge configuration	<ul style="list-style-type: none"> • Double-deck fixed-span bridge configuration • Single-level fixed-span bridge configuration* • Single-level movable-span bridge configuration
C Street ramps	<ul style="list-style-type: none"> • With C Street ramps* • Without C Street ramps
I-5 Alignment in downtown Vancouver	<ul style="list-style-type: none"> • Centered I-5 alignment* • Westward shift of I-5 alignment
Park and Rides	<ul style="list-style-type: none"> • Provide parking capacity to accommodate 1,270 vehicles distributed across just two park and rides: one park and ride with 570 parking spaces near the Waterfront Station and one park and ride with 700 parking spaces near the Evergreen Station. The locations for park and rides that were evaluated included: <ul style="list-style-type: none"> ➢ Potential Waterfront Station park and rides <ul style="list-style-type: none"> ▪ Columbia Way (below I-5) ▪ Columbia Street/SR 14 ▪ Columbia Street/Phil Arnold Way ➢ Potential Evergreen Station park and rides <ul style="list-style-type: none"> ▪ Library Square ▪ Columbia Credit Union • Provide parking capacity to accommodate 1,270 vehicles dispersed among five park and rides listed above ^{*a}

Notes:

* Recommended Design Options are in bold.

a Depending on final design considerations, the decision may be made to use fewer than the five sites. The analysis assumes all five sites as it encompasses all physical impacts.

The transportation improvements proposed for the Modified LPA and the design options are shown in Figure 1-2. The Modified LPA includes all of the components listed above. If there are differences in environmental effects or benefits between the design options, they are identified in the sections below.

Section 1.1.1, Interstate 5 Mainline, describes the overall configuration of the I-5 mainline through the study area, and Sections 1.1.2, Portland Mainland and Hayden Island (Subarea A), through Section 1.1.5, Upper Vancouver (Subarea D), provide additional detail on four geographic subareas (A through

D), which are shown on Figure 1-3. In each subarea, improvements to I-5, its interchanges, and the local roadways are described first, followed by transit and active transportation improvements. Design options are described under separate headings in the subareas in which they would be located. The description of the Modified LPA and design options are based on conceptual design and are subject to refinement as the design is finalized. The IBR Program will continue to consult with regulatory agencies, local agencies with jurisdiction, and tribes to seek opportunities for improvements and avoidance and minimization of impacts.

Figure 1-2. Modified LPA Components



Figure 1-3. Modified LPA – Geographic Subareas



1.1.1 Interstate 5 Mainline

Today, within the 5-mile corridor, I-5 has three, typically 12-foot-wide, through lanes in each direction, an approximately 6- to 12-foot-wide inside shoulder, and an approximately 6- to 12-foot-wide outside shoulder, with the exception of the Interstate Bridge, which has approximately 1- to 2-foot-wide inside and outside shoulders. There are currently intermittent one and two auxiliary lane sections between the Victory Boulevard and Hayden Island interchanges in Oregon and between SR 14 and SR 500 in Washington.

The Modified LPA would include three 12-foot through lanes from Interstate Avenue/Victory Boulevard to SR 500/39th Street and one or two 12-foot auxiliary lanes, as detailed below and shown on Figure 1-4. Many of the existing auxiliary lanes on I-5 between the SR 14 and Main Street interchanges in Vancouver would remain, although they would be reconfigured. The existing auxiliary lanes

between the Victory Boulevard and Hayden Island interchanges would be replaced with changes to on- and off-ramps and interchange reconfigurations. The existing Interstate Bridge over the Columbia River does not have auxiliary lanes; the Modified LPA would add one or two auxiliary lanes in each direction across the new Columbia River bridges.

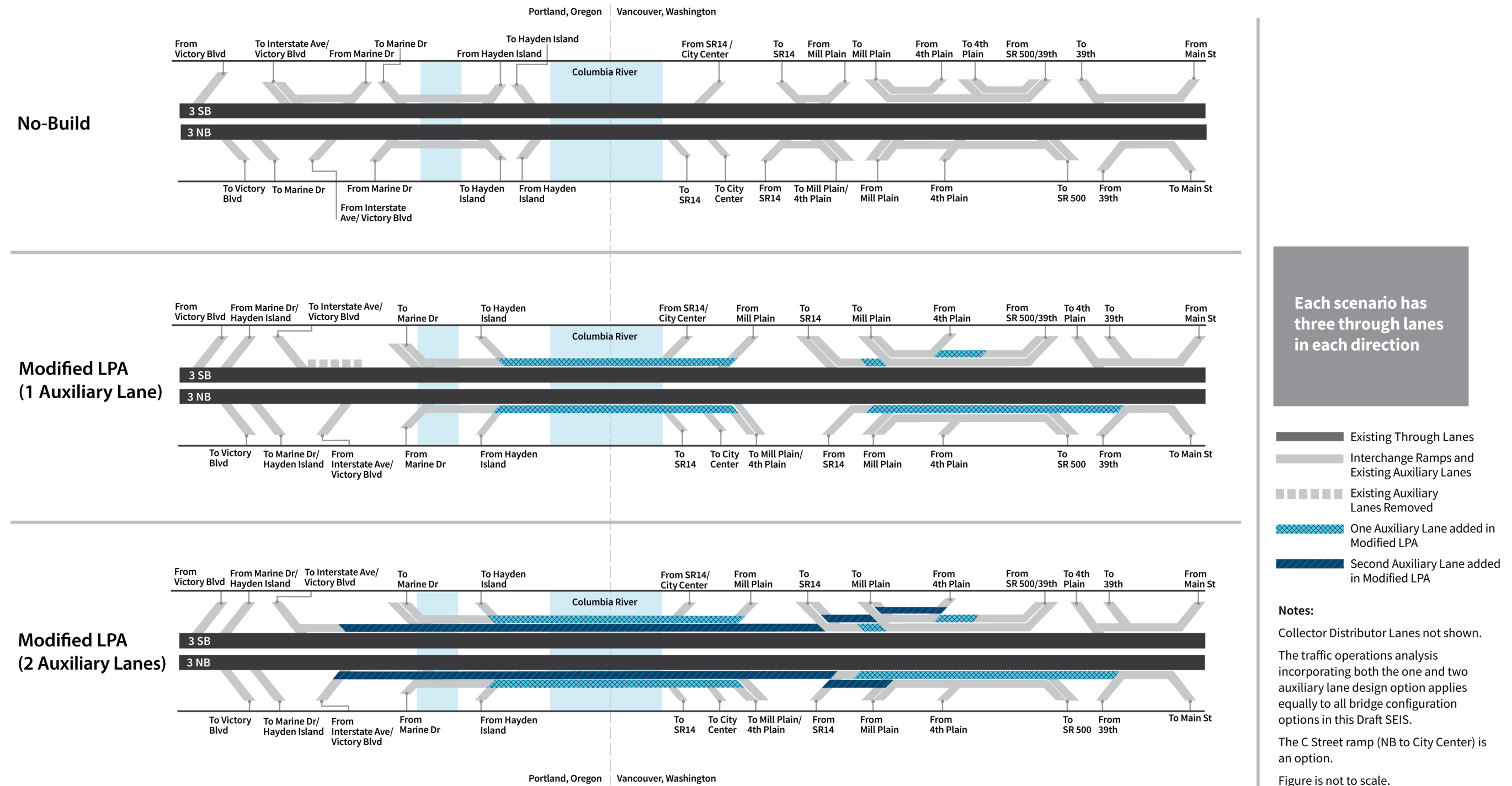
The Modified LPA would also include shoulders (11- to 14-foot inside shoulders and 10- to 14-foot outside shoulders) to be consistent with the design standards of the Oregon Department of Transportation (ODOT) and Washington State Department of Transportation (WSDOT). The inside shoulder would be used by express bus service to bypass mainline congestion, known as “bus on shoulder” (refer to Section 1.1.7, Transit Operating Characteristics). The shoulder would be available for express bus service when general-purpose speeds are below 35 miles per hour.

1.1.1.1 Auxiliary Lane Design Options

The Modified LPA includes design options for one auxiliary lane in each direction or two auxiliary lanes in each direction across the Columbia River bridges in addition to and in combination with existing auxiliary lanes in the area. The one auxiliary lane design option would include an auxiliary lane in each direction across the Columbia River bridges between the Marine Drive interchange and the Mill Plain Boulevard interchange. The two auxiliary lane design option would include a second auxiliary lane from the Interstate Avenue/Victory Boulevard interchange and the SR 500/39th Street interchange, including on the Columbia River bridges (see Figure 1-4). This section provides an overview of the one auxiliary lane and the two auxiliary lane design options.

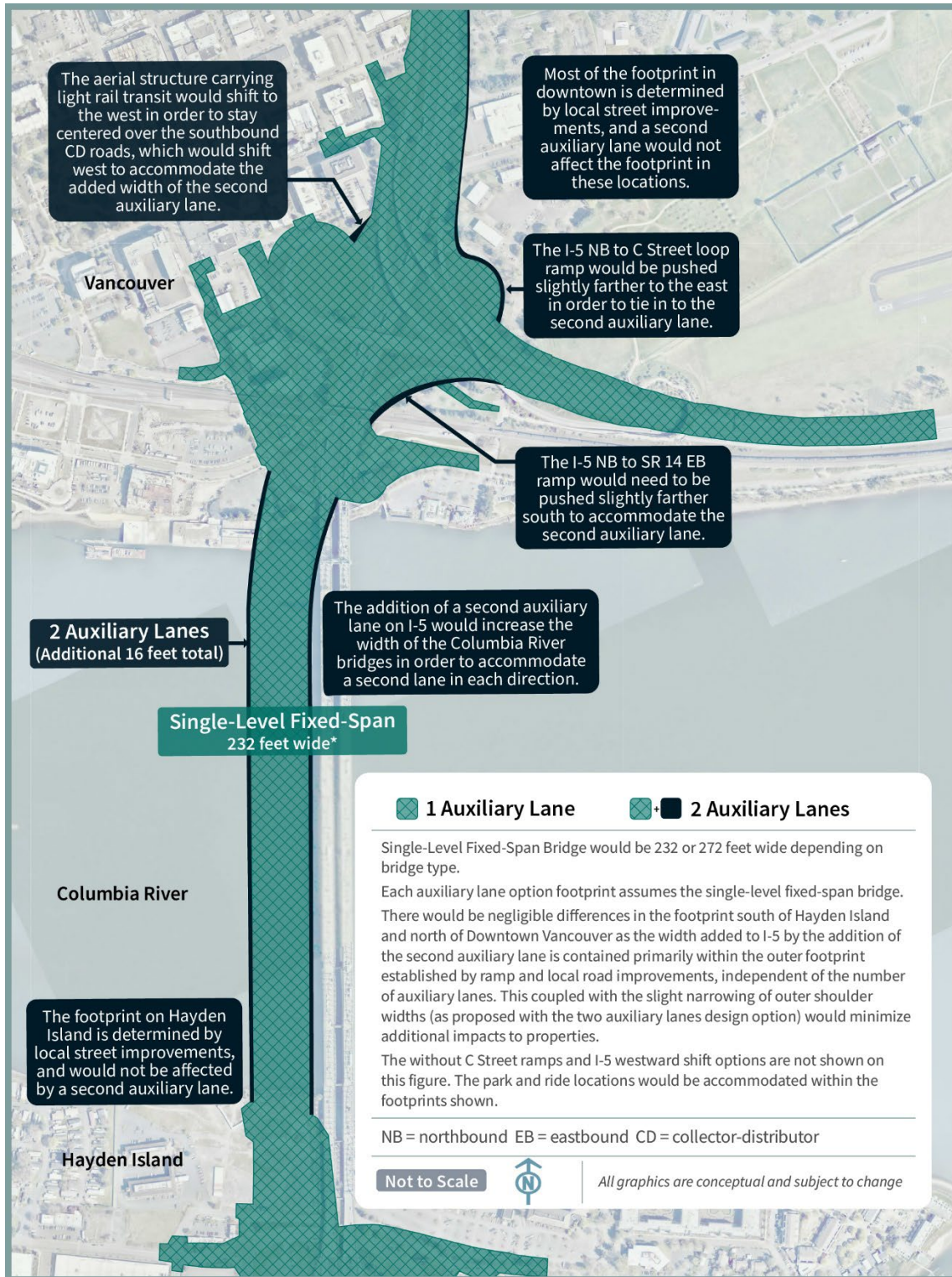
Figure 1-5, which shows a single-level fixed-span bridge configuration for comparison purposes, shows that the scale of the physical impacts (footprint, or the limits of permanent improvements) would be similar for the Modified LPA with one auxiliary lane design option and the Modified LPA with two auxiliary lanes design option, except over the Columbia River and in downtown Vancouver. For all bridge configuration design options, the two auxiliary lane design option would add a net of approximately 16 feet (8 feet in each direction) in total roadway width to the Columbia River bridges compared to the one auxiliary lane design option.

Figure 1-4. Auxiliary Lane Configurations



10.26.2023 | Copyright 2023 Interstate Bridge Replacement Program

Figure 1-5. Auxiliary Lane Configuration Footprint Differences



Note: All dimensions are approximate.

ONE AUXILIARY LANE DESIGN OPTION – RECOMMENDED DESIGN OPTION

The one auxiliary lane design option would include a 12-foot-wide auxiliary lane in each direction across the Columbia River bridges between the Marine Drive interchange and the Mill Plain Boulevard interchange.

On northbound I-5, the auxiliary lane would extend the existing auxiliary from the Marine Drive on-ramp to the Hayden Island off-ramp to continue across the Columbia River bridge, and end at the combined off-ramp to Mill Plain/Fourth Plain Boulevard, north of SR 14 (see Figure 1-4). The existing auxiliary lane from the SR 14 on-ramp to the Mill Plain/Fourth Plain off-ramp would be extended to connect to the existing auxiliary lane from the 39th Street on-ramp to the Main Street off-ramp, creating an auxiliary lane beginning at the SR 14 on-ramp and ending at the Main Street off-ramp. The existing auxiliary lane located between the Mill Plain Boulevard on-ramp and the SR 500 off-ramp would remain.

On southbound I-5, the two existing auxiliary lanes between SR 500/39th Street and Mill Plain Boulevard would remain, with some reconfiguration due to the braided ramps between the SR 500/39th Street and Fourth Plain Boulevard interchanges. The new auxiliary lane across the Columbia River would begin at the Mill Plain Boulevard on-ramp and would continue across the Columbia River bridge, connecting to the existing auxiliary lane on Hayden Island and ending at the Marine Drive off-ramp. The existing southbound auxiliary lane between Marine Drive and Victory Boulevard/Interstate Avenue would be removed due to ramp reconfigurations as part of the Marine Drive braided ramp with the Victory Boulevard/Interstate Avenue off-ramp.

TWO AUXILIARY LANE DESIGN OPTION

The two auxiliary lane design option would include the same improvements as described under the one auxiliary lane design option and would add a second 12-foot-wide auxiliary lane in each direction of I-5 across the Columbia River bridges to further improve safety and operations in the corridor.

On northbound I-5, the inside auxiliary lane would extend from the combined Interstate Avenue/Victory Boulevard on-ramp, continue across the Columbia River bridge, and end at the SR 500/39th Street interchange, connecting to the existing auxiliary lane between the SR 14 on-ramp and Mill Plain on-ramp and the existing auxiliary lane between the 39th Street on-ramp and the Main Street off-ramp. The outside auxiliary lane would extend from the Marine Drive on-ramp across the Columbia River bridge and end at the Mill Plain/Fourth Plain Boulevard off-ramp. A new outside auxiliary lane would begin at the SR 14 on-ramp connecting to the existing auxiliary lane between the Mill Plain Boulevard on-ramp and the SR 500/39th Street off-ramp.

The IBR Program recommends advancing the one auxiliary lane in each direction of I-5 design option. The one and two auxiliary lane design options would provide important benefits to highway operations and safety. Both options received a mix of positive and negative feedback from the public. The one auxiliary lane design option is recommended because it would reduce overall environmental impacts while improving transportation operations and safety. The one auxiliary lane design option is also supported by local transportation agencies.

On southbound I-5, the two existing auxiliary lanes between SR 500/39th Street and Mill Plain Boulevard would remain, with some reconfiguration because of the braided ramps between the SR 500/39th Street and Fourth Plain Boulevard interchanges. In addition, there would be a third auxiliary lane between the Fourth Plain Boulevard on-ramp and the Mill Plain Boulevard off-ramp to improve operations and safety between these two closely spaced ramps. The existing auxiliary lane between the SR 500/39th Street on-ramp would extend to the SR 14 collector-distributor off-ramp. This auxiliary lane would then continue across the Columbia River bridge to the Interstate Avenue/Victory Boulevard off-ramp. The outside auxiliary lane would extend from the Mill Plain on-ramp across the Columbia River bridge to connect to the existing auxiliary lane between Hayden Island and the Marine Drive off-ramp.

1.1.2 Portland Mainland and Hayden Island (Subarea A)

This section discusses the geographic Subarea A (Figure 1-3 provides an overview of the geographic subareas). Figure 1-6 shows highway and interchange improvements in Subarea A, including the North Portland Harbor bridges.

1.1.2.1 Levee System Improvements

Within Subarea A, the IBR Program has the potential to alter three federally authorized levee systems:

- The Oregon Slough segment of the Peninsula Drainage District Number 1 levee (PEN 1).
- The Oregon Slough segment of the Peninsula Drainage District Number 2 levee (PEN 2).
- The PEN1/PEN2 Cross Levee segment of the PEN 1 levee (Cross Levee).

The levee systems are shown on Figure 1-7, and intersections with Modified LPA components are described throughout this section (Section 1.1.2, Portland Mainland and Hayden Island (Subarea A)), where appropriate. Within Subarea A, the IBR Program study area intersects with PEN 1 to the west of I-5 and with PEN 2 to the east of I-5. PEN 1 and PEN 2 include a main levee along the south side of North Portland Harbor and are part of a combination of levees and floodwalls. PEN 1 and PEN 2 are separated by the Cross Levee that is intended to isolate the two districts if one of them were to fail. The Cross Levee is located along the I-5 mainline embankment, except in the Marine Drive interchange area, where it is located on the west edge of the existing ramp from Marine Drive to southbound I-5.⁴

There are two concurrent projects underway that are planning improvements to PEN1, PEN2, and the Cross Levee to reduce flood risk:

- The U.S. Army Corps of Engineers (USACE) Portland Metro Levee System (PMLS) project.
- The Columbia Corridor Flood Safety (CCFS) projects (formerly known as “Flood Safe Columbia River” and “Levee Ready Columbia”).

⁴ The portion of the original Denver Avenue levee alignment within the Marine Drive interchange area is no longer considered part of the levee system by UFSWQD.

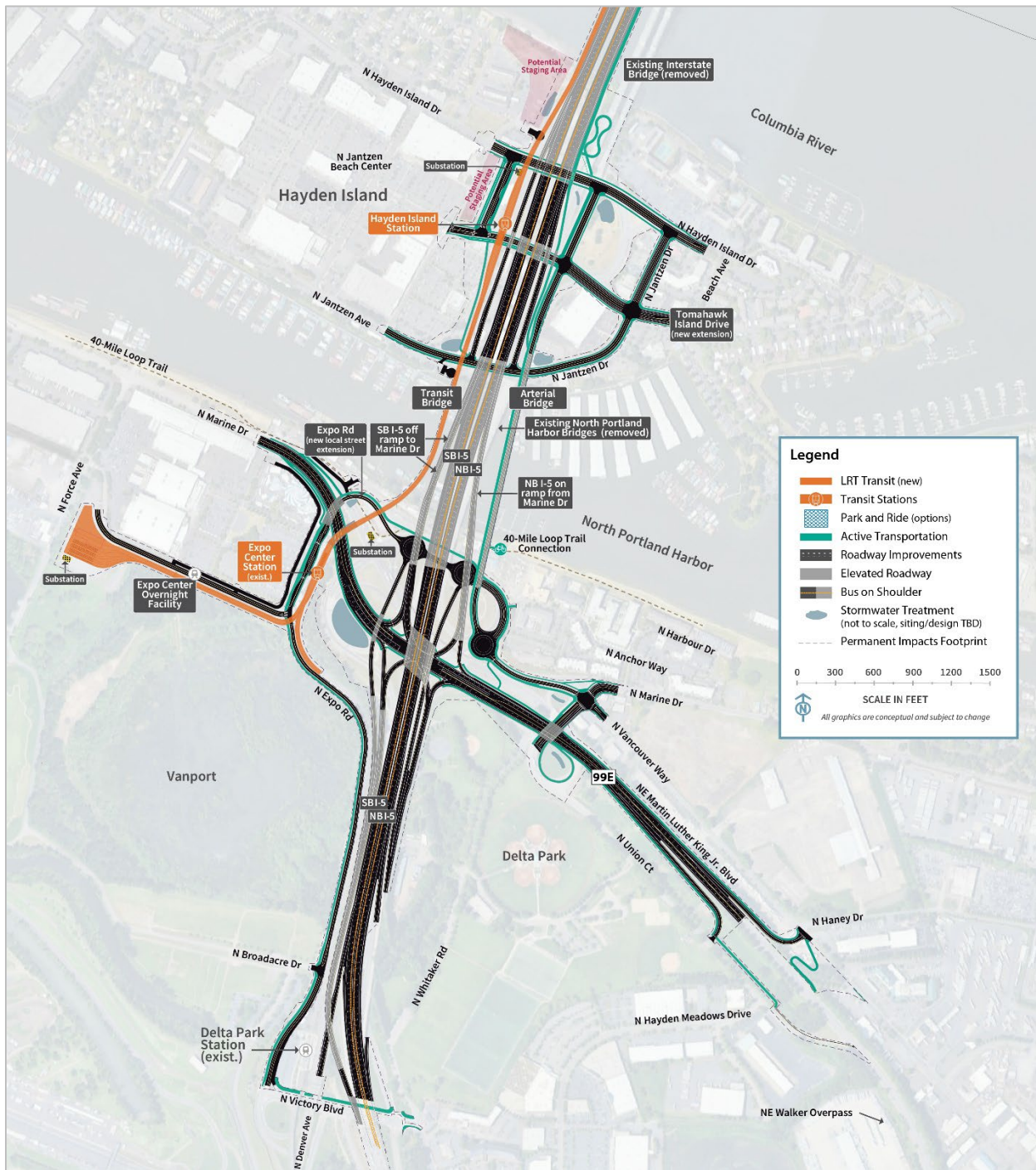
The Urban Flood Safety and Water Quality District (UFSWQD)⁵ is working in partnership with the USACE on the PMLS project, which includes improvements at PEN 1 and PEN 2 (e.g., raising these levees to elevation 38.2 feet for earthen levees and 39.2 feet for flood walls North American Vertical Datum of 1988 [NAVD 88]).⁶ Additionally, as part of the CCFS projects, UFSWQD has identified the need to raise a low spot in the Cross Levee on the southwest side of the Marine Drive interchange.

The IBR Program is in close coordination with UFSWQD and the USACE to ensure that the IBR Program's design efforts consider the timing and scope of the PMLS and the CCFS proposed modifications. The intersection of the IBR Program proposed actions to both the existing levee configuration and the anticipated future condition based on the proposed PMLS and CCFS projects are described below, where appropriate.

⁵ UFSWQD includes PEN 1 and PEN 2, Urban Flood Safety and Water Quality District No. 1, and the Sandy Drainage Improvement Company.

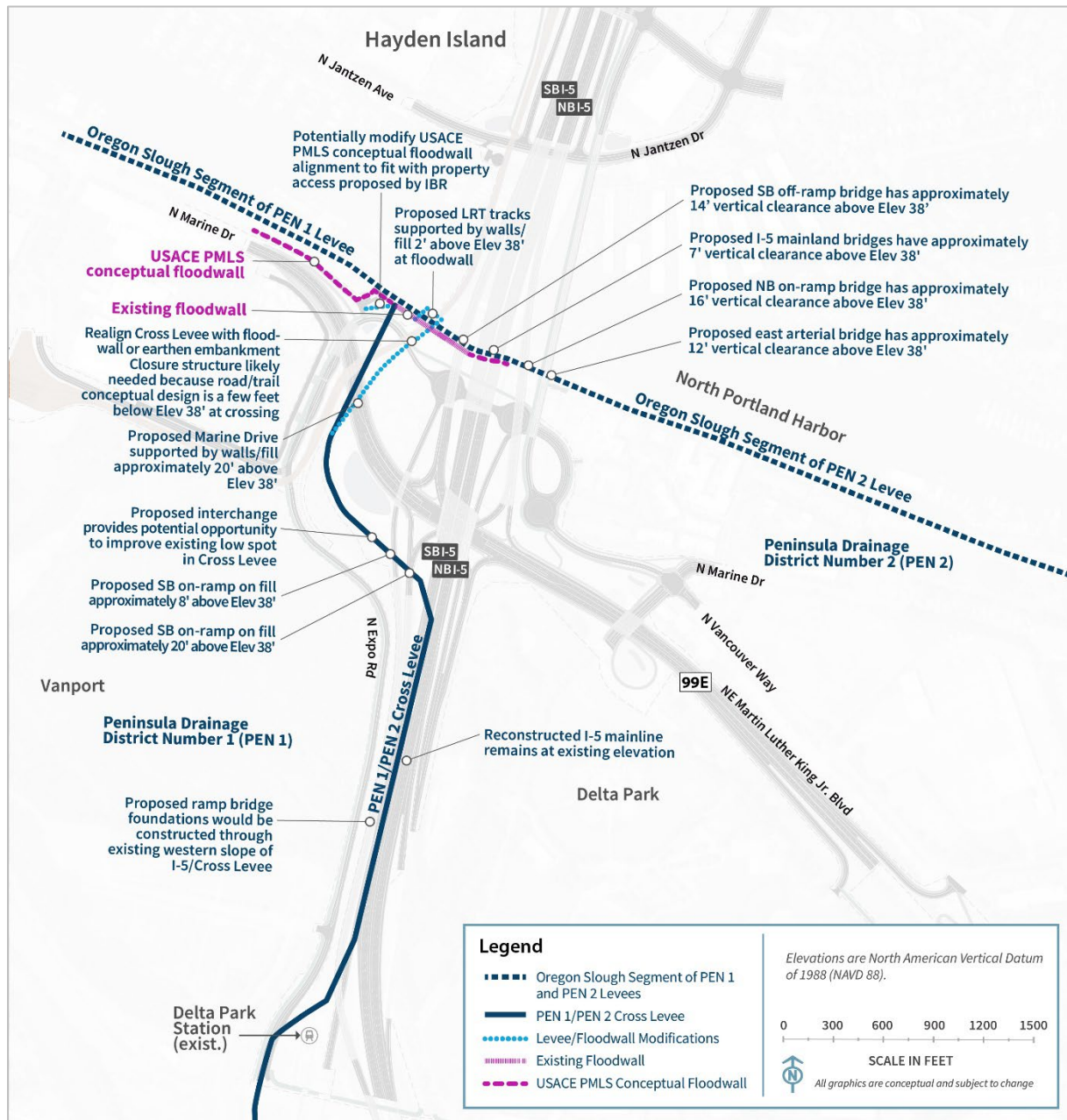
⁶ NAVD 88 is a vertical control datum (reference point) used by federal agencies for surveying.

Figure 1-6. Portland Mainland and Hayden Island (Subarea A)



LRT = light-rail transit; NB = northbound; SB = southbound; TBD = to be determined

Figure 1-7. Levee Systems in Subarea A



1.1.2.2 Highways, Interchanges, and Local Roadways

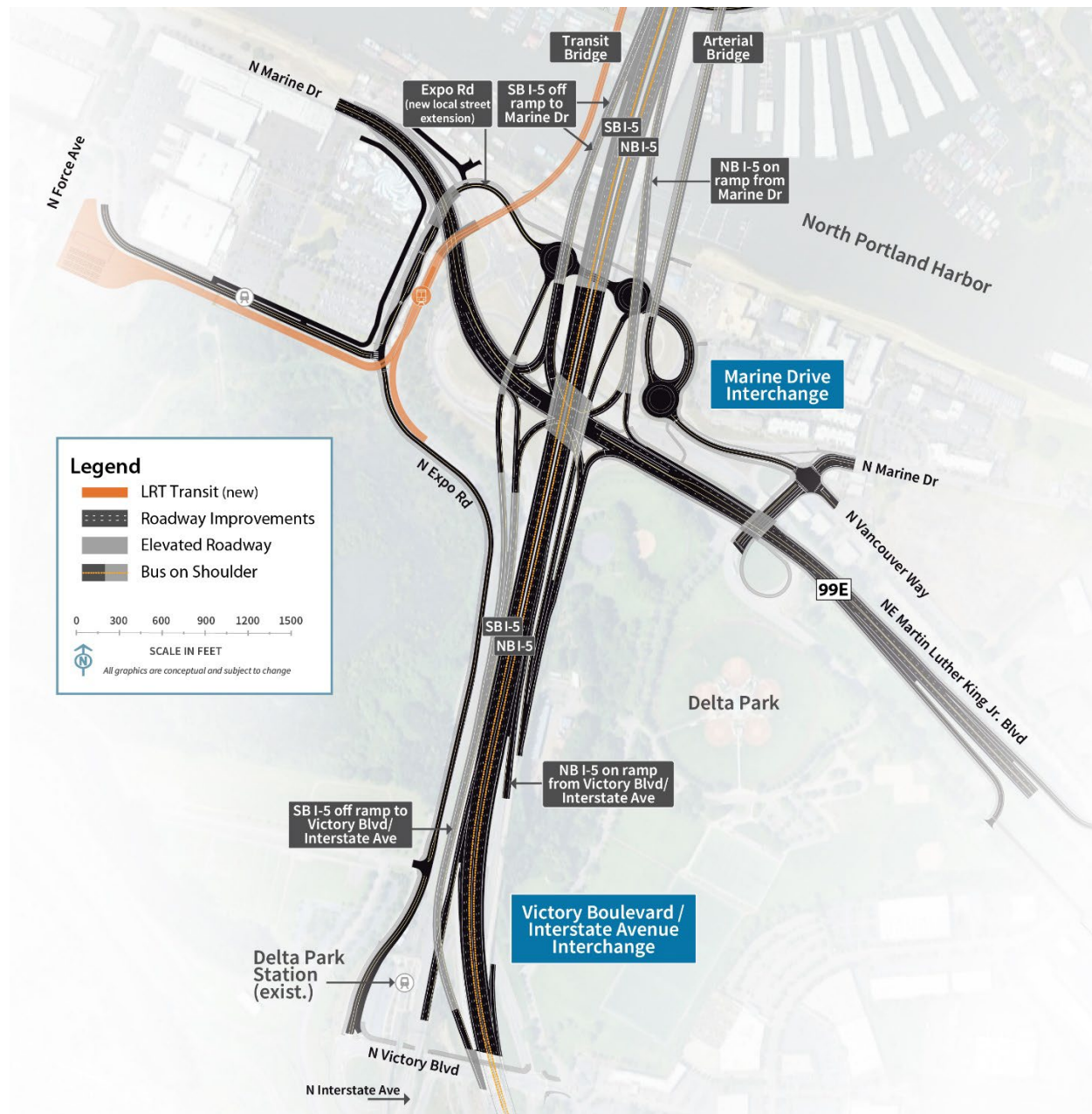
VICTORY BOULEVARD/INTERSTATE AVENUE INTERCHANGE AREA

The southern extent of the Modified LPA would improve two ramps at the Victory Boulevard/Interstate Avenue interchange (see Figure 1-6 and Figure 1-8). The first ramp improvement would be the southbound I-5 off-ramp to Victory Boulevard/Interstate Avenue; this off-ramp would be braided below (i.e., grade separated or pass below) the Marine Drive to the I-5 southbound on-ramp (see the

Marine Drive Interchange Area section below). The other ramp improvement would lengthen the merge distance for northbound traffic entering I-5 from Victory Boulevard and from Interstate Avenue.

The existing I-5 mainline between Victory Boulevard/Interstate Avenue and Marine Drive is part of the Cross Levee (see Figure 1-7). The Modified LPA would require some pavement reconstruction of the mainline in this area; however, the improvements would mostly consist of pavement overlay, and the profile and footprint would be similar to existing conditions.

Figure 1-8. Transit and Roadway Improvements in North Portland



MARINE DRIVE INTERCHANGE AREA

The next interchange north of the Victory Boulevard/Interstate Avenue interchange is at Marine Drive. All movements within this interchange would be reconfigured to improve safety and operations for motorists entering and exiting I-5, and all active transportation users accessing areas in the vicinity of the interchange. In addition, Marine Drive would be raised over the proposed LRT extension to separate motorist and transit users. The proposed Marine Drive interchange configuration would be a single-point urban interchange. Figure 1-8 shows Marine Drive interchange's layout and construction footprint.

Martin Luther King Jr. Boulevard would have new more direct connections to I-5. The new interchange configuration would change the westbound Marine Drive and westbound Vancouver Way connections to Martin Luther King Jr. Boulevard. An improved connection farther east of the interchange (near Haney Drive) would provide access to westbound Martin Luther King Jr. Boulevard for these two streets. The existing access to westbound Martin Luther King Jr. Boulevard from Vancouver Way east of Haney Drive would be closed. For eastbound travelers on Martin Luther King Jr. Boulevard exiting to Union Court, the existing loop connection would be replaced with a new connection farther east (between the access to the East Delta Park Owens Sports Complex and N Hayden Meadows Drive).

Expo Road from Victory Boulevard to the Expo Center would be reconstructed with improved active transportation facilities. North of the Expo Center, Expo Road would be extended under Marine Drive and continue under I-5 to the east, connecting with Marine Drive and Vancouver Way through three new connected intersections. The westernmost intersection would connect the new local street extension to I-5 southbound. The middle intersection would connect the I-5 northbound off-ramp to the local street extension. The easternmost intersection would connect the new local street extension to an arterial bridge crossing North Portland Harbor to Hayden Island. This intersection would also connect the local street extension to Marine Drive and Vancouver Way.

To access Hayden Island using the arterial bridge from the east on Martin Luther King Jr. Boulevard, motorists would exit Martin Luther King Jr. Boulevard at the existing off-ramp to Vancouver Way just west of the Walker Street overpass. Then motorists would travel west on Vancouver Way, through the intersection with Marine Drive and straight through the intersection to the arterial bridge.

From Hayden Island, motorists traveling south to Portland via Martin Luther King Jr. Boulevard would turn onto the arterial bridge southbound and travel straight through the intersection onto Vancouver Way. At the intersection of Vancouver Way and Marine Drive, motorists would turn right onto Union Court and follow the existing road southeast to the existing on-ramp onto Martin Luther King Jr. Boulevard.

The conceptual floodwall alignment from the proposed USACE PMLS project is located on the north side of Marine Drive, near two industrial properties, with three proposed closure structures⁷ for property access. The Modified LPA would realign Marine Drive to the south to maintain traffic on existing Marine Drive during construction. The Modified LPA would provide access to the two industrial properties via the new local road extension from Expo Road. Therefore, the change in

⁷ Levee closure structures are put in place at openings along the embankment/floodwall to provide flood protection during high water conditions.

access for the two industrial properties could require small modifications to the floodwall alignment (a potential shift of approximately 5 to 10 feet to the south) and closure structure locations. The IBR Program is coordinating with USACE PMLS and the UFSWQD on modifications to the floodwall alignment.

Marine Drive and the two southbound on-ramps would travel over the Cross Levee approximately 10 to 20 feet above the proposed elevation of the improved levee, and they would be supported by fill and retaining walls near an existing low spot in the Cross Levee.

The I-5 southbound on-ramp from Marine Drive would continue on a new bridge structure. Although the bridge's foundation locations have not been determined yet, they would be constructed through the western slope of the Cross Levee (between the existing I-5 mainline and the existing light-rail).

NORTH PORTLAND HARBOR BRIDGES

To the north of the Marine Drive interchange is the Hayden Island interchange area, which is shown in Figure 1-6. I-5 crosses over the North Portland Harbor when traveling between these two interchanges. The Modified LPA proposes to replace the existing I-5 bridge spanning North Portland Harbor to improve seismic resilience.

Six new parallel bridges would be built across the waterway under the Modified LPA: one on the east side of the existing I-5 North Portland Harbor bridge and five on the west side or overlapping the location of the existing bridge (which would be removed). From west to east, these bridges would carry:

- The LRT tracks.
- The southbound I-5 off-ramp to Marine Drive.
- The southbound I-5 mainline.
- The northbound I-5 mainline.
- The northbound I-5 on-ramp from Marine Drive.
- An arterial bridge between the Portland mainland and Hayden Island with a shared-use path for pedestrians and bicyclists.

All new structures would have at least as much vertical navigation clearance over North Portland Harbor as the existing North Portland Harbor bridge.

All of the six bridges would be designed and constructed to have sufficient clearance over the levees for access and maintenance. The foundation locations for the five roadway bridges have not been determined at this stage of design, but some foundations could be constructed through landward or riverward levee slopes.

HAYDEN ISLAND INTERCHANGE AREA

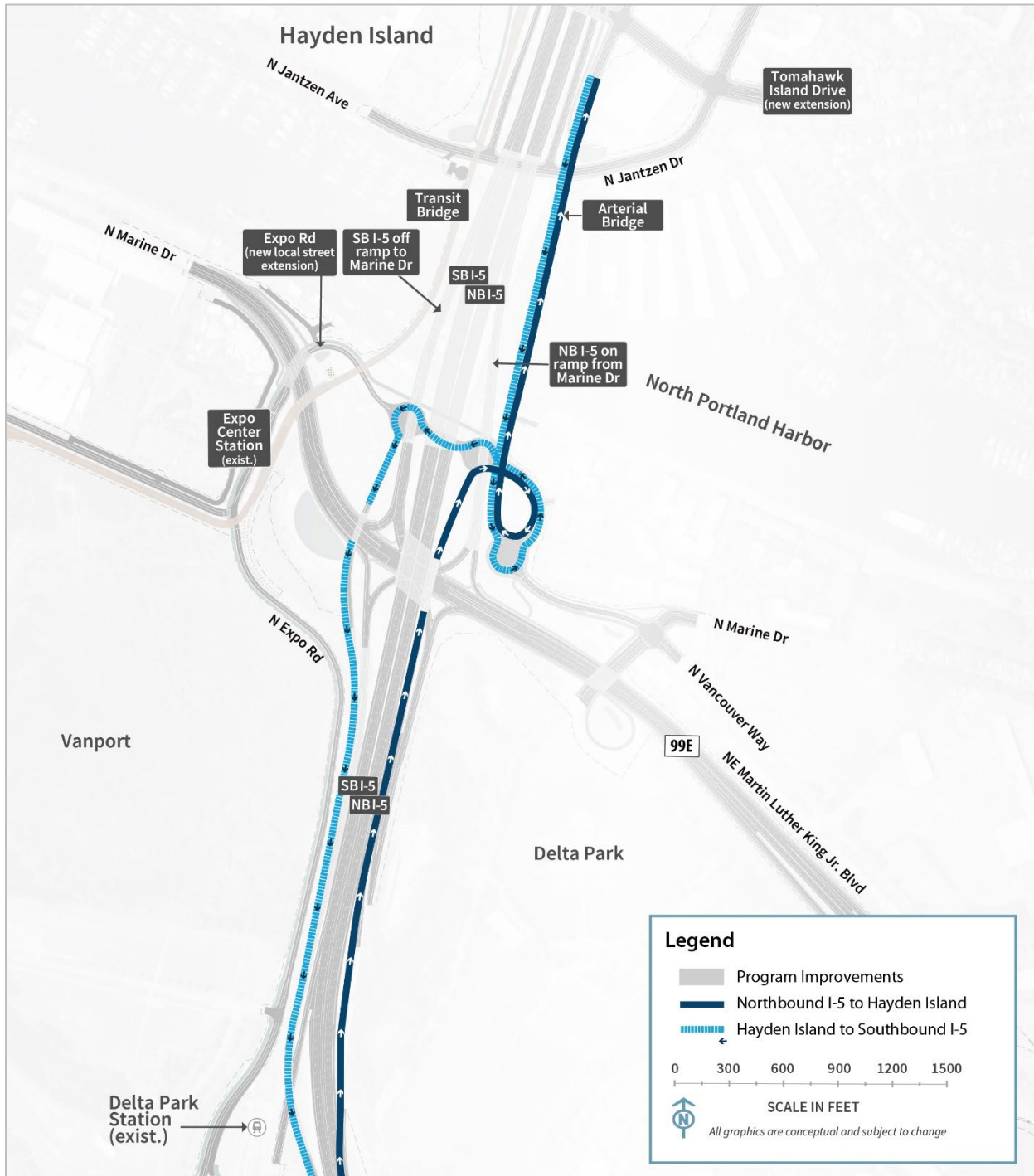
All traffic movements for the Hayden Island interchange would be reconfigured. Figure 1-6 shows the layout and construction footprint of the Hayden Island interchange. A partial interchange would be built on Hayden Island with a northbound I-5 on-ramp from Jantzen Drive and a southbound I-5 off-ramp to Jantzen Drive. This would improve ramp lengths to provide sufficient merging/diverging

areas compared to the existing substandard ramps that require acceleration and deceleration in a short distance. The I-5 mainline would be partially located on fill across the island and partially elevated to provide east–west connections on Hayden Island.

There would not be a southbound I-5 on-ramp or northbound I-5 off-ramp located on Hayden Island. Connections to Hayden Island for those movements would be via the local access (i.e., arterial) bridge connecting North Portland to Hayden Island (Figure 1-9). Vehicles traveling northbound on I-5 wanting to access Hayden Island would exit with traffic going to the Marine Drive interchange, cross under Martin Luther King Jr. Boulevard to the new intersection at the Expo Road local street extension, and use the arterial bridge to cross North Portland Harbor. Vehicles on Hayden Island looking to enter I-5 southbound would use the arterial bridge to cross North Portland Harbor, cross under I-5 using the new Expo Road local street extension to the westernmost intersection, cross under Marine Drive, merge with the Marine Drive southbound on-ramp, and merge with I-5 southbound south of Victory Boulevard.

Improvements to Jantzen Avenue may include additional left-turn and right-turn lanes at the interchange ramp terminals and active transportation facilities. Improvements to Hayden Island Drive would include new connections to the new arterial bridge over North Portland Harbor. The existing I-5 northbound and southbound access points from Hayden Island Drive would also be removed. A new extension of Tomahawk Island Drive would travel east–west through the middle of Hayden Island and under the I-5 interchange, thus improving connectivity across I-5 on the island.

Figure 1-9. Vehicle Circulation between Hayden Island and the Portland Mainland



NB = northbound; SB = southbound

1.1.2.3 Transit

A new light-rail alignment for northbound and southbound trains would be constructed within Subarea A (Figure 1-6) to extend from the existing Expo Center MAX Station over North Portland Harbor to a new station at Hayden Island. An overnight LRV facility would be constructed on the southwest corner of the Expo Center property (Figure 1-6) to provide storage for trains during hours when the MAX is not in service. This facility is described in Section 1.1.6, Transit Support Facilities. The existing Expo Center MAX Station would be modified to remove the westernmost track and platform. Other platform modifications, including track realignment and regrading the station, are anticipated to transition to the extension alignment. This could require reconstruction of the operator break facility, signal/communication buildings, and TPSSs. The existing TPSS at the end of TriMet's MAX Yellow Line would be decommissioned. A new TPSS would be constructed to the east of the LRT tracks and south of Expo Road, as well as at the overnight LRV facility, east of N Force Avenue. Immediately north of the Expo Center MAX Station, the LRT alignment would curve east toward I-5, pass beneath an elevated Marine Drive, cross the proposed Expo Road local street extension and the 40-Mile Loop Trail at grade, then rise over the existing levee onto a light-rail bridge to cross North Portland Harbor.

