

4. FINANCIAL ANALYSIS

This chapter describes the costs, revenue options, and 2023 financial plan for the IBR Program’s Modified Locally Preferred Alternative (LPA). In December 2022, the IBR Program shared an updated cost estimate range of \$5 to \$7.5 billion with a most likely risk-mitigated target of approximately \$6 billion (IBR 2022). The December 2022 cost estimate is the first one prepared for the Modified LPA, which includes the vision and components preferred by the Oregon Department of Transportation (ODOT), the Washington State Department of Transportation (WSDOT), and all eight program partners (the Tri-County Metropolitan Transportation District of Oregon [TriMet], Clark County Public Transit Benefit Area Authority [C-TRAN], City of Vancouver, City of Portland, Port of Vancouver, Port of Portland, Oregon Metro, and Southwest Washington Regional Transportation Council [RTC]).

Cost estimates presented in the IBR Program’s December 2020 conceptual financial plan (CFP) were based on the 2012 cost estimates for the four alternatives associated with the Columbia River Crossing (CRC) project. The 2023 IBR Program financial plan, using a cost estimate for components of the Modified LPA, is based on the budgetary risk-loaded cost target of \$5.935 billion year-of-expenditure dollars (YOES), which includes identified proactive risk mitigation to control costs. To achieve this level of funding, the IBR Program will seek funding from both states, the federal government, and tolling in the following amounts:

- Existing state funding (\$197.7 million committed).
- Move Ahead Washington funding (\$1 billion committed).
- Oregon funding contribution (\$1 billion committed).
- Toll funding (\$1.237 billion committed).
- Federal competitive grants (\$2.5 billion prospective, including \$1 million that is committed).

4.1 Background

In November 2019, Oregon Governor Kate Brown and Washington Governor Jay Inslee signed a bi-state memorandum of intent to restart work to replace the Interstate Bridge. The memorandum outlines how the IBR Program would be developed and delivered by a bi-state, multiagency multimodal team comprising ODOT, WSDOT, C-TRAN, TriMet, Southwest Washington RTC, Metro, the City of Vancouver, and the City of Portland. The IBR Program involves a new team and objectives that are separate from the previous CRC project. However, the IBR Program received clear direction from both states to leverage and build upon the extensive work completed for the CRC project.

The IBR Program anticipates having a few primary sources of funding: U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) highway and multimodal grants, a Federal Transit Administration (FTA) Capital Investment Grant (CIG), Oregon and Washington State contributions, and toll funding. The Bipartisan Infrastructure Law (BIL), signed into law in November 2021, provides a host of new and more robust federal grant funding opportunities that the IBR Program is actively pursuing. Additionally, in 2022 the Washington State Legislature passed the Move Ahead Washington funding package, committing \$1 billion in funds to the Program.¹ In 2023, the Oregon State Legislature passed Oregon House Bill 5005, which provided Oregon’s \$1 billion contribution.²

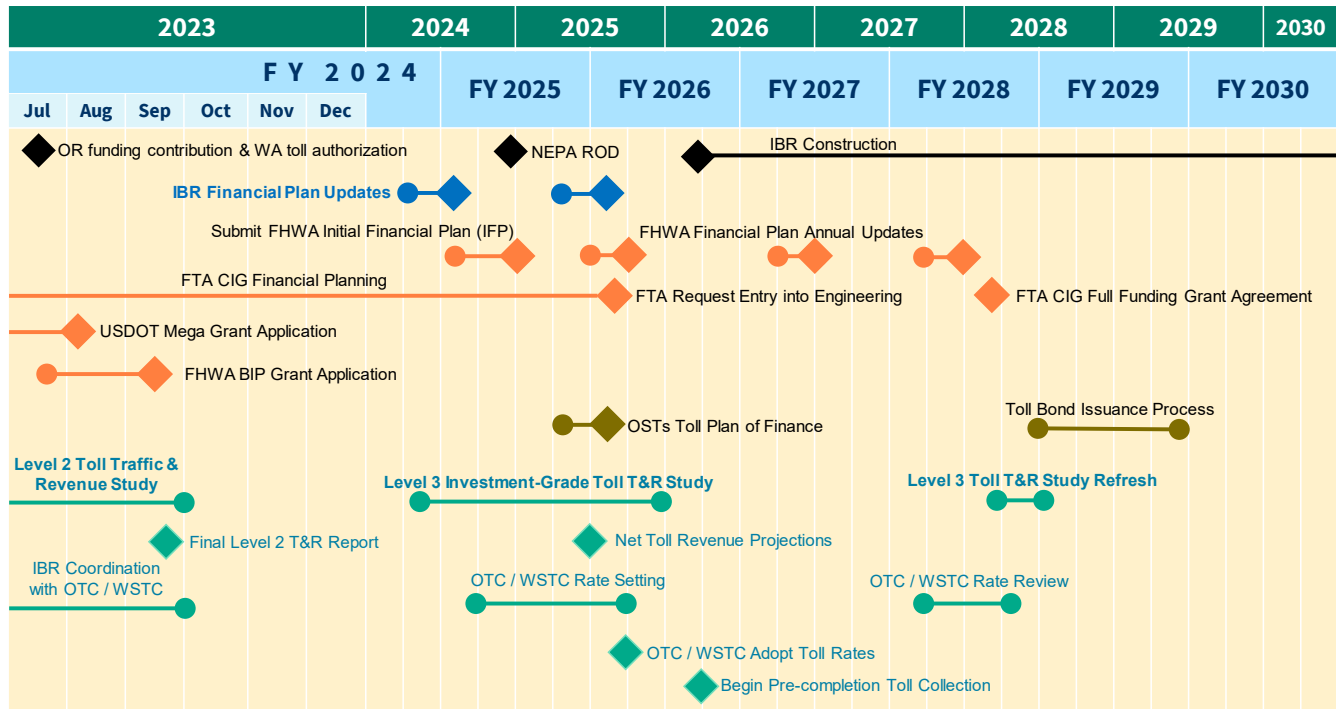
¹ Washington Engrossed Substitute Senate Bill 5974, Chapter 182, July 2022

² Oregon Enrolled House Bill 5005, August 2023

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1 This chapter outlines a funding and financing strategy to plan, design, and construct the Modified LPA
 2 assuming the timeline illustrated in Figure 4-1. This chapter is one step in a series of financial planning
 3 activities and procedures required by the states and the federal government. The financial plan for the IBR
 4 Program will be refined periodically as it advances and decisions are made by the Program team, the state
 5 legislatures, and the federal government.

6 Figure 4-1. IBR Program Financial Planning and Toll Funding Timeline



7
 8 This chapter covers the following topics:

- 9 • **Capital Cost Estimates for the Modified LPA:** Updated cost estimates based on the conceptual design
 10 and inclusive of risk factors from a qualitative risk assessment (QRA) based on WSDOT’s Cost Estimate
 11 Validation Process (CEVP) methodology.
- 12 • **Potential Funding Sources and Financing Mechanisms:** Narrowed list of candidate funding sources and
 13 financing mechanisms, including state contributions, leveraging toll revenues, and various federal
 14 discretionary grant programs authorized under the BIL.
- 15 • **Sources and Uses of Funds:** Conceptual cash flow analysis to align the uses of funds by their year of
 16 expenditure to determine available sources and resolve any funding gaps.
- 17 • **Operations and Maintenance (O&M) Cost Estimates and Funding Sources:** Conceptual cost estimates
 18 for highway and transit O&M costs and potential funding sources under consideration.

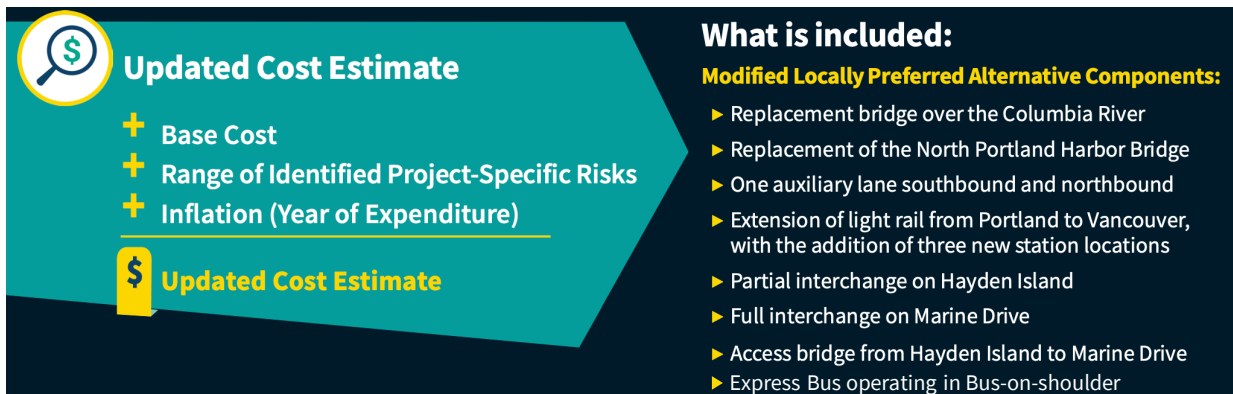
19 **4.2 Capital Costs of the Modified LPA**

20 The cost estimate is a combination of three elements:

- 21 1. A base cost (in constant 2021/fiscal year [FY] 2022 dollars) composed of estimates of activities—
 22 preliminary engineering and program management, right-of-way acquisition, and construction—and their

- 1 various labor and material quantities, unit costs, and relevant additive factors such as taxes (see Section
 2 4.2.3).
- 3 2. A range of identified Program-specific risks presented in a quantitative risk assessment based on the CEVP
 4 used by WSDOT for all major projects (see Section 4.2.2).
- 5 3. A set of inflation projections to escalate the cost estimates to YOES based on the planned IBR Program
 6 schedule (see Section 4.2.4).
- 7 These three elements combine to produce the risk-loaded cost estimate described in Section 4.2.5. Figure 4-2
 8 illustrates this synthesis and the major scope elements included in the estimate.

9 Figure 4-2. Building Blocks of the Cost Estimate



10

11 The prior cost estimates presented in the December 2020 CFP were inflation-adjusted estimates of capital
 12 cost estimates prepared in 2012 for the four alternatives associated with the CRC project. Differences in the
 13 elements of the 2012 CRC project alternatives and the Modified LPA included in the financial plan are:

- 14 • Replacement of the North Portland Harbor Bridges.
- 15 • Light-rail transit (LRT) traveling on an elevated structure adjacent to Interstate 5 (I-5) in Vancouver, rather
 16 than track along city streets, and shortening the length of the extension by terminating at the Evergreen
 17 Station.
- 18 • Revised connections and ramps for a Hayden Island partial interchange.
- 19 • Fewer park and rides and LRT stations.
- 20 • Addition of a transit vehicle overnight facility at the Expo Center and expansion of TriMet’s Ruby Junction
 21 Maintenance facility.
- 22 • One auxiliary lane.
- 23 • Inclusion of bus-on-shoulder and express buses.

24 Infrastructure and Construction industries have undergone many changes since 2012. In 2012, the
 25 construction sector was still experiencing effects from a recession. Recently, historically high inflation rates,
 26 workforce shortages, and competition among regional projects have combined to produce higher costs.
 27 Additionally, costs have increased from the reduced availability of materials due to global supply chain issues.
 28 These and other market conditions contribute to the higher unit costs presented in this chapter.

