Agenda 600 NE Grand Ave. Portland, OR 97232-2736 Transportation Policy Alternatives Committee (TPAC) Meeting: Date: Friday, May 6, 2022 Time: 9:00 a.m. to 12:00 p.m. Place: Virtual meeting held via Zoom Connect with Zoom Passcode: 042255 Phone: 877-853-5257 (Toll Free) 9:00 a.m. Call meeting to order, declaration of quorum and introductions Chair Kloster 9:05 a.m. **Comments from the Chair and Committee Members** • Committee input on Creating a Safe Space at TPAC (Chair Kloster) Updates from committee members around the Region (all) • Monthly MTIP Amendments Update (Ken Lobeck) Fatal crashes update (Lake McTighe) 9:15 a.m. Public communications on agenda items Chair Kloster 9:22 a.m. Consideration of TPAC minutes, April 1, 2022 (action item) 9:25 a.m. Metropolitan Transportation Improvement Program (MTIP) Formal Ken Lobeck, Metro Amendment 22- 5266 (action item, Recommendation to IPACT) Purpose: For the purpose of amending the 2021-26 Metropolitan Transportation Improvement Program (MTIP) to cancel ODOT's OR224, SE 17th Ave to Rainbow Campground, Safety Upgrade Project for later reprogramming in the 2024-27 STIP due to funding issues and overlapping scope elements with the OR224 Riverside Fire Recovery Effort (MY22-12-MAY2) 9:35 a.m. **Metropolitan Transportation Improvement Program (MTIP) Formal** Ken Lobeck, Metro Amendment 22- 5265, I-205: I-5 - OR 213, Phase 1A (action item, <u>Recommendation to IPACT</u>) Purpose: For the purpose of amending the 2021-26 Metropolitan Transportation Improvement Program (MTIP) to increase the construction phase for the I-205: I-5- or 213, Phase IA Project allowing the construction phase to move forward and be implemented (MY22-11-MAY1) 9:45 a.m. Interstate Bridge Replacement (IBR) draft modified LPA discussion Matt Bihn, Metro Purpose: To provide TPAC an update on the IBR program, introduce the modified Locally Preferred Alternative, and to inform the group of next steps. **Transportation System Management and Operations Program** 10:15 a.m. Caleb Winter, Metro **Update and Regional Implementation** Kate Freitag, ODOT Purpose: Report status of projects that are enhancing operator capabilities A.J. O'Connor, TriMet to manage the system. Summarize early steps to implement the 2021 TSMO Strategy and discuss state, transit and local agency roles.

10:45 a.m.	Transit Agencies Budget and Programming of Projects update Purpose: To provide TPAC an overview of SMART's fiscal year 2022-2023 transit budget and programming of projects as part of the 2024-2027 MTIP development coordination	Eric Loomis, SMART
11:15 a.m.	Updated 2024-27 MTIP revenue forecast Purpose: To provide TPAC an overview of the updated 2024-2027 MTIP revenue forecast.	Ted Leybold, Metro Grace Cho, Metro
11:35 a.m.	Update on new IIJA Programs – Great Streets and Innovative Mobility Program Purpose: To provide TPAC information on two new IIJA programs created by OTC at their March 30 meeting.	Kazim Zaidi, ODOT Susan Peithman, ODOT
11:55 a.m.	Committee comments on creating a safe space at TPAC	Chair Kloster
12:00 p.m.	Adjournment	Chair Kloster

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ [។] សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលពាក្យបណ្តឹងរើសអើងសូមចូលទស្សនាគេហទំព័រ www.oregonmetro.gov/civilrights9 เบีเงกกษุกุกูรการษุกับกับกา้งเธาเต่งหมู ប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្លៃធ្វើការ មុនថ្លៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរប៉ស់លោកអ្នក ។

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2022 TPAC Work Program As of 4/28/2022 NOTE: Items in italics are tentative; bold denotes required items

May 0. LULL 1.00 am = 0.000	May 11, 2022 - TPAC Workshop	
Comments from the Chair:	9:30 am – noon	
 Comments from the Chair: Creating Safe Space at TPAC (Chair Kloster) Committee member updates around the Region (Chair Kloster & all) Monthly MTIP Amendments Update (Lobeck) Fatal crashes update (Lake McTighe) Agenda Items: MTIP Formal Amendment 21-5266 Recommendation to JPACT (Lobeck, 10 min) MTIP Formal Amendment 21-5265, I-205: I-5 - OR 213, Phase 1A Recommendation to JPACT (Lobeck, 10 min) Interstate Bridge Replacement (IBR) draft modified LPA discussion (Matt Bihn, Metro, 30 min) TSMO program update and Regional Implementation (Caleb Winter, Metro/ Kate Freitag, ODOT, & A.J. O'Connor, TriMet 30 min) Transit Agencies Budget and Programming of Projects Update (Eric Loomis, SMART, 30 min) Updated 2024-27 MTIP revenue forecast (Grace Cho/Ted Leybold, Metro; 20 min) Update on new IIJA Programs – Great Streets 	 9:30 am - noon Agenda Items: Regional Flexible Funds Allocation (RFFA) Outcomes Evaluation and Risk Assessment review (Dan Kaempff, 45 min) Transit-Oriented Development (TOD) Program Strategic and Work Plan update (Andrea Pastor & Patrick McLaughlin, Metro, 30 min) TriMet Forward Together Service Alternatives Planning Project (Grant O'Connell and Tara O'Brien, TriMet, 30 min.) 	
 (Grace Cho/Ted Leybold, Metro; 20 min) Update on new IIJA Programs – Great Streets and Innovative Mobility Program (Kazim Zaidi and Susan Peithman, ODOT; 20 min) Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 		

<u>June 3, 2022</u> 9:00 am – noon	<u>Iune 15, 2022 – MTAC/TPAC Workshop</u>
Comments from the Chair:	9:30 am – noon
 Creating Safe Space at TPAC (Chair Kloster) 	
Committee member updates around the Region	Agenda Items:
(Chair Kloster & all)	 DLCD Climate Friendly & Equitable
Monthly MTIP Amendments Update (Ken	Communities Rulemaking item (Kim Ellis,
Lobeck)	Metro; 60 min)
• Fatal crashes update (Lake McTighe)	 Emerging Transportation Trends Study
	Recommendations (Eliot Rose, Metro, 30
Agenda Items:	min)
MTIP Formal Amendment 21-****	 Regional Freight Delay & Commodities
Recommendation to JPACT (Lobeck, 15 min)	Movement Study (Tim Collins, Kyle Hauger
• I-5 Interstate Bridge Replacement Modified LPA	& Joe Broach, Metro; 60 min)
Resolution 22-**** Recommendation to JPACT	
(Matt Bihn, Metro, 30 min)	
Regional Mobility Policy Update: Recommended	
Policy and Action Plan - Discussion (Kim Ellis,	
Metro/ Glen Bolen, ODOT/ Susie Wright,	
Kittleson & Associates, 60 min)	
Regional Flexible Funds Allocation (RFFA) initial	
input on developing staff proposals (Dan	
Kaempff, Metro; 30 min)	
• 2023 RTP policy brief - Congestion Pricing Policy	
Development (Alex Oreschak, Metro; 60 min)	
• RTP Vision, Goals & Objectives (Kim Ellis, Metro;	
30 min)	
• Committee Wufoo reports on Creating a Safe	
Space at TPAC (Chair Kloster; 5 min)	

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$\frac{1019}{2022} 9.00 \text{ and } = 10011$	$\frac{1019}{100} \frac{1000}{100} \frac{1000}{1000} $
Comments from the chair:	9:30 am - 1100n
Creating Safe Space at TPAC (Chair Kloster)	A J . The
 Committee member updates around the Region 	Agenda Items:
(Chair Kloster & all)	Regional Flexible Funds Allocation (RFFA)
 Monthly MTIP Amendments Update (Ken 	refining staff recommendations (Dan
Lobeck)	Kaempff, Metro, 90 min)
• Fatal crashes update (Lake McTighe)	 2024-2027 MTIP Performance Evaluation –
	Approach & Methods (Grace Cho, 30 min)
Agenda Items:	
MTIP Formal Amendment 21-****	
Recommendation to IPACT (Lobeck, 15 min)	
• High Capacity Transit Strategy Update for 2023	
RTP (Ally Holmqvist, Metro, 30 min)	
Transportation Needs and Disparities Analysis	
for 2023 RTP (Eliot Rose, Metro, 30 min)	
• Regional Flexible Funds Allocation (RFFA) public	
comment report, initial draft staff	
recommendations (Dan Kaempff, Metro, 45 min)	
• Enhanced Transit Concepts / Better Bus update	
(Matt Bihn, Metro, 30 min)	
• 82 nd Avenue Project update (Elizabeth Mros-	
O'Hara, Metro/City of Portland TBD; 30 min)	
Committee Wufoo reports on Creating a Safe	
Space at TPAC (Chair Kloster: 5 min)	
opuce at TTTTE (enan Theorem) o ming	

August 5, 2022 9:00 am - 11:30 a.m.	August 17, 2022 – MTAC/TPAC Workshop
Comments from the Chair:	10 am – noon
• Creating Safe Space at TPAC (Chair Kloster)	
Committee member undates around the Region	Agenda Items:
(Chair Kloster & all)	Urban Growth Management Functional Plan
 Monthly MTIP Amendments Undate (Ken 	Amendments – discussion (Ted Reid & Tim
I obeck)	O'Brien, Metro; 60 min)
 Eatal crashes undate (Lake McTighe) 	
• Tatai crasiles upuate (Lake Me rigile)	
Agenda Items:	
MTIP Formal Amendment 21-****	
Recommendation to IPACT (Lobeck, 15 min)	
Regional Mobility Policy Undate:	
Recommended Policy and Action Plan	
Recommendation to IPACT (Kim Ellis Metro/	
Glen Bolen ODOT/ Susie Wright Kittelson &	
Associates: 30 min)	
Regional Flexible Funds Allocation (RFFA)	
refined draft staff recommendations with CCC	
priorities (Dan Kaempff Metro 45 min)	
Committee Wufee reports on Creating 2 Safe	
Space at TPAC (Chair Kloster: 5 min)	
Sontombor 2, 2022 0:00 am 11:20 a m	Sontombor 14 2022 - TDAC Workshop
<u>September 2, 2022</u> 9:00 am - 11:50 a.m.	$\frac{5 \text{ ptember 14, } 2022 - 11 \text{ AC workshop}}{10 \text{ am} - noon}$
\mathbf{C}	
• Creating Sale Space at TFAC (Chair Moster)	Agenda Items:
Committee member updates around the Region (Chain Vlaster & all)	RTP - Equitable Finance 2023 RTP (Lake
(Unair Kloster & all)	McTighe Metro) 45 min
• Monthly MTIP Amendments Update (Ken	Merigile, Metroj 43 min
Lobeckj	
• Fatal crashes update (Lake McTigne)	
Agondo Itoma	
MTID Formal Amondmont 21-****	
• MITH Formal Amenument 21-	
<u>Recommendation to FACI</u> (Lobeck, 15 mm)	
 Regional riexible runus Anotation (RFFA) Final Project Solection Decommondation to 	
IDACT (Dan Kaampff Matro: 45 min)	
<u>JFAUT</u> (Dall Kaellipli, Mell 0, 45 IIIII)	
KIP needs assessment and performance measures (Eliot Deeg, Matrix, 20 min)	
measures (Enot Rose, Metro, 30 min)	
Lommittee wurde reports on Creating a Safe Superative Transition	
Space at TPAC (Unair Kloster; 5 min)	