After crossing the new Expo Road extension, the new light-rail track would cross over the main levee (Figure 1-7). The light-rail profile is anticipated to provide sufficient clearance above the improved levees at the existing floodwall (and improved floodwall), and the tracks would be constructed on fill supported by retaining walls above the floodwall. North of the floodwall, the light-rail tracks would continue onto the new light-rail bridge over North Portland Harbor.

As the Modified LPA's light-rail extension would cross the north end of the existing Cross Levee, the IBR Program is proposing to realign the Cross Levee to the east of the light-rail alignment. This realigned Cross Levee would intersect the new Expo Road extension. A levee closure structure would be required because the proposed roadway is a few feet lower than the proposed elevation of the improved levee.

On Hayden Island, proposed transit components include northbound and southbound LRT tracks over Hayden Island; the tracks would be elevated at approximately the height of the new I-5 mainline. An elevated LRT station would also be built on the island immediately west of I-5. Active transportation facilities, described below, would connect to the new Hayden Island Station. A new TPSS would be constructed at the Hayden Island Station, north of the transit platform. If a single-level fixed-span or movable-span Columbia River bridge configuration were implemented, the light-rail alignment would extend north on Hayden Island along the western edge of I-5 before transitioning onto the outer (western) edge of the new western single-level bridge over the Columbia River. For the double-deck configuration, the light-rail alignment would transition to the lower level of the new double-deck southbound I-5 bridge over the Columbia River.

1.1.2.4 Active Transportation

In the Victory Boulevard interchange area (Figure 1-6), active transportation facilities would be provided on Victory Boulevard beneath I-5 and Interstate Avenue between Expo Road and the northbound on/off-ramp terminal east of I-5. Active transportation facilities would also be provided along Expo Road between Victory Boulevard and the Expo Center. These facilities would provide

direct connections between the Victory Boulevard and Marine Drive interchange areas, as well as links to the Delta Park and Expo Center MAX Stations.

New shared-use path connections throughout the Marine Drive interchange area would provide access between the Bridgeton neighborhood (on the east side of I-5), Hayden Island, and the Expo Center MAX Station. There would also be connections to the existing portions of the 40-Mile Loop Trail, which runs north of Marine Drive under I-5 through the interchange area. The path would continue along the extension of Expo Road under the interchange to the intersection of Marine Drive and Vancouver Way, where it would connect under Martin Luther King Jr. Boulevard to Delta Park.

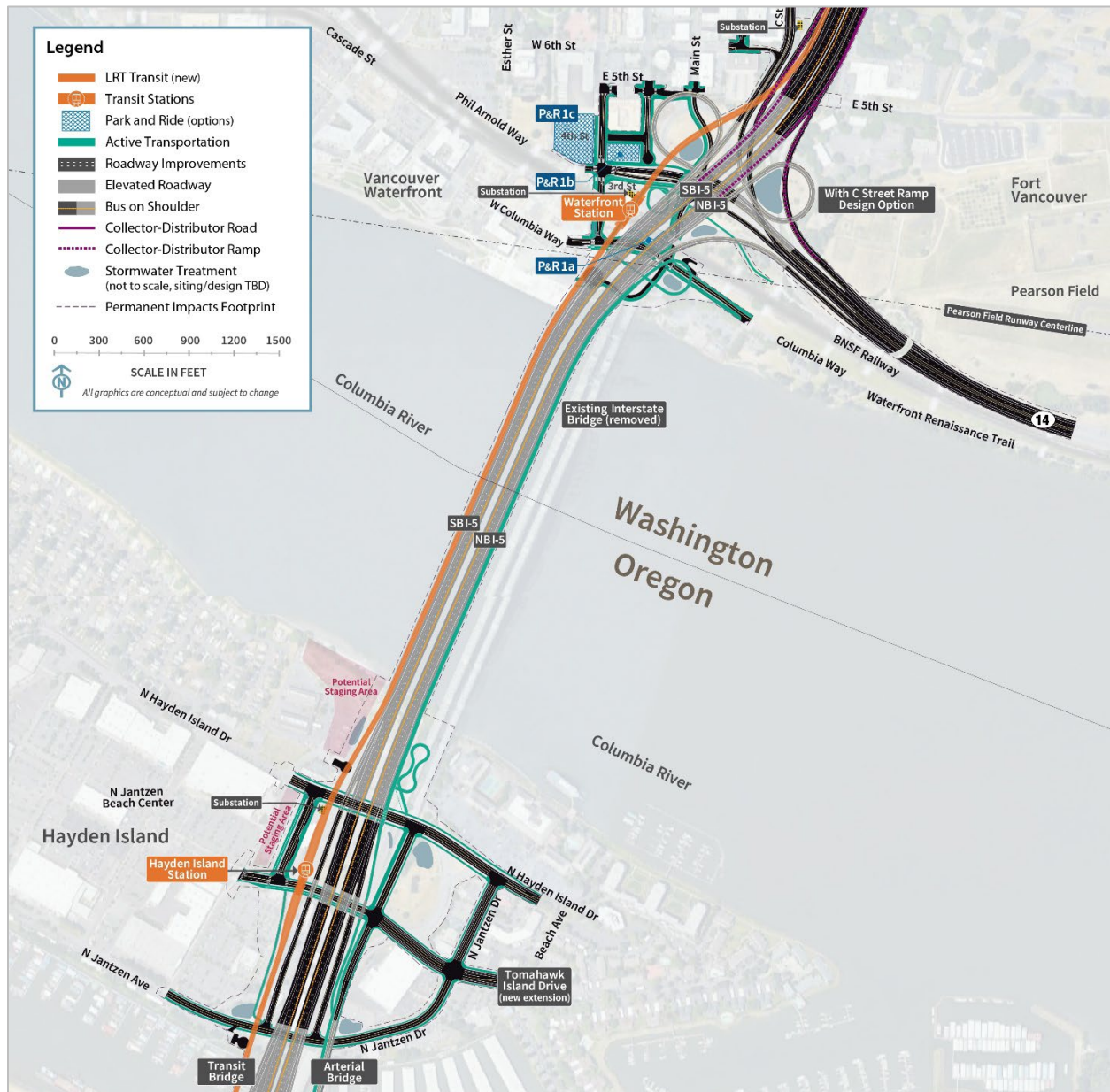
East of the Marine Drive interchange, active transportation facilities on Martin Luther King Jr. Boulevard and on the parallel street, Union Court, would connect travelers to Marine Drive and across the arterial bridge to Hayden Island. The active transportation facilities on Martin Luther King Jr. Boulevard would provide westbound and eastbound cyclists and pedestrians with off-street crossings of the interchange and would also provide connections to both the Expo Center MAX Station and the 40-Mile Loop Trail to the west.

The new arterial bridge over North Portland Harbor would include a shared-use path for pedestrians and bicyclists (Figure 1-6). On Hayden Island, active transportation facilities would be provided on Jantzen Avenue, Hayden Island Drive, and Tomahawk Island Drive and would connect to the Hayden Island Station. The shared-use path on the arterial bridge would continue along the arterial bridge to the south side of Tomahawk Island Drive. A parallel, elevated path from the arterial bridge would continue adjacent to I-5 across Hayden Island and cross above Tomahawk Island Drive and Hayden Island Drive to connect to the outer edge of the new single-level, or lower level of the double-deck eastern bridge over the Columbia River. A ramp down to the north side of Hayden Island Drive would be provided from the elevated path.

1.1.3 Columbia River Bridges (Subarea B)

This section discusses the geographic Subarea B (Figure 1-3 provides an overview of the geographic subareas). Figure 1-10 shows highway and interchange improvements in Subarea B.

Figure 1-10. Columbia River Bridges (Subarea B)



1.1.3.1 Highways, Interchanges, and Local Roadways

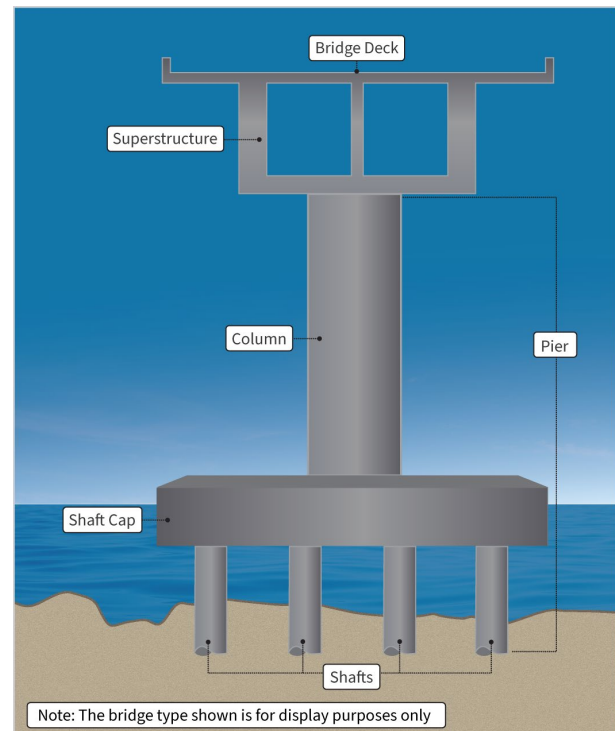
The two existing parallel northbound and southbound I-5 bridges that cross the Columbia River were constructed in 1917 and 1958, respectively. When the 1958 bridge was constructed, pier 5 of the 1917 bridge was removed and the profile was raised to match the new bridge. For the IBR Program, the two existing bridges would be replaced by two new parallel bridges, located west of the existing bridges (Figure 1-10). The new bridges would be designed to current American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design Bridge Design Specifications and AASHTO Seismic Guide Specifications and in compliance with ODOT and WSDOT

design criteria. With all bridge configuration design options, the new eastern bridge would accommodate northbound highway traffic and a shared-use path. The new western bridge would carry southbound traffic and light-rail tracks. Whereas the existing bridges each have three lanes with no shoulders, each of the two new bridges would accommodate three through lanes, one or two auxiliary lanes, and shoulders on both sides of the highway. Lanes and shoulders would be built to full design standards.

As with the existing bridge (Figure 1-12), the new Columbia River bridges would provide three navigation channels: a primary navigation channel and two barge channels (Figure 1-13). The current location of the primary navigation channel is near the Vancouver shoreline where the existing lift spans are located. The IBR Program is coordinating with the USACE to obtain authorization to change the location of the primary navigation channel. Under the Modified LPA, the primary navigation channel would be shifted south approximately 500 feet (measured by channel centerlines), and the existing center barge channel would shift north and become the north barge channel. The new primary navigation channel would be 400 feet wide (this width includes a 300-foot USACE-authorized channel and a 50-foot channel maintenance buffer on each side of the authorized channel), and the two barge channels would also each be 400 feet wide.

The existing Interstate Bridge has nine in-water pier sets⁸ and four pier sets on land (pier locations are shown on Figure 1-12). The new Columbia River bridges (any bridge configuration) would be built on six in-water pier sets, plus multiple piers on land (pier locations are shown on Figure 1-13). Each in-water pier set would be supported by a foundation of drilled shafts; each group of shafts would be tied together with a concrete shaft cap. Columns or pier walls would rise from the shaft caps and connect to the superstructures of the bridges (Figure 1-11).

Figure 1-11. Bridge Foundation Concept



BRIDGE CONFIGURATION OPTIONS

Three bridge configuration options are being considered: (1) double-deck fixed-span (with one bridge type); (2) a single-level fixed-span (with various potential bridge types); and (3) a single-level movable-span (with one bridge type). Both the double-deck and single-level fixed-span configurations would provide 116 feet of vertical navigation clearance at their respective highest spans, which was the vertical navigation clearance of the CRC LPA. The CRC LPA included a double-deck fixed-span bridge configuration. The single-level fixed-span configuration was developed and is

⁸ A pier set consists of the pier supporting the northbound bridge and the pier supporting the southbound bridge at a given location.

being considered as part of the IBR Program in response to the physical and contextual changes (e.g., design and operational considerations) since 2013 that allowed for opportunities to examine a refinement in the double-deck bridge configuration (e.g., ingress and egress of transit from the lower level of the double-deck fixed-span configuration on the north end of the southbound bridge).

Consideration of the single-level movable-span configuration as part the IBR Program was necessitated by the U.S. Coast Guard's (USCG) review of the Program's navigation impacts on the Columbia River and issuance of a Preliminary Navigation Clearance Determination (PNCD) (USCG 2022). The USCG PNCD set the preliminary vertical navigation clearance recommended for the issuance of a bridge permit at 178 feet; this is the current vertical navigation clearance of the Interstate Bridge. On January 16, 2026, the USCG issued a revised PNCD for the new Columbia River bridges and set the preliminary vertical navigation clearance at 116 feet or greater (USCG 2026).

The IBR Program is carrying forward the three bridge configurations, each of which meets the IBR Program's Purpose and Need, to address changed conditions to ensure a permittable bridge configuration is within the range of options considered in the Supplemental Environmental Impact Statement (SEIS). Each of the bridge configuration design options provides at least 116 feet of vertical navigation clearance and is consistent with the January 2026 PNCD issued by the USCG. Additional discussion on pending actions to obtain authorizations from USCG and USACE for the Columbia River bridges' primary navigation channel location are described in Section 2.6, Additional Compliance, of the Final SEIS.

Each of the bridge configurations assumes one auxiliary lane; two auxiliary lanes could be applied to any of the bridge configurations. All typical sections with one auxiliary lane would provide 14-foot shoulders to accommodate bus on shoulder and maintain traffic during construction of the Modified LPA and future maintenance.

Figure 1-12. Existing Navigation Clearances of the Interstate Bridge

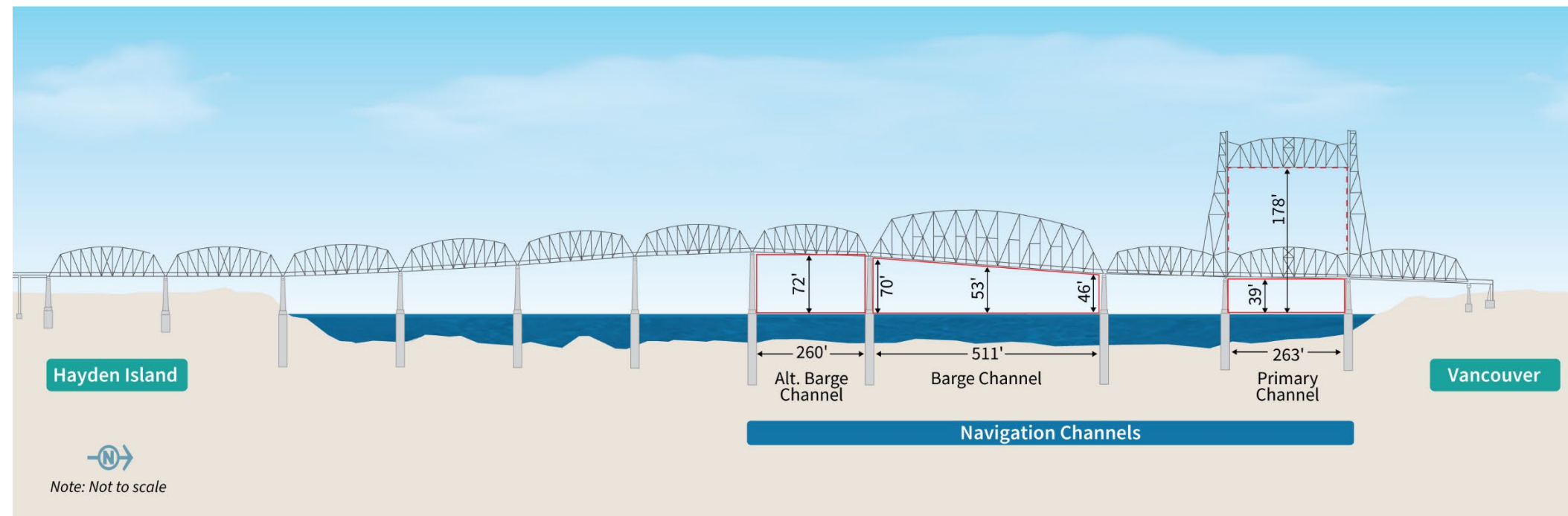
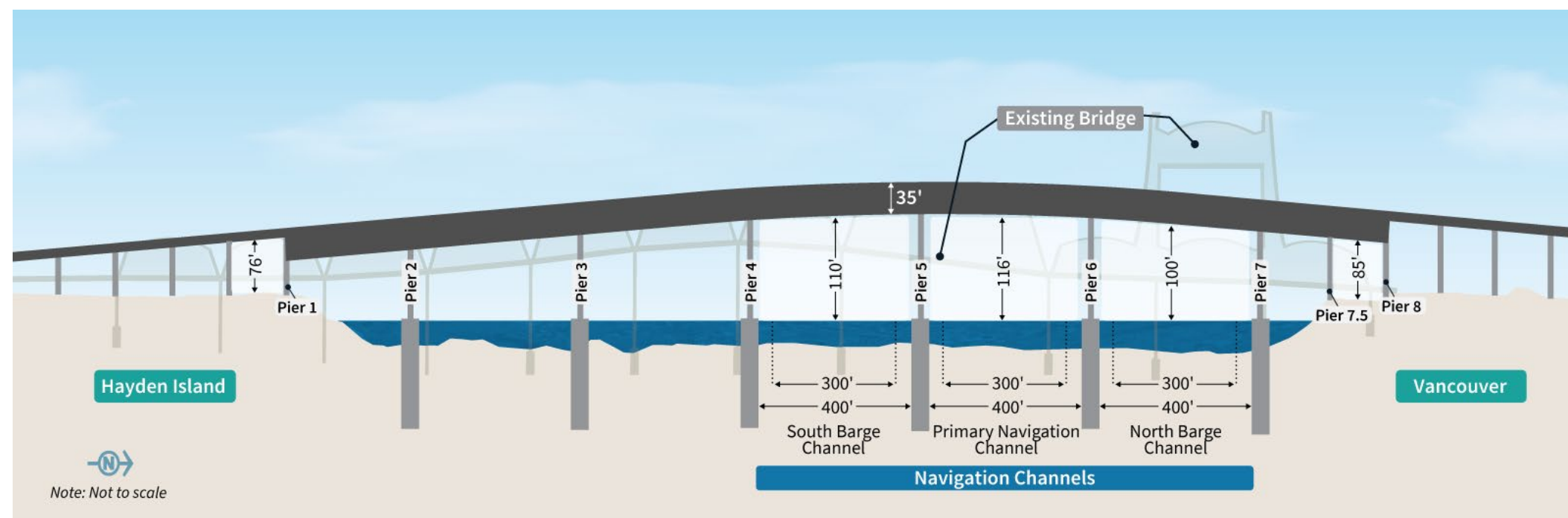


Figure 1-13. Navigation Clearances and Proposed Profile of the Modified LPA Columbia River Bridges with a Double-Deck Fixed-Span Configuration



Note: The location and widths of the proposed navigation channels would be same for all bridge configuration and bridge type options. The three navigation channels would each be 400 feet wide (this width includes a 300-foot USACE-authorized channel (shown in dotted lines) plus a 50-foot channel maintenance buffer on each side of the authorized channel). The vertical navigation clearance would vary, as described in the following sections.

Double-Deck Fixed-Span Configuration

The double-deck fixed-span configuration would be two side-by-side, double-deck, fixed-span steel truss bridges. Figure 1-14 shows an example of this configuration (this image is subject to change and is shown as a representative concept; it does not depict the final design). The double-deck fixed-span configuration would provide 116 feet of vertical navigation clearance for river traffic using the primary navigation channel and 400 feet of horizontal navigation clearance at the primary navigation channel, as well as barge channels.

The eastern bridge would accommodate northbound highway traffic on the upper level and the shared-use path and utilities on the lower level. The western bridge would carry southbound traffic on the upper level and one set of light-rail tracks (one northbound track and one southbound track) on the lower level. Each bridge deck would typically be 79 feet wide, with a total out-to-out width of approximately 173 feet.⁹

Figure 1-14. Conceptual Drawing of a Double-Deck Fixed-Span Configuration

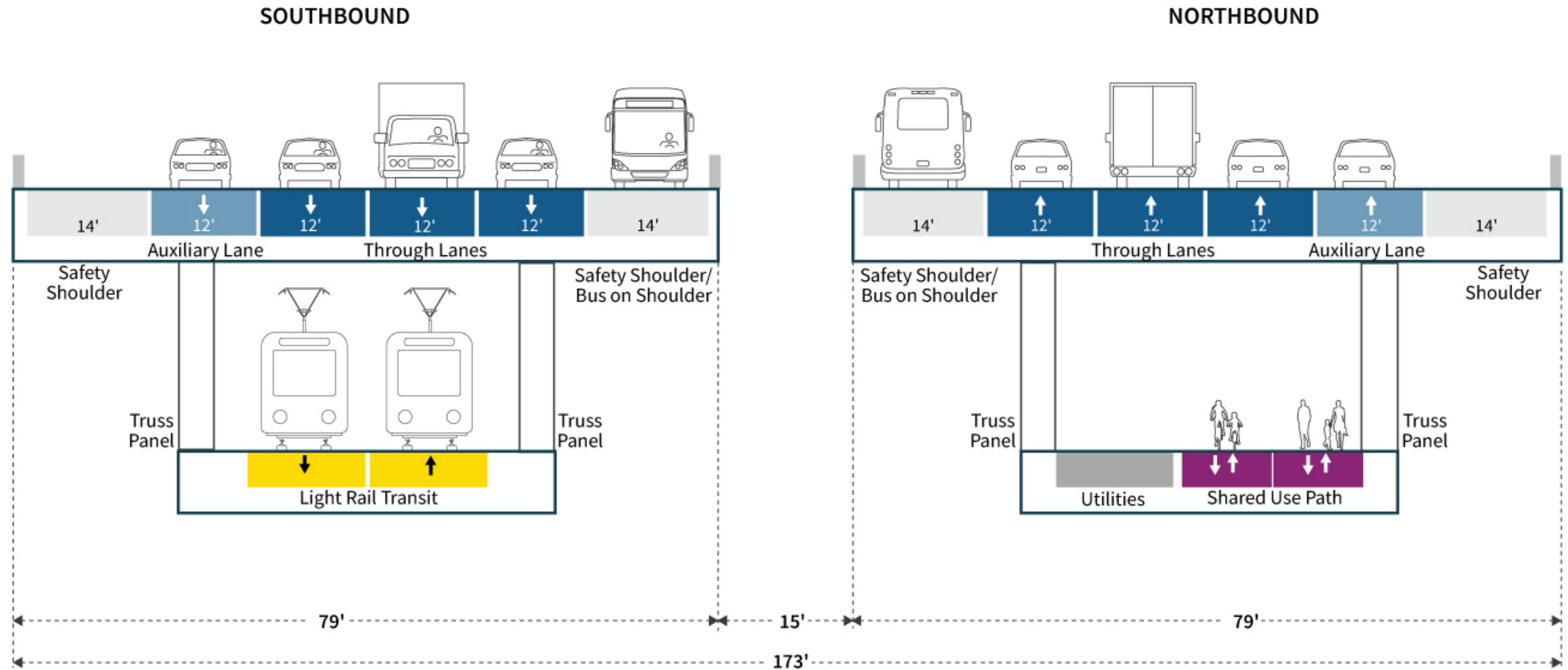


Note: Visualization is looking southeast from Vancouver.

Figure 1-15 shows a typical cross section of the two parallel double-deck bridges. Like all bridge configuration design options under consideration, the double-deck fixed-span configuration would have six in-water pier sets. Each pier set would require 12 in-water drilled shafts, for a total of 72 in-water drilled shafts. Each individual shaft cap would be approximately 50 feet by 85 feet. This bridge configuration would have up to a 4% maximum grade on both the Oregon and Washington sides. All vertical profiles would follow AASHTO, WSDOT, and ODOT design standards.

⁹ "Out-to-out width" is the measurement between the outside edges of the bridge across its width at the widest point.

Figure 1-15. Typical Cross Section of the Double-Deck Fixed-Span Configuration



Note: Design is not final and subject to change. Widths may vary with final design. The one auxiliary lane design option is used for illustration purposes. The two auxiliary lane design option would add approximately 8 feet to each bridge (i.e., 16 feet to the total width).

Single-Level Fixed-Span Configuration – Recommended Design Option

The single-level fixed-span configuration would have two side-by-side, single-level, fixed-span steel or concrete bridges. This report considers two single-level fixed-span bridge type options: a girder (steel or concrete segmental) bridge and an extradosed bridge.¹⁰ The description in this section applies to both bridge types (unless otherwise indicated). Conceptual examples of both options are shown on Figure 1-16. These images are subject to change and do not represent final design.

This configuration would provide 116 feet of vertical navigation clearance for river traffic using the primary navigation channel and 400 feet of horizontal navigation clearance at the primary navigation channel, as well as barge channels, which is consistent with the January 2026 PNCD issued by the USCG.

The eastern bridge would accommodate northbound highway traffic and the shared-use path; the bridge deck would be approximately 104 feet wide. The western bridge would carry southbound traffic and light-rail tracks; the bridge deck would be approximately 113 feet wide. The I-5 highway, light-rail tracks, and the shared-use path would be on the same level across the two bridges, instead of being divided between two levels as with the double-deck configuration. The total out-to-out width of the single-level fixed-span configuration (extradosed option) would be approximately 272 feet at its widest point, approximately 99 feet wider than the double-deck configuration. The total out-to-out width of the single-level fixed-span configuration (girder option) would be approximately 232 feet at its widest point. Figure 1-17 shows a typical cross section of the single-level configuration with an extradosed bridge as shown

The IBR Program recommends advancing the single-level fixed-span bridge configuration. All bridge configurations would provide important benefits to highway operations and safety and have similar impacts to many resources. The main differences between either of the fixed-span configurations and the movable-span configuration is that the latter would provide more vertical clearance to accommodate larger vessels and a lower grade for all land-based transportation modes (which would benefit freight and active transportation users in particular), but this configuration would also periodically disrupt all other land-based transportation modes (personal vehicles, freight, transit, and active transportation) with bridge openings. The main differences between the double-deck and single-level fixed-span configurations are that the slightly higher grade of the former would impact freight traffic and active transportation users, and the latter would have faster emergency response times (although there would also be more exposure to vehicles) and give users of the shared-use path a greater sense of security due to “eyes on the path.” The fixed-span configurations received generally positive comments from the public, while there was mixed feedback on the movable-span because of the tradeoffs given above.

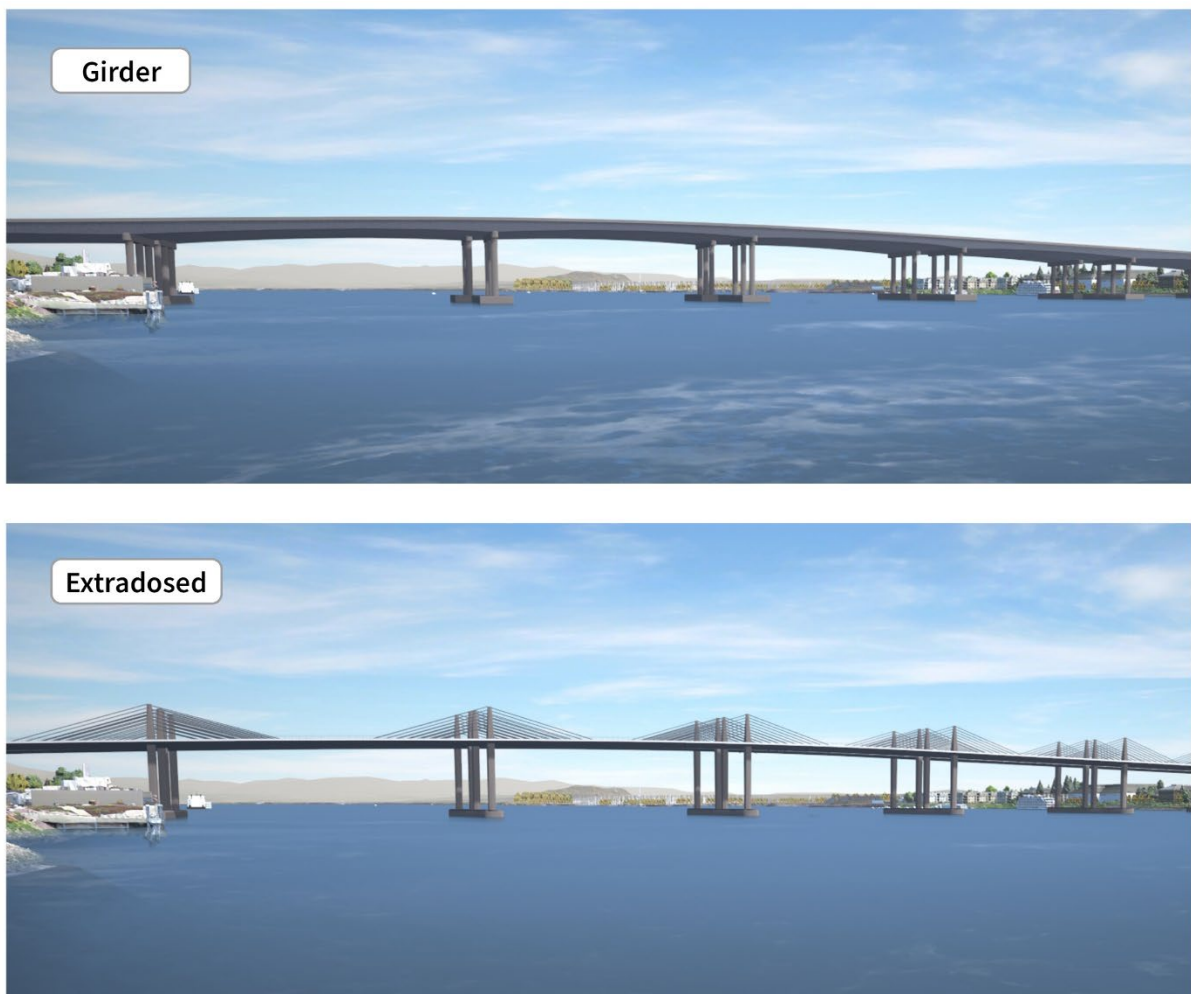
¹⁰ The Draft SEIS also included a finback as a single-level fixed-span bridge type. As the design of the various bridge types progressed, it was determined that the finback would have higher risks associated with increased cost and construction schedule because this bridge type is less common and applying this bridge type to the scale of the new Columbia River bridges would introduce more design and construction challenges than the other bridge type options. Other bridge types, such as concrete or steel girder or extradosed, would have fewer risks and would be a more suitable for this location. As a result, the finback bridge type was dropped from further consideration.

by the 10-foot-wide bridge columns. Figure 1-18 shows a typical cross section with a girder bridge, which would not have the 10-foot-wide bridge columns shown on Figure 1-17.

There would be six in-water pier sets with 16 in-water drilled shafts on each combined shaft cap, for a total of 96 in-water drilled shafts. The combined shaft caps for each pier set would be approximately 50 feet by 230 feet.

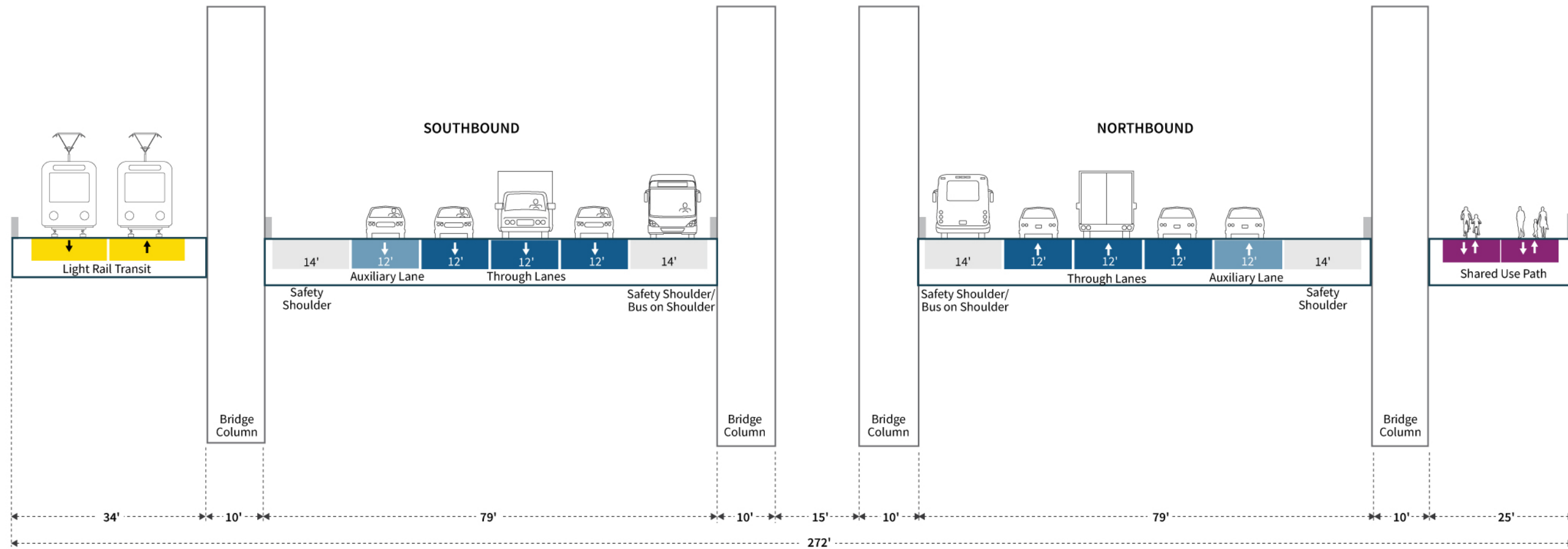
This bridge configuration would be expected to have an approximate grade of 3% on both the Oregon and Washington sides of the bridge. All vertical profiles would follow AASHTO, WSDOT, and ODOT design standards.

Figure 1-16. Conceptual Drawings of Single-Level Fixed-Span Bridge Types



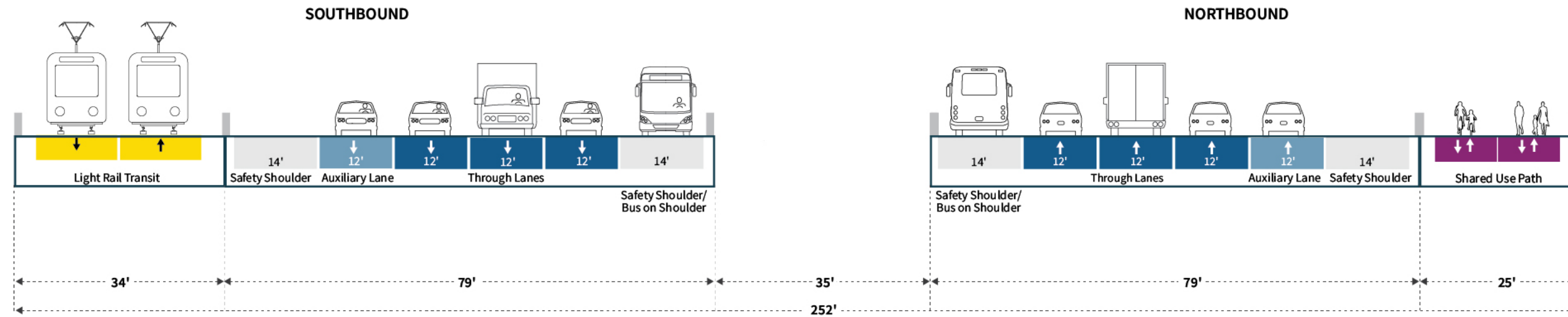
Note: Visualizations are for illustrative purposes only. They do not reflect property impacts or represent final design. Visualization is looking southeast from Vancouver.

Figure 1-17. Typical Cross Section of the Single-Level Fixed-Span Configuration (Extradosed Type)



Note: Design is not final and subject to change. Widths may vary with final design. The two auxiliary lane design option would add approximately 8 feet to each bridge (i.e., 16 feet to the total width).

Figure 1-18. Typical Cross Section of the Single-Level Fixed-Span Configuration (Girder Type)



Note: Design is not final and subject to change. Widths may vary with final design. The cross section for a girder bridge type would be the same as an extradosed bridge type except that it would not have the four 10-foot bridge columns. The distance between the two bridges could be reduced to 10 feet. The one auxiliary lane design option is used for illustration purposes. The two auxiliary lane design option would add approximately 8 feet to each bridge (i.e., 16 feet to the total width).

Single-Level Movable-Span Configuration

The single-level movable-span configuration would have two side-by-side, single-level steel girder bridges with movable spans between Piers 5 and 6. For the purpose of this report, the IBR Program assessed a vertical lift movable-span configuration with counterweights based on the analysis in the *River Crossing Bridge Clearance Assessment Report – Movable-Span Options*, included as part of Attachment C in Appendix D, Design Options Development, Screening, and Evaluation Technical Report to the Final SEIS. A conceptual example of a vertical lift-span bridge is shown in Figure 1-19. These images are subject to change and do not represent final design.

A movable span must be located on a straight and flat bridge section (i.e., without horizontal curvature and with minimal grade). To comply with these requirements, and for the bridge to maintain the highway, transit, and active transportation connections on Hayden Island and in Vancouver while minimizing property acquisitions and displacements, the movable span is proposed to be located approximately 500 feet south of the existing lift span, between Piers 5 and 6.

The single-level movable-span configuration would provide approximately 90 feet of vertical navigation clearance over the proposed relocated primary navigation channel when the movable spans are in the closed position, with 99 feet of vertical navigation clearance available over the north barge channel. It satisfies the requirement of a minimum of 72 feet of vertical navigation clearance (the existing Interstate Bridge's maximum clearance over the alternate [southernmost] over the barge channel when the existing lift span is in the closed position).

In the open position, the movable span would provide 178 feet of vertical navigation clearance over the proposed relocated primary navigation channel. Similar to the fixed-span configurations, the movable span would provide 400 feet of horizontal navigation clearance for the primary navigation channel and for each of the two barge channels. The vertical lift-span towers would be approximately 243 feet high, which would be slightly shorter than the existing lift-span towers, which are 247 feet high.

Similar to the single-level fixed-span configuration, the eastern bridge would accommodate northbound highway traffic and the shared-use path, and the western bridge would carry southbound traffic and light-rail tracks. The I-5 highway, light-rail tracks, and shared-use path would be on the same level across the bridges instead of on two levels as with the double-deck configuration. Typical cross sections of the single-level movable-span configuration are shown in Figure 1-20; the top section depicts the vertical lift spans (Piers 5 and 6), and the bottom section depicts the fixed spans (Piers 2, 3, 4, and 7). The movable and fixed cross sections are slightly different because the movable span requires lift towers, which are not required for the fixed spans of the bridges.

There would be six in-water pier sets and two piers on land per bridge. The vertical lift span would have 22 in-water drilled shafts each for Piers 5 and 6; the shaft caps for these piers would be approximately 50 feet by 312 feet to accommodate the vertical lift spans. Piers 2, 3, 4, and 7 would have 16 in-water drilled shafts each; the shaft caps for these piers would be the same as for the fixed-span options (approximately 50 feet by 230 feet). The single-level movable-span configuration (with a vertical lift span) would have a total of 108 in-water drilled shafts.

This single-level movable-span configuration would be expected to have an approximate grade of 3% on the Oregon side of the bridge and an approximate grade of 1.5% on the Washington side. All vertical profiles would follow AASHTO, WSDOT, and ODOT design standards.

Figure 1-19. Conceptual Drawings of Single-Level Movable-Span Configurations in the Closed and Open Positions

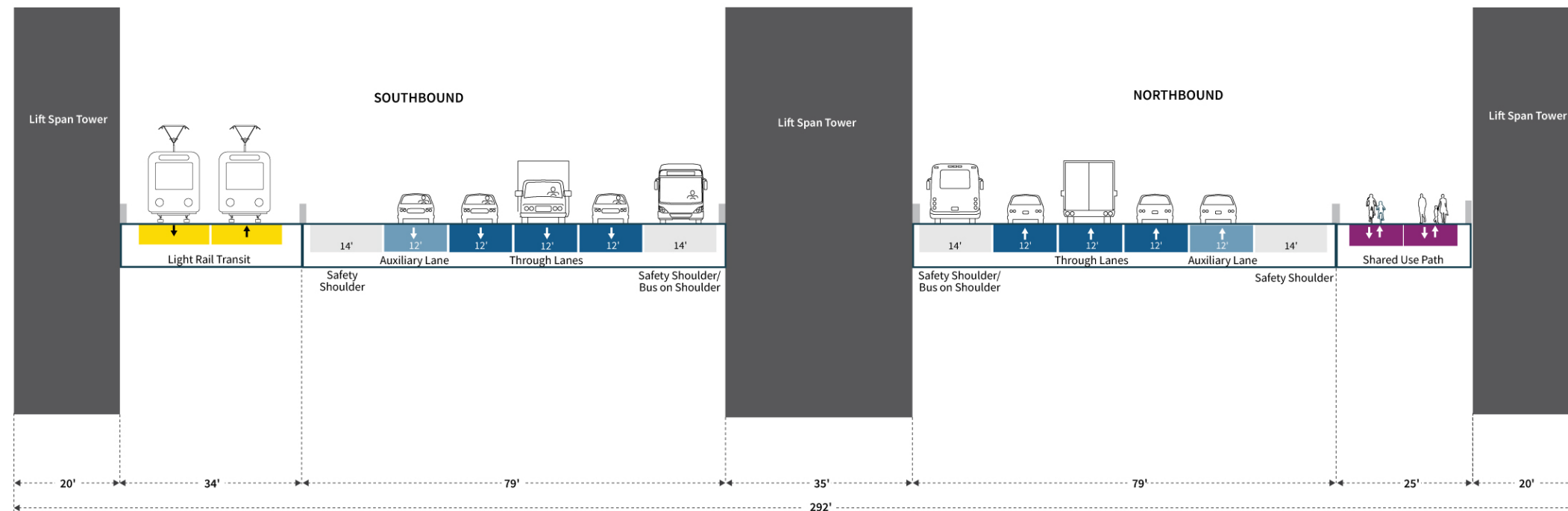


Visualizations are for illustration purposes only. They do not reflect property impacts or represent final design.

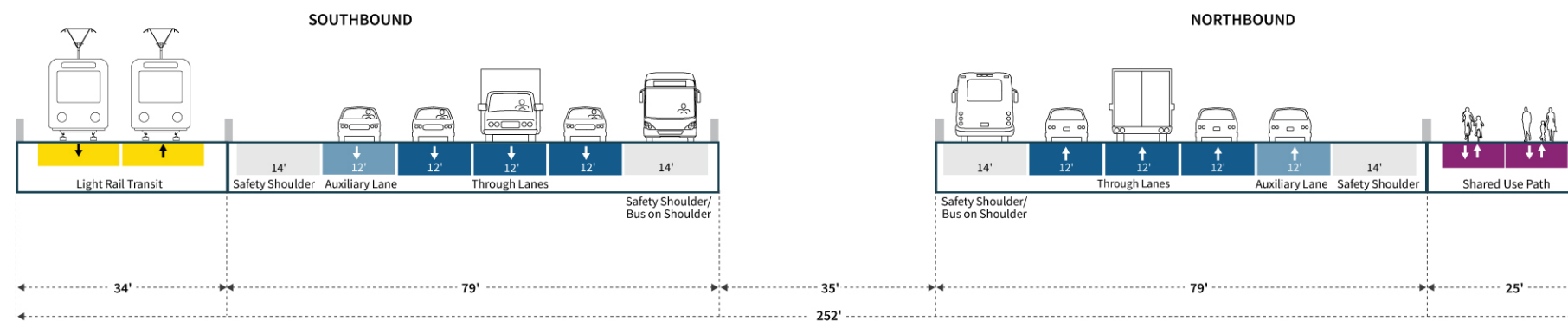
Note: Visualization is looking southeast (upstream) from Vancouver.