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4.2.1 Methodology

The conceptual cost for the Modified LPA was prepared in two concurrent phases:

1. **Conceptual Design:** The engineering and planning teams collaboratively developed highway, interchange configuration, and local roadway options; each included transit alternatives. These options drew from previous work completed for the CRC project.
2. **Screening:** The cost team prepared conceptual cost estimates of the conceptual design options to screen them against each other. This process involved reviewing past estimates from the CRC project, developing a “cost library,” and estimating quantities of the build-up composite cost activities to generate a relative cost difference between options.

Once the IBR Program partners agreed on the Modified LPA, a more detailed base cost estimate was prepared, which includes the following:

- One auxiliary lane in each direction on the new Columbia River bridges.
- Embedded LRT at at-grade intersections and direct-fixation track throughout the rest of the Program improvements.
- At-grade station and underground parking garage near Evergreen Boulevard that would accommodate up to 700 spaces.
- Elevated Waterfront Station with up to 570 parking spaces.
- Vancouver bus improvements.
- Overnight LRT facility at the Expo Center and expansion of the Ruby Junction Maintenance facility.

4.2.2 Cost Estimate Validation Process

A QRA was performed for the IBR Program based on the CEVP methodology. The objectives of the QRA were to provide independent review of Program cost and schedule estimates and to quantify the uncertainty and risk associated with those estimates. The IBR Program held a risk assessment workshop from October 10 to 14, 2022, that was attended by IBR Program partners and subject matter experts (SMEs) from WSDOT, ODOT, local transit agency partners, and construction industry.

A risk register was developed that identified specific risks (threats and opportunities) to the cost and schedule. A total of 201 risks were identified, of which 121 were determined to be significant. Risks were characterized and quantified by consensus (i.e., collective professional judgment) of the SMEs.

Following the risk workshop, a series of focused discussions were held with SMEs representing each major technical discipline to:

1. Identify specific mitigation strategies and actions to reduce the most significant Program risks (or explore opportunities).
2. Revise the cost associated with selected risks to include the potential impact of incorporating the risk mitigation strategy into the IBR Program.

The inputs developed in the CEVP workshops (including base cost, schedule, risks, and uncertainties) were loaded into a Monte Carlo simulation model to generate probability distributions for key performance measures related to cost and schedule, along with prioritized risk rankings. The simulation generated 10,000 independent potential outcomes and a statistical compilation of selected results for “pre-mitigation” and “post-mitigation” scenarios, described below:

- 1 • **Pre-mitigation:** Schedule and cost risk impacts and probabilities represented in the risk register reflect
2 current status without additional mitigation actions taken.
- 3 • **Post-mitigation:** IBR Program staff identify specific additional actions that may be undertaken to
4 mitigate specific risks, and the risk impacts and/or probability are adjusted in the risk register to reflect
5 successful implementation of these actions.

6 4.2.3 Base Cost Estimate

7 A base cost estimate was developed for the Modified LPA that incorporated comments received during and
8 after the CEVP workshop. The base cost estimate is broken down by state and by highway- versus transit-
9 related costs.

10 For the Modified LPA, the post-CEVP base cost estimate, in constant 2022 dollars, totaled \$3.71 billion over a
11 15-year development and delivery period (FYs 2020–2034). Construction activities account for the majority of
12 the cost at \$3.24 billion, with \$169 million for right-of-way acquisition and \$305 million for preliminary
13 engineering and project management. The construction and right-of-way costs include design allowances of
14 30% and 35%, respectively.

15 4.2.4 Inflation Assumptions

16 The inflation assumptions included in this chapter rely on inflation forecasts provided by the WSDOT Capital
17 Program Development and Management (CPDM) division; the forecasts are assembled from third-party
18 forecasts purchased from IHS Markit. The current CPDM inflation projections for preliminary engineering, right
19 of way, and construction originate from third-party forecasts prepared in the first quarter of 2022, though they
20 are dated June 2022 based on their adoption by CPDM within its Capital Program Management System.

21 After accounting for above-average inflation in FY 2022, the projected inflation rates for the three indices
22 revert to more historical trends, averaging over FY 2023 through FY 2035, as follows:

- 23 • Preliminary engineering: 2.12% per year
- 24 • Right of way: 2.60% per year
- 25 • Construction: 2.17% per year

26 Consideration of risk factors, including higher-than-expected inflation rates, are part of the process for
27 developing a reasonable cost estimate in projected YOES\$, which are captured in the CEVP QRA process
28 described below.

29 4.2.5 Risk-Loaded Cost Estimate

30 Cost estimates resulting from probabilistic analyses are commonly reported in terms of the probability that a
31 cost estimate will not exceed a particular percentage (i.e., percentile-value or, less formally, confidence level).
32 For example, the 60th percentile estimate means that there is a 60% likelihood that the actual value will be
33 less than or equal to the estimate (and conversely, there is a 40% likelihood that the value will be greater than
34 the estimate).

35 The QRA process was finalized in early December 2022. For the Modified LPA, the 60th percentile cost estimate
36 for the post-mitigation scenario is \$5,935 million in YOES\$, and the 10th to 90th percentile (i.e., 80% confidence
37 level) range is \$5,049 million to \$6,650 million. For the pre-mitigation scenario, the 60% confidence level cost
38 estimate is \$6,523 million, and the 10th to 90th percentile range is \$5,383 million to \$7,487 million in YOES\$.
39 These values are displayed in Table 4-1.

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1 Table 4-1. IBR Program 2022 Cost Estimate Validation Process Cost Estimate (Year-of-Expenditure
2 Dollars)

CEVP Category	P10	P60	P90
Pre-Mitigation Risk-Loaded Cost Estimate	\$5,383 M	\$6,523 M	\$7,487 M
Post-Mitigation Risk-Loaded Cost Estimate	\$5,049 M	\$5,935 M	\$6,650 M

3 CEVP = cost estimate validation process; M = million; P10 = 10th percentile; P60 = 60th percentile; P90 = 90th percentile

4 The IBR Program elected to use the 60th percentile post-mitigation Program cost of \$5,935 million as the
5 budgetary target for this finance analysis. The 10th percentile post-mitigation (\$5,049 million) and 90th
6 percentile pre-mitigation (\$7,487 million) values were also communicated to provide a range of potential cost
7 outcomes, simplified to a range of \$5 billion to \$7.5 billion, with a budgetary target of \$6 billion.³ These costs
8 are shown in YOES\$.

9 **4.3 Capital Revenue Options**

10 This section of the finance chapter describes the capital funding sources and financing options for the IBR
11 Program. Funding to cover the design, procurement, and capital construction of the Modified LPA will come
12 from state, regional, and federal sources, including funds procured from long-term borrowing. To ensure that
13 funds are available to cover Program costs when expended pursuant to the IBR Program’s construction
14 schedule, interim short-term financing tools may be required that borrow against some of the future Program
15 revenues to meet current cash-flow requirements. The status of these funding sources is classified as one of
16 three categories:

- 17 • **Committed** funds are sources that have already been committed to the Program through legislation,
18 grant award, or some other mechanism.
- 19 • **Anticipated** funds are high-likelihood planned sources not yet committed to the Program.
- 20 • **Prospective** funds are sources that are not committed or anticipated at this time that are being
21 considered by the Program (e.g., an existing or future grant application awaiting decision).

22 This section describes the following:

- 23 • State and regional funding
- 24 • Federal funding
- 25 • Financing mechanisms

26 **4.3.1 State and Regional Funding**

27 Large transformative transportation projects such as the Modified LPA require funding from a variety of
28 sources. Securing timely commitments at the state and regional levels will be essential in competing for the
29 federal grant programs described in Section 4.3.2. This section details existing and potential future funding
30 streams in Oregon and Washington that could be used to fund the IBR Program.

³ Preliminary cost estimates for the Columbia River Bridges range from approximately \$580 million to \$1 billion, depending on bridge configuration. The cost estimate included in this chapter assumes a double-deck fixed-span bridge configuration, which has approximately the average cost of the bridge configurations.

1 Key state and regional funding options discussed in this chapter include leveraging IBR Program toll revenues
2 and funding from the Oregon and Washington Legislatures. It is anticipated that both state legislatures will
3 contribute equal amounts of capital funding to the IBR Program; however, it is important to note that the
4 timing and mechanisms of funding allocation and application will not necessarily occur concurrently.

5 **Existing Oregon and Washington Funding Contributions**

6 The Washington Legislature enacted transportation budget bills for 2019,⁴ 2020,⁵ and 2022⁶ that appropriated
7 a total of \$45 million from state motor vehicle revenues to staff the IBR Program office and fund planning and
8 preliminary engineering. The Oregon Transportation Commission (OTC) approved \$55 million in funding from
9 ODOT (\$9 million in 2019,⁷ \$6 million in 2020,⁸ \$30 million in 2021,⁹ and \$10 million in 2022¹⁰) to similarly
10 support planning, environmental analysis, and design work. This \$100 million from ODOT and WSDOT is
11 considered committed.

12 Additionally, the 2015 Connecting Washington Transportation Funding Package¹¹ established a 16-year, \$16.1
13 billion investment program primarily funded by an 11.9-cent gas tax increase to enhance and maintain critical
14 transportation infrastructure. This program dedicated \$97.7 million to fund improvements to the I-5/State
15 Route (SR) 501-Mill Plain Boulevard interchange in downtown Vancouver. Construction funding for this
16 program is budgeted among the 2023–25, 2025–27, and 2027–29 biennia.¹² This finance analysis assumes that
17 these improvements will be constructed as part of the Modified LPA and includes their costs and associated
18 funding. However, since this project pre-dates the initiation of the IBR Program, it is currently assumed that
19 Washington funding for the I-5/SR 501-Mill Plain Boulevard interchange project is not matched with Oregon
20 funds. The \$97.7 million in Connecting Washington funds are considered committed.

21 **Move Ahead Washington**

22 In March 2022, the Washington House and Senate each passed, and Governor Jay Inslee signed into law a \$16-
23 billion, 16-year transportation package called Move Ahead Washington. Move Ahead Washington included a
24 commitment of \$1 billion to the IBR Program.

25 The \$1.0 billion funding contribution from the Washington Legislature under Move Ahead Washington is
26 considered committed. Some of these revenues may come from federal formula programs administered by
27 the state, and others may be from state funding sources. Eligible uses of these funds vary by revenue source;
28 for example, the 18th Amendment in the Washington State Constitution restricts the expenditure of gas tax
29 and vehicle license fees to “highway purposes.” The specific sources and timing of future Move Ahead
30 Washington budget appropriations are subject to change. The 2023 IBR Program financial plan identifies at
31 least \$300 million (15%) of the combined \$2 billion contribution from both states that needs to be eligible for

⁴ Washington Engrossed Substitute House Bill (ESHB) 1160, Chapter 416, May 2019.

⁵ Washington ESHB 2322, Chapter 219, March 2020.

⁶ Washington ESHB 5689, Chapter 186, March 2022.

⁷ OTC Allocation of Oregon's Federal-Aid Highway Program Redistribution for FY 2019, August 2019.

⁸ OTC Allocation of Oregon's Federal-Aid Highway Program Redistribution for FY 2020, September 2020.

⁹ OTC 2021-2024 Statewide Transportation Improvement Program Update, March 2021.

¹⁰ OTC Allocation of Federal Redistribution Funding for FY 2022-2027, June 2022.

¹¹ Washington ESHB 5987, Chapter 44, July 2015.

¹² The timing for the \$97.7 million in state funding for the I-5/SR 501-Mill Plain Boulevard interchange project is consistent with the current law-enacted budget at time of writing (see 2021–23 Transportation Plan, December 2020) of the 2023 IBR Financial Plan. The 2023–25 Legislative Transportation budget defers this funding beyond the 2027–29 biennium with an inflationary adjustment. Future funding budget appropriations are subject to change.