October 7, 2022 9:00 am - 11:30 a.m.	October 19, 2022 – MTAC/TPAC Workshop
Comments from the Chair:	10 am – noon
• Creating Safe Space at TPAC (Chair Kloster)	
Committee member updates around the Region	Agenda Items:
(Chair Kloster & all)	
 Monthly MTIP Amendments Update (Ken 	
Lobeck)	
• Fatal crashes update (Lake McTighe)	
Agonda Itoma.	
Agenua nems: MTID Formal Amondmont 21-****	
 MITE FORMALAMENTAL Recommendation to IPACT (Lobeck 15 min) 	
Committee Wufoo reports on Creating a Safe	
Space at TPAC (Chair Kloster: 5 min)	
Nbar 4 2022 0.00 am 11.20 am	Neverthan 0 2022 TDAC Washan
<u>November 4, 2022</u> 9:00 am - 11:30 a.m.	<u>NOVEMBER 9, 2022 – TPAC WORKSHOP</u> 10 am – noon
• Creating Safe Space at TPAC (Chair Kloster)	
 Committee member undates around the Region 	Agenda Items:
(Chair Kloster & all)	• 2019-2021 Regional Flexible Fund – Local
Monthly MTIP Amendments Update (Ken	Agency Project Fund Exchanges Update
Lobeck)	(Grace Cho, 15 min)
• Fatal crashes update (Lake McTighe)	
Agenda Items:	
MTIP Formal Amendment 21-****	
Recommendation to JPACT (Lobeck, 15 min)	
High Capacity Transit Strategy Update for 2023	
RTP (Ally Holmqvist, Metro, 30 min)	
Committee Wufoo reports on Creating a Safe	
Space at TPAC (Chair Kloster; 5 min)	
N	
December 2, 2022 9:00 am - 11:30 a.m.	December 21, 2022 – MTAL/ IPAL WORKSNOP
\bullet Creating Safe Space at TDAC (Chair Klocter)	
 Committee member undates around the Region 	Agenda Items:
(Chair Kloster & all)	• 2024 Growth Management Decision Work
Monthly MTIP Amendments Undate (Ken	Program (Ted Reid, 60 min)
Lobeck)	
 Fatal crashes update (Lake McTighe) 	
Agenda Items:	
 MTIP Formal Amendment 21-**** 	
<u>Recommendation to JPACT</u> (Lobeck, 15 min)	
Committee Wufoo reports on Creating a Safe	
Space at TPAC (Chair Kloster; 5 min)	

Parking Lot: Future Topics/Periodic Updates

- RTP Goals, Objectives and Targets for the 2023 RTP (Kim Ellis & Eliot Rose)
- RTP Safe and Healthy Urban Arterials Policy Development for 2023 RTP (John Mermin & Lake McTighe)
- RTP Climate Smart Strategy Update and Climate Analysis for 2023 RTP (Kim Ellis)
- RTP Transportation Equity Analysis for the 2023 RTP (Eliot Rose)
- RTP Transportation Needs and Disparities Analysis for 2023 RTP (Eliot Rose)
- RTP Revenue Forecast for 2023 RTP (Ted Leybold)
- RTP Needs Analysis and Performance Measures for Evaluating 2023 RTP Priorities (Eliot Rose)
- RTP Call for Projects for 2023 RTP (Kim Ellis)
- RTP Update on Call for Projects for 2023 RTP (Kim Ellis)
- Needs Assessment Approach for the 2023 RTP (Eliot Rose)

- Ride Connection Program Report (Julie Wilcke)
- Get There Oregon Program Update (Marne Duke)
- RTO Updates (Dan Kaempff)
- Update on SW Corridor Transit
- Burnside Bridge Earthquake Ready Project Update (Megan Neill, Multnomah Co)
- Columbia Connects Project
- Best Practices and Data to Support Natural Resources Protection
- Better Bus Program (Matt Bihn)
- Regional Emergency Transportation Routes Update Phase 2 (John Mermin, Metro & Laura Hanson, RDPO)

Agenda and schedule information E-mail: <u>marie.miller@oregonmetro.gov</u> or call 503-797-1766. To check on closure or cancellations during inclement weather please call 503-797-1700.

Memo



Date:	March 26, 2022
To:	TPAC and Interested Parties
From:	Ken Lobeck, Funding Programs Lead
Subject:	TPAC Metropolitan Transportation Improvement Program (MTIP) Monthly Submitted Amendments (from the end of March through Late April, 2022)

BACKGROUND

Formal Amendments Approval Process:

Formal/Full MTIP Amendments require approvals from Metro JPACT& Council, ODOT-Salem, and final approval from FHWA/FTA before they can be added to the MTIP and STIP. After Metro Council approves the amendment bundle, final approval from FHWA and/or FTA can take 30 days or more from the Council approval date. This is due to the required review steps ODOT and FHWA/FTA must complete prior to the final approval for the amendment.

Administrative Modifications Approval Process:

Projects requiring only small administrative changes as approved by FHWA and FTA are completed via Administrative Modification bundles. Metro normally accomplishes one "Admin Mod" bundle per month. The approval process is far less complicated for Admin Mods. The list of allowable administrative changes are already approved by FHWA/FTA and are cited in the Approved Amendment Matrix. As long as the administrative changes fall within the approved categories and parameters, Metro has approval authority to make the change and provide the updated project in the MTIP immediately. Approval for inclusion into the STIP requires approval from the ODOT. Final approval into the STIP usually takes between 2-4 weeks to occur depending on the number of submitted admin mods in the approval queue.

Added as Part of This Amendment Report Cycle: Inflation Adjusted Administrative Modifications

An increase of project cost increases due to inflationary adjustments are now becoming more common as part of requested administrated modifications or formal/full MTIP Amendment requests. The project scope and/or limits are not changing, but update material and delivery cost increases are now being applied to phase estimates which are resulting in a 20%-50% or greater cost increase to the project. For projects where the cost increase is purely inflationary based and not due to scope, design, or limit updates, Metro is allowing the cost increase to be processed as administrative modifications even if they exceed he amendment threshold.

The cost increase for projects are being individually reviewed. Not every project will be considered eligible to progress as an administrative modification to complete the cost increase. The inflationary factors impacting the project cost are evaluated in determining if the project can progress under administrative modification rules even if the cost increase exceeds the Matrix thresholds. As part of the monthly amendment report, a project log will be included that list projects with cost increases that normally require a formal/full amendment, but allowed to progress administratively.

MTIP Formal Amendments

Proposed I-205 Tolling PE Phase Project Formal Amendment Amendment Type: Formal/Full Amendment #: FB22-06-FEB Total Number of Projects: 1					
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key 22507 New Project	TBD	ODOT	I-205: OR213 - Stafford Rd Variable Rate Tolling Project	Complete design & NEPA activities for variable rate tolling implementation across all lanes to manage congestion and to raise revenue to fund construction of the I-205 improvements projects from approximately OR213 to Stafford Rd.	ADD NEW PROJECT: The formal amendment adds the Preliminary Engineering phase consisting of \$27.257,890 of federal and matching funds to the FY 2021-26 MTIP

Status:

- 1. Due to added comments and issues raised by TPAC and JPACT, Metro delayed action on this project during their April 14, 2022 meeting.
- 2. Both the RTP amendment and MTIP amendments were delayed until the Metro Council meeting on April 26, 2022
- 3. Metro Council also added conditions for the RTP amendment based on the Sherman amendment items and the revised Letter of Agreement.
- 4. Metro Council's action on the RTP amendment passed on a 5-2 vote. The MTIP amendment passed on a 6-1 vote.

April 2022

Proposed April 2022 Formal Amendment Bundle Amendment Type: Formal/Full Amendment #: AP22-09-APR Total Number of Projects: 2					
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key 22583 New Project	TBD	Metro	Metro Transportation Options FFY22 - FFY24	Metro funding to promote and encourage the use of alternative transportation options during federal fiscal years 2022, 2023 and 2024.	ADD NEW PROJECT: Add ODOT's supplemental Travel Options grant as a stand-alone project to support Metro's Regional Travel Options (RTO) program
Project #2 Key TBD New Project	TBD	Multnomah County	Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave	Replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety	ADD NEW PROJECT: The formal amendment adds the PE phase with \$123.3 million of local funds for the new Earthquake Ready Burnside Bridge replacement/ reconstruction project. The MTIP Detailed description is updated to be more generic based on the multiple alternatives under review for the FEIS.

Status:

- 1. TPAC approval on April 1, 2022
- 2. JPACT approval on April 21, 2022
- 3. Metro Council approval scheduled for May 12, 2022

Late March through Late April 2022 Administrative Modifications

Key	Lead Agency	Name	Change
19276	Clackamas County	Jennings Ave: OR 99E to Oatfield Rd	Add \$100k of STBG plus match to the PE phase

March #3 Administrative Modification AM22-15-MAR3

April #1 Administrative Modification AM22-16-APR1

Кеу	Lead Agency	Name	Change
20363	ODOT	I-84: Corbett Interchange - Multnomah Falls	Cost increase to Construction phase. 30% threshold waived as increase is an inflationary adjustment.
18841	ODOT	OR217: OR10 - OR99W	Phase deletion and fund type code updates
21602	ODOT	I-5: Marquam Bridge - Capitol Highway	Phase slips – ROW to FFY 2023 plus UR and Cons to FFY 2024
21607	ODOT Portland	OR213 at NE Glisan St and NE Davis St	Phase slips – Slip ROW, UR, Other, and Cos to FFY 2024. Change Lead agency to Portland

April #2 Administrative Modification Bundle AM22-17-APR2

Key	Lead Agency	Name	Change
21608	ODOT	OR8 at Armco Ave, Main St and A&B Row	<u>Phase Slip:</u> Slip UR/Other phase from FFY 2022 to FFY 2023

Inflationary Cost Increases Processed Administrative Modifications As of April 26, 2022

Key	Lead Agency	Name	Cost Increase Summary	Month	Amendment Number
20363	ODOT	I-84: Corbett Interchange - Multnomah Falls	Construction bids submitted much higher than expected resulting in construction phase and total project cost increase of 39%. No scope or limits change.	April 2022	AM22-16-APR1

Memo



Date:	April 29, 2022
То:	Transportation Policy Advisory Committee (TPAC), Metro Technical Advisory Committee (MTAC) and interested parties
From:	Lake McTighe, Regional Planner
Subject:	April 2022 Report - Traffic Deaths in the three counties

The purpose of this memo is to provide a monthly update to TPAC, MTAC and other interested parties on the number of people killed in traffic crashes in Clackamas, Multnomah and Washington Counties in 2022. 1

There are typically several factors that contribute to the seriousness of crashes, including speed and vehicle size; when crashes occur at higher speeds and/or when larger vehicles are involved there is a greater likelihood of the crash being serious.

There have been at least 41 traffic fatalities in the three counties since the beginning of the year. Twenty-one of the people have been walking, including one person in a wheelchair. At least six of the crashes involved a hit and run.

Fatalities	Name, age	Mode(s) of travel	Roadway	County	Date
41	•	•	•	·	
1	Kathleen Hupp , 72	walking	SE Harmony Rd and SE Fuller St, Milwaukie	Clackamas	4/5/22
1	Eric Canty, 43	motorcycling	Hwy 224, near SE Edison Street, Milwaukie	Clackamas	4/15/22
2	Matthew Amaya, 17 and Juan Pacheco Aguilera, 16	driving	SW Tualatin Valley Hwy and SW Murray Blvd	Washington	4/27/22
1	Wendy Falk, 52	driving	Hwy 211 near Eagle Creek	Clackamas	4/14/22
1	unidentified man	walking (skateboarding)	Tualatin Valley Hwy & SW 198th Ave	Washington	4/19/22
1	Michael Philip Frainey, 52	walking	SW Barrows Rd/ SW160th St	Washington	4/11/22
1	Angela C. Boyd, 47	walking	SE Powell Blvd/SE 47th Ave	Multnomah	4/4/22
1	Michael Scott Fields, 64	driving	Washington St & Agnes Ave	Clackamas	3/22/22
1	Catherine M Jarosz, 70	walking	SW Hall Blvd & SW Farmington Rd	Washington	3/15/22

Traffic crash deaths in Clackamas, Multnomah and Washington Counties

Source: ODOT preliminary crash report as of 4/21/22, and police and news reports

¹ Metro develops this memo using fatal crash information from the Preliminary Fatal Crash report provided by the Oregon Department of Transportation (ODOT) Transportation Data Section/Crash Analysis and Reporting Unit, as well as news and police reports. See the <u>Oregon Daily Traffic Toll</u> for additional information on ODOT data.