Figure 1-20. Typical Cross Section of the Single-Level Movable-Span Bridge Type

Single-level Bridge with Movable Span - Vertical Lift Span Cross-section (Piers 5 and 6)



Single-level Bridge with Movable Span - Fixed Spans Cross-section (Piers 2, 3, 4, and 7)



Note: Design is not final and subject to change. Widths may vary with final design. The one auxiliary lane design option is used for illustration purposes. The two auxiliary lane design option would add approximately 8 feet to each bridge (i.e., 16 feet to the total width).

Bridge Configuration Comparison

This section summarizes and compares each of the bridge configurations. Table 1-2 lists the key considerations for each bridge configuration. Figure 1-21 compares each of the three bridge configurations' footprints with the one auxiliary lane design option (refer to Figure 1-5 for a comparison of the one and two auxiliary lane design options footprints). The footprints of each configuration would differ in only three locations: over the Columbia River and at the bridge landings on Hayden Island and Vancouver. The rest of the I-5 corridor would have the same footprint. Over the Columbia River, the footprint of the double-deck fixed-span configuration would be approximately 173 feet wide. Comparatively, the extradosed bridge type of the single-level fixed-span configuration would be approximately 272 feet wide (approximately 99 feet wider), and the single-level fixed-span configuration with a girder bridge type would be approximately 232 feet wide (approximately 59 feet wider). The single-level movable-span configuration would be approximately 252 feet wide (approximately 79 feet wider than the double-deck fixed-span configuration), except at Piers 5 and 6, where larger bridge foundations would require an additional width of approximately 40 feet to support the movable span. The single-level configurations would have a wider footprint at the bridge landings on Hayden Island and Vancouver because transit and active transportation would be located adjacent to the highway, rather than below the highway in the double-deck option.

Figure 1-22 compares the basic profile and elevation of each configuration. The single-level fixed-span configuration and the lower deck of the double-deck fixed-span would have similar elevations, but the upper deck of the double-deck bridge would be approximately 35 feet higher. The single-level movable-span configuration would have a lower profile than the fixed-span configurations when the span is in the closed position.

Figure 1-21. Bridge Configuration Footprint Comparison

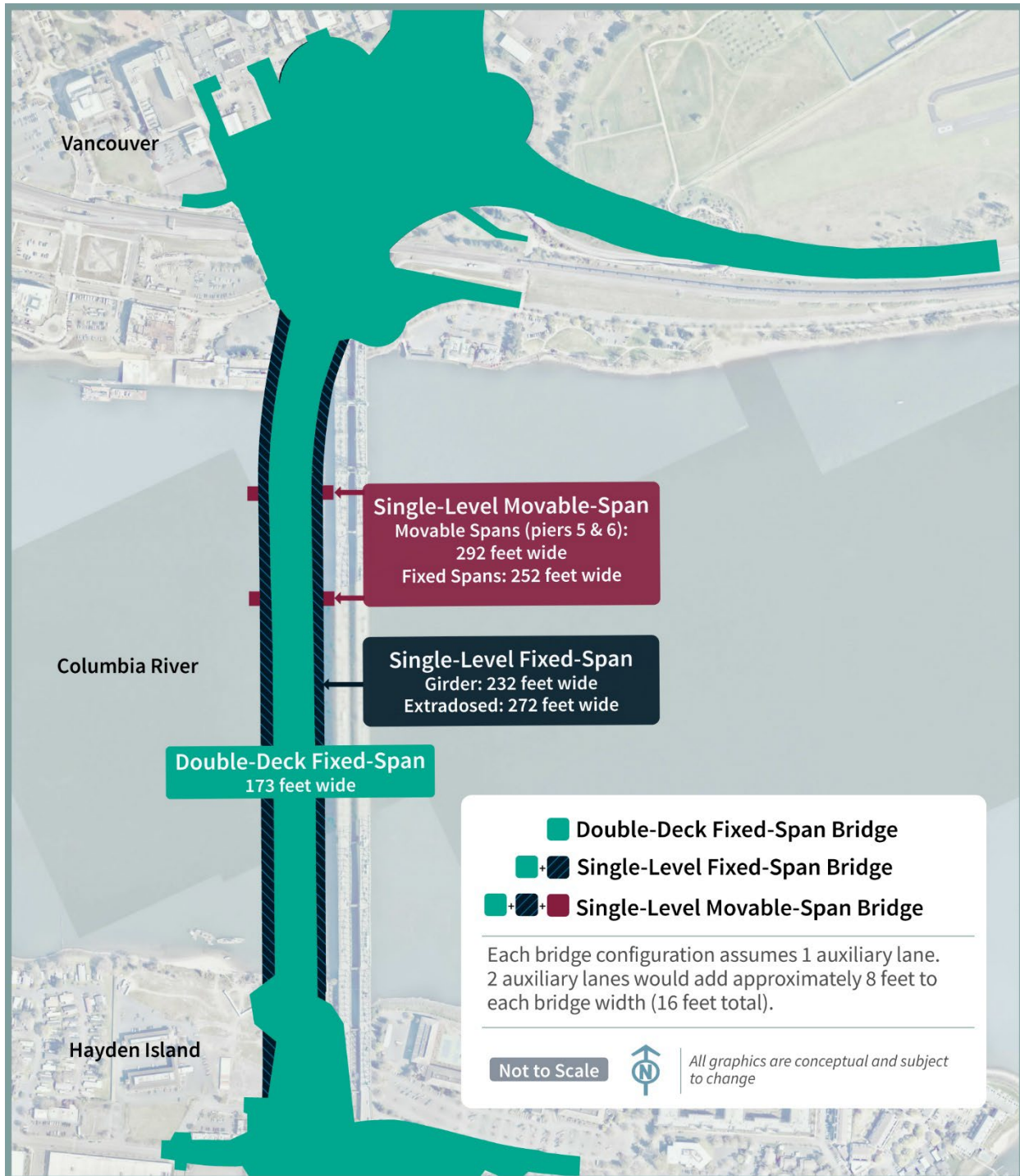
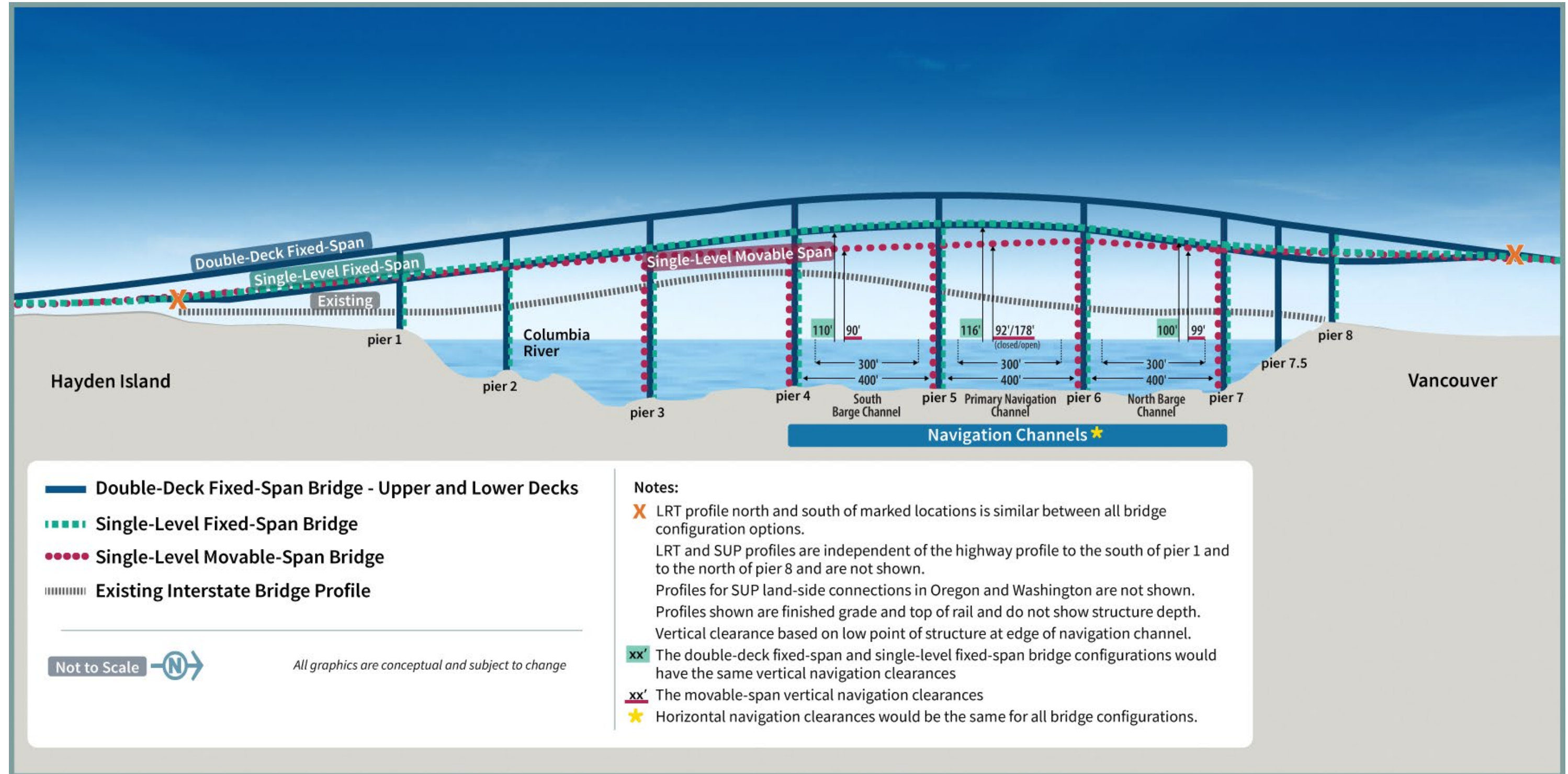


Figure 1-22. Bridge Configuration Profile Comparison



LRT = light-rail transit; SUP = shared-use path

Table 1-2. Summary of Bridge Configurations

Component	No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration	Modified LPA with Single-Level Fixed-Span Configuration ^a	Modified LPA with Single-Level Movable-Span Configuration
Bridge type	Steel through-truss spans	Double-deck steel truss	Single-level, concrete or steel girders, or extradosed	Single-level, steel girders with vertical lift span
Number of bridges	Two	Two	Two	Two
Movable-span type	Vertical lift span with counterweights.	N/A	N/A	Vertical lift span with counterweights
Movable-span location	Adjacent to Vancouver shoreline.	N/A	N/A	Between Piers 5 and 6 (approximately 500 feet south of the existing lift span)
Lift opening restrictions for vessels	Weekday peak AM and PM highway travel periods. ^b Typical bridge opening/gate closure durations are approximately 9 to 27 minutes depending on the purpose of the bridge lift (i.e., maintenance or vessel traffic) and lift elevation (i.e., partial lift or full lift). From 2007 to 2024, there was an average of 152 lifts per year (IBR 2025).	N/A	N/A	<ul style="list-style-type: none"> Considering 2007–2024 trends in vessels transiting under the Interstate Bridge, there would be fewer bridge lifts compared to the No-Build Alternative due to increased vertical navigation clearance in the closed position (99 feet compared to 72 feet). Additional restrictions to daytime bridge openings would be requested to consolidate fewer bridge openings outside of

Component	No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration	Modified LPA with Single-Level Fixed-Span Configuration ^a	Modified LPA with Single-Level Movable-Span Configuration
				<p>morning, midday, and evening peak hours when vehicle and transit demand is high in order to improve LRT on-time performance and system reliability and reduce highway congestion. Changes to bridge opening restrictions would require future federal rulemaking process and authorization by USCG (beyond the assumed No-Build Alternative bridge restrictions for peak AM and PM highway travel periods). ^b</p> <p>Typical opening durations are assumed to be 9 to 18 minutes ^c for the purposes of impact analysis but would ultimately depend on various operational considerations related to vessel traffic and river and weather conditions. Additional time would also be required to stop traffic prior to opening and restart traffic after the bridge closes.</p>

Component	No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration	Modified LPA with Single-Level Fixed-Span Configuration ^a	Modified LPA with Single-Level Movable-Span Configuration
Out-to-out width ^d	138 feet total width	~173 feet total width	Girder: ~232 feet total width Extradosed: 272 feet total width	<ul style="list-style-type: none"> ~292 feet at the movable span ~252 feet at the fixed span
Deck widths	52 feet (SB) 52 feet (NB)	~79 feet (SB) ~79 feet (NB)	Girder: <ul style="list-style-type: none"> ~113 feet (SB) ~104 feet (NB) Extradosed: <ul style="list-style-type: none"> ~133 feet (SB) ~124 feet (NB) 	~113 feet (SB) ~104 feet (NB)
Vertical navigation clearance	Primary navigation channel: <ul style="list-style-type: none"> 39 feet when closed 178 feet when open Barge channel: <ul style="list-style-type: none"> 46 feet to 70 feet Alternate barge channel: <ul style="list-style-type: none"> 72 feet 	Primary navigation channel: <ul style="list-style-type: none"> 116 feet maximum North barge channel: <ul style="list-style-type: none"> 100 feet maximum South barge channel: <ul style="list-style-type: none"> 110 feet maximum 	Primary navigation channel: <ul style="list-style-type: none"> 116 feet maximum. North barge channel: <ul style="list-style-type: none"> 100 feet maximum South barge channel: <ul style="list-style-type: none"> 110 feet maximum 	Primary navigation channel: <ul style="list-style-type: none"> Closed position: ~90 feet. Open position: 178 feet North barge channel: <ul style="list-style-type: none"> ~99 feet maximum South barge channel: <ul style="list-style-type: none"> ~90 feet maximum
Horizontal navigation clearance	<ul style="list-style-type: none"> 263 feet for primary navigation channel 511 feet for barge channel 260 feet for alternate barge channel 	400 feet for all navigation channels (300-foot USACE authorized channel plus a 50-foot channel maintenance buffer on each side)	400 feet for all navigation channels (300-foot USACE authorized channel plus a 50-foot channel maintenance buffer on each side)	400 feet for all navigation channels (300-foot USACE authorized channel plus a 50-foot channel maintenance buffer on each side)

Component	No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration	Modified LPA with Single-Level Fixed-Span Configuration ^a	Modified LPA with Single-Level Movable-Span Configuration
Maximum height of bridge component (elevation relative to NAVD 88) ^e	247 feet at top of lift tower	~166 feet	Girder: ~137 feet. Extradosed: ~179 feet at top of pylons	~243 feet at top of lift tower
Movable span length (from center of pier to center of pier)	278 feet	N/A	N/A	450 feet
Number of in-water pier sets	Nine	Six	Six	Six
Number of in-water drilled shafts	N/A	72	96	108
Shaft cap sizes	N/A	50 feet by 85 feet	50 feet by 230 feet	<ul style="list-style-type: none"> Piers 2, 3, 4, and 7: 50 feet by 230 feet Piers 5 and 6: 50 feet by 312 feet (one combined footing at each location to house tower/equipment for the lift span)
Conceptual vertical grade ^f	4.8%	~4% on the Washington side ~4% on the Oregon side	~3% on the Washington side ~3% on the Oregon side	~1.5% on the Washington side. ~3% on the Oregon side

Component	No-Build Alternative	Modified LPA with Double-Deck Fixed-Span Configuration	Modified LPA with Single-Level Fixed-Span Configuration ^a	Modified LPA with Single-Level Movable-Span Configuration
LRT location	N/A	Below highway on SB bridge	West of highway on SB bridge	West of highway on SB bridge
Express bus	Shared roadway lanes	Inside shoulder of NB and SB (upper) bridges	Inside shoulder of NB and SB bridges	Inside shoulder of NB and SB bridges
Shared-use path location	Sidewalk adjacent to roadway in both directions	Below highway on NB bridge	East of highway on NB bridge	East of highway on NB bridge

All dimensions and quantities are approximate.

- a When different bridge types are not mentioned, data apply to both bridge types under the single-level fixed-span bridge configuration.
- b The No-Build Alternative assume existing conditions that restrict bridge openings during weekday peak periods (Monday through Friday 6:30 a.m. to 9 a.m.; 2:30 p.m. to 6 p.m., excluding federal holidays). For the Modified LPA with a single-level movable-span bridge configuration design option, additional timing restrictions, which would increase restrictions on the timing for and duration of bridge openings, except for emergencies, would be requested and coordinated with the USCG. Bridge openings would be required for vessels and/or cargo with heights greater than 72 feet under the No-Build Alternative; whereas, bridge openings for vessels and/or cargo requiring more than 99 feet of clearance would be required for the Modified LPA with the movable-span bridge configuration design option.
- c For the purposes of the transportation analysis in the Final SEIS (Section 3.1, Transportation of the Final SEIS), the movable-span opening time is assumed to be an average of 13.2 minutes.
- d “Out-to-out width” is the measurement between the outside edges of both northbound and southbound bridge across its width at the widest point and includes the space between the two bridges. The deck width is the measurement of the outer edges of either the northbound bridge or the southbound bridge.
- e NAVD 88 (North American Vertical Datum of 1988) is a vertical control datum (reference point) used by federal agencies for surveying.
- f The maximum allowable vertical grade according to ODOT and WSDOT standards on the I-5 mainline is 4%.

I-5 = Interstate 5; LPA = Locally Preferred Alternative; LRT = light-rail transit; N/A = not applicable; NAVD 88 = North American Vertical Datum of 1988; NB = northbound; ODOT = Oregon Department of Transportation; SB = southbound; SEIS = Supplemental Environmental Impact Statement; USACE = U.S. Army Corps of Engineers; USCG = U.S. Coast Guard; WSDOT = Washington State Department of Transportation

1.1.4 Downtown Vancouver (Subarea C)

This section discusses the geographic Subarea C (Figure 1-3 shows an overview of the geographic subareas). Figure 1-23 shows all highway and interchange improvements in Subarea C.

1.1.4.1 Highways, Interchanges, and Local Roadways

North of the Columbia River bridges in downtown Vancouver, improvements are proposed to the SR 14 interchange (Figure 1-23).

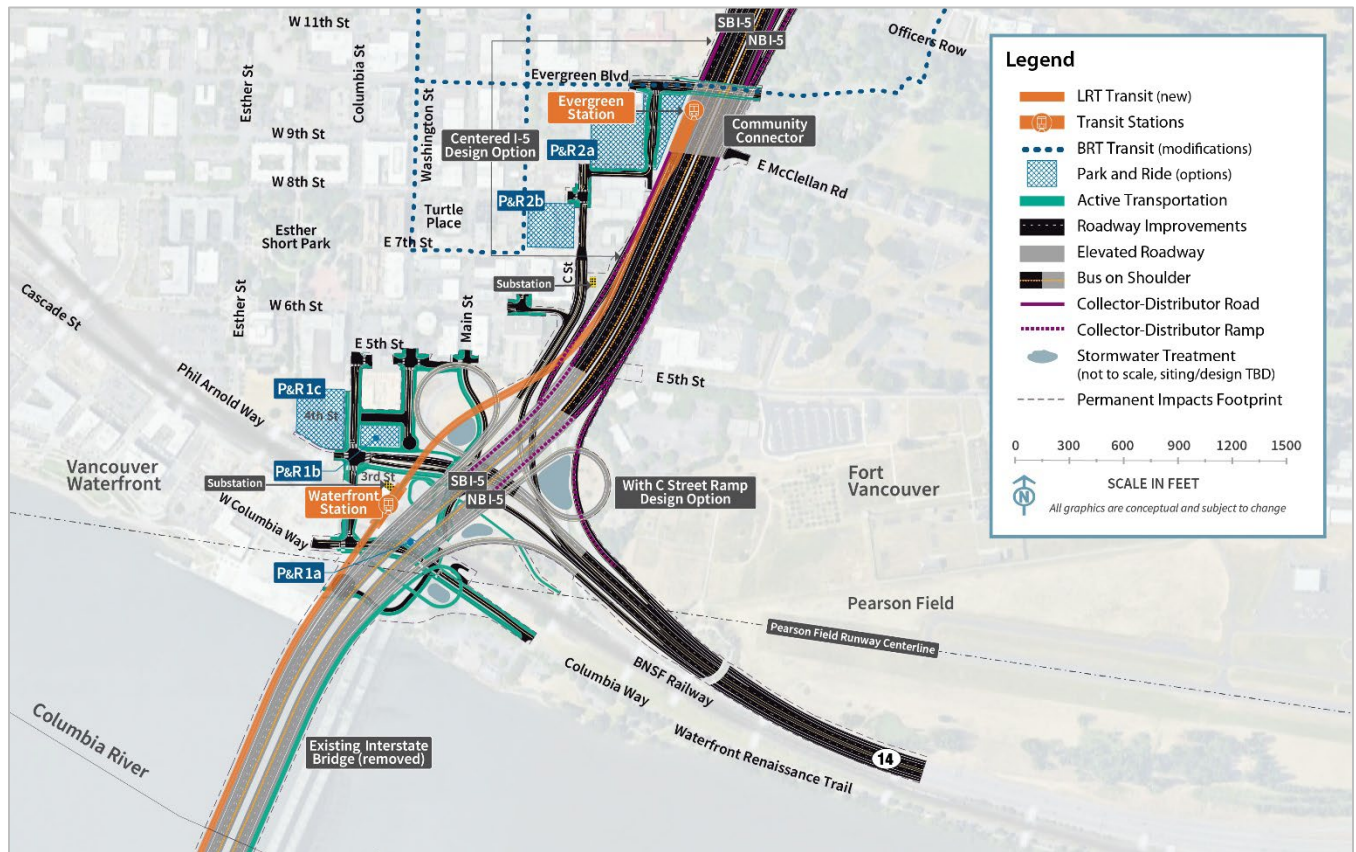
SR 14 INTERCHANGE/DOWNTOWN VANCOUVER

The new Columbia River bridges would touch down just north of the SR 14 interchange (Figure 1-23). The function of the SR 14 interchange configuration would remain essentially the same as it is now, but the interchange would be elevated to meet the new Columbia River bridges that cross over the BNSF Railway tracks. Direct connections between I-5 and SR 14 would be rebuilt. Access to and from downtown Vancouver would be provided as it is today, but the connection points would be relocated. Access from downtown Vancouver to eastbound SR 14 would be relocated from the Washington Street and W 5th Street intersection to a new intersection at Columbia Street and W 3rd Street. Access from westbound SR 14 would also be shifted from C Street to the new Columbia Street and W 3rd Street intersection. Access from downtown Vancouver to southbound I-5 would be relocated from the Washington Street and W 5th Street intersection to C Street. Access from northbound I-5 to downtown Vancouver would remain at C Street. Connections to downtown Vancouver would vary under the two design options under consideration for this area (with C Street ramps and without C Street ramps), as detailed below.

Main Street would be extended between 5th Street and Columbia Way. Vehicles traveling from downtown Vancouver to access SR 14 eastbound would use the new extension of Main Street to the intersection underneath I-5. If coming from the west or south (waterfront) in downtown Vancouver, vehicles would use the Phil Arnold Way/3rd Street extension to the intersection, then continue to SR 14 eastbound. The existing Columbia Way roadway under I-5 would be realigned to the north of its existing location and would intersect both the new Main Street extension and Columbia Street with T intersections.

In addition, the existing overcrossing of I-5 at Evergreen Boulevard would be reconstructed.

Figure 1-23. Downtown Vancouver (Subarea C)



BRT = bus rapid transit; LRT = light-rail transit; NB = northbound; P&R = park and ride; SB = southbound

C Street Ramp Design Options

With C Street Ramps – Recommended Design Option

The design option with C Street ramps would provide access to and from downtown Vancouver similar to existing conditions but with some of the connection points relocated. Access from northbound I-5 to downtown Vancouver would be rebuilt in the same location as the current connection. Downtown Vancouver I-5 access to and from the south would be consolidated at C Street with SR 14 connections to and from downtown at Columbia Street/ W 3rd Street (Figure 1-24).

Without C Street Ramps

Under this design option, downtown Vancouver I-5 access to and from the south would be through the Mill Plain interchange rather than C Street. There would be no eastside loop ramp from northbound I-5 to C Street and no directional ramp on the west side of I-5 from C Street to southbound I-5. The existing eastside loop ramp would be removed. This option would reduce the footprint of the Modified LPA in this area.

I-5 Alignment Design Options

Centered I-5 – Recommended Design Option

This design option would maintain the location of the existing I-5 mainline alignment through downtown Vancouver between the SR 14 interchange and the Mill Plain Boulevard interchange.

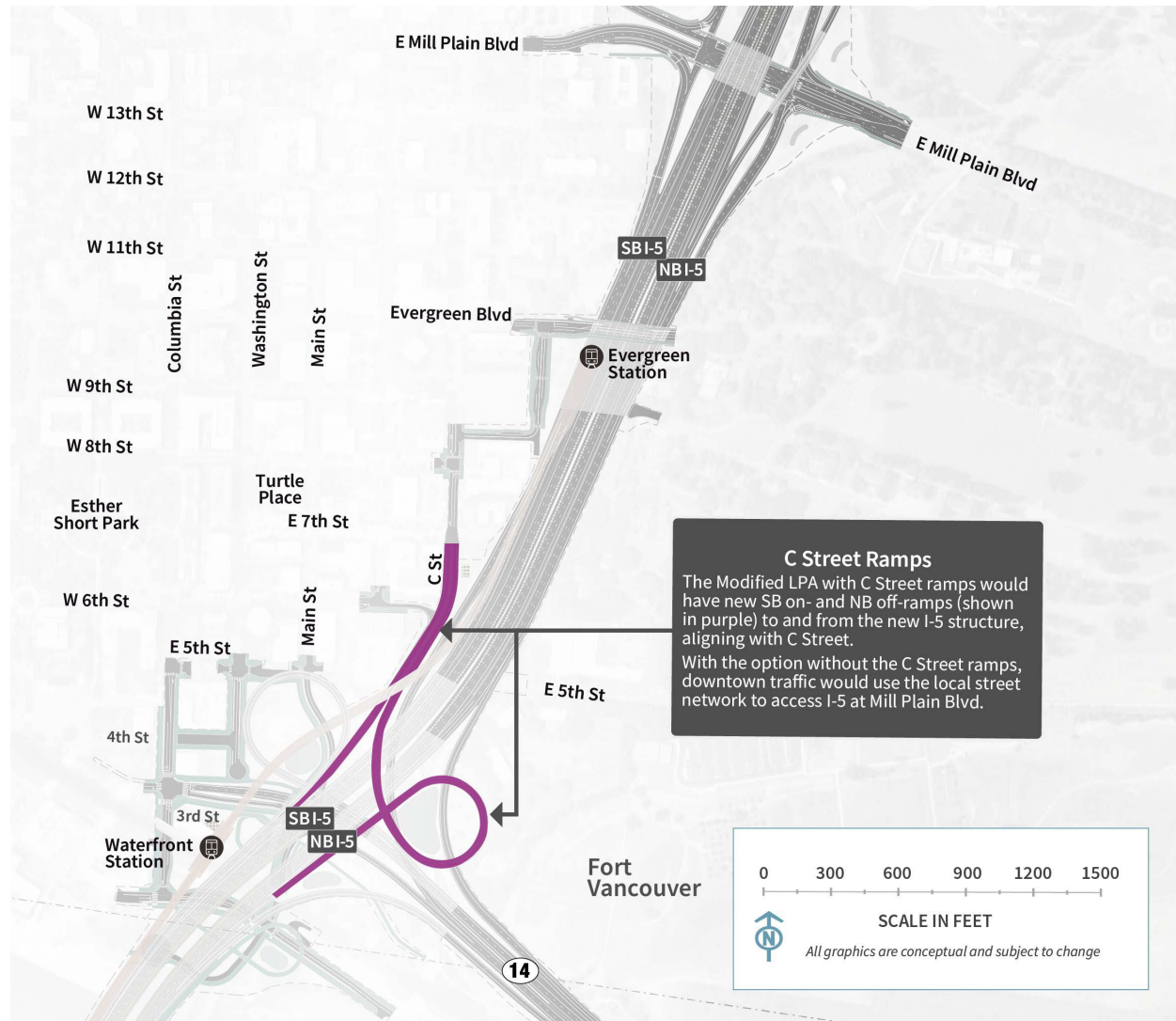
I-5 Shifted West

This design option would shift the I-5 mainline and ramps approximately 40 feet to the west between SR 14 and Mill Plain Boulevard.

The IBR Program recommends advancing the with C Street ramps design option. Both C Street ramp design options would provide important benefits to highway operations and safety and have similar impacts to many other resources, particularly the natural environment. While there would be some short-term construction cost savings and reduced visual impacts without C Street ramps, there would be greater impacts to local traffic as traffic that would have used the C Street ramps would be routed to the Mill Plain interchange, thereby increasing traffic volumes on the local street network and requiring additional mitigation. Both design options received a mix of positive and negative feedback from the public; however, there were more comments in support of the with C Street ramps design option. The with C Street ramps design option also has more support from the local partner agencies.

The IBR Program recommends advancing the centered I-5 alignment design option. Both I-5 mainline alignments would provide important benefits to highway operations and safety and have similar impacts to many other resources, particularly the natural environment. The westward shift design option would notably increase acquisitions resulting in the displacement of an additional three businesses (with approximately 140 employees) and 33 residential units, and the physical removal of the historic Normandy Apartments. However, the westward shift would reduce the area of acquisition and other impacts to the Vancouver National Historic Reserve (VNHR) Historic District (which includes the Fort Vancouver National Historic Site). While some public comments noted the reduced impacts to the VNHR Historic District from the westward shift design option, others raised concerns about its effects on safety, congestion, and increased residential and business displacements.

Figure 1-24. Modified LPA With C Street Ramps



COLLECTOR-DISTRIBUTOR ROADWAYS

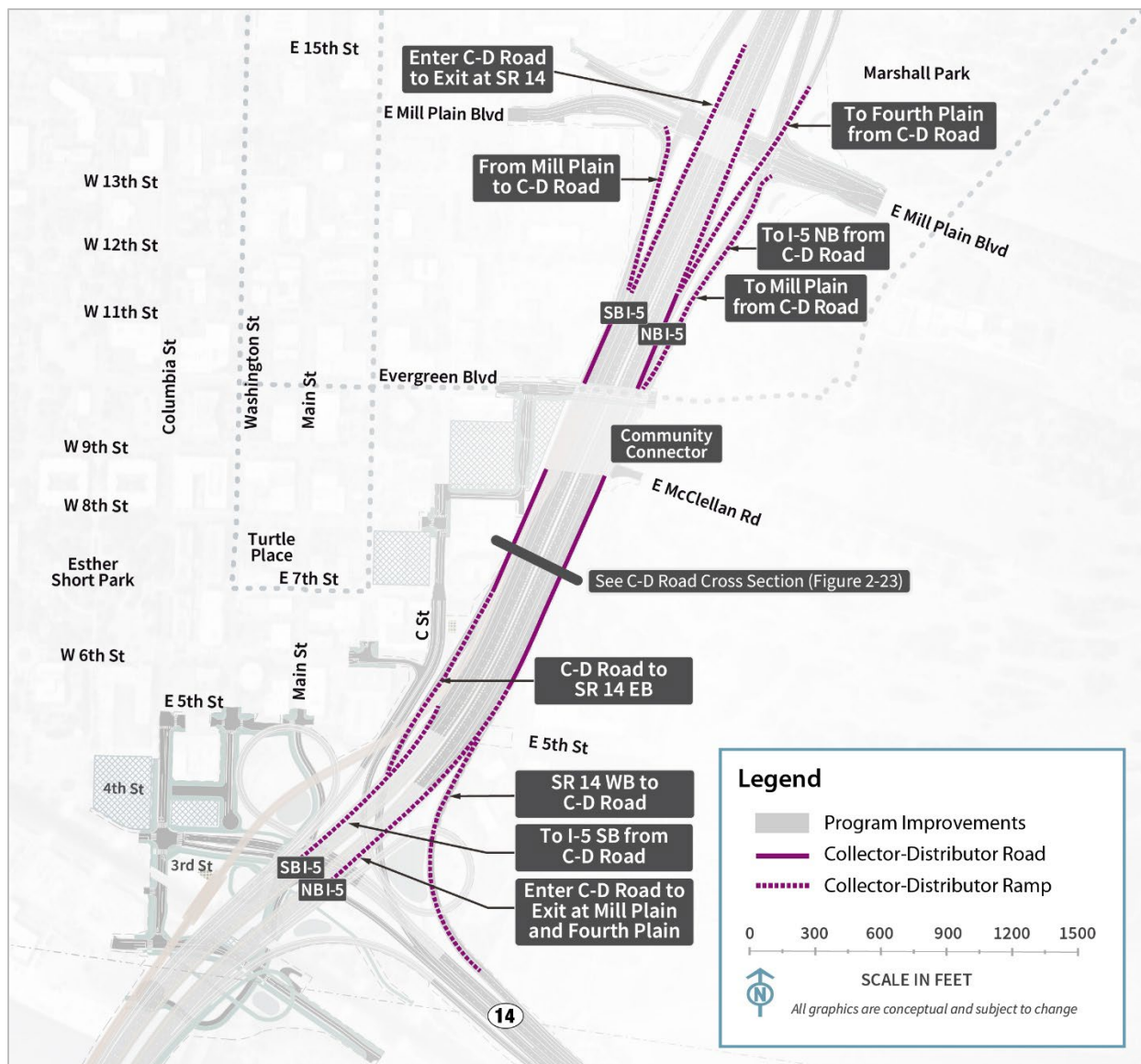
Figure 1-25 shows the location of the collector-distributor (C-D)¹¹ roadways in downtown Vancouver, and Figure 1-26 shows a typical cross section of the C-D roadways.

The on-ramp from SR 14 westbound would join the I-5 northbound off-ramp to Mill Plain/Fourth Plain Boulevard, forming the northbound C-D roadway between SR 14 and Fourth Plain Boulevard. The C-D roadway would provide access from northbound I-5 to the off-ramps at Mill Plain Boulevard and Fourth Plain Boulevard. The C-D roadway would also provide access from westbound SR 14 to the off-ramps at Mill Plain Boulevard and Fourth Plain Boulevard, and to the on-ramp to northbound I-5.

¹¹ A collector-distributor roadway parallels and connects the main travel lanes of a highway and frontage roads or entrance ramps.

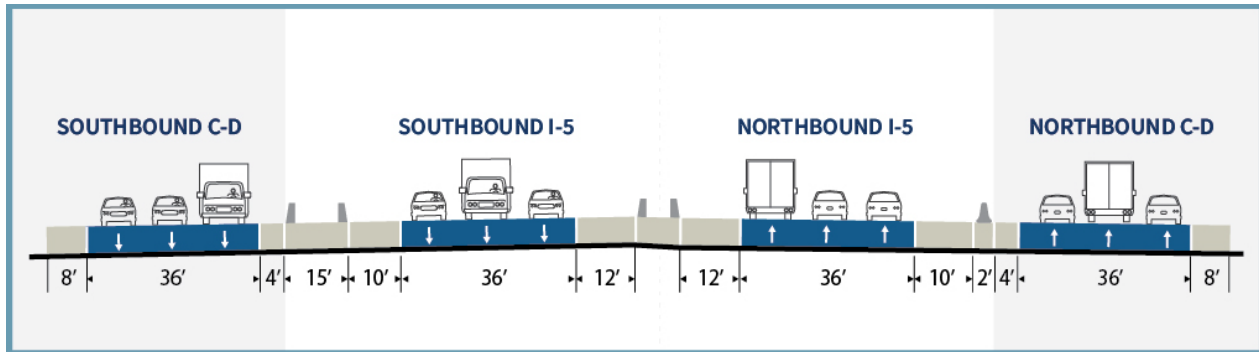
On southbound I-5, the off-ramp to SR 14 would join the southbound I-5 on-ramp from Mill Plain Boulevard to form a C-D roadway. The C-D roadway would provide access from southbound I-5 to the off-ramp to eastbound SR 14 and from Mill Plain Boulevard to the off-ramp to eastbound SR 14 and the on-ramp to southbound I-5.

Figure 1-25. Collector-Distributor Roadways



C-D = collector-distributor; EB = eastbound; NB = northbound; SB = southbound; WB = westbound

Figure 1-26. Typical Cross Section of the Collector-Distributor Roadways



The location of this cross section is shown on Figure 1-25.

1.1.4.2 Transit

LIGHT-RAIL ALIGNMENT AND STATIONS

Under the Modified LPA, the light-rail tracks would exit the highway bridge and be on their own bridge along the west side of the I-5 mainline after crossing the Columbia River (see Figure 1-23). The light-rail bridge would cross over the BNSF Railway tracks. An elevated light-rail station near the Vancouver waterfront (Waterfront Station) would be situated near the overcrossing of the BNSF tracks between Columbia Way and 3rd Street. Access to the elevated station would be primarily by elevator because the station would be situated approximately 90 feet above existing ground level. A stairwell(s) would be provided for emergency egress. The number of elevators and stairwells provided would be based on the ultimate platform configuration, station location relative to the BNSF trackway, projected ridership, and fire and life safety requirements. Passenger drop-off facilities would be located at ground level and would be coordinated with the C-TRAN bus service at this location. Active transportation facilities, described below, would connect to the new Waterfront Station. A new TPSS would be constructed north of the transit platform. The elevated light-rail tracks would continue north, cross over the westbound SR 14 on-ramp and the C Street/6th Street on-ramp to southbound I-5, and- then straddle the southbound I-5 C-D roadway. Transit components in the downtown Vancouver area would be similar between the C Street ramp and I-5 westward shift design options discussed above.

North of the Waterfront Station, the light-rail tracks would continue to the Evergreen Station, which would be the terminus of the light-rail extension (Figure 1-23). The light-rail tracks from downtown Vancouver to the terminus would be entirely on an elevated structure supported by single columns, where feasible, or by straddle bents¹² on either side of the roadway where needed. The Evergreen Station would be located at the same elevation as Evergreen Boulevard and the proposed Community Connector, and it would provide connections to the existing C-TRAN BRT system. Passenger drop-off facilities would be near the station and would be coordinated with the C-TRAN bus service at this location. Active transportation facilities, described below, would connect to the new Evergreen

¹² A straddle bent is a type of bridge support structure that “straddles” vehicle lanes and supports a flyover ramp.

Station. A new TPSS would be located on the south side of 7th Street, approximately 750 feet south of Evergreen Station.

PARK AND RIDES

The Modified LPA would provide parking capacity to accommodate 1,270 vehicles at designated park and rides in Vancouver along the LRT alignment (Figure 1-23) 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.

Park and rides can expand the catchment area of public transit systems (the geographic area from which a station draws ridership), making transit more accessible to people who live farther away from fixed-route transit service, and attracting new riders who might not have considered using public transit otherwise.

The park and rides would be designed to accomplish the following:

- Support transit ridership.
- Promote station access by walking, biking, rolling, and transit.
- Support City of Vancouver objectives to increase mobility and access for a vibrant downtown.
- Include existing parking facilities in downtown Vancouver to help meet the projected demand for park and rides in areas where City of Vancouver studies show surplus parking supply.

Additional information regarding the park and rides can be found in the Transportation Technical Report.

As presented in the Draft SEIS, the Modified LPA would provide parking capacity for LRT riders by locating a single park and ride near the Waterfront Station with approximately 570 parking spaces; three sites were considered for this facility. Similarly, a single park and ride near the Evergreen Station would provide approximately 700 parking spaces; two sites were considered. Based on further design analysis, public comment received on the Draft SEIS, and coordination with local agencies, the approach to providing parking capacity for LRT riders was adjusted to focus on dispersed parking across more facilities, including using all three sites previously identified near the Waterfront Station and both sites previously identified near the Evergreen Station. The approach to disperse parking capacity across more sites would correlate to smaller sites in terms of structure size above or below ground.

The sites under consideration are described below, and the evaluation of impacts and benefits to developing a single, large park and ride at each of the two LRT station or five smaller park and rides are evaluated in this report.

Waterfront Station Park and Rides

Studies included in Appendix D to the Final SEIS have shown the need for park-and-ride capacity to accommodate 570 vehicles in the vicinity of the Waterfront Station. Three possible sites are analyzed (Figure 1-23):

- 1a. Columbia Way (below I-5). This 0.75-acre site could be developed as a new aboveground one-level parking structure. Access would be via Columbia Way. It could support approximately 70 parking spaces.
- 1b. Columbia Street/SR 14. This 0.50-acre site could be developed as a new aboveground six-level structure along the east side of Columbia Street and north of the SR 14 westbound off-ramp. Access would be via Washington Street. It could accommodate approximately 250 parking spaces. To provide all 570 parking spaces at this site, the structure would need to be 10 to 12 levels.
- 1c. Columbia Street/Phil Arnold Way (Waterfront Gateway Site). This 1.5-acre site could be developed as a new surface lot along the west side of Columbia Street, north of Phil Arnold Way. Access would be via Phil Arnold Way. A surface lot would provide approximately 250 parking spaces. To provide all 570 parking spaces at this site, a new four-level structure would be needed.

Evergreen Station Park and Rides

Studies included in Appendix D to the Final SEIS have shown the need for park and rides to accommodate 700 vehicles in the vicinity of the Evergreen Station. Two possible sites are analyzed in this technical report (see Figure 1-23):

- 2a. Library Square. This 3.2-acre site could be developed as a new underground three- to four-level structure east of C Street and south of Evergreen Boulevard. It could accommodate approximately 400 parking spaces. To provide all 700 parking spaces at this site, the structure

The IBR Program recommends advancing 1,270 park-and-ride spaces dispersed across five sites in Vancouver along the light-rail alignment, including three sites near the Waterfront Station and two sites near the Evergreen Station. All of the park and rides would provide similar benefits to the community by increasing the transit stations' catchment areas and making transit more accessible. There could be minor localized differences in traffic patterns and transit ridership depending on the location of spaces. Dispersing the 1,270 parking spaces across five park and rides rather than concentrating the spaces at a single location each near the Waterfront Station and Evergreen Station would promote compatibility with local planning goals and plans for multiuse development, multimodal access, and attractive public spaces. As the FTA's Capital Investment Grant process progresses, the IBR Program team will refine the Program's transit components, which will contribute to further information on parking needs to support transit ridership.

Studies (Appendix D to the Final SEIS) leading to the Modified LPA in 2022 evaluated a mix of light-rail station sites and park and rides and found that 1,270 spaces serving the Waterfront and Evergreen Stations, combined with bus and active transportation improvements, would attract the most riders.

would require seven or more levels below ground.¹³ This site could be combined with Site 2b to provide a total of 700 spaces.

- 2b. Columbia Credit Union. This approximately 1-acre site is an existing parking structure/commercial building and provides an estimated 400 parking spaces to current users on four levels above ground. The parking capacity would not be exclusively available for transit users; however, up to 300 spaces could be used for transit riders. This site could be combined with Site 2a to provide a total of 700 spaces.

1.1.4.3 Active Transportation

Within the downtown Vancouver area, the shared-use path on the northbound (or eastern) bridge would exit the bridge at the SR 14 interchange, loop down on the east side of I-5 via a vertical helix path, cross back below I-5 to the west side of I-5, run beneath the elevated light-rail crossing over BNSF, and then loop down to connect to the Main Street extension at the intersection underneath I-5 with connections to the Waterfront Station from the active transportation facilities. Connections to the Waterfront Renaissance Trail would be made by facilities along Main Street and Columbia Way (Figure 1-23). Access would be provided across state right of way beneath the new bridges to provide a connection between the recreational areas along the city's Columbia River waterfront east of the bridges and existing and future waterfront uses west of the bridges.

Active transportation components in the downtown Vancouver area would be similar for all design options.

As part of the Modified LPA, a Community Connector is proposed to be built over I-5 just south of Evergreen Boulevard and east of the Evergreen Station (Figure 1-23). The structure is proposed to include off-street pathways for active transportation modes including pedestrians, bicyclists, and other micro-mobility modes, and public space and amenities to support the active transportation facilities with connections to the Evergreen Station from the active transportation facilities. The primary intent of the Community Connector is to improve connections between downtown Vancouver on the west side of I-5 and the Vancouver National Historic Reserve on the east side.