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1 transit expenditures. This offers the flexibility needed to meet the matching requirements of the three major
2 federal grant programs that the IBR Program plans to apply for in 2023.¹³

3 **Oregon Funding Contribution**

4 In August 2023, Oregon Governor Tina Kotek signed House Bill 5005 into law, which provides a \$1 billion
5 funding commitment to match the funding provided by the Washington Legislature in 2022.¹⁴ Funding from
6 Oregon House Bill 5005 (2023) is expected to fully comprise non-federal sources in the form of up to \$250
7 million in general obligation bonding authority each biennium; however, a portion of these funds may be
8 restricted to “highway purposes” given state statutes and policies.

9 The 2023 IBR Program financial plan identifies at least \$300 million (15%) of the combined \$2 billion
10 contribution from both states that needs to be eligible for transit expenditures. This offers the flexibility
11 needed to meet the matching requirements of the three major federal grant programs that the IBR Program
12 plans to apply for in 2023.¹³

13 **Toll Funding**

14 Toll revenue will be a vital funding source for both capital and O&M for the IBR Program and has the dual
15 purpose of managing traffic congestion and providing funding. The OTC and Washington State Transportation
16 Commission (WSTC) will collectively set toll rates and determine the details of related policies, including a
17 potential low-income program, prior to the implementation of tolling or toll financing.¹⁵ To generate initial
18 estimates of both gross and net toll revenues sufficient to meet the Program’s toll funding needs, the IBR
19 Program developed an initial set of proposed toll rates as part of the Level 2 toll traffic and revenue (T&R)
20 study, described in more detail in the following subsections.

21 ODOT, in collaboration with the Oregon State Treasury and the Washington Office of the State Treasurer (both
22 using the same “OST” acronym and collectively abbreviated as “the OSTs”) have conducted a preliminary
23 financial capacity assessment of the projected net toll revenues for two toll scenarios. Their work determined
24 that the current toll capital funding assumption of \$1.24 billion in the 2023 IBR financial plan is feasible.

25 In May 2023, Washington State Governor Inslee signed into law Senate Bill 5765, providing toll authorization
26 for the IBR Program in Washington State parallel to that which already existed in Oregon. The toll funding
27 contribution to capital funding for the IBR Program is therefore considered committed.

28 The IBR Program conducted a Level 2 toll T&R study.¹⁶ The objective of the study is to prepare fiscally
29 conservative annual toll revenue forecasts for financial planning purposes under seven different scenarios,
30 the results of which are envisioned to inform the initial rate and policy coordination discussions between the
31 OTC and WSTC, as well as to determine the viability of tolls to meet borrowing needs of the IBR Program’s
32 capital financial plan. Table 4-2 summarizes the characteristics of the seven toll scenarios evaluated in the
33 study. The Scenario B toll rate and policy assumptions are the focus of the SEIS transportation analysis.

¹³ The \$300 million of transit eligible state funding assumes that the Program receives a \$500 million USDOT Mega grant and a \$1 billion FTA CIG award; a lesser amount from either of these grant programs would require a larger share of transit eligible state funding.

¹⁴ Oregon Enrolled House Bill 5005, August 2023.

¹⁵ The Oregon Toll Program prepared a Low-Income Toll Report for the Oregon Legislature to consider in September 2022 (Oregon Toll Program 2022).

¹⁶ General Engineering Consultant team members Stantec and WSP are leading this effort.

1 Table 4-2. Level 2 Toll Traffic and Revenue Study Scenario Matrix

Scenario	Brief Description	Min Auto Toll (FY 2026\$) Assumed	Max Auto Toll (FY 2026\$) Assumed	Toll Escalation Assumed	Low Income Discount Assumed	Other Regional Toll Facilities	Comments
Scenario A	Base Tolls	\$2.15	\$3.55	2.15% per year	No	I-205 Toll Project	Financial Plan Base Case
Scenario B	Lower Tolls (NEPA)	\$1.50	\$3.15	2.15% per year	No	I-205 Toll Project	IBR NEPA analysis using Scenario B rates and policies
Scenario C	Scenario A + No Toll Escalation	\$2.15	\$3.55	None	No	I-205 Toll Project	Financial Stress Test
Scenario D	Scenario A + RMPP	\$2.15	\$3.55	2.15% per year	No	RMPP + I-205 Toll Project	RMPP has not yet been adopted in the OR RTP/STIP
Scenario E	Scenario B + RMPP	\$1.50	\$3.15	2.15% per year	No	RMPP + I-205 Toll Project	RMPP has not yet been adopted in the OR RTP/STIP
Scenario F	Scenario A + 50% Low Income Discount	\$2.15	\$3.55	2.15% per year	Yes	I-205 Toll Project	Applies to <200% FPL, has higher participation rate
Scenario G	Scenario A + 25% Low Income Discount	\$2.15	\$3.55	2.15% per year	Yes	I-205 Toll Project	Applies to <200% FPL, has lower participation rate

2 Notes:

3 Weekend toll rates assumed to be constant at the minimum value.

4 The minimum toll is effectively \$0.00 overnight during pre-completion tolling (FYs 2026–33) when tolling is assumed to be suspended due to construction activities / lane closures, etc.

5 RMPP = ODOT’s Regional Mobility Pricing Project

6 FPL = Federal Poverty Level; FY = fiscal year; I-205 = Interstate 5; IBR = Interstate Bridge Project; Max = maximum; Min = minimum; NEPA = National Environmental Policy Act; OR =

7 Oregon; RMPP = Regional Mobility Pricing Project RTP = Regional Transportation Plan; STIP = Statewide Transportation Improvement Program

1 The above toll scenarios are intended for study purposes only, to inform financial planning, and do not
2 represent final rates or policies. Among the factors evaluated are toll rate levels, toll escalation policies,
3 assumptions regarding other toll projects within the regional highway network, and a pair of scenarios that
4 consider what effects two different low-income discount policies may have on net toll revenues.

5 Toll rates and policies for the Columbia River bridges will be determined by the OTC and WSTC after a more
6 robust analysis and a public process, and in a way that ensures toll revenues are sufficient to meet their
7 required financial obligations while balancing objectives to address peak period congestion and the concerns
8 of low-income travelers.

9 At present, T&R forecasts have been prepared for two base-case scenarios over a 40-year period. The analysis
10 assumes that tolling would commence on the existing Interstate Bridge, referred to as pre-completion tolling,
11 starting April 1, 2026 (FY 2026). The traffic and tolling operations on the new Columbia River bridges are
12 assumed to commence by July 1, 2033 (FY 2034). During the pre-completion period, while the new bridges are
13 under construction, the existing Interstate Bridges are assumed to operate toll-free between 11 p.m. and 5
14 a.m. This toll-free period is intended to avoid situations where users may be charged during lane or partial
15 bridge closures where construction delays may apply. Twenty-four-hour tolling is assumed to begin once the
16 new Columbia River bridges open.

17 Tolling would be implemented according to a fixed schedule where rates vary by time of day, with highest
18 tolls occurring during the most congested hours. The two variable toll rate schedules were studied in the
19 Level 2 Toll T&R study as follows:

- 20 • Scenarios A, C, D, F, and G assumed tolls ranging from \$2.15 to \$3.55 based upon time of day,
21 expressed in FY 2026 (calendar year 2025) dollars. The minimum toll of \$2.15 is assumed all day on
22 weekends. Since overnight tolling is not assumed to begin until the new bridge is completed, the
23 effective weekday minimum toll between 5 a.m. and 11 p.m. is \$3.00. Once the new bridge opens, an
24 overnight toll of \$2.15 in FY 2026 (calendar year 2025) dollars was assumed.
- 25 • Scenarios B and E assumed tolls ranging from \$1.50 to \$3.15 in FY 2026 (calendar year 2025) dollars,
26 with the \$1.50 minimum applying all day on weekends. Similarly, until overnight tolling is assumed to
27 commence on the new bridge, the effective weekday minimum toll assumption between 5 a.m. and 11
28 p.m. is \$2.05.

29 With the exception of Scenario C, all of the toll scenarios assume that the toll rates would increase by 2.15%
30 annually throughout the forecast period to keep pace with general price inflation.

31 This analysis captured the interaction with other committed regional projects and tolling initiatives. The
32 ODOT I-205 Toll Project, which was adopted into the Metro 2023 Regional Transportation Plan, was included
33 in the modeling for this study (Oregon.gov n.d.[a]). The ODOT Regional Mobility Pricing Project (RMPP) is
34 currently in the environmental planning stage and is not yet in the Regional Transportation Plan, so its
35 impacts have been examined separately in Scenarios D and E (Oregon.gov n.d.[b]).

36 The results of the Level 2 toll T&R study are intended to inform initial rate setting discussions within and
37 between the OTC and WSTC. A more rigorous Level 3 (investment-grade) toll T&R study will be conducted on
38 one or two final candidate toll rate scenarios selected by the OTC and WSTC in conjunction with the formal
39 rate setting process prior to the start of pre-completion tolling, currently targeted for April 2026. The Level 3
40 toll T&R study will be updated prior to selling toll bonds at the end of the 2020s decade to help fund
41 construction. Further details about the planned timing of the Level 3 Toll T&R study and rate setting activities
42 by the OTC and WSTC are provided in Section 4.3.3 under “Toll Bonds.”

43 The Level 2 toll T&R study’s toll traffic volumes and gross toll revenue projections were completed for all
44 seven scenarios in Table 4-2. A detailed cost and revenue model was developed to estimate the various

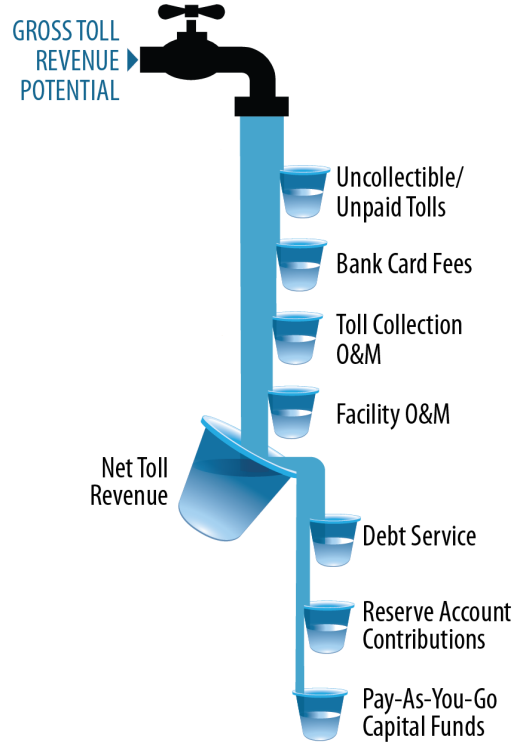
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1 deductions and expenses typically first taken off the toll revenues collected. These include an allowance for
2 uncollectible tolls, fees for processing credit and debit bank cards in the collection of revenue, and the costs
3 of operating and maintaining both the bridge and approaches, as well as the toll collection functions. The last
4 item includes the bridge’s roadway toll collection equipment and systems, as well as the IBR Program’s share
5 of system-wide costs incurred by ODOT as the assumed toll administrator (i.e., customer service systems
6 software, customer service center, transponder pass distribution, and management/vendor oversight).

7 As shown in Figure 4-3, net toll revenues are what remain
8 after accounting for these costs. They represent the cash
9 flow available to provide funding for capital
10 improvements via financing (debt service on toll bonds)
11 and/or on a pay-as-you-go basis. Net toll revenues would
12 also be contributed to various accounts to provide
13 reserves to fund periodic major repair and capital
14 replacement costs.