Fatalities	Name, age	Mode(s) of travel	Roadway	County	Date
1	Unidentified	bicycling	SW Rood Bridge Rd & SW Burkhalter Rd	Washington	3/15/22
1	Donald William Sharpe, 24	driving	S Springwater Rd, near S Spring Creek Rd	Clackamas	3/3/22
1	Unidentified man	walking	NE Marine Dr and NE 148th Ave	Multnomah	3/25/22
1	James Martin, 35	motorcycling	N Vancouver Ave & NE Columbia Blvd.	Multnomah	3/24/22
1	Raymond M. McWilliams, 58	wheelchair	NE Vancouver Way & NE Gertz Road	Multnomah	3/18/22
1	Karen R. Kain, 57	walking	SW Hall Blvd & SW Lucille Ct.	Washington	3/4/22
1	Laysea Mykal Liebenow, 22	driving	US 30 Lower Columbia River HWY	Multnomah	3/7/22
1	Unidentified	driving	Hillsboro-Silverton HWY & SW Farmington Rd	Washington	3/6/22
1	Patrick Heath Bishop, 46	walking	SE Division St	Multnomah	3/3/22
1	Catherine McGuire Webber, 89	walking	SW Highland Dr & SW 11th St	Multnomah	1/3/22
1	Anthony Dean Ward, 55	driving	Firwood Rd near Cornog Rd	Clackamas	2/6/22
1	Clayton Edward Briggs, 48	driving	SE Sunshine Valley Rd	Clackamas	2/12/22
1	Alexander Lee, 23	walking	I-84	Multnomah	2/17/22
1	Cedar C. Markey- Towler, 41	walking	SE Foster	Multnomah	2/25/22
2	Unidentified (Double), 11, 16	walking	SW Edy Rd & SW Trailblazer Pl	Washington	2/20/22
1	Jade Dominic Pruitt, 51	motorcycling	OR211 Eagle Creek-Sandy HWY & SE Eagle Creek Rd.	Clackamas	2/18/22
1	David N Wickham, 43	motorcycling	NE Glisan St. & NE 87th Ave.	Multnomah	2/16/22
1	Unidentified	motorcycling	1-5	Multnomah	2/5/22
1	Liam David Ollila, 26	walking	I-5	Multnomah	1/31/22
1	Duane M Davidson, 56	walking	SE Division St & SE 101st Ave	Multnomah	1/29/22
1	Norman Ray Sterach Jr., 34	motorcycling	OR99E	Clackamas	1/28/22
1	Awbrianna Rollings, 25	walking	US26 SE Powell	Multnomah	1/22/22
1	Douglas Joseph Kereczman, 40	driving	OR99E SE McLoughlin	Multnomah	1/20/22
1	Marcos Pinto Balam, 30	walking	OR99E	Clackamas	1/16/22
1	Unidentified	walking	I-205	Multnomah	1/13/22
1	Kyle M. Beck, 35	walking	1-5	Multnomah	1/12/22
1	Mark Wayne Barnette, 60	driving	OR213	Multnomah	1/9/22
1	Unidentified	walking	NE Alderwood Rd/ NE Cornfoot Rd	Multnomah	1/3/22
1	Levi S. Gilliland, 33	driving	NE Glisan St & NE 56th Ave	Multnomah	1/3/22

Fatalities	Name, age	Mode(s) of travel	Roadway	County	Date
1	Salvador Rodriguez-Lopez, 34	driving	I-5	Multnomah	1/2/22

A note on crash data

Metro includes the names of traffic crash victims included in this report based on the most recently available traffic crash data compiled by the Oregon Department of Transportation (ODOT), as well as police and news reports. ODOT compiles the official crash record for the state using traffic crash investigations and self-reported information. Metro follows national traffic crash reporting criteria, which the Portland Bureau of Transportation also uses. The criteria excludes people who die under the following circumstances:

- More than 30 days after a crash,
- Intentionally (suicide),
- In an act of homicide (a person intentionally crashes into another person),
- In a crash not involving a motor vehicle,
- From a prior medical event (e.g. a heart attack or drug overdose), or
- In a crash in a parking lot

Source for all charts: ODOT preliminary crash report as of 4/29/22 and news and police reports















Meeting minutes



Transportation Policy Alternatives Committee (TPAC) Meeting:

Date/time: Friday, April 1, 2022 | 9:00 a.m. to 12:00 p.m.

Virtual online meeting via Web/Conference call (Zoom) Place:

Members Attending

Tom Kloster, Chair Allison Boyd Chris Deffebach Lvnda David Jaimie Lorenzini Jay Higgins Don Odermott Tara O'Brien Chris Ford **Karen Williams** Laurie Lebowsky Idris Ibrahim Katherine Kelly

Alternates Attending

Jamie Stasny **Steve Williams** Mark Lear Dayna Webb Julia Hajduk Glen Bolen Mike Coleman

Members Excused

Karen Buehrig Eric Hesse Lewis Lem Rachael Tupica **Rob Klug** Shawn M. Donaghy Jeremy Borrego **Rich Doenges**

Guests Attending

Affiliate

Mike Foley Jean Senechal Biggs City of Beaverton

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Affiliate Metro Multnomah County Washington County SW Washington Regional Transportation Council City of Happy Valley and Cities of Clackamas County City of Gresham and Cities of Multnomah County City of Hillsboro and Cities of Washington County TriMet **Oregon Department of Transportation Oregon Department of Environmental Quality** Washington State Department of Transportation **Community Representative** City of Vancouver, WA

Affiliate

Clackamas County Clackamas County City of Portland City of Oregon City and Cities of Clackamas County City of Sherwood and Cities of Washington County **Oregon Department of Transportation** Port of Portland

Affiliate

Clackamas County **City of Portland** Port of Portland Federal Highway Administration (FHWA) **Clark County C-Tran System** Federal Transit Administration Washington Department of Ecology

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Guests attending, (continued)

Cody Field Andre Lightsey-Walker Steve Koper Michael Weston John Charles Alice Bibler Steve Drahota Megan Neill Barbara Fryer **Emily Benoit** Jeff Heilman Jeff Owen Jessica Engelman Jennifer Hughes **Kelsey Lewis** Laura Weigel Nancy Young-Oliver Suzanne Carey Vanessa Vissar Will Farley William Burgel

City of Tualatin The Street Trust City of Tualatin City of King City Cascade Policy Institute Oregon Department of Transportation HDR, Inc. Multnomah County City of Cornelius

Parametrix HRD, Inc. City of Beaverton Parametrix SMART, City of Wilsonville City of Milwaukie TriMet

Oregon Department of Transportation City of Lake Oswego

Metro Staff Attending

Ted Leybold, Resource & Dev. Manager Kim Ellis, Principal Transportation Planner Ken Lobeck, Senior Transportation Planner Dan Kaempff, Principal Transportation Planner Eliot Rose, Transportation Tech & Analyst Ally Holmquist, Senior Transportation Planner Connor Ayers, Metro Councilor Advisor Craig Beebe, Council Policy Advisor Marne Duke, Senior Regional Planner Tim Collins, Senior Transportation Planner

John Mermin, Senior Transportation Planner Alex Oreschak, Senior Transportation Planner Lake McTighe, Senior Transportation Planner Grace Cho, Senior Transportation Planner Molly Cooney-Mesker, Sr. Communications Associate Caleb Winter, Senior Transportation Planner Cindy Pederson, Research Center Manager Malu Wilkinson, Investment Areas Manager Noel Mickelberry, Associate Transportation Planner Marie Miller, TPAC Recorder

Call to Order, Declaration of a Quorum and Introductions

Chair Kloster called the meeting to order at 9:00 a.m. Introductions were made. A quorum of members present was declared. Committee members, member alternates, guests, public and staff were noted as attending. Reminders where Zoom features were found online was reviewed. A reminder was given on the new online format with panelists (committee members/alternates and presenters) and attendees (staff, guests and public members). A reminder was given on naming individual positions with the committee onscreen. Input was encouraged for providing safe space for everyone at the meeting via the link in chat. Comments would be shared at the end of the meeting.

Comments from the Chair and Committee Members

- Updates from committee members and around the Region none provided
- Monthly MTIP Amendments Update (Ken Lobeck) Chair Kloster referred to the memo in the packet provided by Ken Lobeck on the monthly submitted MTIP formal amendments submitted

from the end of February to Mid-March 2022. For any questions on the monthly MTIP amendment projects you may contact Mr. Lobeck directly.

• Fatal crashes update (Lake McTighe) The March 2022 Report - Traffic Deaths in the three counties of Clackamas, Multnomah and Washington counties update was provided. Since the last TPAC report at least 11 traffic deaths have been reported. In 2022 to date, more than half of the people killed were walking, and 19 traffic deaths were in Multnomah County, 5 were in Clackamas County and 5 were in Washington County.

Ms. McTighe thanked those that attended Part 1 of the Safety Webinar the previous week. The recording from the webinar would soon be posted online. Part 2 of this webinar is planned this fall.

 Department of Land Conservation & Development (DLCD) Climate Friendly Equitable Communities (CFEC) Rules, update (Kim Ellis) Key dates were shared with the committee on upcoming meetings planned with the Rulemaking update process: March 17 – revised draft rules published (changed from March 1) March 31 – First hearing and LCDC guidance to staff April 4 and April 11 – Listening sessions with DLCD staff April 11 - one final RAC meeting – tentatively held for– Laura Kelly April 19 - Portland area meeting convened by Margi (8-9AM) May 5 – revised rules and LCDC packet for May 19 published May 19 – 2nd/final hearing; anticipated LCDC action 19th or 20th depending on deliberations and changes needed. CFEC website: https://www.oregon.gov/lcd/LAR/Pages/CFEC.aspx

If the Land Conservation and Development Commission adopts the rules, local governments will be asked to implement them. Many of the rules take effect when a community next does a major update of its Transportation System Plan (TSP), a community's core document describing its transportation needs and future plans. The rules do not set a specific deadline for most TSP updates.

The land use components of the rules have specific deadlines. Communities are asked to study potential Climate-Friendly Areas by June 30, 2023, and adopt Areas by June 30, 2024. Parking reform is scheduled to happen in two phases - the first by the end of 2022, and the second by March 31, 2023. Communities may ask for some flexibility around most of these dates. DLCD is providing or working to find resources for local governments to do this work, along with our agency partners at the Oregon Department of Transportation and the Oregon Housing and Community Services Department.

• Follow up on 2023 Regional Transportation Plan (RTP) Safe and Healthy Arterials Policy Brief (John Mermin & Lake McTighe) Mr. Mermin noted the memo in the meeting packet that provided feedback heard about the Safe and Healthy Urban Arterials policy brief at the 3/9 TPAC Workshop discussion and ask for additional feedback (especially on the recommended actions included in section 4 of the brief) to be received by April 15.

Staff offered to meet one-on-one via video chat with questions or further comments. After staff have refined the policy brief it will be brought to the Metro Council and JPACT for

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discussion later in the Spring and then would be used for creating new policy language in the RTP that will help guide the RTP Needs Assessment and Project list Solicitation.

Public Communications on Agenda Items – none provided

Consideration of TPAC Minutes from March 4, 2022MOTION: To approve minutes from March 4, 2022.Moved: Jay HigginsSeconded: Chris FordACTION: Motion passed unanimously with no abstentions.