1.1.5 Upper Vancouver (Subarea D)

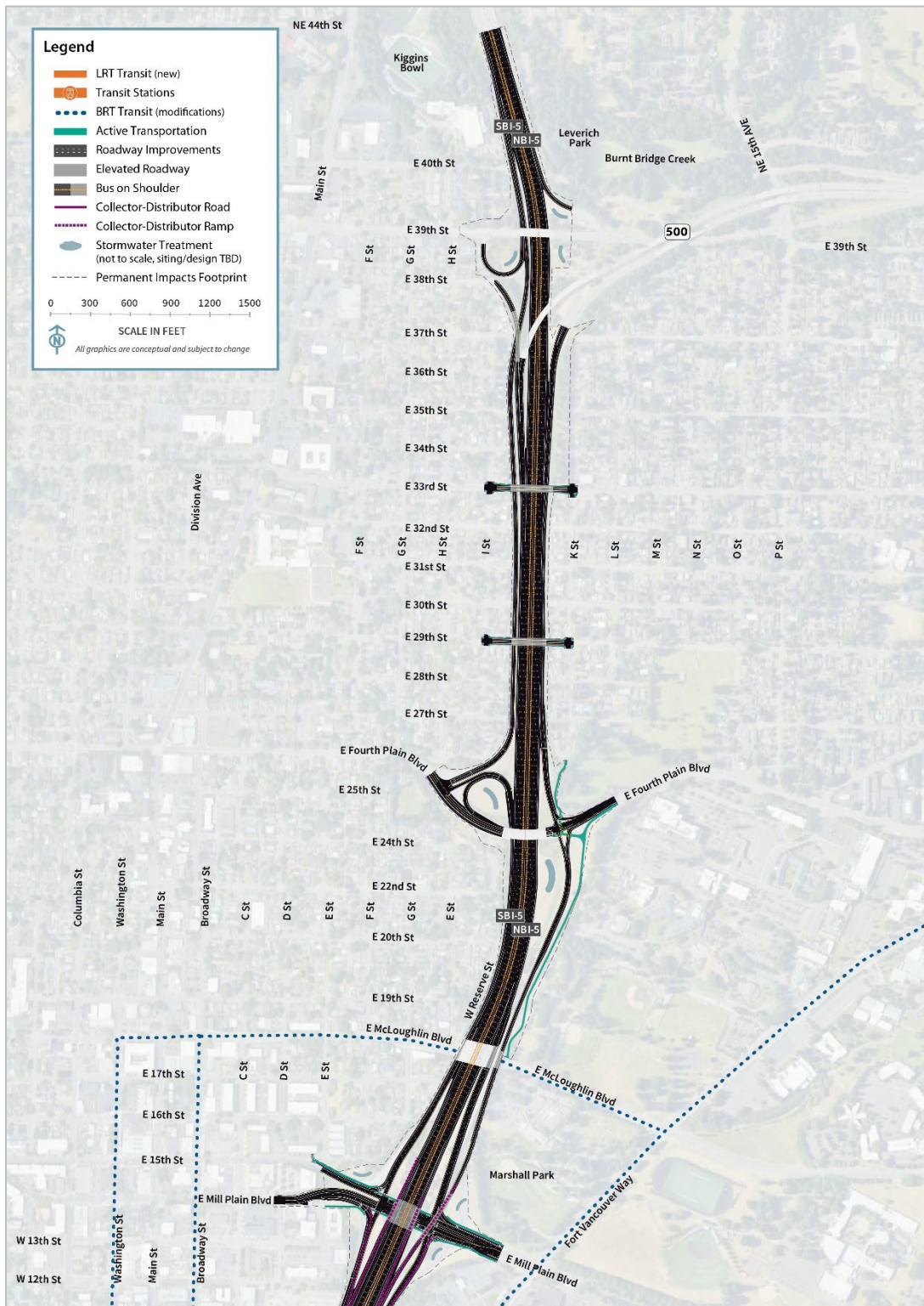
This section discusses the geographic Subarea D (Figure 1-3 shows an overview of the geographic subareas). Figure 1-27 shows all highway and interchange improvements in Subarea D.

1.1.5.1 Highways, Interchanges, and Local Roadways

Within the upper Vancouver area, the IBR Program proposes improvements to three interchanges—Mill Plain, Fourth Plain, and SR 500—as described below.

¹³ The maximum depth of an underground parking structure at Library Square is provided for comparative purposes only. An underground parking structure would likely not exceed 3 or 4 levels because of engineering and environmental constraints.

Figure 1-27. Upper Vancouver (Subarea D)



BRT = bus rapid transit; LRT = light-rail transit; TBD = to be determined

MILL PLAIN BOULEVARD INTERCHANGE

The Mill Plain Boulevard interchange is north of the SR 14 interchange (Figure 1-27). This interchange would be reconstructed as a tight-diamond configuration but would otherwise remain similar in function and footprint to the existing interchange. The ramp terminal intersections would be sized to accommodate high, wide, heavy freight vehicles that travel between the Port of Vancouver and I-5. The off-ramp from I-5 northbound to Mill Plain Boulevard would diverge from the C-D road that would continue north, crossing over Mill Plain Boulevard, to provide access to Fourth Plain Boulevard via a C-D roadway. The off-ramp to Fourth Plain Boulevard would be reconstructed and would cross over Mill Plain Boulevard east of I-5, similar to the way it functions today.

FOURTH PLAIN BOULEVARD INTERCHANGE

At the Fourth Plain Boulevard interchange (Figure 1-27), improvements would include reconstruction of the I-5 ramp terminal intersections. The existing bridge for Fourth Plain Boulevard over I-5 would be retained. Northbound I-5 traffic exiting to Fourth Plain Boulevard would first exit to the northbound C-D roadway, which provides off-ramp access to Fourth Plain Boulevard and Mill Plain Boulevard. The westbound SR 14 to northbound I-5 on-ramp also joins the northbound C-D roadway before continuing north past the Fourth Plain Boulevard and Mill Plain Boulevard off-ramps as an auxiliary lane. The southbound I-5 off-ramp to Fourth Plain Boulevard would be braided below the 39th Street on-ramp to southbound I-5. This change would eliminate the existing nonstandard weave between the SR 500 interchange and the off-ramp to Fourth Plain Boulevard. It would also eliminate the existing westbound SR 500 to Fourth Plain Boulevard off-ramp connection. The existing overcrossing of I-5 at 29th Street would be reconstructed to accommodate a widened I-5, provide adequate vertical clearance over I-5, and provide pedestrian and bicycle facilities.

SR 500/39TH STREET INTERCHANGE AREA

The northern terminus of the I-5 improvements would be in the SR 500 interchange area (Figure 1-27). The improvements would primarily be to connect the Modified LPA to existing ramps. The off-ramp from I-5 southbound to 39th Street would be reconstructed to establish the beginning of the braided ramp to Fourth Plain Boulevard and restore the loop ramp to 39th Street. Ramps from existing I-5 northbound to SR 500 eastbound and from 39th Street to I-5 northbound would be partially reconstructed. The existing bridges for 39th Street over I-5 and SR 500 westbound to I-5 southbound would be retained. The 39th Street to I-5 southbound on-ramp would be reconstructed and braided over (i.e., grade separated or pass over) the new I-5 southbound off-ramp to Fourth Plain Boulevard.

The existing overcrossing of I-5 at 33rd Street would also be reconstructed to accommodate a widened I-5, provide adequate vertical clearance over I-5, and provide pedestrian and bicycle facilities.

1.1.5.2 Transit

There would be no LRT facilities in upper Vancouver. Proposed operational changes to bus service, including I-5 bus-on-shoulder service, are described in Section 1.1.7, Transit Operating Characteristics.

1.1.5.3 Active Transportation

Several active transportation improvements would be made in Subarea D consistent with City of Vancouver plans and policies. On the east side of I-5, a new shared-use path would connect E McLoughlin Boulevard to Fourth Plain Boulevard. At the Fourth Plain Boulevard interchange, there would be improvements to provide better bicycle and pedestrian mobility and accessibility; these include bicycle lanes, neighborhood connections, and a connection to the City of Vancouver's planned two-way cycle track on Fourth Plain Boulevard. The reconstructed overcrossings of I-5 at 29th Street and 33rd Street would provide pedestrian and bicycle facilities on those cross streets. No new active transportation facilities are proposed in the SR 500 interchange area. Active transportation improvements at the Mill Plain Boulevard interchange include buffered bicycle lanes and sidewalks, pavement markings, lighting, and signing.

1.1.6 Transit Support Facilities

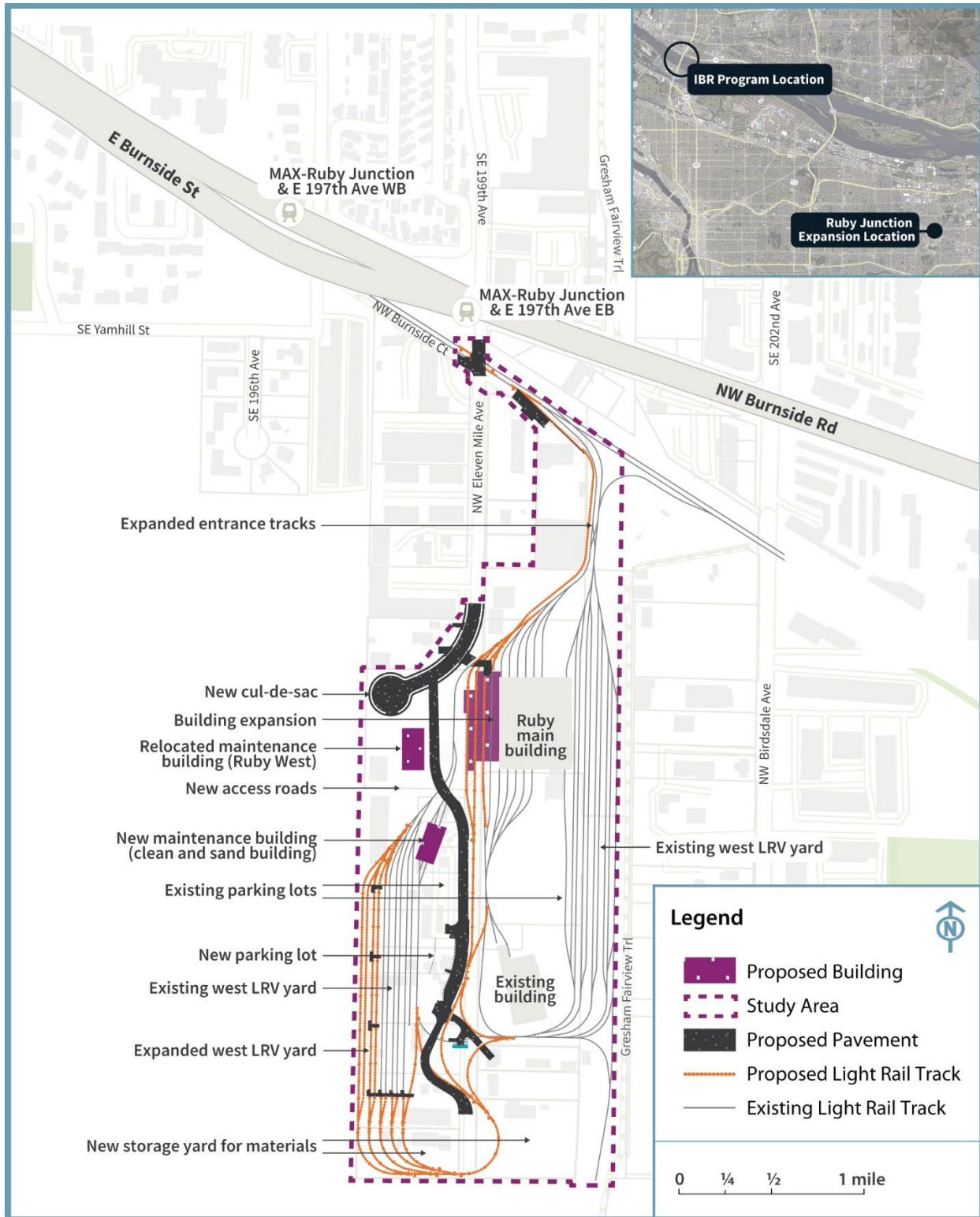
1.1.6.1 Ruby Junction Light-Rail Operations and Maintenance Facility Expansion

The TriMet Ruby Junction Light-Rail OMF in Gresham, Oregon, would be expanded to accommodate the additional LRVs associated with the Modified LPA's LRT service (the Ruby Junction location relative to the study area is shown in Figure 1-28). Improvements would include additional storage tracks for LRVs and maintenance materials and supplies; expanded LRV maintenance bays; expanded parking and employee support areas for additional personnel; an additional maintenance building for daily cleaning and periodic weather-dependent treatments for LRV maintenance, demolition, and relocation of a maintenance building (Ruby West); tenant improvements and new structures for affected operations; and a third lead track at the northern entrance to the Ruby Junction Light-Rail OMF. Adjacent parcels would be acquired to accommodate maintenance and storage needs required for or impacted by the Modified LPA. Figure 1-28 shows the proposed footprint of the expansion.

The existing main building would be expanded west to provide additional maintenance bays. Today, Eleven Mile Avenue extends from NW Burnside Road and dead ends at the southern limits of the existing OMF. To make space for the building expansion, the existing Eleven Mile Avenue public right of way would be vacated and would terminate in a new cul-de-sac west of the main building. A new cul-de-sac would be required to meet City of Gresham code requirements for fire access and turnaround. New internal/nonpublic access roads would be constructed to maintain access to TriMet buildings south of the cul-de-sac; these would impact an existing maintenance building (Ruby West), which would be demolished and rebuilt within Ruby Junction Light-Rail OMF.

The existing western LRV storage yard, west of Eleven Mile Avenue, would be expanded to the west to accommodate additional storage tracks and a runaround track (a track constructed to bypass congestion in the maintenance yard). This expansion would require partial demolition of an existing TriMet building (just north of the LRV storage) and would require relocating the material storage yard to the southeastern corner of the campus. Immediately east of the storage yard, a double track LRV maintenance building would be constructed impacting existing parking. Various other surface parking areas in the west yard would also be relocated north of the cul-de-sac.

Figure 1-28. Ruby Junction Light-Rail Operations and Maintenance Facility Study Area



EB = eastbound; LRV = light-rail vehicle; WB = westbound

All tracks in the west LRV storage yard would also be extended southward to connect to the proposed runaround track. The runaround track would connect to existing and proposed tracks adjacent to the existing Ruby Junction building located to the south. The connections to the runaround track would require partial demolition of an existing TriMet building and, full demolition of one existing building and partial demolition of another building on the adjacent private property to the south. These affected functions would be housed in a new replacement building on site.

A third track would be needed at the north entrance to the Ruby Junction Light-Rail OMF to accommodate increased train volumes without decreasing service. The additional track would also reduce operational impacts during construction and maintenance outages for the yard. Constructing the third track would require reconstruction of Burnside Court east of Eleven Mile Avenue. An additional crossover would also be needed on the mainline track where it crosses Eleven Mile Avenue; it would require reconstruction of the existing track crossings for vehicles, bicycles, and pedestrians.

1.1.6.2 Expo Center Overnight Light-Rail Vehicle Facility

An overnight facility for LRVs would be constructed on the southwest corner of the Expo Center property (as shown on Figure 1-29). The inclusion of the Expo Overnight Facility allows TriMet the ability to maintain current service and maintenance operations on their Blue Line system and reduce deadheading between Ruby Junction and the northern terminus of the MAX Yellow Line extension. Deadheading occurs when LRVs travel without paying passengers to move the vehicles to and from service. Currently, Blue Line is maintained through a limited nighttime work window. With the inclusion of the Expo Overnight Facility, trains originating service at Evergreen have substantially less deadhead time, reducing Yellow Line operating costs, and Blue Line maintenance windows are retained.

The facility would provide a yard access track, storage tracks for approximately 13 LRVs, one building for light LRV maintenance and operator facilities, a TPSS, a sand silo, a parking lot for operators and facility staff, space for security personnel, and other associated facilities. This facility and the lead tracks connecting to it would necessitate relocation and reconstruction of the internal circulation road from the Expo Road entrance to approximately 100 feet west of Building E of the Expo Center (including southern areas of the parking lot, including gates and booths). However, it would not affect existing Expo Center buildings.

The overnight facility lead track would connect to the mainline tracks by crossing Expo Road just south of the existing Expo Center MAX Station. The connection tracks would require relocation of one or two existing LRT facilities, including a TPSS building and potentially the existing signals/communication building, which are both just south of the Expo Center MAX Station. Existing artwork at the station may require relocation.

1.1.6.3 Additional Bus Bays at the C-TRAN Operations and Maintenance Facility

Three bus bays would be added to the existing C-TRAN OMF located at 2425 NE 65th Avenue in Vancouver. These additional bus bays, which would not require the acquisition of any new property, would provide maintenance capacity for the additional express bus service on I-5 (Section 1.1.7, Transit Operating Characteristics). Modifications to the facility would accommodate new vehicles as well as maintenance equipment.

Figure 1-29. Expo Center Overnight LRV Facility



1.1.7 Transit Operating Characteristics

1.1.7.1 Light-Rail Transit Operations

Nineteen new LRVs would be purchased to operate the extension of the MAX Yellow Line. These vehicles would be similar to those currently used for the TriMet MAX system. With the Modified LPA including all design options, LRT service in the new and existing portions of the Yellow Line in 2045

would operate with 6.7-minute average headways¹⁴ during the 2-hour morning peak period. Midday and evening headways would be 15 minutes, and late-night headways would be 30 minutes. LRT service would operate between the hours of approximately 5 a.m. (first southbound train leaving Evergreen Station) and 1 a.m. (last northbound train arriving at the station), which is consistent with current service on the Yellow Line. LRVs would be deadheaded at Evergreen Station before beginning service each day. A third track at this northern terminus would accommodate layovers.

1.1.7.2 Express Bus Service and Bus on Shoulder

C-TRAN provides bus service that connects to LRT and augments travel between Washington and Oregon with express bus service to key employment centers in Oregon. Beginning in 2022, the main express route providing service in the I-5 corridor, Route 105, had two service variations. One pattern provides service between Salmon Creek and downtown Portland with a single intermediate stop at the 99th Street Transit Center, and one provides service between Salmon Creek and downtown Portland with two intermediate stops: the 99th Street Transit Center and downtown Vancouver. This route currently provides weekday service with 20-minute peak and 60-minute off-peak headways.

In 2045, for both the No-Build Alternative and Modified LPA, C-TRAN Route 105 would be revised to only provide direct service from the Salmon Creek Park and Ride and 99th Street Transit Center to downtown Portland with no intermediate stops in downtown Vancouver. Under the Modified LPA with all design options, this route would operate at 5-minute peak headways with no service in the off-peak, compared to 10-minute peak headways under the No-Build Alternative. Under both the No-Build Alternative and the Modified LPA, C-TRAN Route 105 intermediate stop service through downtown Vancouver would be replaced with C-TRAN Route 101, which would provide direct service from downtown Vancouver to downtown Portland and would operate at 15-minute peak and 30-minute off-peak headways and 10-minute peak and 30-minute off-peak headways, respectively.

Two other existing C-TRAN express bus service routes would remain unchanged after completion of the Modified LPA. C-TRAN Route 190 would continue to provide service from the Andresen Park and Ride in Vancouver to Marquam Hill in Portland. This route would continue to operate on SR 500 and I-5 within the study area. Route headways would be 10 minutes in the peak periods with no off-peak service. C-TRAN Route 164 would continue to provide service from the Fisher's Landing Transit Center to downtown Portland. This route would continue to operate within the study area only in the northbound direction during PM service to use the I-5 northbound high-occupancy vehicle lane in Oregon before exiting to eastbound SR 14 in Washington. Route headways would be 10 minutes during the peak and 30 minutes during the off-peak. These two routes provide the same routing and frequencies in both the No-Build Alternative and the proposed Modified LPA.

C-TRAN express bus Routes 105 and 190 are currently permitted to use the existing southbound inside shoulder of I-5 from 99th Street to the Interstate Bridge in Vancouver. However, the existing shoulders are too narrow for bus-on-shoulder use in the rest of the I-5 corridor in the study area. The Modified LPA would include inside shoulders on I-5 that would be wide enough (approximately 14 feet on the Columbia River bridges and 11.5 to 12 feet elsewhere on I-5) to allow northbound and southbound buses to operate on the shoulder, except where I-5 would have to taper to match existing inside

¹⁴ Headways are defined as gaps between arriving transit vehicles.

shoulder widths at the north and south ends of the corridor. Figure 1-6, Figure 1-10, Figure 1-23, and Figure 1-27 show the potential bus-on-shoulder use over the Columbia River bridges. Bus on shoulder could operate on any of the Modified LPA bridge configurations and bridge types. Additional approvals (including a continuing control agreement), in coordination with ODOT, may be needed for buses to operate on the shoulder on the Oregon portion of I-5.

After completion of the Modified LPA, two C-TRAN express bus routes operating on I-5 through the study area would be able to use bus-on-shoulder operations to bypass congestion in the general-purpose lanes. C-TRAN Route 105 would operate on the shoulder for the full length of the study area. C-TRAN Route 190 would operate on the shoulder for the full length of the corridor except for the distance required to merge into and out of the shoulder as the route exits from and to SR 500. These two express bus routes (105 and 190) would have a combined frequency of every 3 minutes during the 2045 AM and PM peak periods. To support the increased frequency of express bus service, eight electric double-decker or articulated buses would be purchased.

With the C Street ramps design option, C-TRAN Route 101 would use bus on shoulder south of the SR 14 interchange but would not use the full extent of bus-on-shoulder lanes that would be included in the Modified LPA because the route would need to begin merging over early to use the C Street off-ramp to access downtown Vancouver. Without the C Street ramps design option, C-TRAN Route 101 would be rerouted to use the Mill Plain interchange to access downtown Vancouver. Under this design option, the Route 101 would also not use the full extent of bus-on-shoulder lanes that would be included in the Modified LPA but would use the bus on shoulder south of Mill Plain Boulevard and begin merging over early to use the Mill Plain off-ramp.

C-TRAN Route 164 would not be anticipated to use bus-on-shoulder operations because of the need to exit to SR 14 from northbound I-5.

1.1.7.3 Local Bus Route Changes

Two TriMet bus routes would be adjusted to accommodate the transit improvements associated with the Modified LPA. TriMet Line 6 bus route would be changed to terminate at the Expo Center MAX Station instead of Hayden Island, where it terminates currently and in the No-Build Alternative. The new Line 6 route would require passengers to transfer to the new LRT connection to access Hayden Island. TriMet Line 6 is anticipated to travel from Delta Park MAX Station north along Expo Road to the Expo Center MAX Station. Table 1-3 shows the existing service and anticipated future changes to TriMet Line 6. In addition to Line 6, TriMet Route 11 could require slight modifications to maintain transfers to the Expo Center MAX Station, depending on the final design of the station and surrounding area.

As part of the Modified LPA, several local C-TRAN bus routes would be changed to better complement the new light-rail extension. Most of these changes would reroute existing bus lines to provide a transfer opportunity at the proposed new Evergreen Station. Table 1-3 shows existing service and anticipated future changes to C-TRAN bus routes. In addition to the changes noted in Table 1-3, other local bus route modifications may move service from Broadway to C Street.

For both TriMet and C-TRAN detailed service planning analysis, including obtaining public feedback for service changes associated with the Modified LPA, would be conducted prior to the start of revenue service.

Table 1-3. Proposed TriMet and C-TRAN Bus Route Changes

Bus Route	Existing Route	Changes with Modified LPA
TriMet Line 6	Connects Goose Hollow, Portland City Center, N/NE Portland, Jantzen Beach, and Hayden Island. Within the study area, service currently runs between Delta Park MAX Station and Hayden Island via I-5.	Route would be revised to terminate at the Expo Center MAX Station. Route is anticipated to travel from the Delta Park MAX Station, north along Expo Road to connect via facilities on the west side of I-5 with the Expo Center MAX Station.
TriMet Line 11	Connects East Columbia, Expo Center, Smith/Bybee lakes, Rivergate and St. Johns via Marine Drive, Lombard, Columbia, Fessenden, and Ivanhoe.	Stops along Marine Drive would be relocated or the line would be rerouted slightly to connect via facilities on the west side of I-5 with the Expo Center MAX Station.
C-TRAN Fourth Plain and Mill Plain bus rapid transit (The Vine)	Runs between downtown Vancouver and the Vancouver Mall Transit Center via Fourth Plain Boulevard, with a second line along Mill Plain Boulevard. In the study area, service currently runs along Washington and Broadway Streets through downtown Vancouver.	Route would be revised to begin/end near the Evergreen Station in downtown Vancouver and provide service along Evergreen Boulevard to Fort Vancouver Way, where it would travel to or from Mill Plain Boulevard or Fourth Plain Boulevard depending on clockwise/counterclockwise operations. The Fourth Plain Boulevard route would continue to serve existing Vine stations beyond Evergreen Boulevard.
C-TRAN #2 Lincoln	Connects the 99th Street Transit Center to downtown Vancouver via Lincoln and Kaufman Avenues. Within the study area, service currently runs along Washington and Broadway Streets between 7th and 15th Streets in downtown Vancouver.	Route would be modified to begin/end near C Street and 9th Street in downtown Vancouver.
C-TRAN #25 St. Johns	Connects the 99th Street Transit Center to downtown Vancouver via St. Johns Boulevard and Fort Vancouver Way. Within the study area, service currently runs along Evergreen Boulevard, Jefferson Street/Kaufman Avenue, 15th Street, and Franklin Street in downtown Vancouver.	Route would be modified to begin/end near C Street and 9th Street in downtown Vancouver.

Bus Route	Existing Route	Changes with Modified LPA
C-TRAN #30 Burton	Connects the Fisher’s Landing Transit Center with downtown Vancouver via 164th/162nd Avenues and 18th, 25th, 28th, and 39th Streets. Within the study area, service currently runs along McLoughlin Boulevard and on Washington and Broadway Streets between 8th and 15th Streets.	Route would be modified to begin/end near C Street and 9th Street in downtown Vancouver.
C-TRAN #60 Delta Park Regional	Connects the Delta Park MAX Station in Portland with downtown Vancouver via I-5. Within the study area, service currently runs along I-5, Mill Plain Boulevard, and Broadway Street.	Route would be discontinued.

1.1.8 Tolling

Consistent with the CRC LPA, tolling cars and trucks that would use the new Columbia River bridges is proposed as a method to help fund the bridge construction and future maintenance, as well as to provide different mode, time, and destination choices for trips across the Columbia River. The sections below describe the tolling authority and tolling operations.

1.1.8.1 Tolling Authority

Federal and state laws provide authority to toll the I-5 crossing. The IBR Program plans to toll the new Columbia River bridges under the federal tolling authorization program codified in 23 U.S. Code (U.S.C.) § 129 (Section 129). Section 129 allows public agencies to impose new tolls on federal-aid interstate highways for the reconstruction or replacement of toll-free bridges or tunnels. In 2023, the Washington State Legislature authorized tolling on the Interstate Bridge, with toll rates and policies to be set by the Washington State Transportation Commission (WSTC). In Oregon, the legislature authorized tolling on the Interstate Bridge in 2013 and gave the Oregon Transportation Commission (OTC) the authority to set toll rates and policies. Subsequently, in January 2025, the OTC reviewed and approved the I-5 tollway project application that designated the IBR Program as a “tollway project” and the facility (the I-5 bridge) as a

Tolling Equipment

Below are the key types of equipment used to collect data for billing purposes.

Transponders: Small tags affixed to vehicles that communicate with tolling equipment as the vehicle passes.

Antenna/Readers: As a vehicle with a transponder enters a toll zone, an antenna transmits a signal between the transponder and the reader. The reader then transmits pertinent information to the toll zone controller.

Automatic Vehicle Classification: Various roadway devices installed overhead and/or in pavement to detect and identify the vehicle type (e.g., truck, bus, personal vehicle, etc.).

License Plate Image Capture Cameras: Cameras and software that capture images of license plates as vehicles pass.

Digital Video Audit System: Various types of cameras monitor traffic flow and equipment locations.

tollway for construction as defined in Oregon Revised Statutes (ORS) 383.003(8) and pursuant to ORS 383.015.

At the beginning of 2024, the OTC and the WSTC entered into a bi-state tolling agreement to establish a cooperative process for setting toll rates and policies. This included the formation of the I-5 Bi-State Tolling Subcommittee, which consists of two commissioners each from the OTC and WSTC, and tasked the subcommittee with developing toll rate and policy recommendations for joint consideration and adoption by each state's commission. At the direction of the commissions, all toll scenarios being analyzed in the next round of tolling analysis (referred to as a level 3 toll traffic and revenue study) for the IBR Program assume a low-income discount. Formal action is still needed by the commissions to implement rates and policies, including discounts and exemptions.

In December 2024, a Memorandum of Understanding (MOU) was executed by both states that outlined their shared understanding of tolling operations, including cooperation between the state Departments of Transportation and roles and responsibilities for the IBR Program. Toll collection would be managed by WSDOT, including drivers' option to use *Good To Go!* accounts for paying tolls. In addition to the memorandum, the two states plan to enter into a separate agreement guiding the sharing and uses of toll revenues, including the order of uses (flow of funds) for bridge construction, debt service, and other required expenditures. WSDOT and ODOT also plan to enter into one or more agreements addressing implementation logistics, toll collection, and operations and maintenance for tolling the bi-state facility.

1.1.8.2 Tolling Operations

The Modified LPA includes a proposal to apply variable tolls on vehicles using the Columbia River bridges with the toll collected electronically in both directions. Tolls would vary by time of day with higher rates during peak travel periods and lower rates during off-peak periods. The IBR Program evaluated multiple toll scenarios with two different variable toll schedules by time of day. For purposes of this National Environmental Policy Act (NEPA) analysis, the lowest toll schedule was analyzed, with tolls assumed to range between \$1.50 and \$3.15 (state fiscal year 2026 dollars) for passenger vehicles and light trucks (i.e., vehicles with two axels) with a *Good To Go!* account. The assumed toll range and other assumptions are documented in the IBR Program Level 2 Toll Traffic and Revenue Study (IBR 2023). Medium and heavy trucks (i.e., vehicles with more than two axels) would be charged a higher toll than passenger vehicles and light trucks. Passenger vehicles and light trucks without a *Good To Go!* account would pay an additional \$2.00 per trip to cover the cost of identifying the vehicle owner from the license plate and invoicing the toll by mail.

It is assumed that tolling would begin on the existing Interstate Bridge, referred to as "pre-completion tolling," in 2027, allowing time after receiving a Record of Decision to hire a contractor, install tolling equipment, and conduct the rate-setting process. The purpose of pre-completion tolling would be to generate initial capital construction funding on a pay-as-you-go basis. Later, toll revenue would be used to secure a portion of Program financing to pay back bonds or loans. Pre-completion tolling would also help pay current interest on the debt to minimize interest costs. Once the new Columbia River bridges are completed, the traffic and tolling operations would shift from the existing Interstate Bridge over to the new bridges, and 24-hour tolls would be implemented; this is referred to as "post-completion tolling."

The start dates for pre-completion tolling would be determined based on the IBR Program environmental and construction timelines; placeholders for tolling start dates were used in this NEPA analysis. This NEPA analysis assumed that pre-completion tolling on the existing Interstate Bridge would be toll-free overnight between 11 p.m. and 5 a.m. (IBR 2023). The OTC and WSTC are also considering this as an option during the level 3 toll traffic and revenue study; however, a decision has not been made on whether these toll-free hours would be implemented. This toll-free period could help avoid situations where users would be charged during lane or partial bridge closures when construction delays may occur.

Tolls would be collected using an all-electronic toll collection system using transponder pass readers and license plate cameras mounted to structures over the roadway. Each traffic lane and shoulder would have a pass reader and license plate camera to ensure accurate detection of vehicles. Toll collection booths would not be required. Instead, motorists could obtain a pass and set up a *Good To Go!* account that would automatically bill the account holder associated with the pass each time the vehicle crossed the bridge. Customers without passes would be tolled by a license plate recognition system that would bill the address of the owner registered to that vehicle's license plate.

There would be two separate "toll zones," which are the area in which the tolling system would detect and classify passing vehicles and then transmit pertinent information to the toll zone controller (Figure 1-30). There would be one zone for northbound traffic and one zone for southbound traffic. During pre-completion tolling, the toll zones would be located on I-5 in Vancouver, between the Interstate Bridge and the BNSF Railway. The location of the post-completion toll zones would be determined at a later date, but it is anticipated that both toll zones would remain in Vancouver.

Figure 1-30. Toll Zone



One gantry (i.e., overhead structure) would be located in each toll zone (Figure 1-30). Generators and equipment cabinets would be located nearby, which would house various equipment needed to support toll operations. Additional equipment cabinets would be placed throughout the Program area to support tolling operations, such as near the toll rate signage (see below).

As previously noted, a key element of tolling would be variable-rate pricing, where toll rates would differ based on the time of day a vehicle uses the bridge. To accomplish this, toll rate signs would be installed at route decision points on local roads, I-5 on-ramps, and on I-5, including locations north and south of the bridges where drivers make informed route decisions (e.g., I-5/Interstate 205 junction and I-5/Interstate 84 junction). The intent of the toll rate signs is to provide both static and variable pricing information. The static sign would contain details such as direction, wayfinding, or other information. These signs would also include a variable message sign panel that would show toll rate(s) in effect at that time.

1.1.9 Transportation System- and Demand-Management Measures

Many well-coordinated transportation demand-management and system-management programs are already in place in the Portland-Vancouver metropolitan region. In most cases, the impetus for the programs comes from state regulations: Oregon’s Employee Commute Options rule and Washington’s Commute Trip Reduction law (described in the sidebar).

The physical and operational elements of the Modified LPA provide the greatest transportation demand-management opportunities by promoting other modes to fulfill more of the travel needs in the corridor. These include:

- Major new light-rail line in exclusive right of way, as well as express bus routes and bus routes that connect to new light-rail stations.
- I-5 inside shoulders that accommodate express buses.
- Modern bicycle and pedestrian facilities that accommodate more bicyclists and pedestrians and improve connectivity, safety, and travel time.
- Park and rides.
- A variable-rate toll on the new Columbia River bridges.

In addition to these fundamental elements of the Modified LPA, facilities and equipment would be implemented that could help existing or expanded transportation system-management measures maximize the capacity and efficiency of the system. These include:

- Replacement or expanded variable message signs in the primary study area. These signs alert drivers to incidents and events, allowing them to seek alternate routes or plan to limit travel during periods of congestion.
- Replacement or expanded traveler information systems with additional traffic monitoring equipment and cameras.
- Expanded incident response capabilities, which help traffic congestion to clear more quickly following accidents, spills, or other incidents.
- Queue jumps or bypass lanes for transit vehicles where multilane approaches are provided at ramp signals for on-ramps. Locations for these features will be determined during the detailed design phase.

State Laws to Reduce Commute Trips

Oregon and Washington have both adopted regulations intended to reduce the number of people commuting in single-occupancy vehicles (SOVs). Oregon’s Employee Commute Options Program, created under Oregon Administrative Rule 340-242-0010, requires employers with over 100 employees in the greater Portland area to provide commute options that encourage employees to reduce auto trips to the work site. Washington’s 1991 Commute Trip Reduction (CTR) Law, updated as the 2006 CTR Efficiency Act (Revised Code of Washington §70.94.521) addresses traffic congestion, air pollution, and petroleum fuel consumption. The law requires counties and cities with the greatest traffic congestion and air pollution to implement plans to reduce SOV demand. An additional provision mandates “major employers” and “employers at major worksites” to implement programs to reduce SOV use.

- Active traffic management strategies including ramp metering and dynamic speed limits. These strategies are intended to manage congestion by controlling traffic flow.

1.1.10 Off-Site Mitigation Sites

The IBR Program will provide off-site mitigation for unavoidable impacts to natural resources, including fish and wildlife species and their habitats, wetlands, surface waters, floodplains, and other regulated habitat features (refer to the Final SEIS, Sections 3.14, Water Quality and Hydrology; 3.15, Wetlands; and 3.16, Ecosystems).¹⁵ Applicable federal, state, and local regulatory frameworks require mitigation sequencing that includes avoidance and minimization of impacts, and compensatory mitigation to achieve “no net loss” of the resource or its functions. Mitigation must fully offset the impacts of the Modified LPA and achieve this “no net loss” standard. The Modified LPA would result in unavoidable impacts to natural resources, which would require mitigation under one or more regulatory frameworks. Mitigation plans and mitigation bank use plans will be prepared to provide compensation for any such unavoidable impacts to regulated resources (wetlands, waters, floodplain, sensitive habitats) and to demonstrate that the IBR Program will achieve “no net loss” of function of these resources. The IBR Program is preparing functional assessments and coordinating with regulatory agencies to quantify the amount and type of compensatory mitigation required to offset Program impacts and achieve “no net loss.”

It is anticipated that compensatory mitigation for unavoidable impacts to aquatic and terrestrial habitats and species in Washington will be provided through the purchase of credits from the proposed Wapato Valley Mitigation and Conservation Bank (Figure 1-31). The bank is approximately 876 acres and is located in the Columbia River floodplain at the mouth of the Lewis River, approximately 19 river miles downstream of the Interstate Bridge. Approval of the bank is expected in 2026.

It is anticipated that compensatory mitigation for unavoidable impacts to wetlands, and aquatic and terrestrial habitats and species in Oregon will be provided partially through the purchase of advance mitigation credits at ODOT’s proposed Columbia Bottomlands Advance Mitigation/Conservation Site, and partially through the purchase and protection under conservation easement of a site on West Hayden Island (shown on Figure 1-31). The Columbia Bottomlands Advanced Mitigation/Conservation site is located in Scappoose Bay, a slough of Multnomah Channel, in Columbia County, Oregon. The site is located approximately 1 mile upstream of where the Multnomah Channel meets the Columbia River and approximately 20 river miles downstream of the Interstate Bridge. The site has been designed to provide advance mitigation credits for impacts to wetlands and aquatic and terrestrial habitats and species for future ODOT projects. All impacted wetlands and other water features would be mitigated in accordance with current USACE mitigation policies, and the conditions of the Section 404 Permit. All compensatory mitigation plans would be developed in coordination with the USACE and other appropriate agencies as part of the Section 404 permitting process. The USACE and other appropriate agencies would determine the appropriate level of mitigation based upon the functions lost or adversely affected as a result of impacts to aquatic resources.

¹⁵ On-site mitigation is identified and analyzed in relevant subsections of Chapter 3, Existing Conditions and Environmental Consequences of the Final SEIS.

The proposed site on West Hayden Island is approximately 65 acres in size and is located approximately 2.5 river miles downstream of the Interstate Bridge, on the south side of the island adjacent to North Portland Harbor. The site is currently owned by the Oregon Department of State Lands, but ODOT has proposed to purchase this site and place it under a conservation easement. One or more compensatory mitigation projects may also be conducted on the site. The specific activities to be conducted at this site would be developed in coordination with the applicable regulatory agencies for each of the various permit applications.

In addition to the compensatory wetland and habitat mitigation described above, the IBR Program may need to excavate material from within the 100-year floodplain to address the compensatory excavation requirements of the City of Portland's recently updated floodplain ordinance. If such activity is required, it is anticipated that this material would be removed from upland portions of the 65-acre parcel on West Hayden Island described above or from aquatic areas adjacent to this parcel. If such excavation activities are conducted, excavated materials will be disposed of at a location approved to receive that type of material.

Figure 1-31. Potential Compensatory Mitigation Sites



1.2 Modified LPA Construction

Construction of the IBR Program would be sequenced in accordance with many factors, such as the scale of improvements, different types of infrastructure and associated construction specialties required, timing of funding received, maintenance of traffic on I-5, navigation on the Columbia River, seasonal and weather constraints, permit conditions, and other considerations. Multiple construction packages are anticipated to be developed and delivered by different agencies—WSDOT, ODOT, TriMet, and C-TRAN—that will use various delivery methods (e.g., design-bid-build, design-build, progressive design-build, construction manager/general contractor).

The first construction packages are anticipated to be the new Columbia River bridges and approaches. Subsequent construction packages would be sequenced throughout the Program area. Early construction activities may occur in the Program area to prepare for the bridge replacement work. Demolition of the existing Interstate Bridge would take place after the new Columbia River bridges were opened to traffic. Construction of other components of the Modified LPA would be sequenced during and after the construction of the new Columbia River bridges begins.

Electronic tolling infrastructure for the existing Interstate Bridge would be constructed and operational near the start of construction on the new Columbia River bridges and would be constructed and operational for the new Columbia River bridges in time for their opening. The toll rates and policies for tolling (including pre-completion tolling) would be determined by the OTC and WSTC (refer to Section 1.1.8, Tolling).

1.2.1 Construction Components, Packaging Plan, and Duration

Table 1-4 lists the main construction components of the Modified LPA along with the estimated construction durations and descriptions of the associated work. Construction packages are also listed in Table 1-4 and illustrated in Figure 1-32. These main construction components would be defined by some functional improvement to the Program corridor; for example, construction of the new bridges would be coordinated with the construction of the connections to the existing I-5, enabling use of the new bridges while other components of the Program are constructed. Each listed component would require multiple construction packages—small and large, general and specialty. As construction progresses, interim connections may be in place while subsequent components are built and final connections and finishes are completed. This preliminary construction plan may change as the Program advances toward construction. Construction packages may further be combined or separated throughout delivery of the Program. Construction of all components identified in the Program could last more than 10 years.

The estimated durations are shown as ranges to reflect the potential for Program funding to be sequenced over time. In addition to funding, contractor schedules, regulatory restrictions on in-water work, river navigation considerations, permits and approvals, weather, materials, and equipment could all influence construction duration and overlap of construction of certain components. Certain work below the ordinary high-water mark of the Columbia River and North Portland Harbor would be restricted to minimize impacts to species listed under the Endangered Species Act and their designated critical habitat.

Throughout most periods of construction, three travel lanes in each direction on I-5 (accommodating personal vehicles, freight, and buses) would remain open during peak hours. Off-peak and weekend restrictions and closures could be required during construction. Active transportation connections would be maintained throughout construction. Advanced coordination and public notice would be given for restrictions, intermittent or longer-term closures, and detours for highway, local roadway, transit, and active transportation users via accessible facilities and wayfinding (refer to the Final SEIS, Section 3.1, Transportation, for additional information, including for local street and ramp or interstate access closures). At least one Columbia River navigation channel would remain open to shipping throughout construction. Advanced coordination and notice would be given for restrictions or intermittent closures to navigation channels as required (refer to the Final SEIS Section 3.2, Navigation, for additional information).