15 The IBR Program shared the net toll revenue projections
16 from Scenarios A and B with WSDOT and ODOT for their
17 coordination with each state’s OST and their respective
18 financial advisors. Contingent upon receipt of the other
19 anticipated and prospective funding in this financial
20 chapter, a \$1.24 billion toll funding contribution is
21 required, with bond proceeds over FYs 2030–31. The
22 preliminary financial capacity assessment conducted by
23 each state confirms the viability of a \$1.24 billion toll
24 capital contribution under a base-case financing
25 scenario. Additional work may be conducted to assess a
26 range of net toll revenue funding capacity.

Figure 4-3. Net Toll Revenue Composition and Uses



27 4.3.2 Federal Funding Options

28 There are several federal competitive grant programs that could contribute significant amounts of
29 discretionary funding to the IBR Program. Each of these has its own set of procedures and criteria. Based on
30 the Modified LPA, three federal competitive grant opportunities stand out as being the likeliest to contribute
31 large federal funding awards for the IBR Program:

- 32 • FHWA Bridge Investment Program (BIP).
- 33 • USDOT National Infrastructure Project Assistance (Mega) Program.
- 34 • FTA New Starts funding under the CIG Program.

35 Other competitive federal discretionary grant programs that may also contribute funds to the IBR Program, to
36 a lesser degree, are:

- 37 • USDOT Nationally Significant Multimodal Freight and Highway Projects (INFRA).
- 38 • USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE).
- 39 • FHWA Accelerated Innovative Deployment (AID) Demonstration Program.
- 40 • USDOT Reconnecting Communities Pilot Program.

1 The relevant federal agencies administering these programs typically prioritize projects based on justification,
2 financial commitment at the state and/or regional level, and readiness, among other factors. These agencies
3 typically prefer to be the “last dollar in” to close a project’s remaining funding gap.

4 This section provides an overview of each of these discretionary grant programs’ requirements, selection
5 criteria, processes, and work required to position for and satisfy the prerequisites. All discretionary federal
6 grant program funds are considered prospective at this stage except for the \$1.0 million BIP planning grant
7 that was awarded to the IBR Program in late 2022, which is considered committed.

8 **FHWA BIP**

9 The 2021 BIL established the competitive BIP, designed to fund projects that replace, rehabilitate, preserve, or
10 protect bridges listed in the National Bridge Inventory. The overarching goals of this program are:

- 11 1. Improve the safety, efficiency, and reliability of people and freight movement over bridges.
- 12 2. Improve the condition of bridges in the U.S.
- 13 3. Leverage non-federal contributions from sponsors and stakeholders involved in planning, design, and
14 construction by providing federal financial assistance.

15 The BIL appropriates \$9.2 billion between federal fiscal year (FFY) 2022 and FFY 2026 to fund the BIP, and an
16 additional \$6.5 billion is authorized for annual congressional appropriation during those years. A portion of
17 this discretionary funding—at least 50%—is reserved for large projects with eligible project costs greater than
18 \$100 million.

19 In June 2022, FHWA released a Notice of Funding Opportunity (NOFO) to solicit applications for three
20 categories of BIP funding opportunities:

- 21 1. Planning.
- 22 2. Bridge Projects (eligible costs of less than \$100 million).
- 23 3. Large Bridge Projects (eligible costs of more than \$100 million).

24 During the FFY 2022 BIP cycle, the IBR Program was awarded a \$1.0 million Planning grant. The IBR Program
25 also applied for a Large Bridge Project construction grant but was not awarded these funds in the FFY 2022
26 BIP cycle. The IBR Program intends to apply to the Large Bridge Project construction grant again in FFY 2023,
27 the NOFO for which is expected in September 2023. Securing additional state funding and staying on schedule
28 to advance the IBR Program through the environmental review process will be key to maximizing federal
29 grant awards.

30 **USDOT National Infrastructure Assistance Program**

31 The BIL created the discretionary Mega grant program for large transportation projects that exceed \$500
32 million in anticipated costs that are likely to “generate national or regional economic, mobility, or safety
33 benefits” and are reasonably expected to begin construction within 18 months of grant obligation. Eligible
34 projects include highway or bridge projects on the National Highway System, as well as freight and passenger
35 rail and public transportation projects. The IBR Program, which includes multimodal investments (e.g.,
36 highway, transit, pedestrian/bike), is eligible for this opportunity. Eligible uses of grant funding are broad and
37 include all stages of project development (i.e., planning, environmental, and design work) and construction,
38 as well as interest and other financing costs required to carry out a project under a multiyear agreement.

39 Mega is now part of the Multimodal Project Discretionary Grant (MPDG) Opportunity, which combined
40 multiple grant opportunities into a single solicitation. Other grant programs included in the MPDG are INFRA

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1 and the Rural Surface Transportation Grant program. The MPDG allows applicants to apply for one, two, or all
2 three of these funding opportunities with one application.

3 The BIL appropriated up to \$5 billion from FFY 2022 through FFY 2026 (and authorized Congress to
4 appropriate up to \$5 billion in additional funding during this period as well); \$1 billion was made available in
5 FFY 2022. Half of the funds are available for projects greater than \$500 million, such as the IBR Program.
6 USDOT issued a NOFO for FFY 2023–2024 grants in June of 2023. WSDOT and ODOT jointly applied to the FFY
7 2023–2024 NOFO to fund multimodal elements of the IBR Program.

8 FTA CIG New Starts Program

9 The CIG program provides capital funding for fixed guideway transit projects such as new and expanded rapid
10 rail, commuter rail, light rail, streetcars, bus rapid transit, and ferries. The CIG program may also provide
11 funding for corridor-based bus rapid transit investments that do not involve a dedicated guideway for transit.
12 Projects costing more than \$400 million or having a CIG share of more than \$150 million are categorized as
13 New Starts; projects costing less than \$400 million and seeking less than \$150 million are categorized as Small
14 Starts. Both TriMet and C-TRAN have successfully secured CIG funding for transit projects in the past. Recent
15 awards include the following:

- 16 • TriMet was awarded \$100 million for the Metropolitan Area Express (MAX) Red Line Extension and
17 Reliability Improvements through the CIG Small Starts program in FFY 2021.
- 18 • C-TRAN was awarded \$25 million for the Mill Plain bus rapid transit through the CIG Small Starts Program
19 in FFY 2020.
- 20 • TriMet received \$87 million for the Division Street Transit Project through the CIG Small Starts program in
21 FFY 2019.
- 22 • C-TRAN received \$38 million for the Fourth Plain bus rapid transit through the CIG Small Starts Program in
23 FFY 2015.
- 24 • TriMet received \$745 million in the form of a New Starts grant for the Portland-Milwaukie Light Rail Project
25 in FFY 2012.

26 The IBR Program expects that the CIG New Starts program will serve as a major funding source for the transit
27 element of the Modified LPA. With a currently estimated New Starts eligible project cost of approximately \$1.8
28 billion, the IBR Program anticipates applying for an award range of \$0.9 to \$1.1 billion. This range assumes
29 that the IBR Program's BIP and Mega grant expectations are met, and the upper end of the range would likely
30 need to increase if the other grant expectations fall short. By comparison, the FTA recommended an \$850
31 million New Starts grant in 2013 to help fund the transit component of the CRC project. Negotiations with FTA
32 during the CRC project accounted for Section 173 of the FY 2010 Consolidated Appropriations Act; those
33 provisions are assumed to continue to apply.¹⁷

34 Unlike BIP, Mega, and most other federal discretionary grants, which are generally awarded within one year
35 from submitting a one-time application, the FTA's CIG process involves a series of steps over multiple years, as
36 set forth in statute and further defined in regulations and policy guidance. Figure 4-4 illustrates the steps

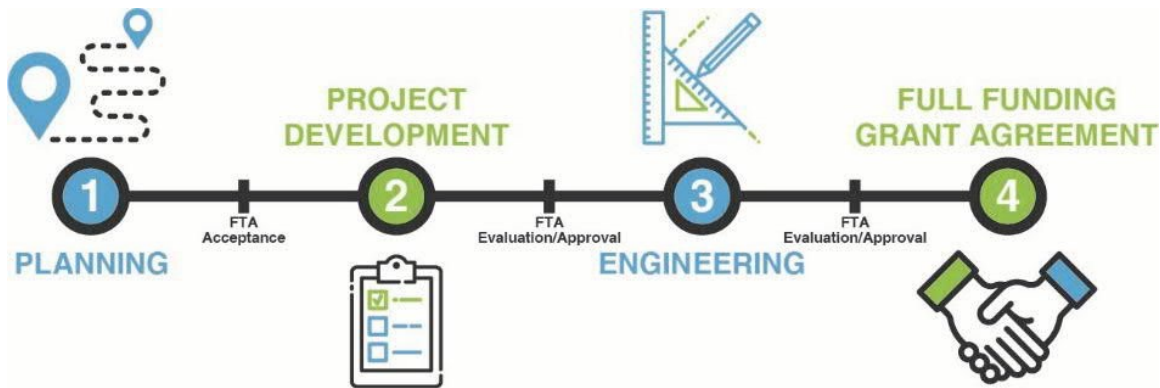
¹⁷ Section 173 of the FY 2010 Consolidated Appropriations Act, sponsored by Senator Patty Murray, clarifies the following for multimodal interstate projects in Interstate Highway corridors applying for CIG New Starts funds:

1) The CIG share and overall federal participation percentages for the IBR Program are based on the overall multimodal Program cost as the denominator (i.e., amounting to a 15–19% New Starts share in this finance analysis)

2) The Project Justification rating is based on solely the costs of the transit elements of the multimodal project (i.e., approximately \$1.8 billion YOES).

1 required for a CIG New Starts grant, from planning to acceptance into the Project Development phase, to
2 approval into the Engineering phase, and finally to approval of a Full Funding Grant Agreement (FFGA). The
3 FFGA establishes the project scope, the amount of CIG funding that FTA will request in congressional
4 appropriations for disbursement to the recipient agency, and the schedule of those requests.

5 **Figure 4-4. Federal Transit Administration Capital Investment Grants New Starts Process**



6

7 Prior to advancing from Project Development to Engineering, the IBR Program will need to document that it
8 meets statutory and FTA policy requirements. Statutory requirements are:

- 9 • Completion of National Environmental Policy Act analysis.
- 10 • Approval for inclusion in regional transportation plans.
- 11 • Submission of information needed for FTA’s justification and financial ratings, with a resulting rating of
12 “Medium” or better.

13 Policy requirements are:

- 14 • Completion of at least a 30% engineering design and cost estimate.
- 15 • A “lock” on the dollar amount to be requested from the CIG program and commitment of at least 30% of
16 non-CIG match funding.
- 17 • Submission and approval of a project management plan and subplans demonstrating the project
18 sponsor’s technical capacity to advance the project successfully.

19 For CIG New Starts applicants, these requirements must be met prior to entering Engineering and again, prior
20 to the FFGA. Critical third-party agreements must also be in place prior to the FFGA. The ratings are reported
21 to Congress in FTA’s Annual Report on Funding Recommendations for the CIG Program, which is submitted as
22 part of the president’s budget each year.

23 The following outlines the key FTA CIG milestones for the Modified LPA’s transit component assumed in this
24 finance analysis:

- 25 • Project Development phase: summer 2023 through summer 2025.
- 26 • Submit required materials and financial plan for initial rating: summer 2024.
- 27 • Initial rating in president’s budget: February 2025.
- 28 • Submit request to FTA Entry into Engineering phase and provide rating materials: summer 2025.
- 29 • Anticipated rating and recommendation for funding in president’s budget: February 2026.