Metropolitan Transportation Improvement Program (MTIP) Formal Amendment 22-5256 (Ken

Lobeck, Metro) Mr. Lobeck noted the April 2022 Formal MTIP Amendment bundle involves adding two new projects to the MTIP. A short summary of the amendment bundle was provided:

- Keys 22583: Both Metro and ODOT support Regional Travel Options as a means to help provide alternatives to motor vehicle travel. The ODOT Transportation Options Program focuses on implementation of the Oregon Transportation Options Plan, including: managing demand across the transportation system; educating students and the public on travel options and how to safely use them; connecting veterans, low income populations, communities of color, and others with ways to get to and from work or school; supporting vanpooling; and more. As part of their program, ODOT is providing Metro with a Travel Options grant award of \$16,197 of federal funds for the FFY 2022-24 Transportation Options cycle. The new project is being added to the MTIP through this amendment.
- Key New Project. Earthquake Ready Burnside Bridge: The primary purpose of the Earthquake Ready Burnside Bridge (EQRB) Project (Project) is to create a seismically resilient Burnside Street lifeline crossing of the Willamette River that would remain fully operational and accessible for vehicles and other modes of transportation immediately following a major Cascadia Subduction Zone (CSZ) earthquake. Through this amendment, the PE phase for the project is being added to the MTIP.

Further discussions with Multnomah County have provided more information on the project. MTIP programming is needed to satisfy FHWA's NEPA-TIP Validation Requirement. As part of the NEPA approval and Record of Decision (ROD) for EA and EIS environmental documents, a programming verification check occurs, so that NEPA-TIP Validation verifies the project is being programmed in the MTIP consistently with the environmental document. Confirmation of project development funding and total PE phase funding has been obtained. As part of the public comment process, it is proposed to adjusting the project programming to include project development funds of \$33.3 million and increase PE phase to \$90 million.

Summary:

- Add \$33.3 million prior expended local funds for project development/pre NEPA activities
- Increase from PE phase from \$23.5 million to \$90 million
- Better reflects actual expenditure and PE phase cost
- Additional funds confirmed by Multnomah County CFO meets proof of funding and fiscal constraint requirement

Post agenda submission discussions/public comments resulted in a request for a detailed description modification. The reasons for this are to provide additional flexibility for final alternative reviews and conflicts between MTIP and FEIS. When final alternative is clearer (around October) project name,

short and detailed description will be updated accordingly in the MTIP. FEIS ROD approval expected around November/December 2022 timeframe.

Described as the Earthquake Ready Burnside Bridge programming MTIP/RTP Next Steps:

- Complete amendment to add the PE phase
- October 2022 Timeframe: Draft final alternative identified Complete another amendment to update the project name, short and detailed descriptions as required
- November/December 2022: NEPA-TIP Validation check completed NEPA ROD obtained
- Multnomah County develops funding plan and adds construction phase to new RTP

Comments from the committee:

- Chris Deffebach asked for confirmation that the reason the Burnside Bridge project programming amendment was needed in the MTIP was to include the NEPA analysis. Mr. Lobeck confirmed this. It was suggested to decrease the amount of description details in the MTIP so that further changes with project changes will not be needed.
- Chris Ford appreciated the work providing understanding on complex issues. It was noted the project is widely-broad supported, and appreciates Multnomah County adding their own funds toward the project. It was asked why this project could not be a consent agenda item at JPACT and Metro Council. Mr. Lobeck noted that JPACT has specifically asked for a short presentation first from Multnomah County. Ted Leybold added the request came from Metro President Peterson's office when it was placed on the legislative agenda.

<u>MOTION:</u> TPAC to provide JPACT an approval recommendation of Resolution 22-5256 consisting of two projects and allow for three programming modifications to the ERQB project that include:

- Adding \$33.3 million of local funds to show the project development investment
- Increasing PE to \$90 million representing the total current authorize local commitment to PE
- Modify the MTIP Detailed Description to avoid possible confusion with the alternatives under review

Moved: Allison BoydSeconded: Chris DeffebachACTION: Motion passed unanimously with no abstentions.

2022-23 Unified Planning Work Program Resolution 22-5244 (John Mermin, Metro) After a brief overview of the Unified Planning Work Program, Metro legislative process was outlined. It was noted that the track-change version presented for approval at this meeting contained all edits made since the February draft was sent out for review. Highlights of the edits include: a new narrative from TriMet on Fleet and Service planning, and a new narrative for the High-Capacity Transit Strategy update (previously described within the Regional Transit Program narrative).

Staff will provide informational briefings to the Metro Council and JPACT in April and then will ask for adoption at the May 19 JPACT and Council meetings. Staff will transmit the adopted UPWP to Federal & State partners by May 20. This allows time for the IGA to be signed by Metro's COO prior to June 30, allowing for federal funding to continue flowing into the region without delay.

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Comments from the committee:

• Chris Ford complimented Mr. Mermin on making the document easier to understand and better serve the public. It was noted that requests to change the JPACT description in the UPWP and other documents such as the RTP have not occurred. It was suggested to describe JPACT as a decision making body.

Chair Kloster noted the Federal Highway Administration comments, referenced, were in conflict with JPACT bylaws. JPACT recommends actions or discussion items to Metro Council, but Council cannot change recommendations if they disagree. Instead the item is sent back to JPACT for further review and discussion. Metro, as the MPO, states that the Metro Council is the only body authorized to make decisions for MPO matters. Since Metro was formed, JPACT has been an advisory committee to Council.

Mr. Ford noted concern that Federal Highway may take issue with final recommendations made by JPACT if sent back from Metro Council. Chair Kloster will work with those concerns if they arise with Metro legal staff discussing the matter further if needed.

- Don Odermott asked for clarification on the Westside Multimodal Study project on the estimated \$800,000 budget listed in the UPWP, and if this was specifically for this Fiscal Year. Mr. Mermin confirmed this.
- Chris Deffebach agreed that the role of JPACT could be better described for clarification, that JPACT is not just an advisory committee but an important part of being an MPO with local jurisdictional representation.

Appreciation on the work with the UPWP was given. Past years better work has been provided keeping narratives shorter but with enough flexibility without having to make constant changes. Noting the importance of Emerging Transportation Routes and other project work on climate and resilience, it was noted there is a need to review these again for updates. It was asked if the Emerging Transportation Routes project was adopted in the RTP, or not happening at all this year.

Mr. Mermin noted the RPO lost their staff person working on this phase of the project. Due to this and needing time to bring a new person brought up to speed, there will interim activities happening this year to get ready for phase 2 where enough resources with the next funding cycle are available. Ms. Ellis added that in the work plan for the RTP update we are recommending bring forward those elements developed in phase 1, and where we can update some of the resilience policies around them have included also.

<u>MOTION:</u> Recommend to JPACT Approval of Resolution No. 22-5244 adopting a UPWP for the Fiscal Year 2022-23 and certifying that the Portland metropolitan area is in compliance with federal transportation planning requirements.

Moved: Don Odermott

Seconded: Tara O'Brien

Discussion on the motion

Chris Ford moved to amend the motion to include in the recommendation to JPACT that we confer with Federal Highway Administration appropriate language to make sure we are in accordance with their understanding of current JPACT description and roles/responsibilities with MPO actions.

Chair Kloster discussed the role of Federal Highway Administration that regulate us, and certifies our planning activities. But their role does not define the MPO role. It was suggested that staff could bring any concerns from FHWA on the JPACT description to them for clarification. It was also suggested that Department Director Margi Bradway could work with the Office of Metro Attorney on this issue and report directly to JPACT and Council.

- Mark Lear noted this issue makes sense to continue. However, it seems to be a governance structural discussion in the middle of this document and does not support the amendment.
- Don Odermott agreed with Mr. Lear. The clarity in the description is important especially with new members joining TPAC and JPACT for transparency, but the amendment on the motion is not needed.
- Tara O'Brien suggested Metro's legal team come back with a letter clarifying this separately from the UPWP motion, with next steps outlined.

Chair Kloster proposed two options the committee could take. One, circle back to FHWA what was not incorporated from their comments in the UPWP presented, and the reasons for this. Or two, make the recommendation with staff including the comments as part of the transmittal for a motion, with the staff report given to JPACT.

Further discussion was held having JPACT time to fully understand these roles, with support from staff and direction by Ms. Bradway. Additional discussion was held on dialogue between Federal Highway and Metro. Jaimie Lorenzini asked for clarification on when reaching out to FHWA, is it the intention to have this clarification made in time for JPACT consideration on this agenda item? Chair Kloster confirmed this would be the hope, but could not guarantee with schedule timing.

Ms. Lorenzini called the question on the motion:

<u>MOTION:</u> Recommend to JPACT Approval of Resolution No. 22-5244 adopting a UPWP for the Fiscal Year 2022-23 and certifying that the Portland metropolitan area is in compliance with federal transportation planning requirements. Included with the motion is for staff to reach out to FHWA on these issues where comments were not included in the UPWP and reasons why, to bring to JPACT in the staff presentation as they consider recommendation to Metro Council, and to try to help resolve clarification before JPACT meets.

Moved: Don OdermottSeconded: Tara O'BrienACTION: Motion passed with one abstention; Chris Ford. It was noted this was not a reflection of the
document, but to have Federal, Metro and JPACT roles documented.

2023 Regional Transportation Plan (RTP) Work Plan, Public Engagement Plan and Values, Outcomes and Actions – Resolution 22-5255 (Kim Ellis and Molly Cooney-Mesker, Metro) Kim Ellis reported on comments received on the draft work plan for the 2023 Regional Transportation Plan (RTP) update. The work plan and public engagement plan have been designed to address the urgent concerns and priority outcomes and actions in the VOA in a comprehensive and integrated manner.

The scoping process for the 2023 RTP update began in October 2021. For the past 6 months, the project team has conducted research and engaged hundreds of people across the region to identify transportation trends and challenges affecting how people travel in the region, urgent challenges and priorities for the update to address and ways to engage local, regional and state public officials and staff, community-based organizations, business groups and community members in developing the updated plan.

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In February 2022, Metro staff began seeking feedback on three documents intended to guide development of the 2023 Regional Transportation Plan (RTP): the draft values, outcomes and actions (VOA), draft work plan and draft engagement plan. This feedback was summarized and described in the presentation with further details in the packet memo.

Overarching points of feedback received are:

- Be clear about the outcomes we are trying to achieve through the RTP update and the process.
- Provide adequate time for discussion of the policy issues identified in the VOA and work plan through the RTP update.
- Provide opportunities for jurisdictional partners and other stakeholders to discuss and help shape the development of policy briefs that will frame options and recommendations to policymakers for how to incorporate new and updated policies in the 2023 RTP.
- Recognize local public engagement efforts and community project priorities identified in local transportation system plans during the RTP update.
- Ensure transparency and diverse voices are engaged in defining project priorities and look for opportunities to highlight past engagement and community support for jurisdictional priorities identified and adopted through a public process.
- Ensure transparency in how the projects will be evaluated by providing opportunities for jurisdictional partners and other stakeholders to participate in updates to data, methods and tools.
- Pricing is expected to have a significant impact on travel in the region. The pricing policy should be a significant focus of the RTP update, and should clarify roles and responsibilities for implementing pricing in the region.
- Address the Climate Friendly and Equitable rulemaking that is underway in the 2023 RTP update.

Metro staff prepared revisions to the VOA, the work plan and the public engagement plan to address TPAC and MTAC's overarching points of feedback and feedback provided by the Metro Council and policy advisory committees since February. Discussion on these documents followed.

Comments from the committee:

- Jaimie Lorenzini noted the VOA listed in italics, apart from the RTP work plan and engagement plan. Did that mean TPAC would not be required to recommend to JPACT as presented? Ms. Ellis noted the committee can chose to just move it forward with the work plan and engagement plan, and have the VOA revisions be an Exhibit to the Resolution. There was concern with the VOA document possibly creating a delay in adopting the work plan and engagement plan. Asked if there might be ramifications with more meetings/workshops working on the VOA toward advancement, Ms. Ellis noted feedback is welcome for updates which will be provided at further workshops and meetings, scheduled as needed.
- Karen Williams had a concern regarding phase 2, where data and analysis of the work plan would be discussed with engagement from state agencies and stakeholders. This timeframe was listed from May through August 2022. Technical content for evaluation and review with this schedule seemed short, given summer vacations. It was asked to elaborate on what the engagement opportunities were for State agencies during this timeframe.