Table 1-4. Preliminary Construction Packaging Plan

Component and General Location	Estimated Duration	Description	Construction Packages
Columbia River bridges, approaches, and demolition of Interstate Bridge <i>Hayden Island to Evergreen Boulevard</i>	6 to 8 years	<ul style="list-style-type: none"> • General sequence for new bridges would include initial preparation and installation of foundation piles, shaft caps, pier columns, superstructure, and deck elements, followed by systems and finish work. • SR 14 interchange would be constructed in a separate construction package and must be completed before all traffic could be transferred to the new Columbia River bridges. • Demolition of the existing Interstate Bridge could begin only after traffic is transferred to the new Columbia River bridges. 	<ul style="list-style-type: none"> • Columbia River Bridges^a • Approaches^a • Pre-completion Tolling Signage and Equipment Installation • SR 14 A • Evergreen Bridge • Interstate Bridge Demolition
Light-rail and bus-on-shoulder transit <i>Expo Station to Evergreen Station; Ruby Junction</i>	4 to 7 years	<ul style="list-style-type: none"> • The light-rail alignment would be partially supported by the southbound Columbia River bridge and approach structure guideways. • Light-rail construction would include all infrastructure associated with light-rail elements of the Transit Packages construction package (e.g., overhead catenary system, tracks, stations, and park and rides). • Bus on shoulder would include corresponding bus elements of the Transit Packages construction package. 	<ul style="list-style-type: none"> • North Portland Harbor Transit Bridge • Marine Drive A (supports transit improvements) • Hayden Island A (supports transit improvements) • Light-rail Overnight Facility • Transit Packages • Ruby Junction

Component and General Location	Estimated Duration	Description	Construction Packages
Marine Drive and Hayden Island interchanges and North Portland Harbor bridges <i>Marine Drive to Hayden Island</i>	4 to 10 years	<ul style="list-style-type: none"> • Hayden Island interchange construction duration would not necessarily entail continuous active construction. • The North Portland Harbor bridges could include sequenced construction of southbound bridges, northbound bridges, and demolition of the existing North Portland Harbor bridge to maintain traffic mobility during construction. • Hayden Island and Marine Drive interchanges could be broken into several contracts, which could spread work over a longer duration. 	<ul style="list-style-type: none"> • Hayden Island Surface Streets • Hayden Island Interchange • North Portland Harbor Bridges • Oregon I-5 Southbound • Oregon I-5 Northbound • North Portland Harbor Bridge Removal • Marine Drive Interchange • North Expo Road
Mill Plain Boulevard, Fourth Plain Boulevard, and SR 500/39th Street interchanges <i>Mill Plain Boulevard to SR 500</i>	3 to 4 years	<ul style="list-style-type: none"> • Construction of these interchanges could be independent from each other. 	<ul style="list-style-type: none"> • Mill Plain Boulevard Interchange • Washington North

a The Columbia River Bridges and Approaches construction packages include light-rail guideway from the Hayden Island Bridge Approach, the Columbia River bridges, north to Evergreen Boulevard.

Figure 1-32. Preliminary Construction Packages



1.2.2 Potential Staging Sites and Casting Yards

Equipment and materials would be staged in the primary study area throughout construction generally within existing or newly purchased right of way, on land vacated by existing transportation facilities (e.g., I-5 on Hayden Island), or on nearby parcels. However, at least one large site could be required for construction offices, equipment maintenance and storage, maintenance of traffic equipment, employee parking, and construction material storage and other needs. Criteria for suitable sites include large, open areas for heavy machinery and material storage, waterfront access for barges (either a slip or a dock capable of handling heavy equipment and material) to convey material to the construction zone, and roadway or rail access for landside transportation of materials by truck or train.

Two potential major staging sites have been identified (see Figure 1-6). Both sites are located on Hayden Island on the west side of I-5. A large portion of both parcels would be required for new right of way for the Modified LPA. Other staging sites may be identified during the design process or by the contractor. Following construction of the Modified LPA, the staging sites could be converted to other uses.

In addition to on-land sites, some staging activities for construction of the new Columbia River and North Portland Harbor bridges would take place on the river itself. Temporary work structures, barges, barge-mounted cranes, derricks, and other construction vessels and equipment would be present on the river during most or all of the bridges' construction period. The IBR Program is working with USACE, USCG, and the Federal Aviation Administration to obtain necessary clearances for these activities.

A casting or staging yard could also be required for construction of the overwater bridges if a precast concrete segmental bridge design is used. A casting yard would require access to the river for barges, a slip or a dock capable of handling heavy equipment and material, a large area suitable for a concrete batch plant and associated heavy machinery and equipment, and access to a highway or railway for delivery of materials. Such a site would likely be between approximately 50 and 100 acres. As with the staging sites, casting yards would be identified during the design process or by the contractor and would be subject to the same contract and permit requirements to implement the best management practices (BMPs) described in Appendix M to the Final SEIS unless more stringent permitting requirements and conditions are required at the time of identification.

All material staging, equipment staging areas, equipment fueling areas, and casting yards would be contained and located outside of environmentally and culturally sensitive areas. To the extent practicable, these sites would be located in upland locations, on areas that are already or have been previously disturbed. These activities would be conducted consistent with the impact minimization BMPs described in Appendix M to the Final SEIS. Construction of the Modified LPA would also include revegetating temporarily disturbed areas consistent with federal, state, and local regulations, and the net result would be no net loss of habitat function in the long term. As with the staging sites, casting or staging yard sites may be identified as the design progresses or by the contractor and would be evaluated via a NEPA re-evaluation or supplemental NEPA document for potential environmental impacts at that time.

1.3 No-Build Alternative

The No-Build Alternative illustrates how transportation and environmental conditions would likely change by the year 2045 if the Modified LPA is not built. This alternative makes the same assumptions as the Modified LPA regarding population and employment growth through 2045, and it assumes that the same transportation and land use projects in the region would occur as planned.

Regional transportation projects included in the No-Build Alternative are those in the financially constrained 2018 *Regional Transportation Plan* (RTP) adopted in December 2018 by the Metro Council (Metro 2018) and in March 2019 (RTC 2019) by the Southwest Washington Regional Transportation Council (RTC) Board of Directors (referred to collectively as the 2018 RTP in this report).¹⁶ The 2018 RTP has a planning horizon year of 2040 and includes projects from state and local plans necessary to meet transportation needs over this time period; financially constrained means these projects have identified funding sources. The Transportation Technical Report lists the projects included in the financially constrained 2018 RTP.

The implementation of regional and local land use plans is also assumed as part of the No-Build Alternative. For the IBR Program analysis, population and employment assumptions used in the 2018 RTP were updated to 2045 in a manner consistent with regional comprehensive and land use planning. In addition to accounting for added growth, adjustments were made within Portland to reallocate the households and employment based on the most current update to Portland's comprehensive plan, which was not complete in time for inclusion in the 2018 RTP.

Other projects assumed as part of the No-Build Alternative include major development and infrastructure projects that are in the planning stage, permitting stage, or partway through phased development. They include the Waterfront Vancouver project, Terminal 1 development, the Renaissance Boardwalk, the Waterfront Gateway project, improvements to the levee system, several restoration and habitat projects, and the Portland Expo Center.

In addition to population and employment growth and the implementation of local and regional plans and projects, the No-Build Alternative assumes that the existing Interstate Bridge would continue to operate as it does today. As the bridge ages, needs for repair and maintenance would potentially increase, and the bridge would continue to be at risk of mechanical failure or damage from a seismic event.

¹⁶ The 2018 RTP was the adopted regional transportation plan available when the IBR Program initiated the SEIS. In 2023, Oregon Metro and RTC updated their respective RTPs as part of their five-year update cycle, as required under 23 CFR Part 450.324. The 2023 RTP was adopted by Oregon Metro in 2023 and RTC in 2024, several years after the IBR Program Draft SEIS analysis was initiated in early 2021. To use the regional travel demand model supporting the 2023 RTP, additional refinement and coordination would be necessary for it to be ready for use in a facility-specific study, such as the IBR Program. This refinement and coordination process is lengthy and can take up to a year and a half for a complex project with numerous partner agencies, like the IBR Program. Therefore, the NEPA lead agencies exercised their discretion and determined, based on their technical expertise, that the 2018 RTP and Travel Demand Model continued to be the most appropriate base tool for the purposes of comparing the No-Build Alternative to the Modified LPA and design options in the Final SEIS.

2. METHODS

2.1 Introduction

This chapter describes the methods used to support the IBR Program environmental evaluation and outlines the approach to evaluating the beneficial and adverse impacts of a Modified LPA. This technical report evaluates potential land acquisitions and displacements that would result from the construction of the Modified LPA.

This chapter includes a description of the analysis area, relevant laws and regulations, significance thresholds, and methods for collecting data, assessing impacts, and evaluating possible mitigation measures. The analysis is designed to comply with NEPA and relevant federal, state, and local laws. These methods are based on those developed for the CRC project, which completed the NEPA process with a signed ROD in 2011, as well as NEPA reevaluations in 2011 and 2013.¹⁷ The CRC project was discontinued in 2014; the IBR Program is evaluating what changes in regulations, policy, and physical conditions have occurred since the completion of the ROD. The updated methods were used to evaluate the potential environmental impacts associated with the Modified LPA.

Property acquisition and displacement are defined as follows:

- Acquisition – An acquisition occurs if part or all of a property or a legal right to a property is purchased or otherwise acquired for temporary or permanent use by a project. An acquisition can be fee title, wherein all property rights are acquired, or an easement, in which certain rights, but not ownership, are obtained.
- Displacement – A displacement occurs if a use, such as a building or parking lot, is demolished or required to move as a result of a project, or if people, a business, or personal property are no longer able to occupy the real property as a result of the project. Individuals, businesses, or personal property displaced from the acquired real property would be eligible to receive relocation benefits.

Acquisitions and displacements may be required if a project requires new or additional right of way. The property acquisitions analysis in this technical report identifies properties, including residences, businesses, and public facilities, that would be acquired for the construction of the Modified LPA. Federal, state, and local laws require that acquisition and relocation impacts of projects be assessed and that property acquisitions and relocation for federally funded projects conform to standards established by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) and that relocation resources are available to all residential and business displacements without discrimination. This analysis also evaluates potential mitigation measures, to the extent necessary, for displaced businesses and residences.

¹⁷ The ROD and supporting environmental documents can be found on the Washington Department of Transportation's website: <https://www.wsdot.wa.gov/accountability/ssb5806/environmental-process-and-permitting.htm>

This report addresses the following questions, based on the preliminary design of the Modified LPA:

- How much land would be acquired, temporarily and permanently, to construct the Modified LPA?
- How many parcels would the IBR Program impact, and to what degree (e.g., entire parcel, portion of parcel)?
- What type of uses would be displaced by the IBR Program?
- Are there comparable business and residential opportunities in the area to accommodate these displaced businesses and households?

The methods used in this report follow those used in the CRC effort. No significant changes to policy or process have been identified. The IBR Program acquisitions and displacements analysis includes updated 2022 property information data and is based on the Modified LPA.

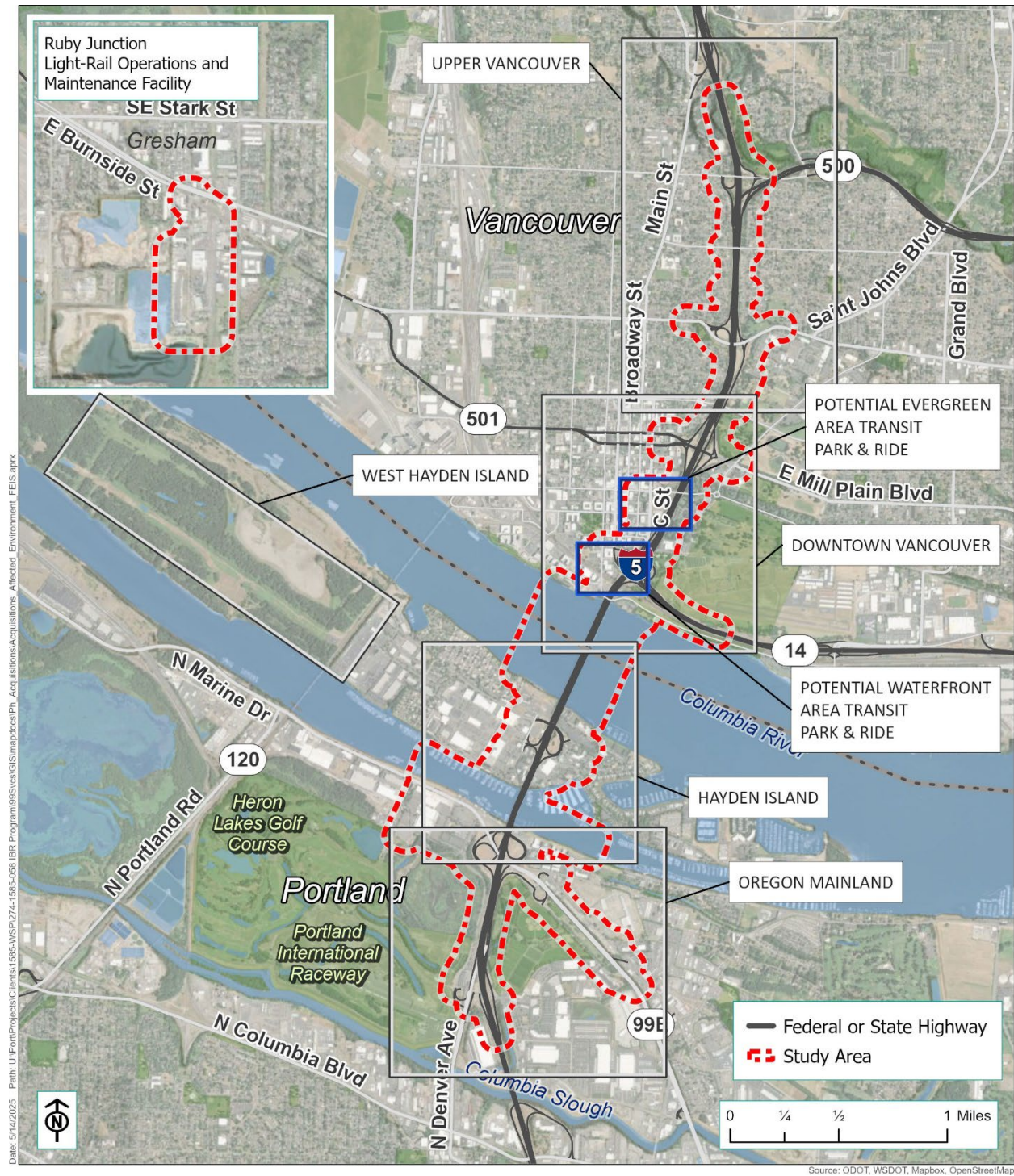
2.2 Study Area

The study area for the property acquisitions analysis includes all areas directly affected by the footprint of the Modified LPA including new or improved highway, transit, and bicycle and pedestrian facilities, fee title and permanent easement acquisitions required to construct the facilities, temporary construction easements, and potential staging areas and casting yards.

The IBR Program study area runs along a 5-mile segment of I-5, approximately between the SR 500 interchange in Washington and the I-5/Columbia Boulevard interchange in Oregon. Most physical changes associated with the Program would occur in this area, though mitigation could still occur outside of it. Temporary construction easements would be established directly adjacent to the proposed construction areas, while larger staging areas and casting yards could be located upstream or downstream of the Columbia River bridges. The CRC LPA and the IBR Modified LPA also include expansion of the TriMet-owned Ruby Junction Light-Rail Operations and Maintenance Facility (OMF) in Gresham, Oregon.

Figure 2-1 shows the IBR Program study area and acquisition reporting subareas.

Figure 2-1. Study Area



This report determines the potential for relocating displaced residences or businesses by exploring vacancy rates and other measures of availability throughout the study area. This exploration is an initial step in the process of relocation; additional details are provided in Section 2.6.4 and Section 3.2.3. Vacancy rate information is reported by third-party firms, such as the Regional Multiple Listing Service (RMLS), and is usually summarized for specific geographies, e.g., west Vancouver, downtown Vancouver, and northeast Portland. For the purposes of this report, this information is reported for those geographies in the study area.

2.3 Relevant Laws and Regulations

2.3.1 Federal

- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (49 Code of Federal Regulations [CFR] Part 24, Public Law 91.646, 42 U.S.C. § 4601, et seq.).
 - This act is relevant for any acquisitions or relocations that occur due to project activities. The purpose of the Uniform Act is stated as “To provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.”
- Title VI of the National Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.).
 - This act prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance, and protects minority persons in the study area.

2.3.2 State

2.3.2.1 Oregon

- Oregon Revised Statutes 35.205–35.625.
 - Together with the Uniform Act, these laws govern mitigation measures for offsetting the potential adverse effects resulting from the acquisition of land or displacement of residences or businesses.
- Oregon Department of Transportation, Right of Way Manual (ODOT 2018).
 - This manual provides interpretations and implementation procedures for discretionary elements of the Uniform Act.

- Oregon’s Statewide Planning Goals and Guidelines, Oregon Administrative Rule 660-15-0000(10), Goal 10, Housing.
 - Statewide Planning Goal 10 is intended to provide for the housing needs of the citizens of the state. Comprehensive plans and zoning codes must encourage the availability of adequate housing units at price ranges and rent levels that are commensurate with the financial capabilities of Oregon households. The City of Portland must incorporate the principles of the Statewide Planning Goals in its comprehensive plan and zoning code. No data collection or analysis will be conducted specifically for this statute, as it is implemented through local code and plans.
 - Oregon Statewide Planning Goals and neighborhood and community plans, and the potential effects of acquisitions and displacements on these goals and plans, are addressed in the Land Use Technical Report and Neighborhoods and Populations Technical Report.

2.3.2.2 Washington

- Revised Code of Washington, Chapter 8.26.
 - This code establishes state law for implementing the Uniform Act.
- Washington Administrative Code 468-100.
 - This code establishes state guidelines for implementing the Uniform Act.
- Washington Department of Transportation, Right of Way Manual (WSDOT 2020).
 - This manual provides interpretations and implementing procedures for discretionary elements of the Uniform Act.

2.3.3 Local

- TriMet Administrative Rules for Relocation Appeals (TriMet 2004)
 - TriMet, the municipal corporation providing public transportation for much of the three counties in the Portland metropolitan area, provides guidelines for conducting informal relocation conferences and formal appeals hearings on relocation-specific transit projects being constructed by TriMet.
- C-TRAN, the agency providing transit mobility options to residents of Clark County, abides by all federal and state displacement and acquisition policies; the agency does not have special rules for their implementation nor requirements for additional actions.

2.4 Effects Guidelines

This analysis addresses two types of direct impacts: the acquisition of additional right of way to construct the Modified LPA and the potential displacement of the following types of uses:

- Residential
 - Single-family
 - Multifamily

- Commercial
 - Retail/Services
 - Office/Professional/Healthcare
 - Lodging
 - Parking
- Public Use
 - Public Service with Employees
 - Park/Historic Site/Museum
 - Religious/Community Center
 - School

The analysis considers permanent acquisition needs, as well as temporary acquisitions or displacements associated with construction easements and larger staging and casting areas. The analysis does not include finalized quantities of subsurface and air leases, as these will be determined during final design.

The secondary impacts of acquisitions and displacements in relation to specific environmental conditions are assessed separately in the Land Use, Public Services, Neighborhoods and Populations, and Economics Technical Reports and Chapter 5 of the SEIS, Section 4(f) Evaluation.

2.5 Data Collection Methods

Right-of-way estimates have been developed by the IBR Program engineering team using computer-aided design and drafting (CADD) drawings of the Modified LPA. The engineering data provided the approximate size and shape of permanent right-of-way requirements, permanent airspace and subsurface easements, and temporary construction easements. From this information, the Program team estimated whether the project would require only a portion of the parcel (a partial acquisition), or the entire parcel (a full acquisition), and whether an impact would displace the use of the property. The Washington and Oregon real estate teams reviewed and concurred with the determinations of level of impact for each parcel and the possibility of displacement. The CADD drawings and impact information were translated into a database using geographic information system (GIS) technology. Temporary construction easements and staging areas required to construct the Modified LPA were also estimated to the extent feasible at the current level of project development.

2.5.1 Primary Data Sources

Primary data sources used in the CRC effort were updated to reflect IBR Program design refinements and updated tax lot boundaries, ownership, and existing uses. Updated tax lot boundaries, ownership, and existing uses were provided by the Clark County Tax Assessor and Metro in 2023.

2.6 Analysis Methods

There are four basic steps in the property acquisition analysis. This section outlines the steps of data collection that were completed for the analysis.

2.6.1 Step 1: Determine Right-of-Way Requirements

General requirements for right of way for the highway, transit, and bicycle and pedestrian components of the IBR Program were determined by the Program team. The engineering team determined the general dimensions of the required right of way by parcel to enable the Program team to estimate the extent of the permanent impacts and determine the type of acquisition—full or partial acquisition of the parcel, with or without the displacement of the use—that may be required. The Program team also identified the temporary construction easements that will be needed to construct the Modified LPA, as well as possible staging areas that could also be required depending on construction methods.

Program staff identified additional supporting facilities for the Modified LPA, which were included in the footprint used in the acquisitions analysis. For example, arterial widening at interchanges, local street improvements, and transit maintenance facilities are included in the summary of acquisitions for the IBR Program.

2.6.2 Step 2: Identify Ownership and Land Use of Parcels

Tax assessors' records for Multnomah and Clark Counties—and other information gathered through contacts with local agency staff, property owners, and community meetings—were used to determine the ownership and use of properties required for the IBR Program.

Public facilities potentially affected by the IBR Program were also identified during this step. Public facilities include offices, recreation centers, warehouse or storage buildings, parking lots, and parks, etc. operated and maintained by public agencies. This includes any public agency function housed on property leased from private parties. The location, type, and condition of any such facilities were verified for this analysis.

2.6.3 Step 3: Verify Findings through Research and Field Investigation

To the extent possible, the Program team verified property information and potential impacts through field investigation. The team checked the location and use type of existing buildings and other improvements. Notations were made concerning the operating characteristics of particular properties subject to acquisition. Additionally, properties identified as potentially having residential or business displacements were surveyed to determine use (e.g., multifamily versus single-family, number of businesses operating).

2.6.4 Step 4: Assess Mitigation Potential

Vacancy and rental rates of residential, commercial, and industrial properties are an indication of the potential for finding viable sites for relocating displaced residents and businesses. Higher vacancy

rates generally indicate greater potential for relocating a displaced use to a location that is desirable to the property owner or tenants. The supply of homes for sale, average length of time that single-family homes are on the market prior to sale, and median single-family home sale price also indicate the potential for finding viable sites for relocating residents of single-family homes. Information on real estate stock, vacancy rates, rental rates, and home values have been collected from RMLS for residential properties and the commercial real estate firm SVN Bluestone & Hockley for commercial properties.

2.7 Coordination

Coordination with affected property owners, working groups, and IBR Program partners will follow a process similar to what was completed for the CRC project. The IBR Program team will conduct extensive outreach to neighborhood groups, business groups, and other potentially affected parties. Prior to publication of the Draft SEIS, property owners potentially affected by project alternatives were notified directly via mail, and meetings specifically focused on the project's potential right-of-way needs will be held. Any property owner concerned about impacts on their property can contact the project team to either talk by phone or set up a meeting at the project office to discuss potential impacts, the property acquisition and relocation process, and the schedule for property acquisitions, among other topics. For publicly owned aquatic lands, coordination meetings will be held with both the Oregon Department of State Lands (DSL) and the Washington Department of Natural Resources (DNR) to identify the process by which the project would obtain permanent and temporary easements over and in the Columbia River and North Portland Harbor.

3. AFFECTED ENVIRONMENT

3.1 Introduction

This chapter provides a brief overview of the affected environment. More detail regarding neighborhoods, land use planning, and regional economics is available in the Neighborhoods and Populations, Land Use, and Economics Technical Reports.

3.2 Regional Conditions

3.2.1 Regional Land Use

Oregon's statewide planning laws and Washington's Growth Management Act agree on general principles of compact urban form, preservation of rural areas, use of urban growth boundaries, and multimodal transportation systems. The proposed project is near the core of a bi-state metropolitan area that functions largely as one economy and one housing market. Land supply is balanced with land needs. This balance is maintained through the growth management legislative processes in both states.

3.2.2 Existing Land Uses in Study Area

This section gives a brief overview of the existing land uses in the study area, specifically those surrounding the proposed improvements. See the Land Use Technical Report for greater detail.

3.2.2.1 Oregon Mainland

The south end of the study area is surrounded by a large wetland mitigation site and large park on either side of I-5. There are a variety of uses surrounding the Marine Drive interchange including marine businesses along North Portland Harbor, the Portland Expo Center west of I-5, and lodging and small businesses on the east side. A small residential neighborhood is located further east of I-5.

3.2.2.2 Hayden Island

Hayden Island has a substantial number of single and multifamily residences including floating home moorage communities on both sides of I-5 in North Portland Harbor. The Jantzen Beach Center is located on the west side of I-5, and includes retail in the mall itself, and big-box retail stores and restaurants in the surrounding area. Additional smaller retail and service businesses occur along I-5 outside of the mall property and include banks, gas stations, and restaurants, among other uses.

Hayden Island completed a master planning process in 2009, which anticipates land use changes on the island in conjunction with the Interstate Bridge replacement and extension of light rail transit to the island. Planning goals for this area have been codified in the City of Portland's Hayden Island Plan District (Section 33.532) dated March 1, 2020. For more information about this plan, see the Land Use Technical Report.

3.2.2.3 Ruby Junction Light-Rail Operations and Maintenance Facility

The existing TriMet Ruby Junction Light-Rail OMF is located approximately 13 miles east of I-5 in Gresham, Oregon, and is surrounded by a mix of single-family residences and light-industrial businesses. In many cases, these uses are combined on a single parcel.

3.2.2.4 Downtown Vancouver

In downtown Vancouver, south of McLoughlin Boulevard, the study area includes a mix of commercial, retail, and high-to-medium density residential development. The Vancouver National Historic Reserve (VNHR), as well as large parks, public facilities, and civic uses, occur along the east side of I-5. Across I-5 from the VNHR in downtown Vancouver are a 12-screen cinema and the Vancouver Community Library, as well as small retail and commercial businesses. Along the waterfront, the City of Vancouver has approved a 32-acre urban development including office space, 250,000 square feet (sq ft) of restaurant and retail space, 3,300 housing units, and multiple public spaces. A portion of the Vancouver waterfront development has already been completed, and additional portions of the proposed site are currently in planning and construction.

3.2.2.5 Upper Vancouver

McLoughlin Boulevard, west of I-5, is comprised of a mix of residential and office uses with a number of business-to-residential conversions. A City-owned park and Clark College facilities are adjacent to on McLoughlin Boulevard east of I-5. Clark College and the Veteran's Administration facilities are located directly north of McLoughlin Boulevard on the east side of I-5. North of these facilities and along the west side of I-5 north of McLoughlin and up to the SR 500 interchange, the area consists of primarily single-family residences. North of the SR 500 interchange is a Vancouver public middle school and a large City-owned park.

3.2.3 Residential, Commercial, and Industrial Vacancy Rates

This section describes vacancy and rental rates for residential, commercial, and industrial properties in the study area, which are indicators of the potential for finding viable sites for relocating displaced residents and businesses. Higher vacancy rates generally indicate greater potential for relocating a displaced use to a location that is desirable to the property owner or tenants. The supply of homes for sale, average length of time that single-family homes are on the market prior to sale, and median single-family home sale price also indicate the potential for finding viable sites for relocating residents of single-family homes. The supply of homes on the market is calculated by dividing the active listings at the end of the month in question by the number of closed sales for that month.

3.2.3.1 Portland/Vancouver Area

According to the RMLS, in July of 2023 the Portland area (including Oregon suburbs but excluding communities in Washington) had a 2.5-month supply of homes for sale and a year-to-date median home sale price of \$532,000. In the same month, Clark County had a 1.7-month home supply and a year-to-date median home sale price of \$515,000. Year-to-date median home prices, but not the supply of homes, are also available for smaller geographic areas for 2021 up to and including the

month of August 2021. For the seven subareas relevant to the IBR Program, year-to-date median sale prices and approximate locations are summarized in Table 3-1.

Table 3-1. Year-to-Date Median Home Prices

Subarea	Year-to-date Median Sale Price	Northern Boundary	Western Boundary	Southern Boundary	Eastern Boundary
Downtown Vancouver	\$399,000	39th St	Vancouver Lake	Columbia River	I-5
Lincoln – SW Hazel Dell	\$489,250	78th St	Vancouver Lake	39th St	I-5
SW Heights	\$544,750	Mill Plain Blvd	I-5	Columbia River	Andresen Blvd
NW Heights	\$368,750	SR 500	I-5	Mill Plain Blvd	Andresen Blvd
E Hazel Dell/ Minnehaha	\$477,000	78th St	I-5	SR 500	Andresen Blvd
North Portland	\$523,875	Columbia River	Willamette River	Willamette River	Williams Ave
NE Portland ^a	\$552,500	Columbia River	Williams Ave	East Burnside	182nd Ave

Source: RMLS 2022

a The “NE Portland” subarea includes Hayden Island east of I-5 and the Bridgeton neighborhood on the south shore of North Portland Harbor and east of I-5.

Ave = avenue; Blvd = boulevard; St = street

Industry reports for the second quarter of 2023 showed that Vancouver, which includes the Vancouver portion of the study area, had a lower vacancy rate and lower costs per unit for multifamily residential units than both the North Portland and Northeast Portland areas (CoStar 2023). Vacancy and rental rates for all areas are listed in Table 3-2.

Table 3-2. Portland-Vancouver Area Multifamily Vacancy and Rental Rates

Subarea	Vacancy Rate	Monthly Rental Rate (per sq ft)	Monthly Rental Rate (per unit)	Northern Boundary	Western Boundary	Southern Boundary	Eastern Boundary
Vancouver	6.2%	\$1.81	\$1,664	City of Vancouver	City of Vancouver	City of Vancouver	City of Vancouver
North Portland	8.5%	\$2.00	\$1,461	Columbia River	Willamette River	I-84	Williams Avenue
Northeast Portland	6.9%	\$2.41	\$1,609	Columbia River	Willamette River	I-84	I-205

Subarea	Vacancy Rate	Monthly Rental Rate (per sq ft)	Monthly Rental Rate (per unit)	Northern Boundary	Western Boundary	Southern Boundary	Eastern Boundary
Portland – Vancouver Metropolitan Area	6.5%	\$1.95	\$1,642	Clark County	Washington County	Clackamas County	Multnomah County

Source: CoStar 2023

sq ft = square foot

Looking more closely at housing within the study area, RMLS research conducted in November 2022 showed 59 residential properties for sale, including 23 condominiums, 15 floating homes, 3 mobile/manufactured homes, and 18 single-family residences. Table 3-3 describes the composition and pricing for available homes.

Table 3-3. Currently Available Residential Properties within the Study Area

Property Type	One- and Two-Bedroom Units	Three- and Four-Bedroom Units	Average Cost per Bedroom	Median Listing Price
Condominiums	17	6	\$370,000	\$479,000
Floating Homes	9	6	\$201,000	\$389,000
Mobile/ Manufactured Homes	1	2	\$41,000	\$100,000
Detached Single-Family Homes and Townhouses	8	10	\$215,000	\$435,000

Source: RMLS 2022

For the same study area, RMLS data gathered in November 2022 shows 71 rental units available, including 61 apartments, 1 floating home, and 9 detached single-family homes. See Table 3-4.

Table 3-4. Currently Available Residential Rental Properties within the Study Area

Property Type	One- and Two-Bedroom Units	Three- and Four-Bedroom Units	Average Cost per Bedroom / Month	Median Rental Rate/Month
Apartments	57	4	\$1,400	\$2,000
Floating Homes	1	0	\$750	\$1,400
Detached Single-Family Homes	6	3	\$1,500	\$1,900

Source: RMLS 2022

Office space in the greater Portland–Vancouver area was more available (22.2 percent vacancy rate) than either retail (4.5 percent) or industrial (2.6 percent) space (CBRE 2023). In the second quarter of 2023, the North Portland subarea, which includes Hayden Island, experienced an estimated 9.7 percent retail building vacancy rate, while the Vancouver subarea experienced an estimated vacancy rate of 5.8 percent (CBRE 2023). Portland–Vancouver area vacancy rates were projected to decrease for retail and industrial space through 2025 and to increase for office space (SVN Bluestone & Hockley 2021b). The trend of increasing office space vacancies is likely due to more employees working from home rather than in traditional office settings. Additional office and retail spaces planned and currently under construction along the Vancouver waterfront could shift both vacancy and rental rates for the Vancouver subareas as they are completed.

Industry reports for the second quarter of 2021 (the most recent data available by subarea) were provided by SVN Bluestone & Hockley for office, retail, and industrial space for the five project subareas. Vacancy rates and rental costs are shown in Table 3-5.

Office space vacancy varies across the five market subareas from a low of 1.4 percent in the Hayden Island/Swan Island subarea to a high of 7.6 percent in the Central Business District (CBD)/West Vancouver subarea. All five market subareas within the study area have vacancy rates below the Portland–Vancouver metropolitan area market average of 11.5 percent (SVN Bluestone & Hockley 2021b). Annual rental rates for office space across the five market subareas vary from a low of \$23.37/sq ft in the Rivergate subarea to a high of \$29.23/sq ft in the Airport Way subarea. The average annual rental rate for the Portland–Vancouver metropolitan area is \$28.61/sq ft, which is higher than the two market subareas within Vancouver and the Rivergate subarea in Portland but lower than the rental rates for both Hayden Island/Swan Island and Airport Way in Oregon.

The average retail space vacancy rate for the Portland–Vancouver metropolitan area is 4.3 percent, which is higher than two of the project subareas, St. Johns/Central Vancouver (4.1 percent) and Airport Way (2.1 percent), but lower than the remaining three subareas. The Hayden Island subarea has the highest retail space vacancy rate of the project subareas at 7.7 percent, and it also has the second highest rental costs at \$22.53/sq ft, behind only the Airport Way subarea with an average cost of \$23.08/sq ft. The Portland–Vancouver metropolitan area average retail rental cost of \$22.75/sq ft is higher than all the project subareas except for the Airport Way subarea. Additional retail space planned and under construction along the Vancouver waterfront may shift both the vacancy rate and average rent for the CBD/West Vancouver subarea as these spaces become available.

The CBD/West Vancouver subarea has the lowest vacancy for industrial space at 3.2 percent, which is lower than the Portland–Vancouver metropolitan area average of 5.1 percent. All other subareas have vacancy rates higher than the Portland–Vancouver metropolitan area average, with Hayden Island/Swan Island having almost double the metropolitan area vacancy rate at 9.2 percent. Average annual rents for industrial space within the five subareas are all lower than the Portland–Vancouver metropolitan area average of \$10.18/sq ft. The Rivergate subarea has the lowest average rent for industrial space at \$7.32/sq ft, and the Airport Way subarea has the highest average rent at \$9.55/sq ft.

Table 3-5. Office, Retail, and Industrial Vacancy Rates

Type of Space	Subarea	Vacancy Rate (Subarea Ranking)	Monthly Office Space Rental Rate per sq ft (Subarea Ranking)	Northern Boundary	Western Boundary	Southern Boundary	Eastern Boundary
Office	CBD/West Vancouver	7.6% (5)	\$25.03 (3)	NW Hazel Dell Way	NW Lower River Rd	Columbia River	I-5
	St. Johns/ Central Vancouver	1.5% (2)	\$24.60 (2)	NE 88th St	I-5	Columbia River	I-205
	Airport Way	6.8% (4)	\$29.23 (4)	Columbia River	I-5	NE Columbia Way	NE 122nd Ave
	Hayden Island / Swan Island	1.4% (1)	\$29.31 (5)	Columbia River	N Portland Rd	Willamette River	I-5
	Rivergate	4.7% (3)	\$23.37 (1)	Columbia River	Willamette River	Willamette River	N Portland Rd
	<i>Portland – Vancouver Metropolitan Area</i>	<i>11.5%</i>	<i>\$28.61</i>	<i>Clark County</i>	<i>Washington County</i>	<i>Clackamas County</i>	<i>Multnomah County</i>
Retail	CBD/West Vancouver	7.2% (4)	\$19.61 (2)	NW Hazel Dell Way	NW Lower River Rd	Columbia River	I-5
	St. Johns/ Central Vancouver	4.1% (2)	\$21.77 (3)	NE 88th St	I-5	Columbia River	I-205
	Airport Way	2.1% (1)	\$23.08 (5)	Columbia River	I-5	NE Columbia Way	NE 122nd Ave
	Hayden Island/Swan Island	7.7% (5)	\$22.53 (4)	Columbia River	N Portland Rd	Willamette River	I-5

Type of Space	Subarea	Vacancy Rate (Subarea Ranking)	Monthly Office Space Rental Rate per sq ft (Subarea Ranking)	Northern Boundary	Western Boundary	Southern Boundary	Eastern Boundary
	Rivergate	4.8% (3)	\$19.18 (1)	Columbia River	Willamette River	Willamette River	N Portland Rd
	<i>Portland – Vancouver Metropolitan Area</i>	4.3%	\$22.75	<i>Clark County</i>	<i>Washington County</i>	<i>Clackamas County</i>	<i>Multnomah County</i>
Industrial	CBD/West Vancouver	3.2% (1)	\$7.87 (2)	NW Hazel Dell Way	NW Lower River Rd	Columbia River	I-5
	St. Johns/ Central Vancouver	5.6% (2)	\$9.41 (4)	NE 88th St	I-5	Columbia River	I-205
	Airport Way	7.8% (3)	\$9.55 (5)	Columbia River	I-5	NE Columbia Way	NE 122nd Ave
	Hayden Island / Swan Island	9.2% (4)	\$8.68 (3)	Columbia River	N Portland Rd	Willamette River	I-5
	Rivergate	7.8% (3)	\$7.32 (1)	Columbia River	Willamette River	Willamette River	N Portland Rd
	<i>Portland – Vancouver Metropolitan Area</i>	4.1%	\$10.18	<i>Clark County</i>	<i>Washington County</i>	<i>Clackamas County</i>	<i>Multnomah County</i>

Source: SVN Bluestone & Hockley 2021a, 2021b, 2021d

Ave = avenue; CBD = central business district; N = north; NE = northeast; NW = northwest; Rd = road; St = street; sq ft = square foot

3.2.3.2 Floating Homes in North Portland Harbor, Oregon

The Modified LPA would require the displacement of floating homes in North Portland Harbor (see Chapter 4). Information regarding floating home availability in North Portland Harbor is not provided in the reports that informed the above discussion, though some information can be gleaned from the RMLS. A search of the active listings in August 2023 showed that there were approximately 78 housing units listed for sale in the study area. Of that number, there were 34 floating homes, 28 condominiums, 6 mobile homes, and 10 conventional homes. This does not include private listings.

Looking more closely at North Portland Harbor, from November 2021 to November 2022, 16 floating homes were sold in North Portland Harbor with a median sale price of \$283,000 and an average homeowners association/moorage cost of \$540 per month (RMLS 2022). By comparison, 23 traditional single-family homes were sold along Marine Drive and on Hayden Island for the same 1-year period with a median sale price of \$505,000 (RMLS 2022). A search of active listings in November 2022 showed 15 floating homes for sale in North Portland Harbor, with a median sale price of \$389,000 and an average homeowners association/moorage cost of \$590 per month (RMLS 2022).

3.2.3.3 Gresham, Oregon

The TriMet Ruby Junction Light-Rail OMF in Gresham, Oregon, would be expanded to accommodate the additional light rail vehicles required by the Modified LPA. This expansion would result in the displacement of some retail/services and industrial uses. As this area is relatively removed from the study area, an additional analysis of vacancy rates in this area is appropriate.

In the second quarter of 2023, industry reports showed a 6.5 percent multifamily residential vacancy rate for rentals in the Portland–Vancouver metropolitan area, with a rental rate averaging \$1.95/sq ft per month. Multifamily residential vacancy rates and rental rate averages are also available for the Gresham/Troutdale subarea, within which the Ruby Junction Light-Rail OMF is located. One additional subarea, East Portland, is within one-half mile of the maintenance facility. The average multifamily vacancy rates and rental rates for each subarea, as well as boundary information for each subarea, are included in Table 3-6. As shown, multifamily units near Ruby Junction tend to have slightly lower rents per square foot than are found in the metropolitan area as a whole.

Table 3-6. Gresham, Oregon Multifamily Vacancy and Rental Rates

Subarea	Average Vacancy Rate	Average Rental Rate (per sq ft)	Monthly Rental Rate (per unit)	Approx. Northern Boundary	Approx. Western Boundary	Approx. Southern Boundary	Approx. Eastern Boundary
Gresham / Troutdale	5.6%	\$1.67	\$1,486	Columbia River	202nd Avenue	Clackamas County	Sandy River
East Portland	3.8%	\$1.49	\$1,239	Columbia River	I-205	Clackamas County	202nd Avenue
Portland – Vancouver Metropolitan Area	6.5%	\$1.95	\$1,642	Clark County	Washington County	Clackamas County	Multnomah County

Approx. = approximate; sq ft = square foot

In the second quarter of 2021, the office vacancy rate in the Gresham subarea was 6.9 percent, with an average annual rent of \$22.52/sq ft. The Gresham subarea is bounded by SE Stark Street on the north, SE Troutdale Road and SE 282nd Avenue on the east, SE Rugg Road on the south, and SE 182nd Avenue and SE 190th Drive on the south.

The retail vacancy rate in the Portland–Vancouver area was 4 percent in the second quarter of 2021. During this same period, vacancies were greater in the Gresham subarea, where the Ruby Junction Light-Rail OMF is located, at 5 percent. The average annual retail rent for the Portland–Vancouver area was also higher at \$28.39/sq ft, compared with the Gresham subarea at \$22.52 in the second quarter of 2021.

The industrial vacancy rate was 5.1 percent in the Portland–Vancouver area in the second quarter of 2021, with an average annual rent of \$10.18/sq ft per month. Industrial vacancy rates and estimated asking rents are also available for the Gresham subarea, within which the Ruby Junction Light-Rail OMF is located. In the second quarter of 2021, the industrial vacancy rate was 4.1 percent, with an average annual rent of \$10.97/sq ft.

4. LONG-TERM EFFECTS

4.1 Introduction

The following sections describe the permanent property acquisitions and displacements that would be required for the Modified LPA. New facilities would include the adjusted and widened highway alignment, new or widened local streets, a new light rail alignment across Hayden Island and into downtown Vancouver, transit stations and park and rides, and new bicycle and pedestrian accesses and pathways. Table 4-1 provides a summary of acquisitions by design option. Section 4.3 summarizes property impacts by geography: Oregon Mainland, Hayden Island, Ruby Junction Light-Rail OMF Expansion Area, Downtown Vancouver, and Upper Vancouver. The total area of property impacts shown for each geography does not differentiate between impacts caused by the various components of the project. A description of how the highway, transit, and bicycle and pedestrian components impact property can be found in the narrative below each table.

In addition to the land required to accommodate proposed new or improved transportation facilities, acquisition of land, or space underground (subsurface),¹⁸ or in the air (airspace),¹⁹ could be required for the long-term maintenance of these facilities. These impacts could be a fee acquisition, where the agency obtains complete ownership of the property, or a permanent easement, where the agency would obtain some rights to the land, air, or subsurface, but would not assume full ownership. Both full and partial acquisitions could result in the displacement of residences, businesses, or public facilities from the parcel. Acquisition of property would typically occur through negotiated purchase through eminent domain.²⁰

Construction and long-term operation and maintenance of the Modified LPA, including all park and rides, would permanently acquire between 129.6 and 131.5 acres of property, including approximately 2.8 acres in permanent easements, which are required for the potential installation of tie-back anchors associated with retaining walls. The Modified LPA with a double-deck bridge configuration would require 0.3 fewer acres of property compared to the single-span options. The I-5 westward shift design option would require an additional 1.6 acres of property acquisition compared to I-5 with a centered alignment. The Modified LPA would require 62 full and 144 partial acquisitions with any combination of design options except the I-5 westward shift option, which would require 64 full acquisitions and 141 partial acquisitions. A list of all anticipated property acquisitions, including the parcel identification number, address, and primary use of each property, can be found in Appendix A of this report. Mitigation for permanent impacts is discussed in Section 7.

¹⁸ Subsurface easement requirements are draft and will be updated prior to construction.

¹⁹ Airspace easements have not been determined but will be updated prior to construction.

²⁰ In Washington, eminent domain is defined as the right of a government to acquire private property for public purpose following payment of just compensation to the property owner. In Oregon, "an authority may acquire, by the exercise of the power of eminent domain, any real property which it deems necessary for its purposes after adoption by it of a resolution declaring that the acquisition of the real property described therein is necessary for such purposes." Just compensation is required in both states.