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- 1 • Anticipated approval for FTA Entry into Engineering phase: spring 2026.
- 2 • Anticipated receipt of FFGA: 2028.¹⁸

3 **Other Potential Federal Grants**

4 This section describes other discretionary federal grants that the IBR Program may be eligible for, including
5 INFRA, RAISE, AID, and Reconnecting Communities. While the Modified LPA may qualify for these
6 opportunities, they are generally smaller than others such as BIP, Mega, and CIG, and therefore are unlikely to
7 serve as primary sources of funding. Currently, the IBR Program is focused on securing funding from the
8 federal grant programs likely to award the largest amounts of discretionary funding and will apply for smaller
9 grant programs for discrete eligible components of the Modified LPA where opportunities arise (e.g., the 2021
10 AID Demonstration Grant application for the IBR digital twin, described below).

11 ***FHWA Nationally Significant Multimodal Freight and Highway Projects Grant Program***

12 INFRA is dedicated to rebuilding the nation's aging infrastructure. It uses selection criteria that promote
13 projects with national and regional economic vitality, as well as environmental justice goals of highway and
14 intercity/freight rail projects. INFRA also incentivizes project sponsors to pursue innovative delivery strategies,
15 including public-private partnerships. In March 2022, USDOT announced up to \$8 billion in funds available for
16 awards from FFY 2022 to FFY 2026, of which approximately \$1.55 billion was made available in FFY 2022. INFRA
17 is part of the MPDG opportunity, which is a combined solicitation with the Mega program and the Rural
18 Surface Transportation Grant program.

19 ***USDOT Rebuilding American Infrastructure with Sustainability and Equity Grants***

20 The RAISE grant program (formerly known as BUILD and TIGER) is a highly competitive USDOT grant program
21 that supports the capital costs of road, rail, transit, and multimodal projects that have a significant impact on
22 the nation, a region, or a metropolitan area. In March 2022, the Consolidated Appropriations Act appropriated
23 an additional \$775 million for the FFY 2022 RAISE Grant Program, bringing the total available funds in FFY 2022
24 to \$2.275 billion. The maximum RAISE grants are typically \$25 million, though the additional funding
25 appropriated by Congress in 2023 increased the maximum possible award amount to \$45 million.

26 ***FHWA AID Demonstration Program***

27 The FHWA AID Demonstration Program seeks to incentivize accelerated innovation in highway transportation
28 projects by including some proven highway transportation application not routinely used by the applicant.
29 Each award may be up to \$1 million. AID awards are limited to two per state department of transportation
30 (DOT) applicant, with no more than one award for a state DOT and no more than one award for a subrecipient
31 applying through the state DOT. FHWA notes a variety of forward-thinking funded projects through AID, such
32 as geospatial data collaboration, intelligent systems technology, and e-Construction,¹⁹ as well as business
33 process management systems.

34 The IBR Program submitted a grant application to the AID Demonstration Program in September 2021 seeking
35 \$1.0 million in federal funds for implementation of a digital twin of the IBR Program works, which will provide

¹⁸ FTA approval through a Letter of No Prejudice review may be needed to ensure that expenses incurred using non-federal sources of funding will remain eligible for reimbursement once an FFGA is signed and executed. A Letter of No Prejudice allows critical, time-sensitive activities to proceed using local funds in advance of federal grant funds available for reimbursement. Since the IBR Program is likely to embark on construction of the multimodal bridge structures prior to the award of an FFGA under the CIG New Starts program, a Letter of No Prejudice should be secured to ensure that the transit portion of these expenditures remains reimbursable.

¹⁹ For more information on e-Construction, see <https://www.fhwa.dot.gov/construction/econstruction/>.

1 the framework for connecting various design inputs, geographic information system (GIS) data, and other
2 previously siloed information to enhance this collaborative working environment and allow key stakeholders
3 to visualize a wealth of project data in one central place. In addition, the digital twin will be used for public
4 outreach, planning, design collaboration and production, cost estimating, and eventually for procurement,
5 construction oversight, operations (assisted by sensors), and asset management.

6 **USDOT Reconnecting Communities Pilot Program**

7 The Reconnecting Communities Pilot Program, enacted as part of the BIL, is a discretionary grant program
8 funded with a cumulative total of \$1 billion over the next five years. The funds can support planning, capital
9 construction, and technical assistance to equitably and safely restore community connectivity through the
10 removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities that create
11 barriers to mobility, access, or economic development. USDOT announced that \$195 million was available for
12 the FFY 2022 solicitation. In June 2022, USDOT released a NOFO to solicit applications for Planning Grants and
13 Capital Construction Grants, which are awarded on a competitive basis.

14 **4.3.3 Financing Mechanisms**

15 There is a key difference between funding and financing and how each could contribute to the IBR Program.
16 Funding is a monetary resource that is available to pay for capital investments when needed, whereas
17 financing is a tool that facilitates borrowing against future revenues to convert them into current funding. The
18 borrowed funds must be repaid with interest in the future. This section describes the following financing
19 mechanisms:

- 20 • Toll bonds.
- 21 • USDOT Transportation Infrastructure Finance and Innovation Act Program.
- 22 • Short-term borrowing (e.g., commercial paper and/or grant anticipation notes).

23 **Toll Bonds**

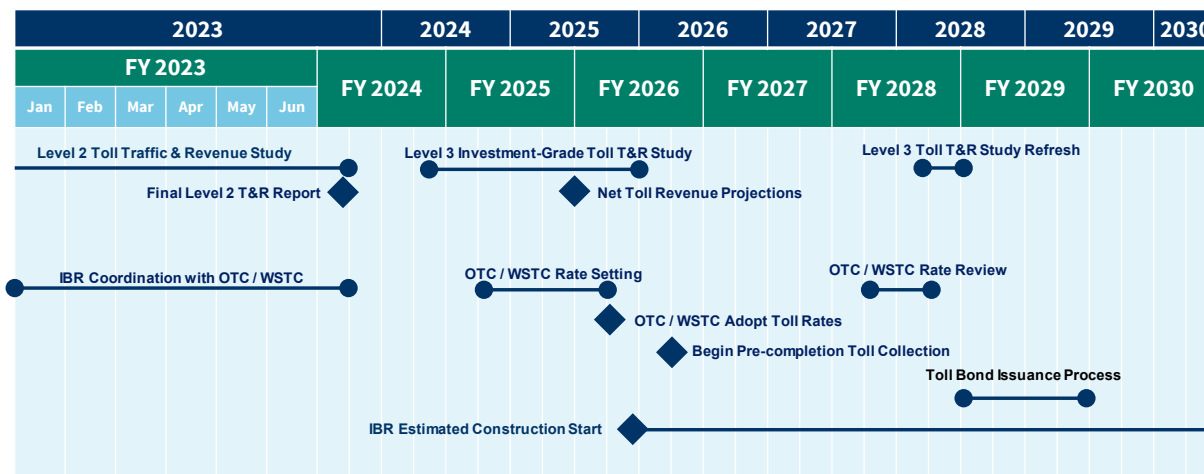
24 A toll bond is a financial instrument issued by an owner or developer to borrow funds from bond investors or
25 lenders. Toll bonds are issued with multiple maturities, in which the borrower makes principal and interest
26 (coupon) payments from toll revenues, typically from net toll revenues (see Figure 4-3). Government agency
27 borrowers generally have access to lower borrowing costs via municipal tax-exempt bonds, in which the
28 investors are willing to accept lower interest rates in exchange for their interest earnings being exempt from
29 income tax. In addition, a toll bond may rely solely on the pledge of toll revenues for repayment (e.g., a stand-
30 alone toll revenue bond) or other additional revenue sources, or the full faith and credit of the state may also
31 be pledged to “backstop” toll revenue to improve the transaction’s credit rating, lower borrowing costs, or
32 increase borrowing capacity.

33 Issuing toll revenue bonds in Oregon and Washington requires slightly different processes; the general
34 milestones are outlined in Figure 4-5, and the following key milestones must be reached prior to the issuance
35 of toll revenue bonds:

- 36 • Establish legislative toll bond authority for the IBR Program in Washington and Oregon.
- 37 • OTC and WSTC adopt toll rates, including periodic reviews and adjustments.
- 38 • Complete a Level 3 investment-grade toll T&R study or study refresh.
- 39 • Prepare a bond trust indenture (contract with investors) by bond counsel.
- 40 • Prepare a plan of finance, official statement(s), and credit rating agencies meetings.

Interstate Bridge Replacement Program

1 Figure 4-5. IBR Program Toll Funding Timeline



2

3 **USDOT Transportation Infrastructure Finance and Innovation Act (TIFIA) Program**

4 The USDOT TIFIA program, administered by the Build America Bureau, provides federal credit assistance in
 5 the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation
 6 projects of national and regional significance. TIFIA provides improved access to capital markets, offering
 7 more flexible repayment terms and potentially more favorable interest rates than can be found in private
 8 capital markets for similar borrowing terms. Any highway or transit capital project eligible for federal aid and
 9 included in the applicable state transportation improvement program is also eligible for the TIFIA program.

10 Historically, credit assistance has been limited to 33% of reasonably anticipated eligible project costs. The
 11 proceeds of a TIFIA loan are not considered to be federal funds because a TIFIA loan for the IBR Program
 12 would be repaid from non-federal funds, such as the tolls for crossing the bridge. However, the total federal
 13 share of a project that is partially funded with a TIFIA loan cannot exceed 80%; the anticipated federal share of
 14 funding described in this finance chapter is well below this limit.

15 TIFIA direct loans typically have a repayment term of up to 35 years after a project’s substantial completion
 16 (though the 2021 BIL amended the term up to 75 years for some projects) and provide borrowers with the
 17 flexibility to accrue interest to the loan balance during construction defer principal and interest payments for
 18 up to five years beyond substantial completion. Creditworthiness is a critical factor in the evaluation process;
 19 if the revenue streams of a project are unproven, an additional pledge by the state or local government can be
 20 used to secure the loan. TIFIA loan recipients do not have to pay a credit risk premium to cover the cost of
 21 potential losses. Congress appropriates funding each year to cover those costs.

22 Benefits of the TIFIA program include low interest rates equal to long-term U.S. Treasury Bonds at the time the
 23 loan is committed and flexible repayment terms. However, the administrative requirements related to
 24 securing a loan and ongoing reporting are extensive and time consuming.

25 ODOT and/or WSDOT could pursue a TIFIA loan, to be repaid with from the relevant state’s share of toll
 26 revenues. The efficiency of a TIFIA loan, combined without potentially lower debt service coverage
 27 requirements, could potentially increase the level of toll funding for the IBR Program. It is anticipated that
 28 current and future toll funding capacity analyses conducted by both states will consider the pros and cons of
 29 the TIFIA program.

1 Short-Term Borrowing

2 The annual amount of federal grant funds available may be less than the cash-flow requirements of a project's
3 construction schedule. Grant anticipation notes (GANs) or commercial paper short-term borrowing
4 mechanisms can help bridge the gap between the annual amount of available funds and the annual funding
5 needs.

6 GANs are obligations that are secured by anticipated FTA grant recipients. Once a grant is secured—in the case
7 of a signed FFGA for a CIG grant or another executed grant agreement—GANs can be helpful as a short-term
8 financing tool if future grant award dispersals are needed earlier than specified in the grant agreement due to
9 project construction cash flow needs and/or if grant award dispersals occur after project completion due to
10 federal budgeting constraints. GANs serve as a source of financing for FTA program grant recipients as the
11 principal and interest on GANs are eligible to be repaid with FTA capital grant funding.