Ms. Ellis noted there will be meetings and workshops held where this information would be discussed. Staff has reached out to ODOT and DLCD on specific analysis and will coordinate

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with State agencies and jurisdictions on this material. As more becomes known a more detailed schedule will be presented. Molly Cooney-Mesker added two expert panel workshops are planned, the first focused on climate and modeling scheduled in a June timeframe. Ms. Ellis added everything might not be concluded by August but some results of the analysis will be known, with more work yet to be done.

• Steve Williams asked for clarification on the understanding of how the VOA in the RTP update, with goals and objectives not changed. Is it correct to say the VOA defines how the process is going to be carried out and what the outcomes will be from the process? Ms. Ellis agreed, noting the goals and objectives will be updated as part of the second phase. The VOA is not a replacement for the goals and objectives.

Mr. Williams noted the confusion about the goals and objectives with the relationship between the VOA. In his experience he has never heard of a MPO doing a VOA document. While an exciting possibility, there are concerns with conflicts from different expectations in the process. It was recommended to have more time with this document, and include in the Resolution and materials no specific target date for completing this, which could take as long to develop as the RTP. Ms. Ellis agreed that time is needed to develop the VOA. Policy makers were very supportive of the values provided, but acknowledged a gap in the development and prosperity in the outcomes and actions or as separate values. Other feedback included to provide adequate time for discussion of the policy issues identified in the VOA and work plan through the RTP update.

Mr. Williams noted a concern this will be incorporated into the RTP. It's not a mandated requirement but something new at Metro. The concern is that you have an updated RTP ready to be adopted except for the VOA. For that reason it was preferred to keep them separate, so that we don't get into a situation where we're attempting something new in a regional basis that is not part of the federal requirement. Ms. Ellis noted that the purpose of the VOA to convey overarching values and priority outcomes for the 2023 RTP update, but not be part of the RTP.

• Don Odermott noted the VOA is an exciting opportunity but would prefer it remain a draft document to refine for later phases. Regarding the list of business stakeholders' forum notes, it appeared most were associations, rather than businesses themselves. There is concern we aren't hearing from the correct stakeholders when mobility affects their bottom line.

It was noted the recognition that when comparing locations away from the local core of the region transit looks vastly different between urban/rural areas. It was recommended we remain sensitive to the sub-regional implications, where people live and work and move using transit for their needs.

It was noted the congestion pricing will be a huge part of this RTP. Conversations with the modeling team to show diversion isn't perfect, but should continue to fold into the step 2 of the work with the modeling team and tools to help bring in money to advance these efforts. With stronger data we can get a better sense where demands will divert travel and where mode shifts occur. It was recommended to bring into the performance measures vehicle miles of operation. It was suggested to have the modeling team present to the committee the programs used and results of applications of data. It was noted that past work on corridors is

missing in important corridors currently, and recommended as we continue to advance our RTP policy, we encourage incorporating this into the work plan.

 Tara O'Brien noted a lot of work to be done with analysis in the work plan and engagement plan. It was hoped we don't crunch the other sections of the work plan with too many other topics where time for discussions are needed. It was asked why small work groups were not planned to inform policy updates. More clarification on this is needed in the work plan. It was suggested that representatives from project delivery agencies and jurisdictions are needed for developing policy updates and if possible to add language to the work plan draft prior to JPACT.

Changes in the work plan financial plan were appreciated for input provided. More time is needed to study the equity financial memo and strategy memo for the RTP process so that we can actively participate in this process.

Ms. Ellis noted the workgroups are not being recommended for policy development this RTP cycle, but we will rely on TPAC and MTAC committee workshops and meetings for input. Exceptions to this are the High Capacity Transit strategy where a work group and project management team will support this program. In addition, Regional Freight also has a work group and stakeholder advisory committee. TPAC and MTAC will have multiple opportunities to review and give feedback.

Ms. Ellis noted the financial plan is needed to meet Federal requirements and demonstrate fiscal constraints with the revenue we expect to have balanced with the projects, and how they will maintain operations of projects. The financial strategy lists ways to fund the broader strategic list of projects that's in the plan. The strategy lays out some potential options to fund the gap with financially constrained list of projects.

Chris Deffebach noted more time is needed discussing the sections of the work plan. She supports moving forward the work plan and engagement plan, but not the VOA at this time. Appreciation to staff was given putting everything together and responding to comments. Clarification was asked on policy briefs, which are significant. It was suggested feedback be provided on the policy briefs both during development and reviewed after they become final. Ms. Ellis noted these were not intended to be only a final product. Future opportunities will be brought forward to help shape them.

It was noted that better evaluations with updated tools used in modeling with congestion impacts and gas emission impacts could help highlight a broader acceptance when used together. It was important regionally when looking at the results as they become known. Ms. Ellis noted they will plan a Modeling 101 session where expert panelists that worked on the climate analysis and gas emissions can participate. Data from DEQ, ODOT and DLCD have provided a basis of what we have to develop targets. These tools have been refined and can be used to reach our targets more effectively in the region.

It was noted engagement and outreach throughout different parts of the region were not seen in the phase boxes listed in the work plan, and assume they will be included as part of engagement in communities. It was suggested more work is needed on the VOA. No language appears to be included in the work plan about prioritizing specific projects with diversity called out. Noting the 2040 Growth Plan is a fundamental concept we are still working on, some outcomes achieved may have landed in the 2040 growth update, but we still have the 2040 Growth Plan as our guide. Asked what happened to the Vision Statement in the RTP, Ms. Ellis noted this is in Chapter 2 and will be updated.

Noted in the chat, from Congresswoman Bonamici to OTC on IIGA: As the Commission works on this critical task, I ask that priority projects include those that create a safer transportation network, reduce emissions, and improve resilience to the climate crisis. Investments should also maximize the creation of good-paying jobs, particularly for individuals who historically have faced barriers to employment, as well as represent the geographic diversity and needs of our communities.

• Jaimie Lorenzini suggested to have the engagement plan include more workshops that could include multimodal driver demands, geographic areas with clear choices to mobility, communities marked with climate change, and cross sections in economic factors for jobs and housing. It was asked how phase 2 of the Emergency Transportation Routes project would be folded into the transportation resiliency policy. Ms. Ellis noted the Emergency Transportation Routes project likely won't start until after the 2023 RTP is adopted. What is described in the work plan is that phase 1 will be brought forward to start on the investment plan for resilience when it becomes available.

It was asked if the transportation needs analysis would identify areas where undeveloped transit services are lacking efficient serves. Ms. Ellis confirmed these gaps with transit connections are lacking would be part of the analysis. It was noted there appears to be a timing disconnect between Metro's congestion pricing policy update and the tangible work on the mobility pricing in the region. How will these sync up in the 2023 RTP? Ms. Ellis noted Metro is working with ODOT on this. When discussing driving economic improvements, language suggestions to create more opportunities matching transportation and discrepancies in low economic areas can be sent to Ms. Ellis.

• Steve Williams suggested including in the plan the definitions between equitable, equitably and equity so that an agreed upon plan can better define the efforts. Ms. Ellis agreed these would be included as part of the goals work to better describe terms.

<u>MOTION:</u> TPAC recognizes the great work Kim Ellis and Metro staff have done, and approve Resolution 22-5255 with the proposed RTP work plan and public engagement plan, but having the Values, Outcomes and Actions (VOA) document not proceed at this time pending further discussions, and authorize Metro staff to make continual technical updates.

Moved: Jaimie Lorenzini Seconded: Steve Williams

Discussion on the motion

Don Odermott noted he agreed with the motion so that more space was able to be built into the work scope per discussion at this meeting.

Chris Ford agreed on the great work Metro has developed with the plans. <u>ACTION</u>: Motion passed with no abstentions.

Regional Flexible Funds Allocation (RFFA) additional fund allocations from IIJA (Ted Leybold, Metro) Mr. Leybold began his presentation by noting the Federal Infrastructure Investments and Jobs Act (IIJA) authorized an increased level of transportation funding to Metro as the region's Metropolitan Planning Organization (MPO). Metro staff has coordinated with the Oregon Department of Transportation to

forecast expected transportation revenues provided by the new IIJA authorization legislation. The increase in these funds forecasted for Metro through the federal fiscal year 2027 above the previous pre-IIJA forecast is approximately \$10.4 million.

The IIJA also created a new funding program, the Carbon Reduction Program that like the STBG funding program, has a portion allocated by State Departments of Transportation and a portion allocated by large MPOs such as Metro. This funding program has its own unique policy objectives and eligible activities and will be subject to federal rule making to provide further direction and guidance on its implementation. Metro will coordinate with ODOT and bring to TPAC a proposed approach to these funds at a separate date.

To leverage additional transportation funding to the region and to maximize outcomes in the Regional Transportation Plan's investment priority outcomes of Safety, Equity, Climate, and Congestion Relief, the funding increase is proposed to be allocated to both RFFA Step 1 and Step 2 elements. The memo in the meeting packet describe in more detail the proposed allocations.

Local Projects – Add \$6.1 million to future allocation (Step 2) Region-wide Strategic Programs - \$4.3 million (Step 1) Project Development and Grant Application Support for IIJA Discretionary Revenues: \$3 million total Regional Corridor Project Development - \$2.5 million Federal Discretionary Grant Application Support: \$.5 million Transportation System Management and Operations (TSMO) strategic plan implementation: \$1 million Regional Photo (LiDAR) program - \$300,000

The final RFFA allocation will be made in fall of 2022 after the Step 2 projects have been decided. The final action by TPAC, JPACT and Metro (by resolution) with any adjustment in forecast revenues accounted for at that time. With approval of the approach presented, the process will proceed as described and be incorporated into the resolution scheduled for adoption this fall.

Comments from the committee:

- Jaimie Lorenzini agreed with the investment toward grant application support, and asked if consideration with Regional Corridor Project Development could have a small allocation portion working with smaller transit providers such as SMART during the I-205 corridor transit area project. Mr. Leybold noted that if there is a Federal Discretionary funding program recognized such as Bus on Shoulder, that SMART and others would be eligible to pursue if interested. Metro could work with both planning staff and inter-governmental staff on identifying which projects have the best opportunity to receive discretionary Federal funding so that we can put together a good application for a competitive national process.
- Chris Ford noted the investment in safety issues with always a need for more money. Acknowledgement was made on these included from direction by JPACT and Council for safety issues and would welcome further discussion on increased investments when funds are available for safety on arterials and areas with equity challenged populations. Mr. Leybold noted the decision of unweighted balance for step 2 project consideration for all projects to leverage additional transportation funding to the region and to maximize outcomes in the Regional Transportation Plan's investment priority outcomes of Safety, Equity, Climate, and Congestion Relief. This funding puts more money around the same approach.
- Don Odermott agreed that as we have more money available it would be advisable to target these safety investments for the best purpose. Mr. Leybold added that in the proposal with the Regional Corridor Project Development allocation of 2.5 million, the highest identified safety

and equity areas were named, including TV Highway Corridor, 82nd Avenue Corridor, and the McLoughlin Corridor.

• Mark Lear liked the proposal, with the acknowledgement of where we are with fatal crashes and wanting to prioritize safety as we go through the Step 2 evaluations.

<u>MOTION</u>: To forward this recommendation and support of this proposal and acknowledge to JPACT the concern of continued fatal crashes and serious injuries, and would like to continue prioritizing projects on safety and equity to the best possible maximum of funds.

Moved: Mark Lear Seconded: Don Odermott

ACTION: Motion passed with no abstentions.