Table 4-1. Summary of Permanent Property Acquisitions and Displacements

Property Acquisitions and Displacements	Type	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, with C Street Ramps ^{a, b, i}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ⁱ	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, i}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ⁱ	Modified LPA with Single-Level ^d Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, i}
Parcels (count)	Full Acquisitions	50 (62)	50 (62)	52 (64)	50 (62)	50 (62)
	Partial Acquisitions ^e	143 (144)	143 (144)	140 (141)	143 (144)	143 (144)
	Total	193 (206)	193 (206)	192 (205)	193 (206)	193 (206)
Displacement: Residential (number of dwelling units)	Single-family	59 (59)	59 (59)	59 (59)	59 (59)	59 (59)
	Multifamily	0 (0)	0 (0)	33 (33)	0 (0)	0 (0)
Displacement: Commercial (number of businesses)	Retail/Services	45 (45)	45 (45)	48 (48)	45 (45)	45 (45)
	Office/Professional/Healthcare	8 (16)	8 (16)	8 (16)	8 (16)	8 (16)
	Lodging	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Other ^h	5 (5)	5 (5)	5 (5)	5 (5)	5 (5)
Permanent Acquisitions	Area Acquired	120.6 acres (126.8 acres)	120.6 acres (126.8 acres)	122.5 acres (128.7 acres)	120.6 acres (126.8 acres)	120.9 acres (127.1 acres)

Property Acquisitions and Displacements	Type	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, with C Street Ramps ^{a, b, i}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ⁱ	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, i}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ⁱ	Modified LPA with Single-Level ^d Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, i}
Permanent Easements	Airspace Easements ^f	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre
	Subsurface Easements ^g	2.8 acres (2.8 acres)	2.8 acres (2.8 acres)	2.8 acres (2.8 acres)	2.8 acres (2.8 acres)	2.8 acres (2.8 acres)
	Property Easements	0 acres	0 acres	0 acres	0 acres	0 acres
Total of Permanent Acquisitions and Easements	Total Area Acquired	123.4 acres (129.6 acres)	123.4 acres (129.6 acres)	125.3 acres (131.5 acres)	123.4 acres (129.6 acres)	123.7 acres (129.9 acres)

- a Parcel impacts, displacements, or total acreage are only counted once when more than one mode (highway, transit, or bicycle and pedestrian) results in the same or overlapping acquisitions.
- b Does not include WSDOT or ODOT-owned property or right of way, City-owned right of way, or in-water leases.
- c A single-level fixed-span or movable-span configuration would require partial acquisition of 0.3 acres from properties (IBR Program ID# 502250000, 986049315, and 986049327) at the bridge approaches that would not be acquired with a double-deck bridge configuration.
- d Reflects impacts for both the single-level fixed-span and movable-span configurations, regardless of bridge type.
- e Properties requiring subsurface easements are included in the count of partial acquisitions.
- f Airspace easements have been rounded up to 1 acre.
- g Subsurface easement requirements are preliminary and will be updated prior to construction.
- h Includes three billboards and two cell-phone tower.
- i Totals shown in parentheses include all park and rides. These totals could decrease if fewer park and rides are selected.

4.2 No-Build Alternative

Under the No-Build Alternative, the existing interstate, local roads, and associated infrastructure would remain as they are today. With no new infrastructure, there would be no temporary or permanent impacts to properties.

4.3 Permanent Property Acquisitions and Easements

4.3.1 Oregon Mainland

Impacts summarized in this section include those between the southern terminus of the project at Victory Boulevard and the south shore of North Portland Harbor. Permanent acquisition of property would be required in this area to accommodate the reconstruction of the Marine Drive interchange and the extension of light rail from its current terminus at the Portland Expo Center over North Portland Harbor. Approximately 16.4 acres of property would need to be permanently acquired in this area; this would impact a total of 18 different parcels. These permanent property impacts are summarized in Table 4-2 and are displayed in Figure B-1 in Appendix B of this report. The Modified LPA design options would not affect acquisitions and displacements in Oregon.

Table 4-2. Summary of Permanent Property Acquisitions and Displacements on the Oregon Mainland

Impact Type	Impact	Modified LPA Totals ^{a,b}
Parcel Impacts (count)	Full parcel acquisitions	3
	Partial parcel acquisitions	15
	Total parcels impacted	18
Displacement of Use (count)	Residential dwelling units: Single-family	9
	Residential dwelling units: Multifamily	0
	Commercial businesses: Retail/services	9
	Commercial businesses: Office/professional/healthcare	1
	Commercial businesses: Lodging	0
	Commercial businesses: Other ^c	2

Impact Type	Impact	Modified LPA Totals ^{a,b}
Permanent Acquisition (acres)	Area acquired in fee	16.3 acres
Permanent Easements (acres)	Subsurface easements ^d	0.1 acres
	Property easements ^e	0 acres
Area required (acres)	Total Area Acquired	16.4 acres

- a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) would result in the same or overlapping acquisition.
- b Does not include ODOT-owned property or right of way, City-owned right of way, or in-water leases.
- c Includes two billboards at the Marine Drive interchange.
- d Subsurface easement requirements are draft and will be updated prior to construction.
- e Airspace easements have not been determined but will be updated prior to construction.

Most of the permanent property impacts in this portion of the study area would be due to local road improvements—specifically, the realignment of Marine Drive and the addition of local street connections near the Marine Drive interchange. These roadway improvements would impact parcels on both sides of the interchange. The realignment of I-5 at the Marine Drive interchange and over North Portland Harbor would result in the displacement of eight businesses along the harbor. This includes six marine businesses, two east of I-5 and four west of I-5. Two additional businesses east of I-5—one office and one retail—would be displaced to accommodate the northbound I-5 on-ramp and arterial bridge. In addition, two billboards at the Marine Drive interchange would be displaced. Farther south, the revised northbound off-ramp to NE Martin Luther King Jr. Boulevard would avoid the west edge of Delta Park, but would require a temporary construction easement to accommodate construction of a new noise wall. Construction impacts would not impact any of the existing ball fields or parking lots in the park.

Road improvements, including new pedestrian and bike facilities, along NE Martin Luther King Jr. Boulevard would require partial acquisition of three light-industrial properties; these acquisitions would not impact buildings or displace businesses. Similar road improvements to Marine Drive east of the freeway would require partial acquisition of six properties including a hotel, two condominium properties, a gas station, and two light-industrial uses, but the improvements would not displace the existing uses. One commercial property at the corner of N Marine Way and N Vancouver Way would be fully acquired, displacing one business to accommodate sidewalk improvements. South of Marine Drive and west of I-5, road and sidewalk improvements along N Expo Road would require the partial acquisition of a public parcel currently used for auto racing. Impacts to this parcel would not affect buildings, parking, or the current use of the property.

The transit alignment over North Portland Harbor would displace eight floating homes and one business associated with a parcel adjacent to and west of I-5. The remaining portion of this parcel, not impacted by transit, would be permanently acquired for the highway alignment, which would displace a single-family home on land. The proposed overnight LRV facility would require partial acquisitions

of three parcels associated with the Portland Expo Center, but it would not impact the Expo Center buildings. A total of eight single-family residences would be displaced in this portion of the study area. Figure B-2 in Appendix B shows the parcels where these displacements would occur.

Most of the bicycle and pedestrian facilities in this area would be associated with the transit alignment and the local roadway improvements, both of which would require permanent property impacts. The project would allow for a connection to the Bridgeton Trail east of the Marine Drive interchange.

An ODOT-owned parcel along North Portland Harbor currently leased by a marine business would be used for local street connections and the transit alignment. The marine business would no longer have access to the parcel for storage and staging.

Permanent easements would need to be obtained from DSL for any permanent structures in North Portland Harbor.

4.3.2 Hayden Island

4.3.2.1 Eastern Hayden Island

Impacts summarized in this section include those on developed, eastern portion of Hayden Island and associated portions of North Portland Harbor. Permanent acquisition of property would be required in this area to accommodate the reconstruction of the Hayden Island interchange and the extension of light rail over Hayden Island. Approximately 26.1 acres of property would need to be permanently acquired in this area, impacting a total of 40 different parcels. There would be no subsurface easements required within the Hayden Island portion of the project.

These permanent property impacts are summarized in Table 4-3 and are displayed on Figure B-2 in Appendix B of this report.

Table 4-3. Summary of Permanent Property Acquisitions and Displacements on Eastern Hayden Island

Impact Type	Impact	Modified LPA Totals ^{a,b}
Parcel Impacts (count)	Full Parcel Acquisitions	21
	Partial Parcel Acquisitions	19
	Total Parcels Impacted	40
Displacement of Use (count)	Residential dwelling units: Single-family	39
	Residential dwelling units: Multifamily	0
	Commercial businesses: Retail/Services	28
	Commercial businesses: Office/Professional/Healthcare	0
	Commercial businesses: Lodging	0
	Commercial businesses: Other ^c	3

Impact Type	Impact	Modified LPA Totals ^{a,b}
Permanent Acquisition (acres)	Area Acquired in Fee	26.1 acres
Permanent Easements(acres)	Subsurface Easements ^d	0 acres
	Property Easements ^e	0 acres
Area required (acres)	Total Area Acquired	26.1 acres

- a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) results in the same or overlapping acquisition.
- b Does not include ODOT-owned property or right of way, City-owned right of way, or in-water leases.
- c Includes two cell-phone towers and one billboard.
- d Subsurface easement requirements are draft and will be updated prior to construction.
- e Airspace easements have not been determined but will be updated prior to construction.

Property impacts on Hayden Island would be due in large part to the realignment of I-5 over the island, as well as the reconstruction of N Jantzen and N Hayden Island Avenues and extension of N Tomahawk Island Drive.

Local roadway improvements on N Jantzen Drive and N Tomahawk Island Drive east of the existing I-5 roadway would result in the displacement of the one restaurant and cell phone array along N Jantzen Drive and the acquisition of several privately owned rights-of-way.

West of the existing I-5 roadway, the light rail alignment and station, in combination with the highway realignment and local road improvements, would displace 26 retail/service-related businesses, a cell phone tower, and a billboard south of Tomahawk Drive. The affected businesses include several restaurants, a mattress store, a cell phone retail outlet, and a marijuana dispensary. One business within the Jantzen Beach Center, north of Tomahawk Drive and west of the existing I-5 roadway, would also be impacted.

One public use—the ODOT storage facility beneath the existing Interstate Bridge north landing—would be impacted by the realignment of I-5.

Nineteen of the 39 residential displacements on Hayden Island would be floating homes located in one row of the moorage in North Portland Harbor east of I-5. The westernmost ramp access to the moorage would also be eliminated, though no floating homes would remain in this moorage following construction. The remaining 20 residential displacements on Hayden Island would also be floating homes, which are located on the four easternmost rows in the moorage located in North Portland Harbor west of I-5.

Figure B-2 in Appendix B shows those parcels where the displacements discussed above would occur.

Permanent and temporary easements would need to be obtained from Oregon Department of State Lands (DSL) for any construction of facilities in North Portland Harbor or the Columbia River; this includes potential acquisition of existing DSL leases.

4.3.2.2 West Hayden Island

Impacts summarized in this section include those on the undeveloped, western portion of Hayden Island. Permanent acquisition of property would be required in this area to accommodate floodplain mitigation for the IBR Program in accordance with City of Portland requirements. Based on the current level of conceptual design, approximately 65.1 acres of property would need to be permanently acquired in this area, impacting a total of 7 different parcels. It is possible that the required acreage may increase and additional properties may be impacted as the mitigation design advances.

The West Hayden Island mitigation site would be accessed from North Hayden Island Drive, north and west of Jantzen Beach Center. Two properties currently used for boat and auto storage may be partially impacted along North Hayden Island Drive, but no displacements are anticipated. Access to the mitigation site would cross an existing Southern Pacific / BNSF easement and property owned by Portland General Electric before crossing a Bonneville Power Administration easement. Access is anticipated to follow existing roads, thereby reducing the amount of property impacts.

The mitigation site would require full acquisition of two properties along the southern bank of West Hayden Island, currently owned by the Oregon Department of State Lands. Both properties are vacant, and their acquisition would not result in any displacements.

These permanent property impacts are summarized in Table 4-4 and are displayed on Figure B-3 in Appendix B of this report.

Table 4-4. Summary of Permanent Property Acquisitions and Displacements on West Hayden Island

Impact Type	Impact	Modified LPA Totals ^{a, b}
Parcel Impacts (count)	Full Parcel Acquisitions	2
	Partial Parcel Acquisitions	5
	Total Parcels Impacted	7
Displacement of Use (count)	Residential dwelling units: Single-family	0
	Residential dwelling units: Multifamily	0
	Commercial businesses: Retail/Services	0
	Commercial businesses: Office/Professional/Healthcare	0
	Commercial businesses: Lodging	0
	Commercial businesses: Other	0
Permanent Acquisition (acres)	Area Acquired in Fee	65.1 acres
	Subsurface Easements ^c	0 acres

Impact Type	Impact	Modified LPA Totals ^{a, b}
Permanent Easements(acres)	Property Easements ^d	0 acres
Area required (acres)	Total Area Acquired	65.1 acres

- a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) results in the same or overlapping acquisition.
- b Does not include ODOT-owned property or right of way, City-owned right of way, or in-water leases.
- c Subsurface easement requirements are draft and will be updated prior to construction.
- d Airspace easements have not been determined but will be updated prior to construction.

4.3.3 Ruby Junction Light-Rail OMF Expansion Area

This section summarizes the impacts of the Modified LPA to the TriMet Ruby Junction Light-Rail OMF in Gresham, Oregon. Permanent acquisition of property would be required to expand the existing maintenance facility to accommodate the additional light rail vehicles needed for the Modified LPA. Approximately 5.5 acres of property would need to be permanently acquired in this area; this would impact a total of seven different parcels.

These permanent property impacts are summarized in Table 4-5 and are displayed on Figure B-4 in Appendix B of this report.

Table 4-5. Summary of Permanent Property Acquisitions and Displacements at the Ruby Junction Light-Rail OMF Expansion Area in Gresham, Oregon

Impact Type	Impact	Modified LPA Totals ^{a, b}
Parcel Impacts (count)	Full Parcel Acquisitions	4
	Partial Parcel Acquisitions	2
	Total Parcels Impacted	6
Displacement of Use (count)	Residential dwelling units: Single-family ^c	0
	Residential dwelling units: Multifamily	0
	Commercial businesses: Retail/Services	8
	Commercial businesses: Office/Professional/Healthcare	0
	Commercial businesses: Lodging	0
	Commercial businesses: Other	0
Permanent Acquisition (acres)	Area Acquired in Fee	5.5 acres
	Subsurface Easements ^c	0 acres

Impact Type	Impact	Modified LPA Totals ^{a,b}
Permanent Easements (acres)	Property Easements ^d	0 acres
Area required (acres)	Total Area Acquired	5.5 acres

- a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) results in the same or overlapping acquisition.
- b Does not include ODOT-owned property or right of way or City-owned right of way.
- c Subsurface easement requirements are draft and will be updated prior to construction.
- d Airspace easements have not been determined but will be updated prior to construction.

Surveys conducted of the impact area indicated that eight light-industrial businesses would be displaced as a result of the expansion. An additional two commercial parcels would be partially acquired but would not result in any building impacts or business displacements.

Figure B-4 in Appendix B shows the parcels where the displacements discussed above would occur.

4.3.4 Downtown Vancouver

Impacts summarized in this section include those from the Columbia River north to 17th Street, excluding impacts on 17th Street. Permanent acquisition of property would be required in this area to accommodate the reconstruction of the SR 14 and Mill Plain interchanges, the realignment of I-5 between those two interchanges, the construction of the Waterfront and Evergreen Park and Rides, and the extension of light rail to Evergreen Station. Impacts in this subarea would differ between the Modified LPA and the design options, as described below.

4.3.4.1 Modified LPA

For the Modified LPA with a single-level bridge configuration, one auxiliary lane, C Street ramps, and centered I-5, 61 different parcels would be impacted in the Downtown Vancouver Subarea, requiring the permanent acquisition of approximately 13.1 acres of property (including park and rides), all acquired in fee, and less than an acre of airspace easements. These permanent property impacts are summarized in Table 4-6 and are displayed on Figures B-5, B-6, and B-7 in Appendix B of this report.

Table 4-6. Summary of Permanent Property Acquisitions and Displacements in Downtown Vancouver

Property Acquisitions and Displacements	Type	Modified LPA with Single-Level Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, and Centered I-5 ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ^h	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ^h	Modified LPA with Single-Level ^d Fixed-Span or Movable-Span Configurations, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, h}
Parcels (count)	Full Acquisitions	11 (23)	11 (23)	13 (25)	11 (23)	11 (23)
	Partial Acquisitions ^e	50 (51)	50 (51)	47 (48)	50 (51)	50 (51)
	Total	61 (74)	61 (74)	60 (73)	61 (74)	61 (74)
Displacement: Residential (number of dwelling units)	Single-family	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Multifamily	0 (0)	0 (0)	33 (33)	0 (0)	0 (0)
Displacement: Commercial (number of businesses)	Retail/Services	0 (0)	0 (0)	3 (3)	0 (0)	0 (0)
	Office/Professional/Healthcare	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)
	Lodging	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Permanent Acquisitions	Area Acquired	6.9 acres (13.1 acres)	6.6 acres (12.8 acres)	8.5 acres (14.7 acres)	6.6 acres (12.8 acres)	6.6 acres (12.8 acres)

Property Acquisitions and Displacements	Type	Modified LPA with Single-Level Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, and Centered I-5 ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ^h	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ^h	Modified LPA with Single-Level ^d Fixed-Span or Movable-Span Configurations, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, h}
Permanent Easements	Airspace Easements ^f	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre
	Subsurface Easements ^g	0 acres	0 acres	0 acres	0 acres	0 acres
	Property Easements	0 acres	0 acres	0 acres	0 acres	0 acres
Total of Permanent Acquisitions and Easements	Total Area Acquired	6.9 acres (13.1 acres)	6.6 acres (12.8 acres)	8.5 acres (14.7 acres)	6.6 acres (12.8 acres)	6.6 acres (12.8 acres)

- a Parcel impacts, displacements, or total acreage are only counted once when more than one mode (highway, transit, or bicycle and pedestrian) would result in the same or overlapping acquisition.
- b Does not include WSDOT-owned property or right of way, City-owned right of way, or in-water leases.
- c A single-level fixed-span or movable-span configuration would require partial acquisition of 0.3 acres from properties (IBR ID# 502250000, 986049315, and 986049327) at the bridge approaches that would not be acquired with a double-deck bridge configuration.
- d Reflects impacts for both the single-level fixed-span and movable-span configurations, regardless of bridge type.
- e Properties requiring subsurface easements are included in the count of partial acquisitions.
- f Airspace easements have been rounded up to 1 acre.
- g Subsurface easement requirements are preliminary and will be updated prior to construction.
- h Totals shown in parentheses include all park and rides. These totals could decrease if fewer park and rides are selected.

4.3.4.2 Design Options

Impacts for the SR 14 interchange without C Street ramps design option would be the same as for the Modified LPA. Impacts for the other design options under consideration for the Downtown Vancouver Subarea are discussed below. See Table 4-6 for additional information on potential acquisitions.

TWO AUXILIARY LANES

The Modified LPA with two auxiliary lanes would require less than 0.1 acre of additional permanent acquisition from the Fort Vancouver property on the east side of I-5 beyond what would be needed for the options with one auxiliary lane.

I-5 MAINLINE WESTWARD SHIFT

This design option would shift the alignment of I-5 through downtown Vancouver west by approximately 40 feet. The design option would impact one less property within Fort Vancouver, compared to the Modified LPA and the SR 14 interchange without C Street ramps design option, but would require additional displacements and result in more property being permanently acquired. Shifting the interstate west would result in the full displacement of a multifamily property with 33 residential units on the northeast corner of E 7th Street and C Street. The property directly north of the apartment complex, which includes three commercial businesses, would also be fully acquired and the three businesses would be displaced. Total permanent acquisitions for this option would be 8.5 acres (14.7 acres including the park and rides). Other combinations of design options, as shown in Table 4-6, would acquire between 6.6 acres (12 acres including the park and rides) and 6.9 acres (13.1 acres including the park and rides).

SINGLE-LEVEL BRIDGE CONFIGURATION WITH FIXED OR MOVABLE SPANS

The Modified LPA with a single-level fixed-span or a single-level movable-span configuration, regardless of bridge type, would require partial acquisition of 0.3 acres from properties at the bridge approaches that would not be acquired with a double-deck bridge configuration. Total permanent acquisitions and easements for this design option would be 6.9 acres (13.1 acres including the park and rides). No additional impacts or displacements would be required for the single-level configuration.

PARK AND RIDES

Three sites have been identified for new park and rides near the proposed Waterfront Station. Site 1a is located directly beneath I-5, and Sites 1b and 1c are located west of the freeway.

Site 1a (Columbia Way) would be built underneath I-5, east of Washington Street, and would require redevelopment of a WSDOT parcel currently used for public parking. No acquisitions would be required for this park and ride.

Site 1b (Columbia Street/SR 14) would occupy three properties on the block between Columbia Street and Washington Street along W 4th Street and would result in three property acquisitions, including one building identified as being locally historic. These acquisitions would displace a parking lot and

seven businesses. Properties impacted by this site would not be impacted by other project improvements.

Site 1c (Columbia Street/Phil Arnold Way) is west of Columbia Street at the intersection with W 4th Street and would result in four full acquisitions and the displacement of one business. Properties impacted by this site would also be impacted by temporary construction easements but would not be permanently impacted by other project improvements.

Property acquisitions associated with the Waterfront park and ride are shown in Table 4-7; these totals are also reflected in Table 4-1 and Table 4-6. Figure B-6 in Appendix B shows the park and rides at Waterfront Station. Property acquisitions associated with the Evergreen Station park-and-ride sites are shown in Table 4-8.

Two alternative park and rides are proposed for the Evergreen Station. Site 2a (Library Square) is located west of I-5 between the Vancouver Community Library and a cinema complex; developing the park and ride at this site would require full acquisition of five properties adjacent to the Vancouver Community Library, including one vacant property and the existing library parking lot but no displacements. These parcels were recently acquired by the City of Vancouver. No impacts would occur to the library building, and no business or residential displacements are anticipated.

Site 2b is bounded by Broadway Street, C Street, E 8th Street, and E 7th Street. This location would use an existing parking structure. Specifics of the design and agreements regarding the proposed park-and-ride sites have not been determined. Depending on the design and agreements, the IBR Program would be required to compensate parties with rights to the garage for impacts to their current parking or property use.

Table 4-7. Summary of Permanent Property Acquisitions and Displacements for Waterfront Park and Rides in Downtown Vancouver

Impact Type	Impact	Site 1a ^{a,b}	Site 1b ^{a,b}	Site 1c ^{a,b,e}	All Sites
Parcel Impacts (count)	Full Parcel Acquisitions	0	3	4	7
	Partial Parcel Acquisitions	0	0	0	0
	Total Parcels Impacted	0	3	4	7
Displacement of Use (count)	Residential dwelling units: Single-family	0	0	0	0
	Residential dwelling units: Multifamily	0	0	0	0
	Commercial businesses: Retail/Services	0	0	0	0

Acquisitions Technical Report

Impact Type	Impact	Site 1a ^{a,b}	Site 1b ^{a,b}	Site 1c ^{a,b,e}	All Sites
	Commercial businesses: Office/Professional/Healthcare	0	7	1	8
	Commercial businesses: Lodging	0	0	0	0
	Commercial businesses: Other	0	0	0	0
Permanent Acquisition (acres)	Area Acquired in Fee	0 acres	0.5 acres	1.5 acres	2 acres
Permanent Easements (acres)	Airspace Easements ^c	0 acres	0 acres	0 acres	0 acres
	Subsurface Easements ^d	0 acres	0 acres	0 acres	0 acres
	Property Easements	0 acres	0 acres	0 acres	0 acres
Area required (acres)	Total Area Acquired	0 acres	0.5 acres	1.5 acres	2 acres

a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) result in the same or overlapping acquisition.

b Does not include WSDOT-owned property or right of way or City-owned right of way.

c Airspace easements have not been determined but will be updated prior to construction.

d Subsurface easement requirements are draft and will be updated prior to construction.

Table 4-8. Summary of Permanent Property Acquisitions and Displacements for the Evergreen Park and Ride in Downtown Vancouver

Impact Type	Impact	Site 2a ^{a,b}	Site 2b ^{a,b,e,f}	All Sites
Parcel Impacts (count)	Full Parcel Acquisitions	5	0	5
	Partial Parcel Acquisitions	0	1	1
	Total Parcels Impacted	5	1	6
Displacement of Use (count)	Residential dwelling units: Single-family	0	0	0
	Residential dwelling units: Multifamily	0	0	0
	Commercial businesses: Retail/Services	0	0	0

Acquisitions Technical Report

Impact Type	Impact	Site 2a ^{a,b}	Site 2b ^{a,b, e, f}	All Sites
	Commercial businesses: Office/Professional/Healthcare	0	0	0
	Commercial businesses: Lodging	0	0	0
	Commercial businesses: Other	0	0	0
Permanent Acquisition (acres)	Area Acquired in Fee	3.2 acres	1 acre	4.2 acres
Permanent Easements (acres)	Airspace Easements ^c	0 acres	0 acres	0 acres
	Subsurface Easements ^d	0 acres	0 acres	0 acres
	Property Easements	0 acres	0 acres	0 acres
Area required (acres)	Total Area Acquired	3.2 acres	1 acre	4.2 acres

- a Does not double- or triple-count parcel impacts, displacements, or total acreage, when more than one mode (highway, transit, or bicycle and pedestrian) result in the same or overlapping acquisition.
- b Does not include WSDOT-owned property or right of way or City-owned right of way.
- c Airspace easements have not been determined but will be updated prior to construction.
- d Subsurface easement requirements are draft and will be updated prior to construction.
- e Includes properties recently purchased by the City of Vancouver.
- f A shared-use agreement has not been developed for this site, therefore a partial acquisition is included in the acreage calculations as a conservative assumption.

4.3.4.3 Impacts from Roadway, Transit, and Bicycle/Pedestrian Improvements Common to All Design Options

Property impacts in downtown Vancouver, included in Table 4-7, would be due in large part to realignments and improvements to local roads and the addition of transit infrastructure through the eastern portion of downtown. These impacts would be the same for the Modified LPA and all design options.

West of the existing I-5 alignment, the realignment of W 3rd Street would result in the full acquisition of three parcels along Columbia Street between W 3rd Street and W 4th Street. Acquisition of these properties would displace one business on the northeast corner of Columbia Street and W 3rd Street.

East of the existing I-5 alignment, improvements to SE Columbia Way would partially impact one BNSF right-of-way parcel south of the existing rail line. Right-of-way owned by the City of Vancouver would be impacted as well.

The bicycle and pedestrian facility located on the northbound (east) bridge would exit the structure at this location and spiral down to SE Columbia Way, requiring full acquisition of two properties located in the southeast quadrant of the I-5/SR 14 interchange. New stormwater facilities adjacent to the bike and pedestrian facilities would partially impact one parcel between SE Columbia Way and the river but would not result in any displacements.

As light rail moves out from beneath the replacement bridge to the new Waterfront Station on Washington Street at W 3rd Street, it would require the acquisition of permanent airspace rights over the BNSF Railway berm that parallels the river and permanent acquisition of an office building on the southeast corner of Columbia Street and W 3rd Street. This acquisition would displace an office business, which leases three floors of the building. The remaining two floors of this building are available for lease at the time of this analysis. The property surrounding the existing pump station along Columbia Street, south of the BNSF Railway rail line, would also be impacted, but the pump station would not be displaced.

Property impacts related to the new bridge landing and adjustments to I-5 would result in 48 partial acquisitions but no residential or business displacements. Several of these partial acquisitions would be to properties with condominium ownership, which accounts for the large number of impacts. The reconstruction of the SR 14 interchange would require small permanent property acquisitions at the Old Apple Tree Park and VNHR near the Land Bridge crossing. The former hotel site at the junction of W Columbia Way and Columbia Street, now the site of the Port of Vancouver's Terminal 1 development, and two surface parking lots would be partially acquired to accommodate the realigned bridge abutment. The IBR Program would coordinate with the Port of Vancouver and the City of Vancouver to minimize the potential for impacts to the Terminal 1 development.

Between E 6th Street and E Evergreen Boulevard, 11 properties would be partially acquired to accommodate I-5 and sidewalk improvements to E Evergreen Boulevard. These include small portions of VNHR along Anderson Street and the Vancouver Police Department property east of the freeway, as well as an apartment building, a cinema complex, and several parking and vacant lots near the Vancouver Community Library west of the freeway. No business or residential displacements would occur as a result. North of E Evergreen Boulevard and west of the freeway, a small portion of the parking lot associated with an office complex and two additional properties would be impacted. Two parcels that comprise Marshall Park would also be partially impacted to accommodate the northbound flyover ramp connecting E Mill Plain Boulevard and E Fourth Plain Boulevard, but the ramp would not affect the existing community center or the parking lot.

In addition to the property impacts described in this section, easements would need to be obtained from DNR for construction of permanent structures in the Columbia River; this would include potential acquisition of existing DNR leases. In-water easements and leases are not included in the parcel or acreage totals shown in the tables.

4.3.5 Upper Vancouver

Impacts summarized in this section include those occurring from 17th Street and McLoughlin Boulevard to the northern terminus of the project. This area is defined for the purposes of this report as Upper Vancouver. The permanent acquisition of property would be required in this area to accommodate the reconstruction of the Fourth Plain and SR 500 interchanges and the realignment of I-5 between these two interchanges. Approximately 1 acre of property would need to be acquired in fee in this area, and an additional 2.7 acres of permanent subsurface easements would be required. A total of 61 different parcels would be impacted. These permanent property impacts are summarized in Table 4-9 and are displayed on Figure B-8 in Appendix B of this report. All the Modified LPA design options would have the same impacts in Upper Vancouver.

Table 4-9. Summary of Permanent Property Acquisitions and Displacements in Upper Vancouver

Property Acquisitions and Displacements	Type	Modified LPA a,b,c
Parcels (count)	Full Acquisitions	9
	Partial Acquisitions d	52
	Total	61
Displacement: Residential (number of dwelling units)	Single-family	9
	Multifamily	0
Displacement: Commercial (number of businesses)	Retail/Services	0
	Office/Professional/Healthcare	0
	Lodging	0
	Other	0
Permanent Acquisitions	Area Acquired	1 acre
Permanent Easements	Airspace Easements e	Less than 1 acre
	Subsurface Easements f	2.7 acres
	Property Easements	0 acres
Total of Permanent Acquisitions and Easements	Total Area Acquired	3.7 acres

- a Parcel impacts, displacements, or total acreage, are only counted once when more than one mode (highway, transit, or bicycle and pedestrian) would result in the same or overlapping acquisition.
- b Does not include WSDOT-owned property or right of way, City-owned right of way, or in-water leases.
- c All Modified LPA design options would have the same impacts in the Upper Vancouver study area.
- d Properties requiring subsurface easements are included in the count of partial acquisitions.
- e Airspace easements have been rounded up to 1 acre.
- f Subsurface easement requirements are preliminary and will be updated prior to construction.

Permanent property impacts in Upper Vancouver would be due in large part to additional retaining walls adjacent to I-5, improvements to the SR 500 and Fourth Plain Boulevard interchanges, and improvements to the E 29th Street and E 33rd Street overpasses.

Freeway interchange improvements, including retaining walls, would require partial acquisition of six residential properties along the east and west sides of the freeway between the Fourth Plain Boulevard interchange and E 29th Street. No buildings would be acquired, and no displacement

would occur to these properties. Eleven additional residential properties would require subsurface easements with no building impacts.

Between E 29th Street and E 33rd Street, 26 residential parcels along both sides of the freeway would require subsurface easements to accommodate retaining walls. These impacts would not impact any buildings or displace any residents.

Continuing north from E 33rd Street to E 39th Street, four residential properties west of the freeway would be partially acquired, but not displaced, to accommodate the ramp connecting Fourth Plain Boulevard with SR 500. The same ramp configuration would require full acquisition and displacement of nine single-family properties between E 35th Street and E 37th Street west of the freeway.

No residential properties would be acquired between E 39th Street and E 40th. The northernmost impact of the project would be a partial acquisition from the southwest corner of the Discovery Middle School property. This impact would not affect the building, but it could impact the corner of the school's parking lot. Table 4-10 provides a summary of the total permanent property acquisitions and displacements in Vancouver, including both Downtown Vancouver and Upper Vancouver.

Table 4-10. Summary of Permanent Property Acquisitions and Displacements in Vancouver (including Downtown Vancouver and Upper Vancouver)

Property Acquisitions and Displacements	Type	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, and Centered I-5 ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ^h	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ^h	Modified LPA with Single-Level ^d Fixed-Span or Movable-Span Configurations, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, h}
Parcels (count)	Full Acquisitions	20 (32)	20 (32)	22 (34)	20 (32)	20 (32)
	Partial Acquisitions ^e	102 (103)	102 (103)	99 (100)	102 (103)	102 (103)
	Total	122 (135)	122 (135)	121 (134)	122 (135)	122 (135)
Displacement: Residential (number of dwelling units)	Single-family	9 (9)	9 (9)	9 (9)	9 (9)	9 (9)
	Multifamily	0 (0)	0 (0)	33 (33)	0 (9)	0 (9)
Displacement: Commercial (number of businesses)	Retail/Services	0 (0)	0 (0)	3 (3)	0 (0)	0 (0)
	Office/Professional/Healthcare	7 (15)	7 (15)	7 (15)	7 (15)	7 (15)
	Lodging	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Permanent Acquisitions	Area Acquired	7.6 acres (13.8 acres)	7.6 acres (13.8 acres)	9.5 acres (15.7 acres)	7.6 acres (13.8 acres)	7.9 acres (14.1 acres)

Property Acquisitions and Displacements	Type	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, and Centered I-5 ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, Centered I-5, without C Street Ramps ^h	Modified LPA with Double-Deck Fixed-Span Configuration, One Auxiliary Lane, C Street Ramps, I-5 Mainline Westward Shift ^{a, b, h}	Modified LPA with Double-Deck Fixed-Span Configuration, Two Auxiliary Lanes, C Street Ramps, Centered I-5 ^h	Modified LPA with Single-Level ^d Fixed-Span or Movable-Span Configurations, One Auxiliary Lane, C Street Ramps, Centered I-5 ^{c, d, h}
Permanent Easements	Airspace Easements ^f	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre	Less than 1 acre
	Subsurface Easements ^g	2.7 acres (2.7 acres)	2.7 acres (2.7 acres)	2.7 acres (2.7 acres)	2.7 acres (2.7 acres)	2.7 acres (2.7 acres)
	Property Easements	0 acres (0 acres)	0 acres (0 acres)	0 acres (0 acres)	0 acres (0 acres)	0 acres (0 acres)
Total of Permanent Acquisitions and Easements	Total Area Acquired	10.3 acres (16.5 acres)	10.3 acres (16.5 acres)	12.2 acres (18.4 acres)	10.3 acres (16.5 acres)	10.6 acres (16.8 acres)

- a Parcel impacts, displacements, or total acreage, are only counted once when more than one mode (highway, transit, or bicycle and pedestrian) would result in the same or overlapping acquisition.
- b Does not include WSDOT-owned property or right of way, City-owned right of way, or in-water leases.
- c A single-level fixed-span or movable-span configuration would require partial acquisition of 0.3 acres from properties at the bridge approaches that would not be acquired with a double-deck bridge configuration.
- d Reflects impacts for both the single-level fixed-span and movable-span configurations, regardless of bridge type.
- e Properties requiring subsurface easements are included in the count of partial acquisitions.
- f Airspace easements have been rounded up to 1 acre.
- g Subsurface easement requirements are preliminary and will be updated prior to construction.
- h Totals shown in parentheses include all park and rides. These totals could decrease if fewer park and rides are selected.

5. TEMPORARY EFFECTS

5.1 Introduction

The following sections describe the temporary acquisitions required to construct the highway, transit, and bicycle and pedestrian features of the Modified LPA. Temporary effects on property acquisitions and displacements would not differ among the Modified LPA design options. These temporary acquisitions would obtain certain rights, such as the right to access or store materials on the property, but not ownership of the property. There are three types of temporary acquisitions that would likely be required: construction easements, staging areas, and, potentially, casting yards. Mitigation for these temporary impacts is discussed in Section 7.

Construction easements include areas directly along the highway, transit, and bicycle and pedestrian improvements that could be temporarily acquired from adjacent properties for construction access and limited storage. These construction easements could be on land, underground (subsurface), or in the air (airspace), depending on construction needs, and are typically determined by establishing a standard buffer of 5 to 15 feet along all improvements. The temporary construction easements could have temporary effects, such as detours, noise, and visual quality changes. Construction easements can also include temporary impacts to a property or building's access. These access impacts would be mitigated as part of the project improvements or through the right-of-way process.

Staging areas include areas outside of the state or city right of way that could be temporarily acquired to store materials or equipment, stockpile soil, or provide employee parking or temporary construction offices, among other things. The project would likely require at least one staging area greater than 15 acres in size which could require property adjacent to or separate from the improvements. It is likely that there would also be smaller staging areas within the interstate right of way, specifically at the SR 14 and Mill Plain interchanges, that are not currently included in the acquisition requirements and could be handled by the contractor. Two sites have been identified as possible major staging areas, including a former I-5 WSDOT rest area (5 acres) and the vacant Thunderbird Hotel site on Hayden Island (3.5 acres).

Casting yards, if used, would be areas outside the state or city right of way that could be temporarily acquired for pre-casting of concrete segments for construction of the bridge and ramp structures. These areas would require barge access, in addition to road and/or rail access, and could also be used for storage of materials or equipment. The need for casting yards has not yet been determined, would depend on the bridge type and construction methods selected during later phases of project design or by a contractor, and the necessary environmental evaluation and permitting would be completed at that time.

Construction easements are included in Appendix A, Comprehensive List of all Property Acquisitions and Easements. For the purposes of this analysis, large staging areas and casting areas are not included in Appendix A. As described in Chapter 1, several potential large staging areas and casting yards were identified for analysis in the CRC Final EIS; however, at the current stage of project development, these types of sites have not yet been identified for the IBR Program. These sites may be

identified during later phases of project design or by a contractor. If a site were identified by a contractor, the contractor would be responsible for the necessary environmental evaluation and permitting.

5.2 Temporary Construction Easements

Table 5-1 summarizes temporary construction impacts by project subarea and use for the Modified LPA, including all design options.

Table 5-1. Temporary Construction Easement Impact Summary

Project Subarea ^a	Residential Properties	Commercial Properties ^b	Public Properties	Vacant/Parking Properties	Total Properties
Oregon	4	24	10	4	42
Washington	47	34	14	15	110

a Includes properties identified as potentially permanently impacted by either a partial acquisition or subsurface easement that also have temporary construction easement impacts.

b Industrial uses are included in the count of commercial properties.

5.2.1 Oregon Mainland

To accommodate the construction of the southern end of the project, a temporary construction easement would need to be acquired from 8 parcels not otherwise impacted by the project. An additional 15 properties identified for partial acquisitions would also be temporarily impacted during construction. In total, 9 acres of construction impacts would occur on the Oregon Mainland.

See Table A-1 in Appendix A for temporary property impacts by parcel and study area.

5.2.2 Hayden Island

Nineteen properties already permanently impacted by the project would also be temporarily impacted to accommodate the construction of the Hayden Island interchange, associated local roadway improvements, and the extension of light-rail over Hayden Island. A total of 12.8 acres of construction easements would be required from these properties on Hayden Island.

See Table A-2 in Appendix A for temporary property impacts by parcel and study area.

5.2.3 Ruby Junction Light-Rail OMF Expansion Area in Gresham, Oregon

No additional land, outside of the permanent property impacts, is anticipated to be required for the expansion of the Ruby Junction Light-Rail OMF.

5.2.4 Downtown Vancouver

Under the Modified LPA (including all design options), approximately 8.2 acres would be required from 61 parcels to accommodate the construction of the bridge landing in downtown Vancouver, local

roads, retaining walls along I-5, and reconstruction of sidewalks. No temporary construction easements have been identified for park and rides at this time. Future design refinements may require temporary construction easements from adjacent properties. Of these properties, 43 would also be partially acquired for project improvements, 2 may also have subsurface easement impacts, and portions of 16 additional properties would be required for construction only.

See Table A-8 in Appendix A for temporary property impacts by parcel and study area.

5.2.5 Upper Vancouver

Approximately 0.3 acres from 49 parcels would need to be temporarily acquired to accommodate the reconstruction of sidewalks, the construction of retaining walls along I-5, and ramps associated with the SR 500 interchange. Of these properties, 11 would also be partially acquired for project improvements, 29 would also have subsurface easement impacts, and portions of 9 additional properties would be required for construction only.

See Table A-8 in Appendix A for temporary property impacts by parcel and study area.

6. INDIRECT EFFECTS

Indirect effects on property acquisitions and displacements would not differ among the Modified LPA design options. Land uses and properties not directly impacted by the project could experience indirect effects from the Modified LPA. Project elements such as realigned streets, active transportation improvements, and the addition of light rail could change the viability of and demand for uses within and around the project footprint. Examples of these indirect effects could include denser, multi-use development around transit stations on Hayden Island and downtown Vancouver and additional commercial uses along newly developed roads near the Marine Drive interchange, on Hayden Island, and in downtown Vancouver. Additional indirect impacts to property could also occur during project construction. Properties directly adjacent to acquired properties and to areas of active construction would be most likely to experience these types of impacts.

For additional Program-related indirect effects, see the Land Use, Economics, Visual Quality, Parks and Recreation, and Noise and Vibration Technical Reports.

7. AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Table 7-1 lists temporary avoidance and minimization measures. Table 7-2 lists temporary and long-term mitigation measures. No long-term avoidance and minimization measures within control of the IBR Program were identified.

Table 7-1. Avoidance and Minimization Measures

Temporary or Long-Term	Impact Type	Avoidance and Minimization Measure
Temporary	Temporary property use during construction	In compliance with 23 CFR Part 710; the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA), as amended; WSDOT’s Standard Specifications for Road, Bridge, and Municipal Construction (M41-10) and RCW 47; and ODOT’s 2024 Standard Specifications for Construction and ORS 35, ODOT and WSDOT will develop approaches to manage temporary construction easements as part of the overall IBR Program right of way plan. The plan will identify measures that would be required for contractors to avoid, minimize, and/or mitigate for impacts to property temporarily used for construction.
Temporary	Disruption to property access during construction	In compliance with the URA, ODOT and WSDOT will maintain continued access to properties during construction to the extent possible. If continued access cannot be provided, the property owner is entitled under the URA to just compensation for the period of time of the closure. Depending on the length of the closure, loss of access could also trigger temporary relocation for any occupants. Specific provisions will be detailed in the IBR Program right-of-way plan and/or specifications.

Table 7-2. Mitigation Measures

Temporary or Long-Term	Impact Type	Mitigation Measure
Temporary	Use of property during construction	In compliance with the URA; WSDOT’s Standard Specifications for Road, Bridge, and Municipal Construction (M41-10) and RCW 47; and ODOT’s 2024 Standard Specifications for Construction and ORS 35, ODOT and WSDOT will mitigate for construction easements through payment to property owners in exchange for the use of their property during construction. Site impacts from temporary construction uses will be restored and property owners compensated according to fair market value.