12 This finance analysis assumes that annual disbursements from the FTA CIG New Starts grant will not exceed
13 \$170 million per year and that GAN financing will not be required. These assumptions will be revised as the
14 IBR Program progresses along the FTA CIG application process.

15 4.4 IBR Program Capital Financial Plan

16 This section outlines an IBR Program capital cash flow that matches the sources and uses of funds by year (see
17 Section 4.4.1) and discusses the next steps required to secure the necessary funding commitments to fully
18 fund the Program (see Section 4.4.2).

19 4.4.1 Cash Flow Analysis

20 This finance analysis matches a host of committed, anticipated, and prospective funding sources to the post-
21 mitigation 60th percentile risk-loaded cost of \$5,935 million (YOE\$) over FY 2020 through FY 2034. Capital cost
22 estimates are split by state and among program management, right of way, construction, and the following
23 high-level categories:

- 24 • Highway costs.
- 25 • Transit costs.
 - 26 – Costs uniquely attributed to the transit component.
- 27 • Transit share of highway bridge costs.
 - 28 – The share of highway bridge costs attributed to the transit component, based on 16% of the cost of
29 the river crossing bridge structure, which is the percentage share of the bridge deck width allocated to
30 LRT.

31 The following funding sources are assumed in this finance analysis:

- 32 • Existing Oregon and Washington State funding (\$197.7 million committed).
- 33 • Move Ahead Washington state funding (\$1 billion committed).
- 34 • Oregon funding contribution (\$1 billion committed).
- 35 • Toll funding (\$1.237 billion committed).
- 36 • Federal competitive grants (\$2.5 billion prospective, of which \$1 million is committed).

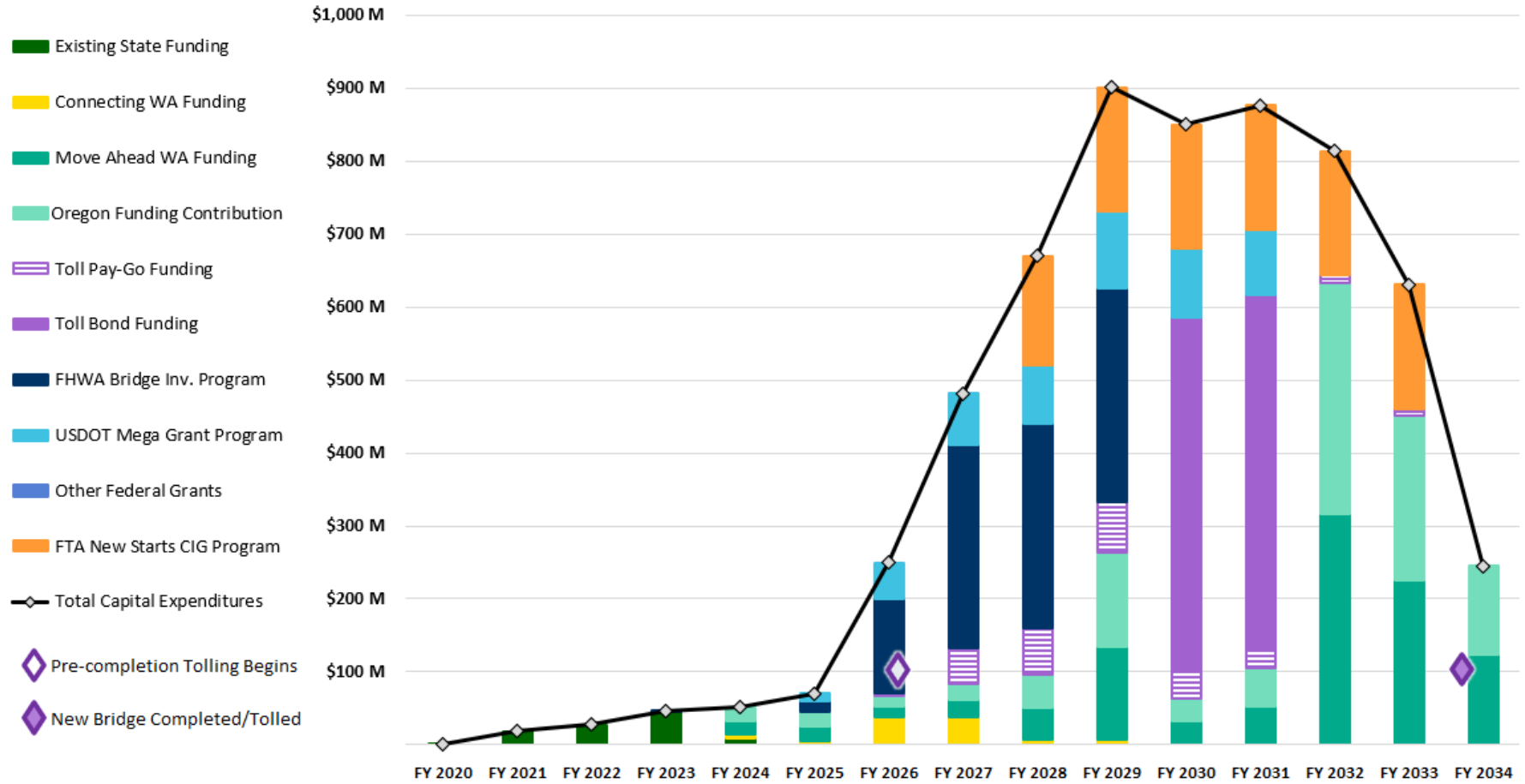
37 The alignment of annual sources and uses of funds for this finance chapter is illustrated in Figure 4-6, Table
38 4-3, and Table 4-4. The assumptions for the sources and uses of funds are likely to evolve as the IBR Program

Work in Progress - Not for Public Distribution

Interstate Bridge Replacement Program

- 1 cost estimates are updated during the next CEVP cycle and more information is known about anticipated and
- 2 prospective funding. In particular, the current financial plan is focused on maximizing federal grant funding
- 3 from the three largest eligible award opportunities from the 2021 BIL. If future expectations for the BIP, Mega,
- 4 and/or CIG awards need to be reduced, the IBR Program will look to other strategies, such as smaller federal
- 5 discretionary grant opportunities, to close the gap.

1 Figure 4-6. IBR Program Annual Sources and Uses of Capital Funds (millions of YOE\$)



2

Work in Progress - Not for Public Distribution

Interstate Bridge Replacement Program

1 Table 4-3. IBR Program Annual Uses of Capital Funds (Millions of Year-of-Expenditure Dollars)

USES OF FUNDS	% SHARE	TOTALS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Program Management	8.7%	\$517.4 M	0.9	18.1	27.5	45.4	51.5	52.6	35.8	36.6	36.0	36.3	37.1	37.9	38.8	39.5	23.4
<i>Highway</i>	6.0%	\$357.1 M	0.6	13.1	19.9	32.8	37.3	38.0	23.8	24.3	24.0	24.2	24.7	25.3	25.8	26.3	17.0
<i>Transit Only</i>	2.4%	\$143.1 M	0.3	5.0	7.6	12.6	14.2	14.5	9.9	10.1	10.0	10.0	10.3	10.5	10.7	10.9	6.5
<i>Transit Share of Hwy</i>	0.3%	\$17.2 M	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	0.0
Right of Way	4.3%	\$252.5 M	0.0	0.0	0.0	0.0	0.0	17.3	46.0	104.2	76.1	9.0	0.0	0.0	0.0	0.0	0.0
<i>Highway</i>	3.1%	\$185.3 M	0.0	0.0	0.0	0.0	0.0	12.0	33.6	77.3	56.2	6.2	0.0	0.0	0.0	0.0	0.0
<i>Transit Only</i>	1.1%	\$67.2 M	0.0	0.0	0.0	0.0	0.0	5.3	12.4	26.9	19.9	2.7	0.0	0.0	0.0	0.0	0.0
<i>Transit Share of Hwy</i>	0.0%	\$0.0 M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	87.0%	\$5,165.4 M	0.0	0.0	0.0	0.0	0.0	0.0	168.1	341.2	557.9	855.9	814.0	839.3	775.8	591.3	221.9
<i>Highway</i>	60.0%	\$3,559.0 M	0.0	0.0	0.0	0.0	0.0	0.0	148.4	301.2	390.5	555.5	528.2	568.8	511.6	332.8	221.9
<i>Transit Only</i>	24.3%	\$1,442.9 M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	126.6	258.7	264.4	270.5	264.2	258.5	0.0
<i>Transit Share of Hwy</i>	2.8%	\$163.4 M	0.0	0.0	0.0	0.0	0.0	0.0	19.7	40.0	40.8	41.7	21.3	0.0	0.0	0.0	0.0
TOTAL USES	100.0%	\$5,935.3 M	0.9	18.1	27.5	45.4	51.5	69.9	249.9	482.0	670.0	901.2	851.1	877.2	814.6	630.8	245.3
<i>Highway</i>	69.1%	\$4,101.4 M	0.6	13.1	19.9	32.8	37.3	50.0	205.8	402.9	470.7	586.0	553.0	594.1	537.4	359.1	238.8
<i>Transit Only</i>	27.9%	\$1,653.2 M	0.3	5.0	7.6	12.6	14.2	19.8	22.3	37.0	156.5	271.5	274.7	280.9	274.9	269.4	6.5
<i>Transit Share of Hwy</i>	3.0%	\$180.7 M	0.0	0.0	0.0	0.0	0.0	0.0	21.8	42.1	42.9	43.8	23.4	2.2	2.2	2.3	0.0

2

1 Table 4-4. IBR Program Annual Sources of Capital Funds (Millions of Year-of-Expenditure Dollars)

SOURCES OF FUNDS	% SHARE	TOTALS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
Existing State Funding	1.7%	\$100.0 M	0.9	18.1	27.5	44.4	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Move Ahead Washington Funding	16.8%	\$1,000.0 M	0.0	0.0	0.0	0.0	18.6	19.8	14.4	23.3	44.8	128.9	31.9	52.8	317.1	225.7	122.7
Oregon Funding Contribution	16.8%	\$1,000.0 M	0.0	0.0	0.0	0.0	18.6	19.8	14.4	23.3	44.8	128.9	31.9	52.8	317.1	225.7	122.7
Connecting Washington Funding	1.6%	\$97.7 M	0.0	0.0	0.0	0.0	5.2	5.2	37.4	37.4	6.3	6.3	0.0	0.0	0.0	0.0	0.0
Toll Pay-Go Funding	4.5%	\$265.8 M	0.0	0.0	0.0	0.0	0.0	0.0	3.6	48.0	64.1	68.2	36.4	25.6	10.5	9.5	0.0
Toll Bond Funding	16.4%	\$971.9 M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	485.9	485.9	0.0	0.0	0.0
FHWA Bridge Investment Program	16.8%	\$1,000.0 M	0.0	0.0	0.0	1.0	0.0	15.0	130.0	280.0	280.0	294.0	0.0	0.0	0.0	0.0	0.0
USDOT Mega Grant Program	8.4%	\$500.0 M	0.0	0.0	0.0	0.0	0.0	10.0	50.0	70.0	80.0	105.0	95.0	90.0	0.0	0.0	0.0
Other Federal Grants	0.0%	\$0.0 M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FTA New Starts CIG Program	16.8%	\$1,000.0 M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	170.0	170.0	170.0	170.0	170.0	0.0
TOTAL SOURCES	100.0%	\$5,935.3 M	0.9	18.1	27.5	45.4	51.5	69.9	249.9	482.0	670.0	901.2	851.1	877.2	814.6	630.8	245.3

2 CIG = Capital Investment Grant; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; FY = fiscal year; IBR = Interstate Bridge Replacement; M = million; USDOT =
 3 U.S. Department of Transportation; YOES\$ = year-of-expenditure dollars

4.4.2 Steps to Securing Anticipated Funding Commitments

Several of the discretionary funding sources discussed in Section 4.3 are not yet committed for the IBR Program and require a series of next steps to secure. This section outlines the steps for securing funding from federal discretionary grant programs. Some of the anticipated or prospective funding sources also require considering financing mechanisms described in Section 4.3.3, which may add to the next steps in solidifying funding commitments. Required tolling approvals to secure the commitment of toll funding have been obtained in both states, the processes of which are outlined below.