TriMet Proposed Annual Budget – Overview and Public Comment (Tara O'Brien & Nancy Young-Oliver, TriMet) A brief presentation was made by Ms. O'Brien and Ms. Young-Oliver on TriMet's FY2023 Budget Overview, FY2023 Budget Themes, and Program of Projects and MTIP Coordination. The budget timeline was noted with key dates included. It was noted a listening session on Federal Program of Projects would be held April 13 at 9am. The Tax Supervising Conservation Committee (TSCC) hearing is April 27 at 8am. The link for details on the budget was shared: https://trimet.org/budget/

FY 2023 Budget Themes:

- 1. Safety
- 2. Maintain and Preserve the System
- 3. Improve System Reliability
- 4. Build Ridership through Quality Service and Innovation
- 5. Advance Regional Corridor Projects and Zero Emissions Fleet transition
- 6. Service

FY2023 Federal Funding

- Regional Flexible Funds
- PMLR Park and Ride improvements
- Program of Projects with other Federal Funding
- Urbanized Area Formula [5307]
- State of Good Repair [5337]
- Enhanced Mobility for Seniors and Individuals with Disabilities [5310]

In summary, Federal funding continues to support focus on capital maintenance and service continuity, public engagement opportunities provided in programming of projects and budget processes will continue, coordinating with MPO staff on proposed programming for 2021-24 and 24-27 MTIP, and exploring federal discretionary grant funding to support zero emissions fleet transition, ridership recovery, state of good repair, vehicles and future high capacity transit network planning.

2024-27 Oregon Department of Transportation (ODOT) Administered Fund Program

<u>Allocations/Scoping updates</u> (Chris Ford, ODOT) Mr. Ford reported the OTC acted on distribution of IIJA flexible funds. This letter spells out the ODOT staff proposal and the action was the same, except that \$5M was moved from ADA to Innovative Mobility Pilot (IMP), with staff to come back with the potential to add up to \$10M to the IMP from other ODOT funds in the future. https://www.oregon.gov/odot/Get-Involved/OTCSupportMaterials/Agenda A IIJA Cover Ltr.pdf <u>Committee comments on creating a safe space at TPAC</u> (Chair Kloster) – One comment was received: Can we turn on the transcription/caption function in future meetings? It would help me take better notes. Thanks!

Chair Kloster noted we could experiment with this at the next meeting. However, transcripts are not saved as part of the public record.

Adjournment

There being no further business, meeting was adjourned by Chair Kloster at 12:15 p.m. Respectfully submitted, Marie Miller, TPAC Recorder

ltem	DOCUMENT TYPE	Document Date	DOCUMENT DESCRIPTION	DOCUMENT NO.
1	Agenda	4/1/2022	4/1/2022 TPAC Agenda	040122T-01
2	TPAC Work Program	3/25/2022	TPAC Work Program as of 3/25/2022	040122T-02
3	Memo	3/23/2022	TO: TPAC and interested parties From: Ken Lobeck, Funding Programs Lead RE: TPAC Metropolitan Transportation Improvement Program (MTIP) Monthly Submitted Amendments the End of February to Mid-March 2022	040122T-03
4	Memo	3/25/2022	TO: TPAC and interested parties From: Lake McTighe, Regional Planner RE: March 2022 Report - Traffic Deaths in the three counties	040122T-04
5	Slide	3/9/2022	Traffic deaths in Clackamas, Multnomah and Washington counties since the last report	040122T-05
6	Handout	March 2022	Climate-Friendly and Equitable Communities	040122T-06
7	March	3/25/2022	TO: TPAC and Interested Parties From: John Mermin & Lake McTighe, Metro RE: 2023 Regional Transportation Plan (RTP) – Follow up from 3/9 TPAC Workshop discussion of Safe and Healthy Urban Arterials policy brief	040122T-07
8	Draft Minutes	3/4/2022	Draft Minutes from TPAC March 4, 2022 meeting	040122T-08
9	Resolution 22-5256	N/A	FOR THE PURPOSE OF ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO PROJECTS, CONSISTING OF AN ODOT GRANT SUPPORTING THE METRO REGIONAL TRAVEL OPTIONS PROGRAM, AND THE PE PHASE FOR THE MULTNOMAH COUNTY EARTHQUAKE READY BURNSIDE BRIDGE PROJECT ENABLING FEDERAL REVIEWS AND FUND OBLIGATIONS TO THEN OCCUR (AP22-10-APR)	040122T-09
10	Exhibit A	N/A	Exhibit A to Resolution 22-5256	040122T-10
11	Staff Report	March 21, 2022	FORMAL AMENDMENT STAFF REPORT in consideration of April 2022 MTIP Formal Amendment & Resolution 21-5256 Approval Request (Regular Bundle)	040122T-11
12	Attachment 1	Fall 2021	Attachment 1; Project Fact Sheet, Earthquake Ready Burnside Bridge	040122T-12
13	Attachment 2	N/A	Attachment 2: Purpose and Need, Earthquake Ready Burnside Bridge	040122T-13

ltem	DOCUMENT TYPE	Document Date	DOCUMENT DESCRIPTION	DOCUMENT NO.
14	Attachment 3	N/A	Attachment 3: Cost Estimate Summaries, Earthquake Ready Burnside Bridge	040122T-14
15	Memo	March 25, 2022	TO: TPAC and interested parties From: John Mermin, Senior Transportation Planner RE: 2022-23 Draft Unified Planning Work Program (UPWP) Exhibit A to Resolution 22-5244	040122T-15
16	Resolution 22-5244	N/A	RESOLUTION NO. 22-5244 FOR THE PURPOSE OF ADOPTING THE FISCAL YEAR 2022-23 UNIFIED PLANNING WORK PROGRAM AND CERTIFYING THAT THE PORTLAND METROPOLITAN AREA IS IN COMPLIANCE WITH FEDERAL TRANSPORTATION PLANNING REQUIREMENTS	040122T-16
17	Exhibit A	N/A	Resolution No. 22-5244, Exhibit B	040122T-17
18	Staff Report	April 1, 2022	STAFF REPORT IN CONSIDERATION OF RESOLUTION NO.22-5244	040122T-18
19	Memo	March 25, 2022	TO: TPAC and interested parties From: Kim Ellis, RTP Project Manager Molly Cooney-Mesker, RTP Engagement and Communications Lead RE: 2023 Regional Transportation Plan (RTP) – Values, Outcomes, and Actions (VOA), Work Plan and Public Engagement Plan – Resolution No. 22-5255	040122T-19
20	Attachment 1 Resolution 22-5255	N/A	Resolution No. 22-5222 FOR THE PURPOSE OF APPROVING A WORK PLAN, PUBLIC ENGAGEMENT PLAN AND VALUES, OUTCOMES AND ACTIONS FOR THE 2023 REGIONAL TRANSPORTATION PLAN UPDATE	040122T-20
21	Attachment 2	3/25/2022	Attachment 2. Values, Outcomes, and Actions - Revised Draft	040122T-21
22	Attachment 3	March 25, 2022	Attachment 3. 2023 RTP Update Work Plan - Revised Draft	040122T-22
23	Attachment 4	March 25, 2022	Attachment 4. 2023 RTP Update Engagement Plan - Revised Draft	040122T-23
24	Attachment 5	NA	Attachment 5. Comments Submitted by MTAC and TPAC members	040122T-24
25	Memo	March 25, 2022	TO: TPAC and interested parties From: Margi Bradway, Ted Leybold RE: Infrastructure Investments and Jobs Act (IIJA) Funding to Metro	040122T-25
26	Memo	March 25, 2022	TO: TPAC and interested parties From: Grace Cho, Metro RE: 2024-2027 MTIP – Transit Agency Annual Budget Process Update and Programming of Projects	040122T-26
27	Presentation	April 1, 2022	April 2022 Formal MTIP Amendment Resolution 22-5256	040122T-27

ltem	DOCUMENT TYPE	Document Date	DOCUMENT DESCRIPTION	DOCUMENT NO.
28	Presentation	April 1, 2022	2022-23 Unified Planning Work Program	040122T-28
29	Handout	N/A	Comments on 2023 RTP update, work plan and engagement plan, Multnomah County	040122T-29
30	Handout	N/A	Comments on 2023 RTP update, work plan and engagement plan, ODOT	040122T-30
31	Presentation	April 1, 2022	2023 Regional Transportation Plan Update	040122T-31
32	Presentation	April 1, 2022	TriMet Coordination with the Metropolitan Transportation Improvement Program (MTIP)	040122T-32
33	Slide	April 1, 2022	Final OTC Flexible Fund Allocation	040122T-33

BEFORE THE METRO COUNCIL

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FOR THE PURPOSE OF AMENDING THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO CANCEL ODOT'S OR224, SE 17th AVE TO RAINBOWCAMPGROUND SAFETY UPGRADE PROJECT FOR LATER REPROGRAMMING IN THE 2024-27 STIP DUE TO FUNDING ISSUES AND OVERALAPPING SCOPE ELEMENTS WITH THE OR224 RIVERSIDE FIRE RECOVERY EFFORT (MY22-12-MAY2)

RESOLUTION NO. 22-5266

Introduced by: Chief Operating Officer Marissa Madrigal in concurrence with Council President Lynn Peterson

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects from the Regional Transportation Plan (RTP) to receive transportation related funding; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved the 2021-24 MTIP via Resolution 20-5110 on July 23, 2020; and

WHEREAS, JPACT and the Metro Council must approve any subsequent amendments to add new projects or substantially modify existing projects in the MTIP; and

WHEREAS, the U.S. Department of Transportation (USDOT) has issued clarified MTIP amendment submission rules and definitions for MTIP formal amendments and administrative modifications that both ODOT and all Oregon MPOs must adhere to which includes that all new projects added to the MTIP must complete the formal amendment process; and

WHEREAS, ODOT's has planned a safety upgrade project to begin in FFY 2022 along OR 224 from Milwaukie to Rainbow Campground which will provide safety improvements including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway; and

WHEREAS, due to the Riverside Fire and Wildfire Recovery Effort will cancel the project and plan on reprogramming a similar project in the 2024-27 STIP; and

WHEREAS, the OR224, SE 17th Ave to Rainbow Campground safety upgrade project in Key 21612 is now facing funding issues to delivery as programmed; and

WHEREAS, the OR224 Wildfire Recovery Effort also contains overlapping scope elements now completed which complicate delivery of the OR224, SE 17th Ave to Rainbow Campground safety upgrade project; and

WHEREAS, ODOT will pursue a Federal Land Access Program (FLAP) grant with the U.S. Forestry Service to develop a OR224 Corridor Master Plan which will include a traffic safety infrastructure providing recommendations for needed safety upgrades; and
WHEREAS, existing committed Highway Safety Improvement Program (HSIP) funding from the OR224, SE 17th Ave to Rainbow Campground safety upgrade project will be repurposed to other ODOT All Roads Transportation Safety (ARTS) project funding needs; and

WHEREAS, a formal/full amendment is required to remove the project from the MTIP; and

WHEREAS, a special amendment performance evaluation is not required as the project does not exceeds \$100 million, or is capacity enhancing; and

WHEREAS, Regional Transportation Plan consistency check areas included financial/fiscal constraint verification, an assessment of possible air quality impacts, consistency with regional approved goals and strategies, and a reconfirmation that the MTIP's financial constraint finding is maintained a result of this amendment; and

WHEREAS, Metro's Transportation Policy and Alternatives Committee (TPAC) received their notification plus amendment summary overview, and recommended approval to Metro's Joint Policy Advisory Committee on Transportation (JPACT) on May 6, 2022; and

WHEREAS, JPACT approved Resolution 22-5266 consisting of the OR224, SE 17th Ave to Rainbow Campground safety upgrade project Formal MTIP Amendment on May 21, 2022 and provided their approval recommendation to Metro Council; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT on June 9, 2022 through Resolution 22-5266 to formally amend the 2021-26 MTIP to remove the OR224, SE 17th Ave to Rainbow Campground safety upgrade project.

ADOPTED by the Metro Council this ____ day of _____ 2022.