Temporary or Long-Term	Impact Type	Mitigation Measure
Long-term	Business and residential displacements before construction	Under the URA, when property acquisition and residential or business displacements are unavoidable, ODOT and WSDOT will provide affected property owners with just compensation, and affected occupants will receive relocation assistance. Properties will be purchased by ODOT and WSDOT at fair market value. Eligible and displaced residential occupants resulting from the Modified LPA will be provided with decent, safe, and sanitary replacement housing.
Long-term	Property acquisition before construction	<p>ODOT and WSDOT will notify affected property owners that the IBR Program is planning to acquire their property, following the Program’s schedule for acquisitions.</p> <p>In compliance with 23 U.S.C. §§ 107 and 317, ODOT and WSDOT will involve the U.S. General Services Administration in any property acquisition of federally owned property. No other Federal agency landowners would be affected.</p> <p>Under the URA, as amended, ODOT and WSDOT will compensate property owners for loss of deeded reservations of access. The amount of compensation will be determined during the appraisal process by analyzing the value of the property with and without comparable access point(s), in compliance with the Uniform Standards of Professional Appraisal Practice. Access points that are not at a deeded reservation location may be closed or relocated through police power if reasonable alternative access is available.</p>
Long-term	Occupant displacement before construction	Under the URA, even though some displaced occupants may choose to leave the area, finding sufficient and affordable housing for those affected by the IBR Program could remain a challenge. If sufficient comparable replacement housing is not available, ODOT and WSDOT will commit to last resort housing in compliance with the URA’s requirements for decent, safe, and sanitary housing.
Long-term	Relocation of floating homes before construction	Under the URA, as amended, floating homes will be provided relocation assistance to relocate the home to a moorage within the area if available, which may include a supplement payment for moorage. If homes are not moved, ODOT or TriMet will purchase the floating homes at fair market value and provide relocation assistance, which may include payments, if necessary, to confirm compliance with the URA’s requirements for decent, safe, and sanitary housing.

8. PERMITS AND APPROVALS

8.1 Federal Permits

FTA would have to review and approve a Relocation Acquisition Management Plan prepared for the IBR Program before the acquiring agencies are authorized to begin acquiring right of way. Similar review and approval would not be required of FHWA per USDOT written guidance.

8.2 State Permits

The authority to grant easement rights to the Columbia River in Washington is held by DNR. An easement for portions of the Columbia River would be required for placement of the new Columbia River bridge structures. The Columbia River has been designated a Harbor Area by the Washington State Harbor Lines Commission. Any uses other than those related to navigation and commerce, such as a highway facility, must obtain approval from the Harbor Lines Commission. Project staff would work with DNR to conduct a “Public Place” process, for which public hearings are required, to gain this approval.

DSL or other Oregon state agency permits/approvals would be needed to locate highway piers in North Portland Harbor or Columbia River.

8.3 Local Permits

Temporary street vacations or easements may be needed from local jurisdictions to accommodate the construction of the Modified LPA.

9. REFERENCES

- CBRE. 2023. Portland Industrial Figures Q3 2023. October 10, 2023. Available at <https://www.cbre.com/insights/figures/portland-industrial-figures-q3-2023>. Accessed November 29, 2023.
- City of Portland. 2024. Buildings Database (GIS). Accessed September 1, 2024.
- Clark County. 2024. Buildings Database (GIS). Accessed September 1, 2024.
- Clark County. 2024. Parcel Database (GIS). Accessed September 1, 2024.
- CoStar. 2023. Portland-Vancouver Multi-Family Residential Market Report – Q2 2023. April 3, 2023. Available at <<https://www.svnbluestone.com/wp-content/uploads/2021/06/Portland-OR-MultiFamily-Market-August-2021.pdf>>. Accessed August 24, 2023.
- IBR (IBR Program). 2023. Level 2 Toll Traffic and Revenue Study. Available at <https://www.interstatebridge.org/media/sh2lube2/ibr_level-2_tr_report_final_remediated.pdf>. Accessed December 22, 2025.
- IBR. 2025. “Detailed Bridge Lift Data 2007 – 2025.”
- Metro. 2018. 2018 Regional Transportation Plan. Available at <<https://www.oregonmetro.gov/regional-transportation-plan>>. Accessed April 5, 2023.
- ODOT (Oregon Department of Transportation). 2018. 2018 ODOT Right of Way Manual. August 31, 2018. Available at <<https://www.oregon.gov/odot/ROW/Documents/ROW-Manual.pdf>>. Accessed April 12, 2021.
- Oregon Metro. 2024. RLIS Parcel Database (GIS). Accessed September 1, 2024.
- RMLS (Regional Multiple Listing Service). 2022. Regional Multiple Listing Service – RMLS Web. Available at <<https://rmlscentral.com/>>. Accessed October 6, 2022.
- RTC (Regional Transportation Commission). 2019. Regional Transportation Plan for Clark County. Available at <<https://www.rtc.wa.gov/programs/rtp/clark/>>. Accessed June 6, 2023.
- SVN Bluestone & Hockley. 2021a. Portland-Vancouver Industrial Market Report – Q2 2021. August 24, 2021. Available at <<https://www.svnbluestone.com/portland-commercial-real-estate-market-reports/>>. Accessed October 6, 2022.
- SVN Bluestone & Hockley. 2021b. Portland-Vancouver Office Market Report – Q2 2021. August 24, 2021. Available at <<https://www.svnbluestone.com/portland-commercial-real-estate-market-reports/>>. Accessed October 6, 2022.

- SVN Bluestone & Hockley. 2021c. Portland-Vancouver Multi-Family Residential Market Report – Q2 2021. August 24, 2021. Available at <<https://www.svnbluestone.com/portland-commercial-real-estate-market-reports/>>. Accessed October 6, 2022.
- SVN Bluestone & Hockley. 2021d. Portland-Vancouver Retail Market Report – Q2 2021. August 24, 2021. Available at <<https://www.svnbluestone.com/portland-commercial-real-estate-market-reports/>>. Accessed October 6, 2022.
- TriMet. 2004. Relocation Appeals Procedure. November 15, 2004. Available at <https://trimet.org/pdfs/code/TriMet_Code_Chapter_8.pdf>. Accessed April 12, 2021.
- USCG (U.S. Coast Guard). 2022. Preliminary Navigation Clearance Determination for the Interstate Bridge Replacement Program. Letter to Thomas D. Goldstein, PE, IBR Program Oversight Manager, FHWA, from B. J. Harris, Chief, Waterways Management Branch, Coast Guard District 13. June 17. Available at <https://www.interstatebridge.org/media/fi2b3xei/ibr_next_steps_bridge_permitting_june2022_remediated.pdf>. Accessed September 25, 2023.
- USCG. 2026. Preliminary Navigation Clearance Determination for the Interstate Bridge Replacement Program. Letter to Carley Francis, Interim IBR Program Administrator, IBR Program, from Brian L Dunn, Chief, Office of Bridge Programs. January 16, 2026. Available at <https://www.interstatebridge.org/media/2ildjsdp/ibrp_pncd_2026.pdf>. Accessed January 16, 2026.
- US DOT (U.S. Department of Transportation). 2019. Uniform Relocation Act 49 CFR part 24 [FHWA Docket No. FHWA-2018-0039]. Available at <<https://www.federalregister.gov/documents/2019/12/18/2019-25558/uniform-relocation-assistance-and-real-property-acquisition-for-federal-and-federally-assisted>>. Access September 1, 2024.
- WSDOT (Washington State Department of Transportation). 2020. Right of Way Manual. September 2020. Available at <<https://www.wsdot.wa.gov/publications/manuals/fulltext/M26-01/ROW.pdf>>. Accessed April 12, 2021.

Appendix A. List of Property Acquisitions and Easement

APPENDIX A LIST OF PROPERTY ACQUISITIONS AND EASEMENTS

Appendix Table A1 - Portland Mainland

IBR ID#	Address	Zoning	Land Use	Acquisition Status	Total Property Size (sqft)	Permanent Impact (sqft)	Temporary Construction Impact (sqft)
1N1E03 -00300	10850 N DENVER AVE	OS	Public - Park	TCE	3,739,051	0	91
1N1E03 -00400	N DENVER AVE	OS	Public - Vacant	TCE	63,017	0	1
1N1E03B -00100	N MARINE DR	CE	Vacant	TCE	199,047	0	27,199
1N1E03B -00500	11021 N VANCOUVER WAY	IG2	Industrial	TCE	16,109	0	473
1N1E03B -00800	10931 N VANCOUVER WAY	IG2	Industrial	TCE	28,828	0	936
1N1E03BB -02300	1101 N MARINE DR	CM2	Multi Family Residential	TCE	22,049	0	50
1N1E03CA -00200	720 N HAYDEN MEADOWS DR	IG2	Industrial	TCE	311,021	0	0
1N1E04A -00600	10890 N DENVER AVE	OS	Public - Utilities	TCE	9,102	0	1
1N1E03 -00201	10725 N VANCOUVER WAY	IG2	Industrial	Partial	144,719	853	11,120
1N1E03 -00202	10615 N VANCOUVER WAY	IG2	Industrial	Partial	145,213	65,880	79,333
1N1E03BB -00100	1415 WI/ N MARINE DR	CE	Vacant	Partial	46,896	0	46,774
1N1E03BB -00501	1000 N ANCHOR WAY	CM2	Multi Family Residential	Partial	47,435	741	0
1N1E03BB -00600	1200 N ANCHOR WAY	CM2	Hotel	Partial	82,682	662	1,191
1N1E03BB -01200	1014 N MARINE DR	IG2	Commercial - Retail	Partial	53,979	2,614	3,481
1N1E03BB -01801	1250 N ANCHOR WAY	CM2	Hotel	Partial	81,546	1,042	6,365
1N1E03CA -00100	125-233 N HAYDEN MEADOWS DR	IG2	Vacant	Partial	53,920	4,197	49,723
1N1E04 -00100	2060 WI/ N MARINE DR	IG2	Public- Expo	Partial	470,939	178,933	3,178
1N1E04 -00400	1940 N VICTORY BLVD	OS	Public - PIR	Partial	15,528,777	3,861	9,543
2N1E33 -00200	2060 N MARINE DR	IG2	Public- Expo	Partial	1,656,266	298,179	126,315
2N1E33 -00202	10799 WI/ N EXPO RD	OS	Public - Vacant	Partial	31,747	6,535	11,692
2N1E33D -01400	LEVY CODE 710	IG2	Public - Park	Partial	158,333	4,954	4,917
2N1E33DD -00300	1801-1809 N PIER 99 ST	IG2	Industrial	Partial	34,134	13	3,347
2N1E33DD -00400	1835 WI/ N MARINE DR	IG2	Marina	Partial	70,739	6,502	5,111
1N1E03BB -01300	11051 N VANCOUVER WAY	IG2	Commercial - Retail	Full	21,232	21,232	0
2N1E33DD -00100	1610 N PIER 99 ST	IG2	Industrial / SFR (Floating Homes)	Full	44,344	44,344	0
2N1E34C -02000	1415 N PIER 99 ST	CE	Commercial - Retail / Marina	Full	69,379	69,379	0
						709,920	390,839
						16.3 acres	9 acres

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A2 - Hayden Island

IBR ID#	Address	Zoning	Land Use	Acquisition Status	Total Property Size (sqft)	Permanent Impact (sqft)	Temporary Construction Impact (sqft)
2N1E33 -00100	1555 N TOMAHAWK IS DR	CE	Commercial - Retail	Partial	2,447,829	150,976	119,793
2N1E33D -00100	N JANTZEN AVE	CE	ROW	Partial	81,217	17,371	217
2N1E33D -00502	1525-2055 N JANTZEN AVE	CE	Single Family Residential - Marina Parking	Partial	230,606	20,246	17,068
2N1E33D -00600	12045 N PARKER AVE	CE	Commercial - Retail	Partial	339,061	7,518	63,919
2N1E33D -01200	1501 N JANTZEN AVE	CE	Public - River	Partial	779,963	59,405	39,498
2N1E34 -00300	1401 N HAYDEN IS DR	CE	Hotel	Partial	591,106	225,757	153,755
2N1E34C -00100	909 N HAYDEN IS DR	CE	Hotel	Partial	601,873	22,195	46,193
2N1E34C -00300	1321-1337 N HAYDEN IS DR	CE	Commercial - Retail	Partial	28,303	1,239	1,509
2N1E34C -01300	11901-11945 N JANTZEN DR	CE	Commercial - Retail	Partial	203,392	28,412	12,720
2N1E34C -01700	12050 N JANTZEN DR	CE	Commercial - Retail	Partial	166,623	13,581	10,286
2N1E34C -01800	LEVY CODE 201	CE	Single Family Residential - Floating Homes	Partial	1,101,653	40,013	58,508
2N1E34CA -00500	12226 N JANTZEN DR	CM1	Hotel	Partial	129,159	3,676	8,627
2N1E34CA -00600	909 N TOMAHAWK IS DR	CM1	Commercial - Office	Partial	34,281	1,978	7,196
2N1E34CA -00700	12118 N JANTZEN DR	CM1	Commercial - Retail	Partial	27,467	7,891	3,110
2N1E34CA -00900	12240 N JANTZEN DR	CM1	Commercial - Retail	Partial	25,476	2,743	5,808
2N1E34CA -01300	12237 N JANTZEN DR	CM1	Commercial - Retail	Partial	27,402	8,381	2,828
2N1E34CA -01400	12225 N JANTZEN DR	CM1	Commercial - Retail	Partial	27,639	5,581	2,086
2N1E34CA -01500	12105 WI/ N JANTZEN DR	CM1	Commercial - Retail	Partial	30,375	7,849	3,164
2N1E34CA -01600	900 N TOMAHAWK IS DR	CE	Public - Fire Dept.	Partial	54,411	2,232	1,983
2N1E33D -00101	N CENTER AVE	CE	ROW	Full	56,801	56,801	0
2N1E33D -00200	11950 N CENTER AVE	CE	Commercial - Retail	Full	42,169	42,169	0
2N1E33D -00300	N CENTER AVE	CE	Vacant	Full	2,788	2,788	0
2N1E33D -00400	N CENTER AVE	CE	Other	Full	5,061	5,061	0
2N1E33D -00501	11850 N CENTER AVE	CE	Commercial - Retail	Full	18,364	18,364	0
2N1E34C -00200	1401 WI/ N HAYDEN IS DR	CE	Vacant	Full	4,906	4,906	0
2N1E34C -00400	12300 N PARKER AVE	CE	Commercial - Retail	Full	22,433	22,433	0
2N1E34C -00601	N CENTER AVE	CE	Vacant	Full	884	884	0
2N1E34C -00602	12229 N CENTER AVE	CE	Commercial - Retail	Full	19,871	19,871	0
2N1E34C -00603	12235 N CENTER AVE	CE	Commercial - Retail	Full	34,091	34,091	0
2N1E34C -00604	12105 N CENTER AVE	CE	Commercial - retail	Full	47,907	47,907	0
2N1E34C -00605	12005 N CENTER AVE	CE	Commercial - Retail	Full	40,702	40,702	0
2N1E34C -00606	12055 N CENTER AVE	CE	Commercial - Retail	Full	24,089	24,089	0
2N1E34C -00607	11915 N CENTER AVE	CE	Commercial - Retail	Full	52,255	52,255	0
2N1E34C -01400	11875 N JANTZEN DR	CE	Commercial - Retail	Full	50,352	50,352	0
2N1E34C -01500	N JANTZEN AVE	CE	Vacant	Full	712	712	0
2N1E34C -01600	N JANTZEN DR	CE	ROW	Full	50,763	50,763	0
2N1E34CA -00800	N JANTZEN AVE	CM1	Vacant	Full	92	92	0
2N1E34CA -01000	N JANTZEN AVE	CM1	Vacant	Full	46	46	0
2N1E34CA -01100	N JANTZEN AVE	CM1	ROW	Full	25,678	25,678	0
2N1E34CA -01200	909 WI/ N HAYDEN IS DR	CM1	Vacant	Full	11,820	11,820	0

1,138,831 558,266
26.1 acres 12.8 acres

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A3 - West Hayden Island

IBR ID#	Address	Zoning	Land Use	Acquisition Status	Total Property Size (sqft)	Permanent Impact (sqft)*	Temporary Construction Impact (sqft)*
2N1E33A -01500	N HAYDEN IS DR	IG2	Industrial	Partial	130,141	0	0
2N1E33B -00100	3000 NW/ N HAYDEN IS DR	IG2	Industrial	Partial	166,388	0	0
2N1E33B -00200	LEVY CODE 390	MUF19	Utilities	Partial	254,995	0	0
2N1E29 -EAS	BPA Right-of-Way	MUF19	Utilities	Partial	689,886	0	0
2N1E30 -00300	LEVY CODE 390	MUF19	Vacant	Full	1,138,740	1,138,740	0
NA	BNSF (Easement)	MUF19	Utilities	Partial	520,160	0	0

1,138,740
26.1 acres 0
12.8 acres

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Permanent and temporary area of impact for West Hayden Island are not available at the current level of conceptual design.

Appendix Table A4 - Ruby Junction

IBR ID#	Address	Zoning	Land Use	Acquisition Status	Total Property Size (sqft)	Permanent Impact (sqft)	Temporary Construction Impact (sqft)
1S3E05DA -03500	1709 NW ELEVEN MILE AVE	HI	Industrial	Partial	43,704	11,105	0
1S3E05DA -01500	1806 NW ELEVEN MILE AVE	HI	Industrial	Full	21,609	21,609	0
1S3E05DA -01300	1702 NW ELEVEN MILE AVE	HI	Industrial	Full	67,968	67,968	0
1S3E05AD -02400	2450 NW ELEVEN MILE AVE	SC-RJ	Commercial - Retail	Partial	42,349	2,239	0
1S3E05AD -03200	2227 NW ELEVEN MILE AVE	HI	Industrial	Full	43,508	43,508	0
1S3E05AD -02500	2410 NW BURNSIDE CT	HI	Industrial	Full	58,685	58,685	0

205,115
5.46 acres 0
0 acres

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
12454005	800 E 40TH ST, VANCOUVER, 98663	R-22	Public - School	Partial	977,608	77	12,313	470
12760000	714 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,127	0	0	0
12770000	3906 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,086	0	0	0
12825000	3907 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	6,147	0	0	0
12830000	800 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	4,969	0	0	0
12882000	3921 I ST, VANCOUVER, 98663	R-22	Multi Family Residential	Subsurface Easement	7,689	0	2,484	0
13455000	3114 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,264	0	1,748	0
13460000	3110 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,567	0	1,802	0
13470000	3106 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	4,857	0	1,646	0
13471000	3100 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,914	0	1,640	0
13670000	903 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	13,750	0	3,391	159
13700000	3014 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,723	0	1,994	0
13710000	3012 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,080	0	1,741	0
13720000	3004 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	5,639	0	1,940	0
13725000	3000 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,845	0	1,737	0
13960000	3811 H ST, VANCOUVER, 98663	R-22	Commercial - Office	TCE - Access Impact	10,673	0	0	0
13980000	3814 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,910	0	0	0
13990000	709 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,920	0	0	0
14000000	3812 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,000	0	0	0
14075000	705 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,934	0	0	0
14686000	3701 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	8,129	0	4,583	540
14690000	3709 I ST, VANCOUVER, 98663	R-9	Platted Residential	Subsurface Easement	2,463	0	11	224
14763000	3601 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Full	5,000	5,000	0	0
14765000	3605 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
14766000	3609 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
14768000	3615 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15080000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15090000	900 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,500	0	4,043	0
15095000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential (Accessory Parcel)	Full	2,500	2,500	0	0
15105000	3515 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15230000	900 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	466	2,303	297
15240000	3405 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	5,000	651	2,303	297
15241000	3409 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	829	2,311	305
15250000	3415 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	1,014	2,313	306
15600000	814 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	159
15670000	900 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	4,465	0	0	333
15675000	904 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	4,339	4,339	0	0
15680000	905 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,035	5,035	0	0
15840000	3214 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,669	0	2,354	956
15850000	3208 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,030	0	1,909	41
15860000	3204 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,415	0	2,174	281
15870000	3200 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,318	0	1,725	0
15970000	3201 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,998	0	1,574	70
15975000	3205 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,663	74

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
15980000	3211 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,751	75
15985000	3215 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,077	0	1,358	120
16000000	815 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	128
16225000	904 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	3,371	189
16234000	905 E 32ND ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	3,824	292
16360000	904 E 26TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,919	0	2,903	1,719
16370000	2611 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,500	0	1,271	226
16380000	2613 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	885	72
16750000	2914 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	12,760	0	4,237	223
16770000	N/A	R-9	Public - Vacant	Subsurface Easement	1,094	0	441	862
16775000	2900 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,521	0	1,110	546
16776000	2904 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,081	0	1,588	0
16810000	900 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,500	0	0	664
16815000	904 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,654	749
16820000	903 E 30TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,885	118
16851000	814 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	5,560	0	0	43
17200000	815 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	5
17275000	904 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	1,594	73
17280000	905 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	6,000	0	1,628	143
17285000	901 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	48
17290000	2816 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,249	0	2,312	513

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
17300000	2800 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,905	0	3,175	275
17390000	2811 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	6,385	0	0	363
17570000	2714 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	9,583	30	3,489	163
17580000	2708 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,097	88	1,898	2
17586000	2700 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,654	8	1,952	45
17630000	900 E 27TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	788	23
17632000	2707 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	790	21
17634000	2709 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	791	24
17636000	901 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,547	0	800	26
17925000	2614 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,886	178	2,226	159
17935000	2610 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,633	328	2,112	165
17950000	2600 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	6,788	209	3,865	563
19885000	2901 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	10,177	0	0	266
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279908	111 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	34,308	0	0	164
38279911	NA	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279914	1105 E 5TH ST, VANCOUVER, 98661	CPX	Public - Park	Partial	8,382,860	18,900	0	37,605
38279916	605 E EVERGREEN BLVD, VANCOUVER, 98661	CPX	Public - Police	Partial	89,581	450	0	221
38279920	1009 E MCLOUGHLIN BLVD, VANCOUVER, 98663	CPX	Public - Park	Partial	393,631	15,605	0	4,106
38279927	N/A	CPX	Public - Park	Partial	88,754	5,514	0	6,127
38279930	N/A	CX	Rail	Partial	747	747	0	0
38279934	N/A	CPX	Public - Park	Partial	22,164	5,063	0	3,295

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279935	112 SE COLUMBIA WAY, VANCOUVER, 98661	CPX	Public - Vacant	Partial	53,867	10,655	0	38,426
38279940*	701 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279941*	601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279942*	650 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279943*	750 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279944*	800 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279945*	850 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279946*	901 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279947*	951 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279948*	1001 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279949*	1051 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279950*	1101 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279951*	1151 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279952*	1201 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279953*	1251 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279954*	1301 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279955*	1351 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279956*	1401 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279957*	1451 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279958*	1501 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279959*	1551 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279960*	1601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279962	605 BARNES ST, VANCOUVER, 98661	CPX	Public - Park	Partial	474,838	5,790	0	12,309
38470002	500 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470004*	500 BROADWAY ST UNIT GAR, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470006*	500 BROADWAY ST UNIT 501, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470008*	500 BROADWAY ST UNIT 502, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470010*	500 BROADWAY ST UNIT 503, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470012*	500 BROADWAY ST UNIT 504, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470014*	500 BROADWAY ST UNIT 505, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470016*	500 BROADWAY ST UNIT 506, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470018*	500 BROADWAY ST UNIT 507, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470020*	500 BROADWAY ST UNIT 508, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470022*	500 BROADWAY ST UNIT 509, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470024*	500 BROADWAY ST UNIT 510, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470026*	500 BROADWAY ST UNIT 511, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470028*	500 BROADWAY ST UNIT 601, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470030*	500 BROADWAY ST UNIT 602, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470032*	500 BROADWAY ST UNIT 603, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470034*	500 BROADWAY ST UNIT 604, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470036*	500 BROADWAY ST UNIT 605, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470038*	500 BROADWAY ST UNIT 606, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38470040*	500 BROADWAY ST UNIT 607, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470042*	500 BROADWAY ST UNIT 608, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470044*	500 BROADWAY ST UNIT 609, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470046*	500 BROADWAY ST UNIT 610, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38515000	N/A	CX	Public - Vacant	TCE	5,076	0	0	0
38520000	N/A	CX	Public - Vacant	TCE	2,208	0	0	0
38580000	606 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Retail	TCE	10,300	0	0	70
38820000	318 E 7TH ST, VANCOUVER, 98660	CX	Multi Family Residential	Partial	29,719	412	0	12,817
38823000	901 C ST, VANCOUVER, 98660	CX	Public - Library	Partial	28,236	1,761	0	1,479
38826000	N/A	CX	Parking	Partial	40,150	26,012	0	14,139
38828000	N/A	CX	Vacant	Partial	63,649	29,391	0	33,295
38840000	801 C ST, VANCOUVER, 98660	CX	Commercial - Retail	Partial	70,147	6,587	0	2,607
39198000	N/A	CX	Vacant	TCE	17,104	0	0	17,104
39212000	N/A	CX	Parking	Partial	10,011	10,011	0	0
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	7,028	7,028	0	0
39220000	400 E EVERGREEN BLVD UNIT 1, VANCOUVER, 98660	CX	Commercial - Office	TCE	136,134	0	0	2,096
39220001	400 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	70,541	0	0	11
39431001	415 E 13TH ST, VANCOUVER, 98660	CX	Commercial - Retail	Subsurface Easement	40,001	0	0	22
40000000	400 E MILL PLAIN BLVD, VANCOUVER, 98660	CX	Commercial - Office	TCE	30,619	0	0	1,062
40440000	404 E 15TH ST, VANCOUVER, 98663	CX	Commercial - Office	TCE	25,150	0	0	1,532
40640000	1601 G ST, VANCOUVER, 98663	CX	Commercial - Office	Subsurface Easement	9,448	0	0	16
47560000	102 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	Full	2,310	2,310	0	0
47580000	100 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Commercial	Full	6,000	6,000	0	0
47585000	101 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	25,415	0	0	71
47600000	N/A	CX	Rail	Partial	6,131	6,082	0	30
47615000	N/A	CX	Public - Vacant	Full	3,390	3,390	0	0

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48320000	411 COLUMBIA ST	0	MULTI-FAMILY 100 OR MORE UNITS	TCE - Access Impact	40,458	0	0	0
48380000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	5,036	0	0	0
48390000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	4,937	0	0	0
48400000	215 W 4TH ST	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	TCE - Access Impact	12,030	0	0	0
48410000	NA	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	Full	6,943	6,943	0	0
48420000	210 W 3RD ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	10,020	10,020	0	0
48430000	300 WASHINGTON ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	5,024	5,024	0	0
48450000	201 COLUMBIA ST	CCW:VAN	RAILROAD RIGHT-OF-WAY	Partial	5,054	5,054	0	0
48710000	301 W 6TH ST, VANCOUVER, 98660	CX	Commercial	TCE - Access Impact	92,416	0	0	0
48740000	N/A	CX	Public - Parking	TCE	14,058	0	0	13,909
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	10,058	0	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	TCE - Access Impact	20,281	0	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Parking	TCE - Access Impact	22,194	0	0	0
48835000	304 COLUMBIA ST, VANCOUVER, 98660	CX	Utilities	TCE	4,019	0	0	646
48840000	403 QUAYSIDE PL	XX	UNUSED OR VACANT LAND - NO IMPROVEMENTS	TCE - Access Impact	28,260	0	0	0
502240000	501 W COLUMBIA WAY, VANCOUVER, 98660	Water	Vacant	TCE	56,045	0	0	897
502245000	103 Quayside Place Unit IRR, Vancouver, WA 98660	CX	Vacant	TCE	34,127	0	0	639
502246000	N/A	CX	Vacant	TCE	45,949	0	0	880
502250000	100 COLUMBIA ST	XX	TIDELANDS	Partial	35,381	13,849	0	232
502280000	NA	<Null>	Vacant	Partial	6,535	0	0	5,447
986049314	211 W COLUMBIA WAY, VANCOUVER, 98660	CX	Commercial	Partial	31,955	0	0	31,381
986049315		CCW:VAN	PRIME COMMERCIAL PAD SITE - VACANT	Partial	21,007	1,379	0	14,384

Appendix Table A5 -Double-Deck Fixed Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (102)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
986049316	330 W COLUMBIA WAY	CCW:VAN	PARKING GARAGES OR STRUCTURES	TCE - Access Impact	48,962	0	0	0
986049327		CCW:VAN	ZERO VALUE PROPERTY FOR VARIOUS REASONS	Partial	3,209	1,606	0	197
986053203	NA	Park	Commercial	TCE - Access Impact	440,058	0	0	0
986055014*	275 W 3RD ST UNIT 200, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055015*	275 W 3RD ST UNIT 300, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055016*	275 W 3RD ST UNIT 400, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055017*	275 W 3RD ST UNIT 500, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055018*	275 W 3RD ST UNIT 600, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986068123	904 E 30TH ST	R-9	Vacant	Subsurface Easement	4,125	0	1,770	88
NA**	NA	NA	Utilities	Partial	0	10,660	0	0

332,574
7.6ac 117,174
2.7ac 374,519
8.6ac

a - Properties identified as Subsurface Easement are included as Partial Acquisitions in Table 4-4

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE - Access Impact = The properties building or driveway access will be rebuilt accommodate project improvements.

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Indicates condominium ownership in a multi-use, commercial-residential tower.

** City of Vancouver Pump Station Locations which is not a recognized taxlot.

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
12454005	800 E 40TH ST, VANCOUVER, 98663	R-22	Public - School	Partial	977,608	77	12,313	470
12760000	714 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,127	0	0	0
12770000	3906 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,086	0	0	0
12825000	3907 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	6,147	0	0	0
12830000	800 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	4,969	0	0	0
12882000	3921 I ST, VANCOUVER, 98663	R-22	Multi Family Residential	Subsurface Easement	7,689	0	2,484	0
13455000	3114 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,264	0	1,748	0
13460000	3110 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,567	0	1,802	0
13470000	3106 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	4,857	0	1,646	0
13471000	3100 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,914	0	1,640	0
13670000	903 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	13,750	0	3,391	159
13700000	3014 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,723	0	1,994	0
13710000	3012 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,080	0	1,741	0
13720000	3004 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	5,639	0	1,940	0
13725000	3000 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,845	0	1,737	0
13960000	3811 H ST, VANCOUVER, 98663	R-22	Commercial - Office	TCE - Access Impact	10,673	0	0	0
13980000	3814 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,910	0	0	0
13990000	709 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,920	0	0	0
14000000	3812 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,000	0	0	0
14075000	705 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,934	0	0	0
14686000	3701 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	8,129	0	4,583	540
14690000	3709 I ST, VANCOUVER, 98663	R-9	Platted Residential	Subsurface Easement	2,463	0	11	224
14763000	3601 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Full	5,000	5,000	0	0
14765000	3605 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
14766000	3609 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
14768000	3615 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15080000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15090000	900 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,500	0	4,043	0
15095000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential (Accessory Parcel)	Full	2,500	2,500	0	0
15105000	3515 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15230000	900 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	466	2,303	297
15240000	3405 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	5,000	651	2,303	297
15241000	3409 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	829	2,311	305
15250000	3415 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	1,014	2,313	306
15600000	814 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	159
15670000	900 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	4,465	0	0	333
15675000	904 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	4,339	4,339	0	0
15680000	905 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,035	5,035	0	0
15840000	3214 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,669	0	2,354	956
15850000	3208 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,030	0	1,909	41
15860000	3204 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,415	0	2,174	281
15870000	3200 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,318	0	1,725	0
15970000	3201 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,998	0	1,574	70
15975000	3205 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,663	74

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
15980000	3211 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,751	75
15985000	3215 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,077	0	1,358	120
16000000	815 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	128
16225000	904 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	3,371	189
16234000	905 E 32ND ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	3,824	292
16360000	904 E 26TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,919	0	2,903	1,719
16370000	2611 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,500	0	1,271	226
16380000	2613 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	885	72
16750000	2914 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	12,760	0	4,237	223
16770000	N/A	R-9	Public - Vacant	Subsurface Easement	1,094	0	441	862
16775000	2900 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,521	0	1,110	546
16776000	2904 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,081	0	1,588	0
16810000	900 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,500	0	0	664
16815000	904 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,654	749
16820000	903 E 30TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,885	118
16851000	814 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	5,560	0	0	43
17200000	815 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	5
17275000	904 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	1,594	73
17280000	905 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	6,000	0	1,628	143
17285000	901 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	48
17290000	2816 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,249	0	2,312	513

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
17300000	2800 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,905	0	3,175	275
17390000	2811 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	6,385	0	0	363
17570000	2714 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	9,583	30	3,489	163
17580000	2708 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,097	88	1,898	2
17586000	2700 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,654	8	1,952	45
17630000	900 E 27TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	788	23
17632000	2707 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	790	21
17634000	2709 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	791	24
17636000	901 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,547	0	800	26
17925000	2614 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,886	178	2,226	159
17935000	2610 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,633	328	2,112	165
17950000	2600 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	6,788	209	3,865	563
19885000	2901 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	10,177	0	0	266
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279908	111 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	34,308	0	0	164
38279911	NA	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279914	1105 E 5TH ST, VANCOUVER, 98661	CPX	Public - Park	Partial	8,382,860	19,869	0	36,637
38279916	605 E EVERGREEN BLVD, VANCOUVER, 98661	CPX	Public - Police	Partial	89,581	450	0	221
38279920	1009 E MCLOUGHLIN BLVD, VANCOUVER, 98663	CPX	Public - Park	Partial	393,631	15,605	0	4,106
38279927	N/A	CPX	Public - Park	Partial	88,754	5,514	0	6,127
38279930	N/A	CX	Rail	Partial	747	747	0	0
38279934	N/A	CPX	Public - Park	Partial	22,164	5,063	0	3,295

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279935	112 SE COLUMBIA WAY, VANCOUVER, 98661	CPX	Public - Vacant	Partial	53,867	10,655	0	38,426
38279940*	701 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279941*	601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279942*	650 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279943*	750 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279944*	800 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279945*	850 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279946*	901 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279947*	951 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279948*	1001 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279949*	1051 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279950*	1101 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279951*	1151 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279952*	1201 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279953*	1251 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279954*	1301 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279955*	1351 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279956*	1401 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279957*	1451 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279958*	1501 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279959*	1551 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279960*	1601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279962	605 BARNES ST, VANCOUVER, 98661	CPX	Public - Park	Partial	474,838	5,790	0	12,309
38470002*	500 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470004*	500 BROADWAY ST UNIT GAR, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470006*	500 BROADWAY ST UNIT 501, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470008*	500 BROADWAY ST UNIT 502, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470010*	500 BROADWAY ST UNIT 503, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470012*	500 BROADWAY ST UNIT 504, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470014*	500 BROADWAY ST UNIT 505, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470016*	500 BROADWAY ST UNIT 506, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470018*	500 BROADWAY ST UNIT 507, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470020*	500 BROADWAY ST UNIT 508, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470022*	500 BROADWAY ST UNIT 509, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470024*	500 BROADWAY ST UNIT 510, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470026*	500 BROADWAY ST UNIT 511, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470028*	500 BROADWAY ST UNIT 601, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470030*	500 BROADWAY ST UNIT 602, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470032*	500 BROADWAY ST UNIT 603, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470034*	500 BROADWAY ST UNIT 604, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470036*	500 BROADWAY ST UNIT 605, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470038*	500 BROADWAY ST UNIT 606, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38470040*	500 BROADWAY ST UNIT 607, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470042*	500 BROADWAY ST UNIT 608, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470044*	500 BROADWAY ST UNIT 609, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470046	500 BROADWAY ST UNIT 610, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38515000	N/A	CX	Public - Vacant	TCE	5,076	0	0	0
38520000	N/A	CX	Public - Vacant	TCE	2,208	0	0	0
38580000	606 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Retail	TCE	10,300	0	0	70
38820000	318 E 7TH ST, VANCOUVER, 98660	CX	Multi Family Residential	Partial	29,719	412	0	12,817
38823000	901 C ST, VANCOUVER, 98660	CX	Public - Library	Partial	28,236	1,761	0	1,479
38826000	N/A	CX	Parking	Partial	40,150	26,012	0	14,139
38828000	N/A	CX	Vacant	Partial	63,649	29,391	0	33,295
38840000	801 C ST, VANCOUVER, 98660	CX	Commercial - Retail	Partial	70,147	6,587	0	2,607
39198000	N/A	CX	Vacant	TCE	17,104	0	0	17,104
39212000	N/A	CX	Parking	Partial	10,011	10,011	0	0
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	7,028	7,028	0	0
39220000	400 E EVERGREEN BLVD UNIT 1, VANCOUVER, 98660	CX	Commercial - Office	TCE	136,134	0	0	2,096
39220001	400 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	70,541	0	0	11
39431001	415 E 13TH ST, VANCOUVER, 98660	CX	Commercial - Retail	Subsurface Easement	40,001	0	0	22
40000000	400 E MILL PLAIN BLVD, VANCOUVER, 98660	CX	Commercial - Office	TCE	30,619	0	0	1,062
40440000	404 E 15TH ST, VANCOUVER, 98663	CX	Commercial - Office	TCE	25,150	0	0	1,532
40640000	1601 G ST, VANCOUVER, 98663	CX	Commercial - Office	Subsurface Easement	9,448	0	0	16
47560000	102 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	Full	2,310	2,310	0	0
47580000	100 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Commercial	Full	6,000	6,000	0	0
47585000	101 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	25,415	0	0	71
47600000	N/A	CX	Rail	Partial	6,131	6,082	0	30
47615000	N/A	CX	Public - Vacant	Full	3,390	3,390	0	0

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48320000	411 COLUMBIA ST	0	MULTI-FAMILY 100 OR MORE UNITS	TCE - Access Impact	40,458	0	0	0
48380000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	5,036	0	0	0
48390000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	4,937	0	0	0
48400000	215 W 4TH ST	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	TCE - Access Impact	12,030	0	0	0
48410000	NA	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	Full	6,943	6,943	0	0
48420000	210 W 3RD ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	10,020	10,020	0	0
48430000	300 WASHINGTON ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	5,024	5,024	0	0
48450000	201 COLUMBIA ST	CCW:VAN	RAILROAD RIGHT-OF-WAY	Partial	5,054	5,054	0	0
48710000	301 W 6TH ST, VANCOUVER, 98660	CX	Commercial	TCE - Access Impact	92,416	0	0	0
48740000	N/A	CX	Public - Parking	TCE	14,058	0	0	13,909
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	10,058	0	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	TCE - Access Impact	20,281	0	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Parking	TCE - Access Impact	22,194	0	0	0
48835000	304 COLUMBIA ST, VANCOUVER, 98660	CX	Utilities	TCE	4,019	0	0	646
48840000	403 QUAYSIDE PL	XX	UNUSED OR VACANT LAND - NO IMPROVEMENTS	TCE - Access Impact	28,260	0	0	0
502240000	501 W COLUMBIA WAY, VANCOUVER, 98660	Water	Vacant	TCE	56,045	0	0	897
502245000	103 Quayside Place Unit IRR, Vancouver, WA 98660	CX	Vacant	TCE	34,127	0	0	639
502246000	N/A	CX	Vacant	TCE	45,949	0	0	880
502250000	100 COLUMBIA ST	XX	TIDELANDS	Partial	35,381	13,849	0	232
502280000	NA	<Null>	Vacant	Partial	6,535	0	0	5,447
986049314	211 W COLUMBIA WAY, VANCOUVER, 98660	CX	Commercial	Partial	31,955	0	0	31,381
986049315		CCW:VAN	PRIME COMMERCIAL PAD SITE - VACANT	Partial	21,007	1,379	0	14,384

Appendix Table A6 -Double-Deck Fixed Span, 1-Aux Lane, Without C Street Ramps, and Centered I-5 (103)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
986049316	330 W COLUMBIA WAY	CCW:VAN	PARKING GARAGES OR STRUCTURES	TCE - Access Impact	48,962	0	0	0
986049327		CCW:VAN	ZERO VALUE PROPERTY FOR VARIOUS REASONS	Partial	3,209	1,606	0	197
986053203	NA	Park	Commercial	TCE - Access Impact	440,058	0	0	0
986055014*	275 W 3RD ST UNIT 200, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055015*	275 W 3RD ST UNIT 300, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055016*	275 W 3RD ST UNIT 400, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055017*	275 W 3RD ST UNIT 500, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055018*	275 W 3RD ST UNIT 600, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986068123	904 E 30TH ST	R-9	Vacant	Subsurface Easement	4,125	0	1,770	88
NA**	NA	<Null>	Utilities	Partial	<Null>	10,660	0	0

333,543 117,174 373,550
7.9ac 2.7ac 8.6ac

a - Properties identified as Subsurface Easement are included as Partial Acquisitions in Table 4-4

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE - Access Impact = The properties building or driveway access will be rebuilt accommodate project improvements.

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Indicates condominium ownership in a multi-use, commercial-residential tower.