Federal Grant Applications

The IBR Program has applied for, or plans to apply for, several federal discretionary grants:

- **USDOT Mega Program:** The IBR Program submitted a grant application in August 2023.
- **FHWA BIP:** A NOFO is anticipated in September 2023.
- **FTA CIG Program:** The IBR Program submitted materials to enter the Project Development phase of the New Starts process in summer 2023.

Successfully securing the maximum federal grant funding possible requires a sound, feasible financial plan demonstrating that both states have taken the necessary actions to fully commit all other funding sources, including state and toll funding. Funding awards from these federal discretionary grant programs will be highly competitive, and award decisions will hinge on the strength of the financial plan submitted in the application process, among other selection criteria.

To the extent possible, state funding should recognize the multimodal components of the IBR Program and allow flexibility in using the funds for both highway and transit components. As funding sources, and aging of both states funding contributions, are determined, the non-federal matching requirements of the three major federal grant programs for which the IBR Program plans to be applying in 2023 should be considered.

Federal Financing Mechanisms

As the IBR Program financial plan continues to develop, additional consideration of federal financing in the form of TIFIA or GANs will be included based on the direction of the two states and their financial advisors.

Toll-Related Approvals

On a federal level, Title 23 of the U.S. Code, Section 129 authorizes the tolling of the I-5 Columbia River bridges based upon their reconstruction. Meanwhile, Oregon and Washington have different policies and procedures for establishing highway tolls.

As part of establishing the Oregon Toll Program, the Oregon Legislature has already put in place the authorization to toll and bond against toll revenues. The OTC, composed of individuals appointed by the governor, can approve tollways and the rate setting on these facilities within the state. The Toll Program Fund was established by the Oregon Legislature via House Bill 3055²⁰ to segregate toll revenues within the Oregon State Highway Fund and allow them to be separated into individual tollway accounts or pooled across the system of Oregon Toll Program tollways to meet financial obligations, including debt service. While tolling for the IBR Program is already authorized in Oregon, agreements between the states will be required to detail how toll revenue will be shared and to document other toll-related operational expectations and procedures. Additional legislation may be needed to enable aspects of these agreements, such as toll bond authorization.

²⁰ Oregon State Legislature HB 3055, Section 136, September 2021.

1 In Washington, the legislature holds the power to authorize all tolled roadway facilities, but it leaves toll rate
2 setting to the WSTC. Each toll facility has its own account. Toll financing, including debt repayment, is
3 handled on a project-by-project basis regardless of whether tolls are directly pledged to debt service or used
4 to reimburse the motor vehicle fuel tax fund. In 2023, the Washington Legislature passed legislation providing
5 toll authorization for the IBR facility, demonstrating a commitment of toll funding for the Columbia River
6 bridges.

7 Next steps for issuing toll bonds to support construction are detailed in Section 4.3.3.

8 4.5 Operations and Maintenance Costs

9 Once the Modified LPA is constructed, funding would be needed for ongoing operation and maintenance
10 costs. This section outlines the anticipated O&M costs and discusses potential ongoing funding sources for
11 both the highway and the transit components.

12 4.5.1 Highway Facility Operation and Maintenance and Repair and Replacement 13 Costs

14 To meet the anticipated conditions within a future bond trust indenture document, the IBR Program assumes
15 that the routine O&M costs for the bridge and approaches would be paid from toll revenues, as illustrated in
16 Figure 4-3, as a shared cost between the two states. Periodic capital repair and replacement (R&R) costs are
17 further assumed to be paid from a reserve account that is funded from net toll revenues. IBR Program-related
18 I-5 highway O&M and R&R costs unique to each state are assumed to be paid from each state's relevant
19 maintenance and preservation budgets in the same manner those costs are currently covered. Accordingly,
20 this chapter only documents the shared costs assumed to be toll-funded for assumed O&M and R&R activities
21 for the Columbia River bridges and approaches.

22 In the Level 2 toll T&R Study, WSDOT and ODOT prepared updated bridge and approach facility O&M and R&R
23 cost estimates for use in estimating net toll revenue projections. Facility O&M and R&R costs are derived from
24 initial analyses by ODOT and WSDOT in support of federal discretionary grant applications in both 2021 and
25 2022, with updates to reflect recent escalation in materials and labor costs.

26 One key reason that routine facility O&M costs are assumed to be paid from tolls is to ensure that the
27 Columbia River bridges and approaches remain open and functional. Proper maintenance of the facility also
28 ensures that the expected level of service is provided to motorists. Typically, facility O&M activities include
29 lane restriping, lighting maintenance, routine bridge maintenance and repairs, pothole and pavement repair,
30 traffic operations, signage, litter pickup, etc. These activities help preserve safety and travel reliability along
31 the corridor.

32 Periodic bridge and approach facility R&R costs are assumed to be covered through a reserve account funded
33 from net toll revenue contributions, typically made after debt service payments. Periodic facility costs
34 typically involve major capital upgrades, renewal, and improvements, including replacement of strip seal
35 expansion joints, surface rehabilitation, painting, inspections, and related capital rehabilitation. Cost
36 estimates for periodic R&R items are dependent on several design characteristics of the facility, including the
37 type of construction materials and structural attributes.

38 Bridge insurance premiums, for a potential policy to cover repairs to the bridge and replace lost toll revenues
39 required due to a catastrophic event, have not been included as a bridge and facility O&M cost component.
40 The bridge design has yet to be determined, and WSDOT and ODOT will consider options for, and conduct risk
41 assessments of, policy coverage, terms, and whether to self-insure the bridge fully or partially following final
42 design.

Work in Progress - Not for Public Distribution

Interstate Bridge Replacement Program

1 The currently assumed facility O&M and R&R cost estimates are summarized in Table 4-5 as YOES amounts.

2 **Table 4-5. Columbia River Bridges and Approaches Operations and Maintenance and Repair and**
 3 **Replacement Cost Estimates (Millions of Year-of-Expenditure Dollars)**

Facility Costs	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FYs 2036-67	FYs 2026-67
O&M	0.86	1.17	1.20	1.23	1.26	1.29	1.32	1.36	1.39	1.43	70.4	82.9
R&R	-	-	-	-	-	-	-	-	-	-	73.6	73.6

4 “-” = not applicable because repair and replacement would not be needed at this time; IBR = Interstate Bridge; FY = fiscal year; O&M
 5 operations and maintenance; R&R = repair and replacement

6 Toll Collection O&M and R&R Costs

7 The IBR Program team, in close coordination with WSDOT and ODOT, has prepared preliminary toll collection
 8 O&M cost forecasts as part of the ongoing Level 2 toll T&R study. Toll collection costs include bank (credit/
 9 debit) card processing fees, roadway and back-office toll collection systems O&M, back-office customer
 10 service center operations, agency staffing and consulting support, and transponder pass purchase and
 11 distribution costs. Some of these toll O&M costs are specific to the IBR Program, and others represent a share
 12 of system-wide costs. Toll collection R&R costs include a share of the periodic re-procurement costs for toll
 13 vendor contracts, as well as periodic replacement of the roadway toll systems equipment.

14 The forecasted toll O&M and R&R costs consider a centralized toll system and toll operations that assume
 15 tolling of I-5 at the Columbia River bridges, as well as tolling of the Interstate 205 (I-205) Abernethy and
 16 Tualatin River bridges. As noted in Section 4.3.1, ODOT’s RMPP, which proposes to toll portions of I-5 and I-205
 17 beyond the Interstate and I-205 bridges, is still in early stages and is not sufficiently developed to warrant
 18 inclusion in the Regional Transportation Plan and thus has been omitted from toll T&R projections and the
 19 development and allocation of the system-wide O&M and R&R cost estimates.

20 The base cost estimates, which are derived from current prices and technology assumptions, are escalated to
 21 future year-of-expenditure values based on an assumed 2.5% annual inflation rate, informed from historical
 22 average cost inflation.

23 The assumed toll collection O&M and R&R cost estimates for Scenario A are provided in Table 4-6.

24 **Table 4-6. IBR Toll Collection Operations and Maintenance and Repair and Restoration Cost**
 25 **Estimates (Millions of Year-of-Expenditure Dollars)**

Toll Collection Costs	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FYs 2036-67	FYs 2026-67
O&M	7.2	17.3	18.5	19.4	20.4	21.4	22.5	23.2	25.9	26.8	1,437	1,640
R&R	-	-	-	-	-	-	-	-	12.9	18.4	199	231

26 “-” = not applicable because repair and replacement would not be needed at this time; IBR = Interstate Bridge; FY = fiscal year; O&M
 27 operations and maintenance; R&R = repair and replacement

4.5.2 Transit Operations and Maintenance Costs

The 2023 IBR Program financial plan outlines the transit elements included in the Modified LPA, including the following elements that would operate in dedicated transit right of way across the Columbia River:

- **Light Rail Transit:** An LRT extension of the MAX Yellow Line from the Expo Center into Vancouver, with new stations at Hayden Island, Vancouver Waterfront, and Evergreen Boulevard, and vehicles and operating facilities to support the extension of service.
- **Express Bus Service:** Increased frequencies for express bus service with an expansion of bus-on-shoulder facilities along I-5 from Fourth Plain Boulevard across the Columbia River to Marine Drive.

Transit O&M Cost Estimates

TriMet prepared an updated cost estimate for the LRT extension O&M in the Modified LPA. Concurrently, C-TRAN prepared an updated cost estimate for the complementary express bus service in the Modified LPA. These cost estimates assumed the service levels and assets needed to deliver the service forecast in 2045. Detailed modeling for the opening year and 2045 service levels will be completed, and a refined transit O&M cost estimate with service scaling from the opening year to 2045 service levels will be prepared in a future update of the IBR Program’s financial plan.

The cost estimates were prepared using 2019 cost information from both transit agencies to capture pre-pandemic cost of service characteristics. The estimates were escalated to future year of opening expenditure dollars (2033). Escalation from FY 2019 base-year costs to FY 2022 dollars was based on the actual O&M cost inflation that the two transit agencies experienced since FY 2019. The express bus FY 2033 costs have been escalated from constant FY 2022 dollars using an annual inflation rate assumption of 2.5%. TriMet has experienced different, somewhat more variable annual inflation rates in the past and the FY 2033 O&M cost estimate for LRT reflects TriMet's assumptions for future O&M inflation, which average 4.5% per year between FY 2023 and FY 2033.

Table 4-7 shows the annual transit O&M cost estimates by mode in the year of opening in FY 2033 year-of-expenditure dollars. These costs are for the transit elements only. It is assumed that the state DOTs will fully fund O&M of the Columbia River bridges and the highway portions of the Modified LPA.