Lynn Peterson, Council President

Approved as to Form:

Carrie MacLaren, Metro Attorney



2021-2026 Metropolitan Transportation Improvement Program

Proposed May #2 2022 Formal Amendment Key 22612 - OR224: SE 17th Ave - Rainbow Campground safety upgrade project Amendment Type: Formal/Full Amendment #: MY 22-12-MAY2 Total Number of Projects: 1							
Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action			
Project #1 ODOT Key 21612 MTIP ID 71166	ODOT	OR224: SE 17th Ave - Rainbow Campground	Complete various safety upgrades Improvements including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway.	<u>CANCEL PROJECT</u> : Funding and complications with the Riverside Wildfire Recovery Effort necessitate ODOT to remove the project from the MTIP and STIP now and reprogram it later in the 2024-27 STIP			

Formal/Full MTIP Amendment MY22-12-MAY2



20121-24 Metropolitan Transportation Improvement Program (MTIP) PROJECT AMENDMENT DETAIL WORKSHEET

Metro

Formal/Full Amendment CANCEL PROJECT Cancel Key 21612 due to funding

issues

Lead Agency: ODOT		Project Type:	Safety		ODOT Key:	21612
Project Name:		ODOT Type	Safety		MTIP ID:	71166
OP224: SE 17th Ave. Painhow Comparound	1	Performance Meas:	Yes		Status:	Canceled
OR224. SE 17th Ave - Kainbow Campground		Capacity Enhancing:	No		Comp Date:	N/A
Project Status: N/A - Project is being canceled from the MTIP and delayed until the		Conformity Exempt:	Yes		RTP ID:	12095
next STIP cycle		On State Hwy Sys:	OR224		RFFA ID:	N/A
		Mile Post Begin:	0.00		RFFA Cycle:	N/A
		Mile Post End:	49.97		UPWP:	No
Short Description Improvements including signs, stop have, sumple string, signals		Length:	49.97	_	UPWP Cycle:	N/A
Short Description: Improvements including signs, stop bars, runnie strips, signals, reflectorized back plates and lighting to increase cafety on this section of highway		Flex Transfer to FTA	No		Transfer Code	N/A
reflectorized back plates and lighting to increase safety on this section of highway.		1st Year Program'd:	2022		Past Amend:	0
		Years Active:	1		OTC Approval:	No
Key 21612 is being Canceled and Removed from the		STIP Amend #: 21-24-20	35		MTIP #: MY22-1	12-MAY2
MTIP and STIP Detailed Description: Improvements including signs, stop bars, rumble strips, signator of highway.	als, refle	ctorized back plates ar	nd lighting to	incr	ease safety on	this section

STIP Description: Improvements including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway.

Last Amendment of Modification: None. First amendment to project

					PROJEC	T FUNDIN	G DETAI	LS					
Fund Type	Fund Code	Year	Planning	F	Preliminary Engineering	Right of	Way	(Uti	Other lity Relocation)	Con	struction		Total
Federal Funds													
HSIP	ZS30	2022		<u>\$</u>	<u>303,067</u>							\$	-
HSIP	Z\$30	2023				<u>\$</u>	12,341					\$	-
HSIP	Z\$30	2023						\$ —	38,484			\$	-
HSIP	ZS30	2024								\$	1,366,197	\$	-
												\$	-
Notes:								1		Fede	eral Totals:	\$	-
Federal F	und Oblig	ations \$:											Federal Aid ID
	EA	Number:											
Initi	al Obligat	ion Date:											
	EA E	nd Date:											
Kno	own Expe	nditures:											
State Funds													
State	Match	2022		\$	25,568						-	\$	-
State	Match	2023				\$	_1,041					\$	-
State	Match	2023						\$ <u> </u>	3,247			\$	-
State	Match	2024								\$	115,257	\$	-
												\$	-
										S	State Total:	\$	-
Local Funds	1							T		T			
												\$	-
												\$	-
										Lo	cal Total	\$	-
Phase Tota	Phase Totals Before Amend: \$			\$	328,635	\$	13,382	\$	41,731	\$ —	1,481,454	\$ —	1,865,202
Phase Totals After Amend: \$		\$-	\$	-	\$	-	\$	-	\$	-	\$	-	
									Year Of Ex	pendi	ture (YOE):	\$	-
Net Phase Fu	unding Ch	nange:	\$ -	\$	(328,635)	\$ (13,382)	\$	(41,731)	\$ (1,481,454)	\$	(1,865,202)
Phase Percent Change:			0.0%		-100.0%	-100.	0%		-100.0%	-2	100.0%		-100.0%

Notes and Summary of Changes:

> Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.
 > What are we changing? The project is being canceled and removed from the MTIP.

Amendment Summary:

The formal amendment cancels the project and removes it from the MTIP. The project has been identified as being under budget. Some of the required sign replacements have been completed as part of the OR224 Fire Recovery project. ODOT also has submitted a Federal Lands Access Program (FLAP) grant to develop a OR224 Corridor Master Plan. The FLAP was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators. As a result of these actions, ODOT is canceling the project for now and will add it to the 2024-27 STIP. The existing funds will be re-programmed to address other ARTS projects funding shortfalls.

RTP References:

- > RTP ID: 12095 Safety & Operations Projects
- > RTP Description: Projects to improve safety or operational efficiencies such as pedestrian crossings of arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, that do not add motor vehicle capacity.
- > Regional Significant Project: Yes
- > UPWP amendment: No
- > RTP Goals: Goal 5 Safety and Security
- > Goal Objective: 5.1 Transportation Safety
- > Goal Description: Eliminate fatal and severe injury crashes for all modes of travel.
- > Proof of Funding Verification: N/A
- > Scope changes included: Yes, project cancelation
- > Limit changes included: N/A
- > Formal/full amendment requirement under Matrix: Project cancellations require a full/formal amendment
- > Add Special Performance Evaluation assessment required to be completed: No
- > Exempt or Capacity Project: Exempt project per 40 CFR 93.126, Table 2
- > Exemption reference: safety Highways Safety Implementation Program

Fund Codes:

> HSIP = Federal Highway Safety Improvement Program funds appropriated to the state DOT and used for various transportation system safety improvements.
> State = General state transportation funds provided by the lead agency as part of the required match.

Other

- > On NHS: Yes. OR224 is identified as an "Other NHS Routes" on the NHS system
- > Metro Model: Yes Motor Vehicle Network
- > Model category and type: Throughways and Major Arterials
- > TCM project: No
- > Located on the CMP: Yes

	Fund Codes										
Phase	Fund Code	Description	ICA P	Percent of Phase	Total Amount	Federal Percent	Federal Amount	State Percent	State Amount	Local Percent	Local Amount
PE	ZS30	HIGHWAY SAFETY IMP PROG FAST		0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	PE Totals			0.00%	0.00		0.00		0.00		0.00
RW	ZS30	HIGHWAY SAFETY IMP PROG FAST		0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	RW Totals			0.00%	0.00		0.00		0.00		0.00
UR	ZS30	HIGHWAY SAFETY IMP PROG FAST		0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	UR Tot	tals		0.00%	0.00		0.00		0.00		0.00
CN	ZS30	HIGHWAY SAFETY IMP PROG FAST		0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	CN Tot	als		0.00%	0.00		0.00		0.00		0.00
	Grand Totals				0.00		0.00		0.00		0.00



Key 21612 Project Limits span from the beginning of OR 224 at MP 0.00 down to Rainbow Campground at MP 49.97

Memo



Date:	April 21, 2022
То:	TPAC and Interested Parties
From:	Ken Lobeck, Funding Programs Lead
Subject:	May #2 2022 MTIP Formal Amendment & Resolution 22-5266 Notification and Approval Request
	OR224: SE 17th Ave - Rainbow Campground Project Cancelation

FORMAL AMENDMENT STAFF REPORT

FOR THE PURPOSE OF AMENDING THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO CANCEL ODOT'S OR224, SE 17th AVE TO RAINBOWCAMPGROUND SAFETY UPGRADE PROJECT FOR LATER REPROGRAMMING IN THE 2024-27 STIP DUE TO FUNDING ISSUES AND OVERALAPPING SCOPE ELEMENTS WITH THE OR224 RIVERSIDE FIRE RECOVERY EFFORT (MY22-12-MAY2)

BACKROUND

What This Is:

The May #2 2022 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment contains two projects. Both projects are being submitted and processed for final Metro approval under separate resolutions. The second project is under MTIP Amendment MY22-12-MAY2 and is contained in Resolution 22-5266. The project is the OR224, SE 17th Ave to Rainbow Campground project in Key 21612. The project MTIP amendment will cancel the project.

What is the requested action?

Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 22-5266 to cancel the ODOT's OR224, SE 17th Ave to Rainbow Campground safety upgrade project

Proposed May #2 2022 Formal Amendment Amendment Type: Formal/Full Amendment #: MY22-12-MAY2 Total Number of Projects: 1							
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes		
Project #1 Key 21612	71166	ODOT	OR224: SE 17th Ave - Rainbow Campground	Improvements including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway.	CANCEL PROJECT: The project has funding issues and overlapping scope elements with the OR224 Riverside Fire Recovery effort. As a result ODOT will cancel the project for later reprogramming in the 2024- 27 STIP		

AMENDMENT SUMMARY:

The May #2 2022 Formal MTIP Amendment bundle involves canceling ODOT's OR224, SE 17th Ave to Rainbow Campground project in Key 21612. The project was schedule to begin PE during FFY 2022. However, due to the Riverside Fire and OR224 Fire Recovery effort, several scope elements overlap into the fire recovery effort. Additionally, ODOT estimate funding issues are already present with Key 21612. ODOT plans on submitting a Federal Lands Access Program grant to develop a OR224 Corridor Master Plan which will include required safety improvements once the Fire Recovery Effort is completed. The updated project then will be included in the 2024-27 STIP to implement required safety upgrades. As a result of the new strategy, Key 21612 is being canceled from the 2021-24 MTIP and STIP.

A more detailed overview of both projects follows the acronym list

Below is a summary list of transportation acronyms used in the report:

- I-205 = Interstate 205
- ARTS = ODOT All Roads Transportation Safety program
- Cons or CN = Construction phase
- FFY = Federal Fiscal Year (e.g. October 1 through September 30)
- FHWA = Federal Highways Administration
- FLAP = Federal Lands Access Program funds
- FMIS = FHWA's Financial Management Information System
- HSIP = Federal Highway Safety Improvement Program funds
- MP = Mile Post limit markers on the State Highway system
- ODOT = Oregon Department of Transportation
- OR 224 = Oregon State Route 224
- OTC = Oregon Transportation Commission
- PE = Preliminary Engineering
- ROW/RW = Right of Way phase
- SFY = State Fiscal Year (July 1 through June 30 of each calendar year)
- State = General state funds used as the match requirement for federal funds committed to a project. Also may be committed as stand-alone funding (state only funds) for a project.

A detailed overview of each project amendment in the bundle begins on the next page.

Project 1	OR224: SE 17th Ave - Rainbow Campground					
Lead Agency:	ODOT					
ODOT Key Number:	21612 MTIP ID Number: 71251					
Projects Description:	 Project Snapshot: Quick Amendment Summary: The amendment cancels the project from the MTIP for later re-programming in the 2024-27 STIP and MTIP. Metro UPWP Project: No This a large capital, capacity enhancing project being implemented Proposed improvements: Key 22612 is proposed to complete required safety improvement upgrades including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway. Source: Existing project Amendment Action: The amendment cancels the project from the current 2021-24 MTIP and STIP. The project is anticipated to return as part of the 2024-27 STIP and MTIP. Additional Amendment Evaluation Required: No The project is not capacity enhancing or exceeds \$100 million in total project costs. Funding: The current funding for the project primarily relies on the federal Highway Safety Improvement Program (HSIP) funds. Upon cancelation, the funding will be reprogrammed to other eligible projects. FTA Conversion Code: Not applicable. No transit funds are involved. The federal funds will not be flex transferred to FTA. Location: UR224 Cross Street Limits: Overall limits start on OR224 in Milwaukie and proceed southeast to the Rainbow Campground Overall Mile Post Limits: MP 0.00 to MP 49.97 Current Status Code: N/A - Canceled Air Conformity/Capacity Status: Key 22612 is a non-capacity enhancing improvement project. It is exempt from air quality conformity and transportation demand modeling analysis per 40 CFR 93.126, Table 2, Safety – Highway Safety Implementation Program. 					