** City of Vancouver Pump Station locations which is not a recognized taxlot.

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
12454005	800 E 40TH ST, VANCOUVER, 98663	R-22	Public - School	Partial	977,608	77	12,313	470
12760000	714 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,127	0	0	0
12770000	3906 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,086	0	0	0
12825000	3907 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	6,147	0	0	0
12830000	800 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	4,969	0	0	0
12882000	3921 I ST, VANCOUVER, 98663	R-22	Multi Family Residential	Subsurface Easement	7,689	0	2,484	0
13455000	3114 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,264	0	1,748	0
13460000	3110 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,567	0	1,802	0
13470000	3106 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	4,857	0	1,646	0
13471000	3100 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,914	0	1,640	0
13670000	903 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	13,750	0	3,391	159
13700000	3014 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,723	0	1,994	0
13710000	3012 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,080	0	1,741	0
13720000	3004 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	5,639	0	1,940	0
13725000	3000 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,845	0	1,737	0
13960000	3811 H ST, VANCOUVER, 98663	R-22	Commercial - Office	TCE - Access Impact	10,673	0	0	0
13980000	3814 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,910	0	0	0
13990000	709 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,920	0	0	0
14000000	3812 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,000	0	0	0
14075000	705 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,934	0	0	0
14686000	3701 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	8,129	0	4,583	540
14690000	3709 I ST, VANCOUVER, 98663	R-9	Platted Residential	Subsurface Easement	2,463	0	11	224
14763000	3601 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Full	5,000	5,000	0	0
14765000	3605 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
14766000	3609 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
14768000	3615 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15080000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15090000	900 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,500	0	4,043	0
15095000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential (Accessory Parcel)	Full	2,500	2,500	0	0
15105000	3515 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15230000	900 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	466	2,303	297
15240000	3405 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	5,000	651	2,303	297
15241000	3409 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	829	2,311	305
15250000	3415 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	1,014	2,313	306
15600000	814 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	159
15670000	900 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	4,465	0	0	333
15675000	904 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	4,339	4,339	0	0
15680000	905 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,035	5,035	0	0
15840000	3214 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,669	0	2,354	956
15850000	3208 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,030	0	1,909	41
15860000	3204 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,415	0	2,174	281
15870000	3200 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,318	0	1,725	0
15970000	3201 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,998	0	1,574	70
15975000	3205 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,663	74

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
15980000	3211 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,751	75
15985000	3215 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,077	0	1,358	120
16000000	815 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	128
16225000	904 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	3,371	189
16234000	905 E 32ND ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	3,824	292
16360000	904 E 26TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,919	0	2,903	1,719
16370000	2611 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,500	0	1,271	226
16380000	2613 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	885	72
16750000	2914 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	12,760	0	4,237	223
16770000	N/A	R-9	Public - Vacant	Subsurface Easement	1,094	0	441	862
16775000	2900 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,521	0	1,110	546
16776000	2904 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,081	0	1,588	0
16810000	900 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,500	0	0	664
16815000	904 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,654	749
16820000	903 E 30TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,885	118
16851000	814 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	5,560	0	0	43
17200000	815 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	5
17275000	904 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	1,594	73
17280000	905 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	6,000	0	1,628	143
17285000	901 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	48
17290000	2816 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,249	0	2,312	513

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
17300000	2800 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,905	0	3,175	275
17390000	2811 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	6,385	0	0	363
17570000	2714 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	9,583	30	3,489	163
17580000	2708 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,097	88	1,898	2
17586000	2700 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,654	8	1,952	45
17630000	900 E 27TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	788	23
17632000	2707 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	790	21
17634000	2709 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	791	24
17636000	901 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,547	0	800	26
17925000	2614 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,886	178	2,226	159
17935000	2610 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,633	328	2,112	165
17950000	2600 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	6,788	209	3,865	563
19885000	2901 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	10,177	0	0	266
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,346	0	896
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	TCE	440,058	0	0	896
38279908	111 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	34,308	0	0	164
38279911	NA	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279914	1105 E 5TH ST, VANCOUVER, 98661	CPX	Public - Park	Partial	8,382,860	18,788	0	37,718
38279916	605 E EVERGREEN BLVD, VANCOUVER, 98661	CPX	Public - Police	Partial	89,581	450	0	221
38279920	1009 E M CLOUGHLIN BLVD, VANCOUVER, 98663	CPX	Public - Park	Partial	393,631	15,605	0	4,106
38279927	N/A	CPX	Public - Park	Partial	88,754	5,514	0	6,127
38279930	N/A	CX	Rail	Partial	747	747	0	0
38279934	N/A	CPX	Public - Park	Partial	22,164	5,063	0	3,295

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279935	112 SE COLUMBIA WAY, VANCOUVER, 98661	CPX	Public - Vacant	Partial	53,867	10,655	0	38,426
38279940	701 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279941	601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279942	650 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279943	750 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279944	800 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279945	850 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279946	901 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279947	951 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279948	1001 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279949	1051 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279950	1101 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279951	1151 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279952	1201 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279953	1251 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279954	1301 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279955	1351 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279956	1401 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279957	1451 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279958	1501 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279959	1551 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279960	1601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279962	605 BARNES ST, VANCOUVER, 98661	CPX	Public - Park	Partial	474,838	124	0	17,975
38470002	500 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470004	500 BROADWAY ST UNIT GAR, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470006	500 BROADWAY ST UNIT 501, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470008	500 BROADWAY ST UNIT 502, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470010	500 BROADWAY ST UNIT 503, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470012	500 BROADWAY ST UNIT 504, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470014	500 BROADWAY ST UNIT 505, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470016	500 BROADWAY ST UNIT 506, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470018	500 BROADWAY ST UNIT 507, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470020	500 BROADWAY ST UNIT 508, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470022	500 BROADWAY ST UNIT 509, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470024	500 BROADWAY ST UNIT 510, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470026	500 BROADWAY ST UNIT 511, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470028	500 BROADWAY ST UNIT 601, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470030	500 BROADWAY ST UNIT 602, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470032	500 BROADWAY ST UNIT 603, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470034	500 BROADWAY ST UNIT 604, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470036	500 BROADWAY ST UNIT 605, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470038	500 BROADWAY ST UNIT 606, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38470040	500 BROADWAY ST UNIT 607, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470042	500 BROADWAY ST UNIT 608, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470044	500 BROADWAY ST UNIT 609, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470046	500 BROADWAY ST UNIT 610, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38515000	N/A	CX	Public - Vacant	TCE	5,076	0	0	0
38520000	N/A	CX	Public - Vacant	TCE	2,208	0	0	0
38580000	606 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Retail	TCE	10,300	0	0	70
38820000	318 E 7TH ST, VANCOUVER, 98660	CX	Multi Family Residential	Full	29,719	29,719	0	0
38823000	901 C ST, VANCOUVER, 98660	CX	Public - Library	Partial	28,236	1,761	0	1,479
38826000	N/A	CX	Parking	Partial	40,150	26,012	0	14,139
38828000	N/A	CX	Vacant	Partial	63,649	29,391	0	33,294
38840000	801 C ST, VANCOUVER, 98660	CX	Commercial - Retail	Full	70,147	70,147	0	0
39198000	N/A	CX	Vacant	TCE	17,104	0	0	17,104
39212000	N/A	CX	Parking	Partial	10,011	10,011	0	0
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	7,028	7,028	0	0
39220000	400 E EVERGREEN BLVD UNIT 1, VANCOUVER, 98660	CX	Commercial - Office	TCE	136,134	0	0	2,096
39220001	400 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	70,541	6,793	0	0
39431001	415 E 13TH ST, VANCOUVER, 98660	CX	Commercial - Retail	Subsurface Easement	40,001	0	0	5
40000000	400 E MILL PLAIN BLVD, VANCOUVER, 98660	CX	Commercial - Office	TCE	30,619	0	0	1,062
40440000	404 E 15TH ST, VANCOUVER, 98663	CX	Commercial - Office	TCE	25,150	0	0	1,532
40640000	1601 G ST, VANCOUVER, 98663	CX	Commercial - Office	Subsurface Easement	9,448	0	0	16
47560000	102 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	Full	2,310	2,310	0	0
47580000	100 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Commercial	Full	6,000	6,000	0	0
47585000	101 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	25,415	0	0	71
47600000	N/A	CX	Rail	Partial	6,131	6,082	0	30
47615000	N/A	CX	Public - Vacant	Full	3,390	3,390	0	0

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48320000	411 COLUMBIA ST	0	MULTI-FAMILY 100 OR MORE UNITS	TCE - Access Impact	40,458	0	0	0
48380000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	5,036	0	0	0
48390000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	4,937	0	0	0
48400000	215 W 4TH ST	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	TCE - Access Impact	12,030	0	0	0
48410000	NA	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	Full	6,943	6,943	0	0
48420000	210 W 3RD ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	10,020	10,020	0	0
48430000	300 WASHINGTON ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	5,024	5,024	0	0
48450000	201 COLUMBIA ST	CCW:VAN	RAILROAD RIGHT-OF-WAY	Partial	5,054	5,054	0	0
48710000	301 W 6TH ST, VANCOUVER, 98660	CX	Commercial	TCE - Access Impact	92,416	0	0	0
48740000	N/A	CX	Public - Parking	TCE	14,058	0	0	13,909
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	10,058	0	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	TCE - Access Impact	20,281	0	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Parking	TCE - Access Impact	22,194	0	0	0
48835000	304 COLUMBIA ST, VANCOUVER, 98660	CX	Utilities	TCE	4,019	0	0	646
48840000	403 QUAYSIDE PL	XX	UNUSED OR VACANT LAND - NO IMPROVEMENTS	TCE - Access Impact	28,260	0	0	0
502240000	501 W COLUMBIA WAY, VANCOUVER, 98660	Water	Vacant	TCE	56,045	0	0	897
502245000	103 Quayside Place Unit IRR, Vancouver, WA 98660	CX	Vacant	TCE	34,127	0	0	639
502246000	N/A	CX	Vacant	TCE	45,949	0	0	880
502250000	100 COLUMBIA ST	XX	TIDELANDS	Partial	35,381	13,849	0	232
502280000	NA	<Null>	Vacant	Partial	6,535	0	0	5,447
986049314	211 W COLUMBIA WAY, VANCOUVER, 98660	CX	Commercial	Partial	31,955	0	0	31,381
986049315		CCW:VAN	PRIME COMMERCIAL PAD SITE - VACANT	Partial	21,007	1,379	0	14,384

Appendix Table A7 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Westward I-5 (108)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
986049316	330 W COLUMBIA WAY	CCW:VAN	PARKING GARAGES OR STRUCTURES	TCE - Access Impact	48,962	0	0	0
986049327		CCW:VAN	ZERO VALUE PROPERTY FOR VARIOUS REASONS	Partial	3,209	1,606	0	197
986053203	NA	Park	Commercial	TCE - Access Impact	440,058	0	0	0
986055014	275 W 3RD ST UNIT 200, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055015	275 W 3RD ST UNIT 300, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055016	275 W 3RD ST UNIT 400, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055017	275 W 3RD ST UNIT 500, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055018	275 W 3RD ST UNIT 600, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986068123	904 E 30TH ST	R-9	Vacant	Subsurface Easement	4,125	0	1,770	88
NA**	NA	NA	Utilities	Partial	0	10,660	0	0

417,109
9.5ac 117,174
2.7ac 364,845
8.4ac

a - Properties identified as Subsurface Easement are included as Partial Acquisitions in Table 4-4

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE - Access Impact = The properties building or driveway access will be rebuilt accommodate project improvements.

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Indicates condominium ownership in a multi-use, commercial-residential tower.

** City of Vancouver Pump Station locations which is not a recognized taxlot.

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
12454005	800 E 40TH ST, VANCOUVER, 98663	R-22	Public - School	Partial	977,608	77	12,313	470
12760000	714 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,127	0	0	0
12770000	3906 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,086	0	0	0
12825000	3907 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	6,147	0	0	0
12830000	800 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	4,969	0	0	0
12882000	3921 I ST, VANCOUVER, 98663	R-22	Multi Family Residential	Subsurface Easement	7,689	0	2,484	0
13455000	3114 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,264	0	1,748	0
13460000	3110 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,567	0	1,802	0
13470000	3106 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	4,857	0	1,646	0
13471000	3100 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,914	0	1,640	0
13670000	903 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	13,750	0	3,391	159
13700000	3014 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,723	0	1,994	0
13710000	3012 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,080	0	1,741	0
13720000	3004 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	5,639	0	1,940	0
13725000	3000 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,845	0	1,737	0
13960000	3811 H ST, VANCOUVER, 98663	R-22	Commercial - Office	TCE - Access Impact	10,673	0	0	0
13980000	3814 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,910	0	0	0
13990000	709 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,920	0	0	0
14000000	3812 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,000	0	0	0
14075000	705 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,934	0	0	0
14686000	3701 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	8,129	0	4,583	540
14690000	3709 I ST, VANCOUVER, 98663	R-9	Platted Residential	Subsurface Easement	2,463	0	11	224
14763000	3601 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Full	5,000	5,000	0	0
14765000	3605 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
14766000	3609 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
14768000	3615 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15080000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15090000	900 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,500	0	4,043	0
15095000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential (Accessory Parcel)	Full	2,500	2,500	0	0
15105000	3515 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15230000	900 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	466	2,303	297
15240000	3405 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	5,000	651	2,303	297
15241000	3409 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	829	2,311	305
15250000	3415 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	1,014	2,313	306
15600000	814 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	159
15670000	900 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	4,465	0	0	333
15675000	904 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	4,339	4,339	0	0
15680000	905 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,035	5,035	0	0
15840000	3214 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,669	0	2,354	956
15850000	3208 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,030	0	1,909	41
15860000	3204 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,415	0	2,174	281
15870000	3200 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,318	0	1,725	0
15970000	3201 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,998	0	1,574	70
15975000	3205 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,663	74

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
15980000	3211 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,751	75
15985000	3215 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,077	0	1,358	120
16000000	815 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	128
16225000	904 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	3,371	189
16234000	905 E 32ND ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	3,824	292
16360000	904 E 26TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,919	0	2,903	1,719
16370000	2611 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,500	0	1,271	226
16380000	2613 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	885	72
16750000	2914 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	12,760	0	4,237	223
16770000	N/A	R-9	Public - Vacant	Subsurface Easement	1,094	0	441	862
16775000	2900 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,521	0	1,110	546
16776000	2904 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,081	0	1,588	0
16810000	900 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,500	0	0	664
16815000	904 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,654	749
16820000	903 E 30TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,885	118
16851000	814 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	5,560	0	0	43
17200000	815 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	5
17275000	904 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	1,594	73
17280000	905 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	6,000	0	1,628	143
17285000	901 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	48
17290000	2816 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,249	0	2,312	513

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
17300000	2800 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,905	0	3,175	275
17390000	2811 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	6,385	0	0	363
17570000	2714 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	9,583	30	3,489	163
17580000	2708 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,097	88	1,898	2
17586000	2700 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,654	8	1,952	45
17630000	900 E 27TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	788	23
17632000	2707 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	790	21
17634000	2709 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	791	24
17636000	901 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,547	0	800	26
17925000	2614 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,886	178	2,226	159
17935000	2610 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,633	328	2,112	165
17950000	2600 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	6,788	209	3,865	563
19885000	2901 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	10,177	0	0	266
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279908	111 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	34,308	0	0	164
38279911	NA	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279914	1105 E 5TH ST, VANCOUVER, 98661	CPX	Public - Park	Partial	8,382,860	18,900	0	37,605
38279916	605 E EVERGREEN BLVD, VANCOUVER, 98661	CPX	Public - Police	Partial	89,581	450	0	221
38279920	1009 E MCLOUGHLIN BLVD, VANCOUVER, 98663	CPX	Public - Park	Partial	393,631	15,605	0	4,106
38279927	N/A	CPX	Public - Park	Partial	88,754	5,514	0	6,127
38279930	N/A	CX	Rail	Partial	747	747	0	0
38279934	N/A	CPX	Public - Park	Partial	22,164	5,063	0	3,295

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279935	112 SE COLUMBIA WAY, VANCOUVER, 98661	CPX	Public - Vacant	Partial	53,867	10,655	0	38,426
38279962	605 BARNES ST, VANCOUVER, 98661	CPX	Public - Park	Partial	474,838	5,790	0	12,309
38515000	N/A	CX	Public - Vacant	TCE	5,076	0	0	0
38520000	N/A	CX	Public - Vacant	TCE	2,208	0	0	0
38580000	606 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Retail	TCE	10,300	0	0	70
38820000	318 E 7TH ST, VANCOUVER, 98660	CX	Multi Family Residential	Partial	29,719	412	0	12,817
38823000	901 C ST, VANCOUVER, 98660	CX	Public - Library	Partial	28,236	1,761	0	1,479
38826000	N/A	CX	Parking	Partial	40,150	26,012	0	14,139
38828000	N/A	CX	Vacant	Partial	63,649	29,391	0	33,295
38840000	801 C ST, VANCOUVER, 98660	CX	Commercial - Retail	Partial	70,147	6,587	0	2,607
39198000	N/A	CX	Vacant	TCE	17,104	0	0	17,104
39212000	N/A	CX	Parking	Partial	10,011	10,011	0	0
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	7,028	7,028	0	0
39220000	400 E EVERGREEN BLVD UNIT 1, VANCOUVER, 98660	CX	Commercial - Office	TCE	136,134	0	0	2,096
39220001	400 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	70,541	0	0	11
39431001	415 E 13TH ST, VANCOUVER, 98660	CX	Commercial - Retail	Subsurface Easement	40,001	0	0	22
40000000	400 E MILL PLAIN BLVD, VANCOUVER, 98660	CX	Commercial - Office	TCE	30,619	0	0	1,062
40440000	404 E 15TH ST, VANCOUVER, 98663	CX	Commercial - Office	TCE	25,150	0	0	1,532
40640000	1601 G ST, VANCOUVER, 98663	CX	Commercial - Office	Subsurface Easement	9,448	0	0	16
47560000	102 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	Full	2,310	2,310	0	0
47580000	100 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Commercial	Full	6,000	6,000	0	0
47585000	101 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	25,415	0	0	71
47600000	N/A	CX	Rail	Partial	6,131	6,082	0	30
47615000	N/A	CX	Public - Vacant	Full	3,390	3,390	0	0
48320000	411 COLUMBIA ST	0	MULTI-FAMILY 100 OR MORE UNITS	TCE - Access Impact	40,458	0	0	0
48380000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	5,036	0	0	0

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48390000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	4,937	0	0	0
48400000	215 W 4TH ST	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	TCE - Access Impact	12,030	0	0	0
48410000	NA	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	Full	6,943	6,943	0	0
48420000	210 W 3RD ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	10,020	10,020	0	0
48430000	300 WASHINGTON ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	5,024	5,024	0	0
48450000	201 COLUMBIA ST	CCW:VAN	RAILROAD RIGHT-OF-WAY	Partial	5,054	5,054	0	0
48710000	301 W 6TH ST, VANCOUVER, 98660	CX	Commercial	TCE - Access Impact	92,416	0	0	0
48740000	N/A	CX	Public - Parking	TCE	14,058	0	0	13,909
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	10,058	0	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	TCE - Access Impact	20,281	0	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Parking	TCE - Access Impact	22,194	0	0	0
48835000	304 COLUMBIA ST, VANCOUVER, 98660	CX	Utilities	TCE	4,019	0	0	646
48840000	403 QUAYSIDE PL	XX	UNUSED OR VACANT LAND - NO IMPROVEMENTS	TCE - Access Impact	28,260	0	0	0
502240000	501 W COLUMBIA WAY, VANCOUVER, 98660	Water	Vacant	TCE	56,045	0	0	897
502245000	103 Quayside Place Unit IRR, Vancouver, WA 98660	CX	Vacant	TCE	34,127	0	0	639
502246000	N/A	CX	Vacant	TCE	45,949	0	0	880
502250000	100 COLUMBIA ST	XX	TIDELANDS	Partial	35,381	13,849	0	232
502280000	NA	<Null>	Vacant	Partial	6,535	0	0	5,447
986049314	211 W COLUMBIA WAY, VANCOUVER, 98660	CX	Commercial	Partial	31,955	0	0	31,381
986049315		CCW:VAN	PRIME COMMERCIAL PAD SITE - VACANT	Partial	21,007	1,379	0	14,384
986049316	330 W COLUMBIA WAY	CCW:VAN	PARKING GARAGES OR STRUCTURES	TCE - Access Impact	48,962	0	0	0
986049327		CCW:VAN	ZERO VALUE PROPERTY FOR VARIOUS REASONS	Partial	3,209	1,606	0	197
986053203	NA	Park	Commercial	TCE - Access Impact	440,058	0	0	0

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
986055014*	275 W 3RD ST UNIT 200, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055015*	275 W 3RD ST UNIT 300, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055016*	275 W 3RD ST UNIT 400, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055017*	275 W 3RD ST UNIT 500, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055018*	275 W 3RD ST UNIT 600, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986068123	904 E 30TH ST	R-9	Vacant	Subsurface Easement	4,125	0	1,770	88
38279940*	701 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279941*	601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279942*	650 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279943*	750 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279944*	800 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279945*	850 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279946*	901 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279947*	951 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279948*	1001 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279949*	1051 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279950*	1101 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279951*	1151 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279952*	1201 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279953*	1251 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279954*	1301 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279955*	1351 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279956*	1401 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279957*	1451 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279958*	1501 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279959*	1551 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279960*	1601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38470002*	500 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470004*	500 BROADWAY ST UNIT GAR, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470006*	500 BROADWAY ST UNIT 501, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470008*	500 BROADWAY ST UNIT 502, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470010*	500 BROADWAY ST UNIT 503, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470012*	500 BROADWAY ST UNIT 504, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470014*	500 BROADWAY ST UNIT 505, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470016*	500 BROADWAY ST UNIT 506, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470018*	500 BROADWAY ST UNIT 507, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470020*	500 BROADWAY ST UNIT 508, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470022*	500 BROADWAY ST UNIT 509, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470024*	500 BROADWAY ST UNIT 510, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470026*	500 BROADWAY ST UNIT 511, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470028*	500 BROADWAY ST UNIT 601, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470030*	500 BROADWAY ST UNIT 602, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0

Appendix Table A8 -Single-Level Fixed-Span or Movable-Span, 2-Aux Lane, C Street Ramps, and Centered I-5 (104)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38470032*	500 BROADWAY ST UNIT 603, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470034*	500 BROADWAY ST UNIT 604, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470036*	500 BROADWAY ST UNIT 605, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470038*	500 BROADWAY ST UNIT 606, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470040*	500 BROADWAY ST UNIT 607, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470042*	500 BROADWAY ST UNIT 608, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470044*	500 BROADWAY ST UNIT 609, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470046*	500 BROADWAY ST UNIT 610, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
NA**	NA	NA	Utilities	Partial	0	10,660	0	0

332,574 117,174 374,519
7.6ac 2.7ac 8.6ac

a - Properties identified as Subsurface Easement are included as Partial Acquisitions in Table 4-4

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE - Access Impact = The properties building or driveway access will be rebuilt accommodate project improvements.

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Indicates condominium ownership in a multi-use, commercial-residential tower.

** City of Vancouver Pump Station locations which is not a recognized taxlot.

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
12454005	800 E 40TH ST, VANCOUVER, 98663	R-22	Public - School	Partial	977,608	77	12,313	470
12760000	714 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,127	0	0	0
12770000	3906 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,086	0	0	0
12825000	3907 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	6,147	0	0	0
12830000	800 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	4,969	0	0	0
12882000	3921 I ST, VANCOUVER, 98663	R-22	Multi Family Residential	Subsurface Easement	7,689	0	2,484	0
13455000	3114 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,264	0	1,748	0
13460000	3110 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,567	0	1,802	0
13470000	3106 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	4,857	0	1,646	0
13471000	3100 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,914	0	1,640	0
13670000	903 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	13,750	0	3,391	159
13700000	3014 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,723	0	1,994	0
13710000	3012 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,080	0	1,741	0
13720000	3004 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	5,639	0	1,940	0
13725000	3000 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,845	0	1,737	0
13960000	3811 H ST, VANCOUVER, 98663	R-22	Commercial - Office	TCE - Access Impact	10,673	0	0	0
13980000	3814 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,910	0	0	0
13990000	709 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,920	0	0	0
14000000	3812 H ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	5,000	0	0	0
14075000	705 E 39TH ST, VANCOUVER, 98663	R-22	Platted Residential	TCE - Access Impact	3,934	0	0	0
14686000	3701 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	8,129	0	4,583	540
14690000	3709 I ST, VANCOUVER, 98663	R-9	Platted Residential	Subsurface Easement	2,463	0	11	224
14763000	3601 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Full	5,000	5,000	0	0
14765000	3605 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
14766000	3609 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
14768000	3615 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15080000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15090000	900 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,500	0	4,043	0
15095000	904 E 35TH ST, VANCOUVER, 98663	R-9	Single Family Residential (Accessory Parcel)	Full	2,500	2,500	0	0
15105000	3515 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,000	5,000	0	0
15230000	900 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	466	2,303	297
15240000	3405 I ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	5,000	651	2,303	297
15241000	3409 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	829	2,311	305
15250000	3415 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,000	1,014	2,313	306
15600000	814 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	159
15670000	900 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	4,465	0	0	333
15675000	904 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	4,339	4,339	0	0
15680000	905 E 34TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Full	5,035	5,035	0	0
15840000	3214 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,669	0	2,354	956
15850000	3208 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,030	0	1,909	41
15860000	3204 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	7,415	0	2,174	281
15870000	3200 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,318	0	1,725	0
15970000	3201 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,998	0	1,574	70
15975000	3205 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,663	74

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
15980000	3211 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	1,751	75
15985000	3215 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,077	0	1,358	120
16000000	815 E 33RD ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	128
16225000	904 E 31ST ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	3,371	189
16234000	905 E 32ND ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	3,824	292
16360000	904 E 26TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,919	0	2,903	1,719
16370000	2611 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,500	0	1,271	226
16380000	2613 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,000	0	885	72
16750000	2914 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	12,760	0	4,237	223
16770000	N/A	R-9	Public - Vacant	Subsurface Easement	1,094	0	441	862
16775000	2900 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	4,521	0	1,110	546
16776000	2904 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,081	0	1,588	0
16810000	900 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,500	0	0	664
16815000	904 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,654	749
16820000	903 E 30TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	1,885	118
16851000	814 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	5,560	0	0	43
17200000	815 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	5
17275000	904 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	6,000	0	1,594	73
17280000	905 E 29TH ST, VANCOUVER, 98663	R-9	Multi Family Residential	Subsurface Easement	6,000	0	1,628	143
17285000	901 E 29TH ST, VANCOUVER, 98663	R-9	Single Family Residential	TCE	5,000	0	0	48
17290000	2816 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,249	0	2,312	513

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
17300000	2800 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	9,905	0	3,175	275
17390000	2811 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	6,385	0	0	363
17570000	2714 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	Partial	9,583	30	3,489	163
17580000	2708 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	5,097	88	1,898	2
17586000	2700 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,654	8	1,952	45
17630000	900 E 27TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	788	23
17632000	2707 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	790	21
17634000	2709 I ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,500	0	791	24
17636000	901 E 28TH ST, VANCOUVER, 98663	R-9	Single Family Residential	Subsurface Easement	5,547	0	800	26
17925000	2614 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,886	178	2,226	159
17935000	2610 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	4,633	328	2,112	165
17950000	2600 K ST, VANCOUVER, 98663	R-9	Single Family Residential	Partial	6,788	209	3,865	563
19885000	2901 K ST, VANCOUVER, 98663	R-9	Multi Family Residential	TCE	10,177	0	0	266
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279906	1200 E FOURTH PLAIN BLVD, VANCOUVER, 98663	Park	Commercial	Partial	440,058	9,347	0	895
38279908	111 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	34,308	0	0	164
38279911	NA	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279914	1105 E 5TH ST, VANCOUVER, 98661	CPX	Public - Park	Partial	8,382,860	18,900	0	37,605
38279916	605 E EVERGREEN BLVD, VANCOUVER, 98661	CPX	Public - Police	Partial	89,581	450	0	221
38279920	1009 E M CLOUGHLIN BLVD, VANCOUVER, 98663	CPX	Public - Park	Partial	393,631	15,605	0	4,106
38279927	N/A	CPX	Public - Park	Partial	88,754	5,514	0	6,127
38279930	N/A	CX	Rail	Partial	747	747	0	0
38279934	N/A	CPX	Public - Park	Partial	22,164	5,063	0	3,295

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279935	112 SE COLUMBIA WAY, VANCOUVER, 98661	CPX	Public - Vacant	Partial	53,867	10,655	0	38,426
38279940*	701 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279941*	601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279942*	650 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279943*	750 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279944*	800 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279945*	850 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279946*	901 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279947*	951 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279948*	1001 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279949*	1051 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279950*	1101 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279951*	1151 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279952*	1201 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279953*	1251 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279954*	1301 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279955*	1351 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279956*	1401 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279957*	1451 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279958*	1501 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279959*	1551 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38279960*	1601 OFFICERS ROW, VANCOUVER, 98661	CPX	Commercial - Office	Partial	647,417	19	0	4,637
38279962	605 BARNES ST, VANCOUVER, 98661	CPX	Public - Park	Partial	474,838	5,790	0	12,309
38470002*	500 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470004*	500 BROADWAY ST UNIT GAR, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	61,834	0	0	0
38470006*	500 BROADWAY ST UNIT 501, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470008*	500 BROADWAY ST UNIT 502, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470010*	500 BROADWAY ST UNIT 503, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470012*	500 BROADWAY ST UNIT 504, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470014*	500 BROADWAY ST UNIT 505, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470016*	500 BROADWAY ST UNIT 506, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470018*	500 BROADWAY ST UNIT 507, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470020*	500 BROADWAY ST UNIT 508, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470022*	500 BROADWAY ST UNIT 509, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470024*	500 BROADWAY ST UNIT 510, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470026*	500 BROADWAY ST UNIT 511, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470028*	500 BROADWAY ST UNIT 601, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470030*	500 BROADWAY ST UNIT 602, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470032*	500 BROADWAY ST UNIT 603, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470034*	500 BROADWAY ST UNIT 604, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470036*	500 BROADWAY ST UNIT 605, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470038*	500 BROADWAY ST UNIT 606, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
38470040*	500 BROADWAY ST UNIT 607, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470042*	500 BROADWAY ST UNIT 608, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470044*	500 BROADWAY ST UNIT 609, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38470046*	500 BROADWAY ST UNIT 610, VANCOUVER, 98660	CX	Multi Family Residential - Condos	TCE - Access Impact	61,834	0	0	0
38515000	N/A	CX	Public - Vacant	TCE	5,076	0	0	0
38520000	N/A	CX	Public - Vacant	TCE	2,208	0	0	0
38580000	606 BROADWAY ST, VANCOUVER, 98660	CX	Commercial - Retail	TCE	10,300	0	0	70
38820000	318 E 7TH ST, VANCOUVER, 98660	CX	Multi Family Residential	Partial	29,719	412	0	12,817
38823000	901 C ST, VANCOUVER, 98660	CX	Public - Library	Partial	28,236	1,761	0	1,479
38826000	N/A	CX	Parking	Partial	40,150	26,012	0	14,139
38828000	N/A	CX	Vacant	Partial	63,649	29,391	0	33,295
38840000	801 C ST, VANCOUVER, 98660	CX	Commercial - Retail	Partial	70,147	6,587	0	2,607
39198000	N/A	CX	Vacant	TCE	17,104	0	0	17,104
39212000	N/A	CX	Parking	Partial	10,011	10,011	0	0
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	7,028	7,028	0	0
39220000	400 E EVERGREEN BLVD UNIT 1, VANCOUVER, 98660	CX	Commercial - Office	TCE	136,134	0	0	2,096
39220001	400 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Parking	Partial	70,541	0	0	11
39431001	415 E 13TH ST, VANCOUVER, 98660	CX	Commercial - Retail	Subsurface Easement	40,001	0	0	22
40000000	400 E MILL PLAIN BLVD, VANCOUVER, 98660	CX	Commercial - Office	TCE	30,619	0	0	1,062
40440000	404 E 15TH ST, VANCOUVER, 98663	CX	Commercial - Office	TCE	25,150	0	0	1,532
40640000	1601 G ST, VANCOUVER, 98663	CX	Commercial - Office	Subsurface Easement	9,448	0	0	16
47560000	102 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	Full	2,310	2,310	0	0
47580000	100 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Commercial	Full	6,000	6,000	0	0
47585000	101 SE COLUMBIA WAY, VANCOUVER, 98661	CX	Parking	TCE	25,415	0	0	71
47600000	N/A	CX	Rail	Partial	6,131	6,082	0	30
47615000	N/A	CX	Public - Vacant	Full	3,390	3,390	0	0

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48320000	411 COLUMBIA ST	0	MULTI-FAMILY 100 OR MORE UNITS	TCE - Access Impact	40,458	0	0	0
48380000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	5,036	0	0	0
48390000	NA	0	OFFICE BLDG: LEASING CLASS B & C	TCE	4,937	0	0	0
48400000	215 W 4TH ST	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	TCE - Access Impact	12,030	0	0	0
48410000	NA	0	MISC. BLDG. WITH OFFICE FUNCTIONALITY	Full	6,943	6,943	0	0
48420000	210 W 3RD ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	10,020	10,020	0	0
48430000	300 WASHINGTON ST	0	OFFICE BLDG: LEASING CLASS B & C	Full	5,024	5,024	0	0
48450000	201 COLUMBIA ST	CCW:VAN	RAILROAD RIGHT-OF-WAY	Partial	5,054	5,054	0	0
48710000	301 W 6TH ST, VANCOUVER, 98660	CX	Commercial	TCE - Access Impact	92,416	0	0	0
48740000	N/A	CX	Public - Parking	TCE	14,058	0	0	13,909
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	TCE - Access Impact	10,058	0	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	TCE - Access Impact	20,281	0	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Parking	TCE - Access Impact	22,194	0	0	0
48835000	304 COLUMBIA ST, VANCOUVER, 98660	CX	Utilities	TCE	4,019	0	0	646
48840000	403 QUAYSIDE PL	XX	UNUSED OR VACANT LAND - NO IMPROVEMENTS	TCE - Access Impact	28,260	0	0	0
502240000	501 W COLUMBIA WAY, VANCOUVER, 98660	Water	Vacant	TCE	56,045	0	0	897
502245000	103 Quayside Place Unit IRR, Vancouver, WA 98660	CX	Vacant	TCE	34,127	0	0	639
502246000	N/A	CX	Vacant	TCE	45,949	0	0	880
502250000	100 COLUMBIA ST	XX	TIDELANDS	Partial	35,381	21,832	0	139
502280000	NA	<Null>	Vacant	Partial	6,535	0	0	5,447
986049314	211 W COLUMBIA WAY, VANCOUVER, 98660	CX	Commercial	Partial	31,955	0	0	31,381
986049315		CCW:VAN	PRIME COMMERCIAL PAD SITE - VACANT	Partial	21,007	6,610	0	14,384

Appendix Table A9 -Single-Level Fixed-Span or Movable-Span, 1-Aux Lane, C Street Ramps, and Centered I-5 (107)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
986049316	330 W COLUMBIA WAY	CCW:VAN	PARKING GARAGES OR STRUCTURES	TCE - Access Impact	48,962	0	0	0
986049327		CCW:VAN	ZERO VALUE PROPERTY FOR VARIOUS REASONS	Partial	3,209	2,946	0	197
986053203	NA	Park	Commercial	TCE - Access Impact	440,058	0	0	0
986055014*	275 W 3RD ST UNIT 200, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055015*	275 W 3RD ST UNIT 300, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055016*	275 W 3RD ST UNIT 400, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055017*	275 W 3RD ST UNIT 500, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986055018*	275 W 3RD ST UNIT 600, VANCOUVER, 98660	CX	Commercial - Office	Full	10,294	10,294	0	0
986068123	904 E 30TH ST	R-9	Vacant	Subsurface Easement	4,125	0	1,770	88
NA**	NA	NA	Utilities	Partial	0	10,660	0	0

347,129 117,174 374,426
7.9ac 2.7ac 8.6ac

a - Properties identified as Subsurface Easement are included as Partial Acquisitions in Table 4-4

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

TCE - Access Impact = The properties building or driveway access will be rebuilt accommodate project improvements.

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Indicates condominium ownership in a multi-use, commercial-residential tower.

** City of Vancouver Pump Station locations which is not a recognized taxlot.

Appendix Table A10 - Waterfront Park Ride 1a (Columbia Way)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
No Impacts	-	-	-	-	-	-	-	-
						0	0	0
						0.5ac	0ac	0ac

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A11 - Waterfront 1b (Columbia Street / SR 14)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48380000	NA	0	Parking	Full	5,036	5,036	0	0
48390000	NA	0	Parking	Full	4,937	4,937	0	0
48400000	215 W 4TH ST	0	Commercial - Office	Full	12,030	12,030	0	0
						<i>22,003</i>	<i>0</i>	<i>0</i>
						<i>0.5ac</i>	<i>0ac</i>	<i>0ac</i>

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A12 - Waterfront Park Ride 1c (Columbia Street / Phil Arnold Way)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
48740000	N/A	CX	Public - Parking	Full	14,058	14,058	0	0
48750000	400 COLUMBIA ST, VANCOUVER, 98660	CX	Commercial - Office	Full	14,058	10,058	0	0
48760000	390 COLUMBIA ST, VANCOUVER, 98660	CX	Public - Parking	Full	14,058	20,281	0	0
48790000	318 W 4TH ST, VANCOUVER, 98660	CX	Public - Parking	Full	14,058	22,194	0	0

66,591 0 0
1.5ac 0ac 0ac

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A13 - Evergreen Park Ride 2a (Library Square)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)	Temporary Construction Impact (sqft)
39214000	411 E EVERGREEN BLVD, VANCOUVER, 98660	CX	Public - Parking	Full	7,028	7,028	0	0
38826000	N/A	CX	Public - Parking	Full	40,150	40,150	0	0
39212000	N/A	CX	Public - Parking	Full	10,011	10,011	0	0
39198000	N/A	CX	Vacant	Full	17,104	17,104	0	0
38828000	N/A	CX	Vacant	Full	63,649	63,649	0	0
						<i>137,942</i>	<i>0</i>	<i>0</i>
						<i>3.2ac</i>	<i>0ac</i>	<i>0ac</i>

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

Appendix Table A13 - Evergreen Park Ride 2b (Broadway)

IBR ID#	Address	Zoning	Land Use	Acquisition Status ^a	Total Property Size (sqft)	Permanent Impact (sqft)	Subsurface Easement (sqft)*	Temporary Construction Impact (sqft)*
38740001		CX	Commercial	Partial	41,248	0	0	0
						<i>0</i>	<i>0</i>	<i>0</i>
						<i>0ac</i>	<i>0ac</i>	<i>0ac</i>

Acquisition Status Key

Full = Property will be purchased by Project

Partial = A portion of the property will be purchased by the Project

Subsurface Easement = A subsurface easement will be purchased over a portion of the property to support the Project.

TCE = A temporary construction easement will be purchased over a portion of the property to be used during construction.

* Permanent and temporary area of impact for Evergreen 2b are not available at the current level of conceptual design.

Appendix B. Permanent and Temporary Property Impact Figures

Figure B-1. Property Impacts – Oregon Mainland



Figure B-3. Property Impacts – West Hayden Island



Figure B-4 Property Impacts – Ruby Junction



Figure B-5. Property Impacts – Downtown Vancouver



Figure B-6. Property Impacts – Downtown Vancouver Park and Ride

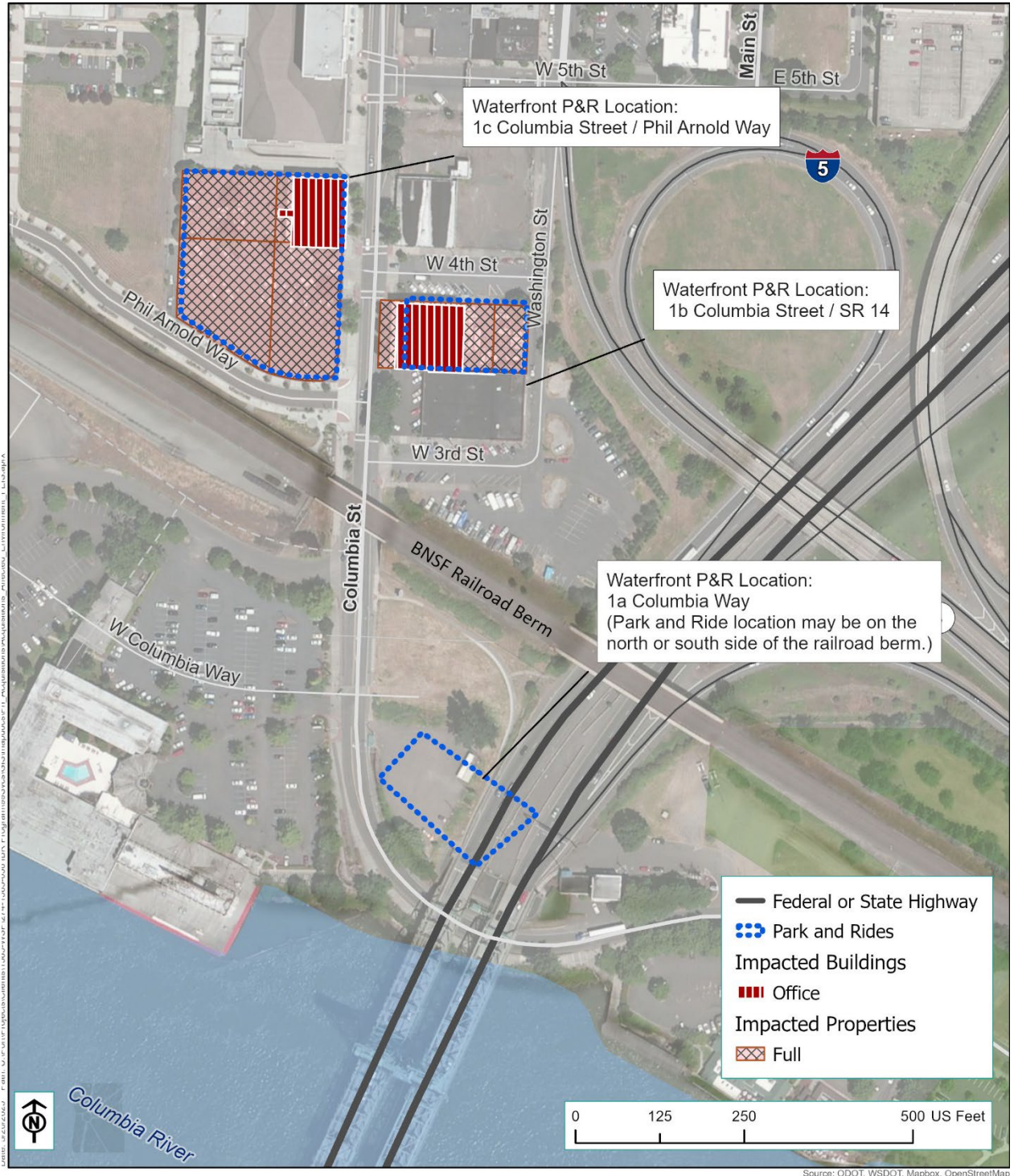
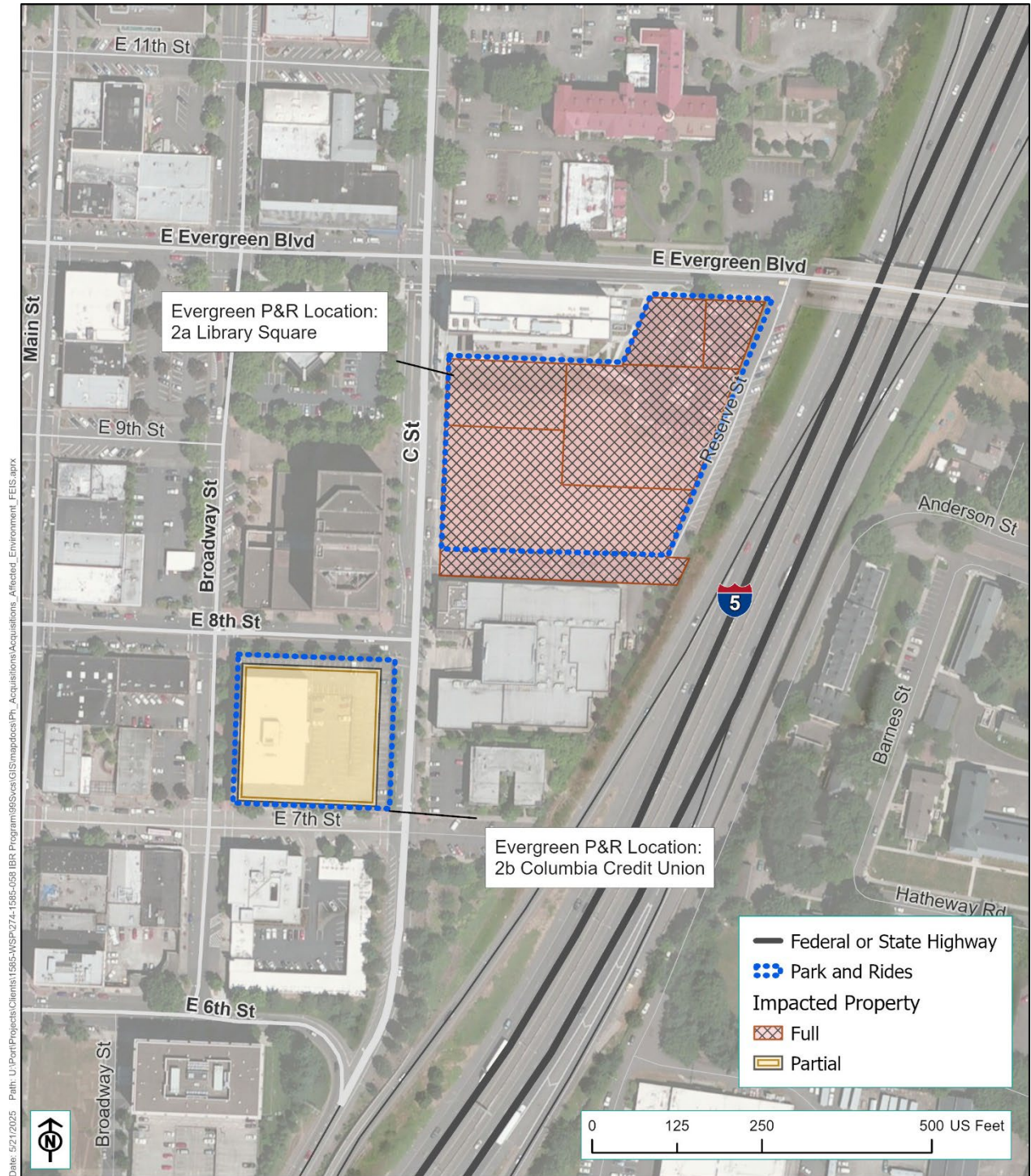


Figure B-7. Property Impacts – Evergreen Park and Ride



Date: 5/21/2025 Path: U:\P&R\Projects\Clients\1585-WSP\274-1585-058 IBR_Program\GIS\MapDocs\PT_Acquisitions\Acquisitions_Affected_Environment_FEIS.aprx

Figure B-8. Property Impacts – Upper Vancouver



This page intentionally left blank.