Table 4-7. Annual IBR Transit Operations and Maintenance Cost Estimate in the Year of Opening

O&M Estimate Category	Opening Year in FY 2033 (YOE\$)
LRT	\$20.0 M
Express Bus	\$1.6 M
Total Transit	\$21.6 M

FY = fiscal year; LRT = light rail transit M = million; O&M = operations and maintenance; YOE\$ = year-of-expenditure dollars

4.6 Operations and Maintenance Funding Options

4.6.1 Highway Operations and Maintenance Funding Sources

Highway O&M funding is anticipated to come from the joint state toll revenues for the Columbia River bridges and approaches. Eligible uses of toll revenues for both O&M and R&R activities will be defined in the bond trust indenture document (contract with investors) developed as part of the process of issuing those bonds. It

1 is common practice to pay for routine facility O&M costs through toll revenues. Other I-5 highway elements
 2 unique to each state and not defined as an eligible use of toll revenues in the future bond trust indenture
 3 would be funded from other state sources, including the WSDOT and ODOT maintenance programs.

4 **4.6.2 Transit Operations and Maintenance Funding Sources**

5 **Potential Transit O&M Funding Options**

6 The transit passenger user fee (fare payment) is not expected to cover the transit O&M costs. The IBR Program
 7 has engaged both TriMet and C-TRAN to participate in a Transit Operations and Maintenance Working Group
 8 to define O&M costs and explore potential sources of funding. Funding options for transit O&M are
 9 constrained by statutory and/or constitutional limitations on the uses of certain funds in one or both states,
 10 as well as the partner agency conditions of the Modified LPA approval. This section outlines these restrictions,
 11 as well as the options being evaluated by the working group for further consideration.

12 Ultimately, to transition from the Project Development Phase to the Engineering Phase, the DOTs and transit
 13 agencies will need to develop a plan for covering the transit O&M costs while maintaining their existing
 14 systems to meet FTA requirements. The expected date for submitting materials to FTA for the application to
 15 enter the Engineering Phase is mid-2025.

16 **Partner Conditions of Modified LPA Approval Related to Transit O&M**

17 Table 4-8 outlines the conditions of approval related to the responsibility of transit O&M funding, passed by
 18 some of the IBR Program’s partner agencies in resolutions. The IBR Program is currently working with these
 19 partners to address their conditions. Other IBR Program partners (City of Vancouver, Port of Portland, Port of
 20 Vancouver, and RTC) did not include conditions on transit O&M.

21 **Table 4-8. Partner Conditions of Modified LPA Approval Related to Facility/Transit Operations and**
 22 **Maintenance**

Agency	Transit O&M Conditions of Approval
TriMet	<ul style="list-style-type: none"> • TriMet will not be responsible for LRT operations and maintenance costs resulting from the extension into Vancouver. Except to the extent otherwise agreed by TriMet, state or other funding sources will be identified and committed to fund LRT operations and maintenance costs incurred by TriMet that are not otherwise funded by LRT farebox revenues allocated to TriMet, and TriMet cost savings attributable to bus service replaced by LRT.
C-TRAN	<ul style="list-style-type: none"> • C-TRAN will not be responsible for operations and maintenance costs of LRT in Vancouver or Clark County, including new park-and-rides that may be constructed as part of the project. Items such as co-located station maintenance, security, and other operational support items may be considered by C-TRAN and its Board. If the IBR team recommends a scenario—beyond ongoing co-located station costs or security—where C-TRAN, through the agency, any PTBA funding, or tax initiative managed by the agency for fiscal responsibility of LRT operations and maintenance, C-TRAN’s Board of Directors’ approval of the Modified LPA will be immediately rescinded.

Agency	Transit O&M Conditions of Approval
City of Portland	<ul style="list-style-type: none"> The Program shall develop a plan for and ensure delivery of a sustainable funding source for transit operations and maintenance. The expectation is that a combination of funding contributions from the states of Washington and Oregon will provide the funding for all components of the project, supplemented by federal funds and future tolling. No local match or similar financial contribution will be required of the City of Portland. The financed elements of the project should include highway elements and key components of transit and local system improvements, including active transportation improvements, that make up the whole project. This includes the development and implementation of a plan for ongoing investment in operations and maintenance, Vision Zero safety and diversion mitigations of the whole project. The Program shall design the transit components of the project, including its transit operations plan, to maximize the ability to be funded as a Federal Transit Administration New Starts program.
Metro	<ul style="list-style-type: none"> The financial plan shall take into account the maintenance and operations needs of transit.

1 IBR = Interstate Bridge Replacement; LPA = Locally Preferred Alternative; LRT = light rail transit; PTBA = Public Transportation Benefit
 2 Area

3 Table 4-9 lists funding sources for transit O&M costs that are no longer being pursued and the reason why they
 4 have been dropped.

5 **Table 4-9. Funding Sources Not Being Pursued for IBR Program Transit Operations and Maintenance**

Funding Source	Reason Funding Source Considered Not Eligible
Existing TriMet Revenues	Constraint from resolution approving Modified LPA
Existing C-TRAN Revenues	Constraint from resolution approving Modified LPA
C-TRAN Tax Increase	Constraint from resolution approving Modified LPA
Fees at Park and Ride Lots	Fees would potentially decrease transit ridership

6 **List of Funding Options Under Consideration**

7 Revenue from transit fares and FTA formula funds will cover a portion of the transit O&M costs. The TriMet
 8 MAX Light Rail farebox recovery ratio (share of O&M costs covered by fares) averaged 42.0% in 2018 and 35.9%
 9 in 2019 before decreasing substantially due to the COVID-19 pandemic.

10 After seven years of revenue operations, the LRT mileage will be included in the FTA State of Good Repair
 11 formula calculations, generating some additional funding to support replacement of the LRT system elements
 12 at the end of their useful lives; however, this is outside the scope of typical O&M. The following potential
 13 sources may be considered for transit O&M costs not recouped from fares:

- 14 • **State General Funds:** The state legislatures could dedicate a portion of their general funds.
- 15 • **Oregon Statewide Transportation Improvement Fund:** A portion of a future increase in funds could
 16 be allocated.
- 17 • **Washington Climate Commitment Act funding:** The Climate Commitment Act (CCA) allocates funds
 18 from Washington carbon emissions cap-and-trade auctions to programs to mitigate climate change.
 19 Transit O&M funds may be eligible under the Carbon Emissions Reduction Account (CERA) in the CCA.
 20 CERA funds are subject to appropriation by the Washington State Legislature, and a local agency will
 21 need to apply for and manage the CERA funds.

- 1 • **Bridge Improvement District:** The two states could form a district within which to collect taxes to
2 pay for O&M costs attributed to the IBR Program's LRT extension and express bus services.
- 3 • **Gross or net IBR toll revenues:** This potential funding source may not be eligible to cover transit
4 O&M due to constitutional/statutory restrictions in Oregon and statutory restrictions in Washington. If
5 determined to be allowable, and at the direction of the state legislature(s), a portion of the toll
6 revenues could fund transit O&M costs.
- 7 • **FHWA Carbon Reduction Program:** This federal grant program allocates funds to projects that will
8 reduce carbon emissions. The funds are allocated to eligible projects in urbanized areas by the
9 Metropolitan Planning Organizations. RTC and Metro both receive Carbon Reduction Program formula
10 funding and could choose to dedicate a portion of these funds to support transit O&M.

11 4.7 Implementation Issues

12 Bi-state projects face unique challenges in coordinating the laws and activities of each state. The laws of
13 Oregon and Washington provide supportive policies and a general basis for a unified program to design,
14 construct, finance, and operate the Modified LPA. Most matters can be addressed without new legislation in
15 interstate agreements between ODOT, WSDOT, and other parties; however, there are certain requirements
16 and issues that are best addressed legislatively.

17 4.7.1 Bi-State Legislative and Agreement Issues

18 The IBR Program is a joint venture of WSDOT and ODOT. Implementation of the IBR Program would require
19 various combinations of WSDOT, ODOT, WSTC, OTC, and the local partners to enter a series of legally binding
20 interstate agreements to develop, construct, finance, operate, maintain, toll, and own components. Current
21 work on the IBR Program is guided by an interstate agreement between WSDOT and ODOT to jointly oversee
22 the environmental and preliminary design phases (WSDOT and ODOT n.d.). WSDOT and ODOT also entered
23 into a memorandum of understanding (MOU); the ODOT & WSDOT Transportation Interagency MOU for IBR
24 Program Toll Collection establishes ODOT as the agency responsible for collecting and administering toll
25 collections for the Columbia River bridges (OTC 2022).

26 Over the next couple years, ODOT, WSDOT, and others will prepare and execute an array of agreements and/
27 or legislative action related to the construction, operation, and financing of the IBR Program. The following
28 outlines some key interstate agreements:

- 29 • **Toll rate setting agreement:** Under existing law, the OTC needs no additional approvals to toll a facility.
30 In May 2023, Washington State Governor Inslee signed into law Senate Bill 5765, providing parallel toll
31 authorization for the IBR Program in Washington State, which will allow the WSTC to enter into an
32 agreement with the OTC to jointly set toll rates and policies for the Interstate Bridges. The OTC and WSTC
33 must coordinate on setting toll rates consistent with Washington and Oregon toll statutes and policies.
34 The laws of both states require that the rates for a toll facility be set by their respective transportation
35 commissions. The transportation commissions can enter into an agreement to coordinate their toll
36 setting process, such as the MOU on coordinated rate setting into which they entered for the CRC project.
- 37 • **Toll operations/collection:** Toll collection would use an all-electronic tolling system that employs
38 transponders and license plate images to bill customers without the need to physically collect cash at a
39 bridge toll facility. ODOT and WSDOT have entered into the IBR Tolling MOU providing that ODOT would
40 select toll systems and vendors; implement and maintain the toll equipment, back-office system software,
41 and customer service operations; and collect and distribute the toll revenues. Using the IBR Tolling MOU
42 as a starting point, there must be an ODOT-WSDOT agreement addressing performance, financial
43 administration, and processing of toll collections and revenue distribution.

- 1 • **Toll revenue sharing/distribution:** ODOT and WSDOT have agreed that ODOT will administer toll
2 collection. This finance analysis assumes that each state will issue bonds and pledge its share of net toll
3 revenues from the Columbia River bridges toward repayment. To facilitate each state's toll bond
4 financing, an agreement will be required to describe the process for distributing each state's share of net
5 toll revenues into the proper accounts.
- 6 • **Toll financing:** An interstate agreement must specify how the states' borrowing programs will be
7 coordinated, including the formula and process for distributing toll bond proceeds between the states,
8 the toll bonding obligation of each state, and how the toll revenues would be distributed and
9 administered to ensure repayment of the debt obligations. Prior to issuing bonds leveraged by future toll
10 revenues to support capital construction, bond authorization is needed from both state legislatures,
11 setting borrowing limits based upon revenues.
- 12 • **O&M:** The roles and responsibilities for operating and maintaining the Columbia River bridges and other
13 components of the IBR Program, including transit, must be agreed to in an interstate agreement between
14 ODOT, WSDOT, and other pertinent parties. Among other issues, this agreement would address whether
15 one state assumes all O&M responsibilities for the Columbia River bridges or if the two states share these
16 responsibilities.
- 17 • **Final design and construction:** The current interstate agreement between ODOT and WSDOT covering
18 environmental and preliminary design activities (WSDOT and ODOT 2022) must be amended to
19 comprehensively address the roles and responsibilities of ODOT and WSDOT for final design and
20 construction of the Modified LPA, such as defining the lead agency for each construction package. There
21 would be other agreements among ODOT, WSDOT, and local partners addressing other design and
22 construction-phase issues.

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