	• <u>Regional Significance Status:</u> The project is considered a regionally significant as it contains federal funds, is located on a major arterial in the network, and addresses a key Metro goal of safety					
	 <u>Amendment ID and Approval Estimates:</u> STIP Amendment Number: 21-24-2035 MTIP Amendment Number: MY22-12-MAY2 OTC approval required: Not required Metro approval date: Not specified yet. 					
	AMENDMENT ACTION: CANCEL PROJECT					
	As a result of the Riverside Fire, clean-up and fire recovery efforts continue on OR224. Key 22612 was planned to begin Preliminary Engineering during FFY 2022. However, the OR224 Fire Recovery effort superseded this project, but also contained some overlapping scoping elements. Upon ODOT's review of the project, Key 21612 was determined to be underfunded.					
What is changing?	Rather than attempt to resolve the issues between the OR224 Fire Recovery effort and Key 21612, ODOT plans in submitting a federal Lands Access Program (FLAP) grant application with the U.S Forestry Service to develop an OR224 Corridor Master Plan that will include a traffic safety infrastructure to determine future required safety upgrades.					
	The change of directions allows Key 2161 now to be canceled from the current 2021-24 MTIP. It is anticipated the project will be re-programmed as part of the 2024-27 STIP. Current funds from Key 21612 will be re-programmed to other eligible projects in the 2021-24 STIP.					



Note: The Amendment Matrix located on the next page included as a reference for the rules and justifications governing Formal Amendments and Administrative Modifications to the MTIP that the MPOs and ODOT must follow.

METRO REQUIRED PROJECT AMENDMENT REVIEWS

In accordance with 23 CFR 450.316-328, Metro is responsible for reviewing and ensuring MTIP amendments comply with all federal programming requirements. Each project and their requested changes are evaluated against multiple MTIP programming review factors that originate from 23 CFR 450.316-328. The programming factors include:

- Verification as required to programmed in the MTIP:
 - o Awarded federal funds and is considered a transportation project
 - Identified as a regionally significant project.
 - Identified on and impacts Metro transportation modeling networks.
 - Requires any sort of federal approvals which the MTIP is involved.
- Passes fiscal constraint verification:
 - Project eligibility for the use of the funds
 - Proof and verification of funding commitment
 - Requires the MPO to establish a documented process proving MTIP programming does not exceed the allocated funding for each year of the four year MTIP and for all funds identified in the MTIP.

- Passes the RTP consistency review: Identified in the current approved constrained RTP either as a standalone project or in an approved project grouping bucket
- RTP project cost consistent with requested programming amount in the MTIP
- If a capacity enhancing project – is identified in the approved Metro modeling network
- Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
- If not directly identified in the RTP's constrained project list, the project is verified to be part of the MPO's annual Unified Planning Work Program (UPWP) if federally funded and a regionally significant planning study that addresses RTP goals and strategies and /or will contri

Type of	Change
FULL A	MENDMENTS
1. Addir	ng or cancelling a federally funded, and regionally significant project to the STIP and sta
funded p	projects which will potentially be federalized
2. Major	change in project scope. Major scope change includes:
 Change 	e in project termini - greater than .25 mile in any direction
 Change 	es to the approved environmental footprint
 Impact 	is to AQ conformity
 Adding 	g capacity per FHWA Standards
 Adding 	g or deleting worktype
3. Chang	ges in Fiscal Constraint by the following criteria:
• FHWA	project cost increase/decrease:
• •	Projects under \$500K – increase/decrease over 50%
• •	Projects \$500K to \$1M – increase/decrease over 30%
• •	Projects \$1M and over – increase/decrease over 20%
 All F1 	FA project changes – increase/decrease over 30%
4. Addir	g an emergency relief permanent repair project that involves substantial change in
function	and location.
ADMINI	STRATIVE/TECHNICAL ADJUSTMENTS
1. Adva	ncing or Slipping an approved project/phase within the current STIP (If slipping outside
current S	STIP, see Full Amendments #2)
2. Addir	ng or deleting any phase (except CN) of an approved project below Full Amendment # $\!$
3. Comb	ining two or more approved projects into one or splitting an approved project into two
more, o	r splitting part of an approved project to a new one.
4. Splitti	ng a new project out of an approved program-specific pool of funds (but not reserves for
future pr	ojects) or adding funds to an existing project from a bucket or reserve if the project wa
selected	d through a specific process (i.e. ARTS, Local Bridge)
5. Minor	technical corrections to make the printed STIP consistent with prior approvals, such as
typos or	r missing data.
6. Chang	ging name of project due to change in scope, combining or splitting of projects, or to
better co	onform to naming convention. (For major change in scope, see Full Amendments #2)
7. Addir	g a temporary emergency repair and relief project that does not involve substantial

and strategies and/or will contribute or impact RTP performance measure targets.

- Determined the project is eligible to be added to the MTIP, or can be legally amended as required without violating provisions of 23 CFR450.300-338 either as a formal Amendment or administrative modification:
 - Does not violate supplemental directive guidance from FHWA/FTA's approved Amendment Matrix.
 - Adheres to conditions and limitation for completing technical corrections, administrative modifications, or formal amendments in the MTIP.
 - Is eligible for special programming exceptions periodically negotiated with USDOT.
 - Programming determined to be reasonable of phase obligation timing and is consistent with project delivery schedule timing.
- Reviewed and initially assessed for Performance Measurement impacts.
- MPO responsibilities completion:
 - Completion of the required 30 day Public Notification period:
 - Project monitoring, fund obligations, and expenditure of allocated funds in a timely fashion.
 - Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

APPROVAL STEPS AND TIMING

Metro's approval process for formal amendment includes multiple steps. The required approvals for the May #2 2022 Formal MTIP amendment (MY22-12-MAY2) will include the following:

	Action	<u>Target Date</u>
•	Initiate the required 30-day public notification process	. May 3, 2022
•	TPAC notification and approval recommendation	May 6, 2022
•	JPACT approval and recommendation to Council	May 21, 2022
•	Completion of public notification process	. June 1, 2022
•	Metro Council approval	. June 9, 2022

Notes:

- * The above dates are estimates. JPACT and Council meeting dates could change.
- ** If any notable comments are received during the public comment period requiring follow-on discussions, they will be addressed by JPACT.

USDOT Approval Steps (The below time line is an estimation only):

	<u>Action</u>				<u>Target D</u>	<u>ate</u>
•	Final amendment	package submission to	ODOT &	USDOT	June 16,	2022

ANALYSIS/INFORMATION

- 1. Known Opposition: None known at this time.
- 2. Legal Antecedents:
 - a. Amends the 2021-24 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 20-5110 on July 23, 2020 (FOR THE PURPOSE OF ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA).
 - b. Oregon Governor approval of the 2021-24 MTIP: July 23, 2020
 - c. 2021-2024 Statewide Transportation Improvement Program (STIP) Approval and 2021 Federal Planning Finding: September 30, 2020
- 3. **Anticipated Effects:** Enables the projects to obligate and expend awarded federal funds, or obtain the next required federal approval step as part of the federal transportation delivery process.
- 4. Metro Budget Impacts: None to Metro

RECOMMENDED ACTION:

Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 22-5266 to cancel the ODOT's OR224, SE 17th Ave to Rainbow Campground safety upgrade project

1 Attachment: OR224 Oregon Wildfire Recovery FAQs



Oregon 224 Wildfire Recovery

Why is it taking so long to re-open OR 224?

Many threats remain along the 19 miles of closed road. These include slides and trees still in danger of falling. Variables like rock scaling work to be done (removing boulders, rocks, dirt and other materials), the availability of contractors and construction materials, the impact of COVID-19 on workers, and unexpected encounters with owl and peregrine falcon nests also cause delays.

How long has the road been closed?

OR 224 has been closed since September 2020 from milepost 31 to 50, the longest closure of any state road from the wildfires.

Who is responsible for the work?

The Debris Management Task Force completed its cleanup work in December and ODOT is now managing the work to complete the road maintenance, which we are responsible for.

When will the road re-open?

The road will re-open when it's safe, and it's not yet safe. ODOT and the U.S. Forest Service are still working on the road and the properties we're responsible for and developing a timeline for re-opening.

Why is it taking so much longer to reopen OR 224 when all the other state roads closed by the wildfires have re-opened?

The Labor Day 2020 fire tore through the area with severity, burning extremely hot throughout this wild and scenic area of the Clackamas River. It destroyed tens of thousands of trees in its path. The hazard trees, most of them perched high above the roadway on steep cliffs, along with falling boulders and rocks, make the corridor unsafe for everyone to access and a very difficult recovery.

Why not open OR 224 one section of the road at a time?

We're considering many re-opening strategies, including segmental openings. When it is safe to do so, we will pick the strategy that works best.

What has to happen for the road to re-open?

Completing the guardrails is critical. We are still installing more than 42,000 feet of guardrail – about eight miles -- at 11 sites along the road. These include locations



where guardrails were destroyed by wildfire and places stripped of protective roadside trees. Replacement highway safety signs are also being installed.

Will there be a recreation season on the Clackamas River?

We expect there will be a recreation season on the Clackamas River in 2022.

Are rockslides still a threat?

Yes. Crews are still rock scaling, bringing down large, dangerous boulders and rocks that could fall onto the road. In those areas, guardrail installation has to wait until the rock scaling work is done.

What's being done to address the rockslide threat?

We're installing protective mesh fencing on slopes in numerous areas.

What's the status of the U.S. Forest Service sites?

The fire damaged virtually all of the Forest Service sites along OR 224, including all of the campgrounds. Two Forest Service boat access sites, the Moore Creek and Hole-in-the-Wall Day Use sites, will open when the highway reopens. Reopening of other sites in 2022 remains uncertain, based on funding for required hazard and repair work.

Has erosion and the threat of slides worsened with the loss of so many trees?

Slides remain a threat. We've seen no major landslides but see rockslides and rock falls almost every day. A variety of erosion mitigation measures have been put into place, including hydro-mulching and using downed hazard trees for chipping. Here are two posts from the Debris Management Task Force on what's been done in the past: <u>"Erosion control helps keep highways safe"</u> and <u>"Get the facts: soil erosion"</u>

What is the plan for replanting?

Replanting is led by the USFS, local land managers, and other <u>local conservation</u>, watershed, and environmental organizations. This work continues in key fire corridors.

BEFORE THE METRO COUNCIL

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FOR THE PURPOSE OF AMENDING THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO INCREASE THE CONSTRUCTION PHASE FOR THE I-205, I-5 to OR 213, PHASE IA PROJECT ALLOWING THE CONSTRUCTION PHASE TO MOVE FORWARD AND BE IMPLEMENTED (MY22-11-MAY1) **RESOLUTION NO. 22-5265**

Introduced by: Chief Operating Officer Marissa Madrigal in concurrence with Council President Lynn Peterson

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects from the Regional Transportation Plan (RTP) to receive transportation related funding; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved the 2021-24 MTIP via Resolution 20-5110 on July 23, 2020; and

WHEREAS, JPACT and the Metro Council must approve any subsequent amendments to add new projects or substantially modify existing projects in the MTIP; and

WHEREAS, the U.S. Department of Transportation (USDOT) has issued clarified MTIP amendment submission rules and definitions for MTIP formal amendments and administrative modifications that both ODOT and all Oregon MPOs must adhere to which includes that all new projects added to the MTIP must complete the formal amendment process; and

WHEREAS, ODOT's I-205 I-5 to OR 213, Phase IA Project, also referred to as the I-205 Abernethy Bridge segment will reconstruct and widening I-205/Abernethy Bridge, include lane widening, a roundabout at I-205/OR43 interchange construction, reconstruct the OR99 interchange, include sound walls, stormwater improvements, and various paving, signage, and landscaping; and

WHEREAS, construction phase bids were submitted much higher than expected resulting in a revised construction phase cost and a funding shortfall; and

WHEREAS, the revised construction phase cost estimate has increased from \$359,200,000 to \$495,000,000; and

WHEREAS, ODOT will utilize added bonding capacity under HB3055 to initially cover the funding increase; and

WHEREAS, the ODOT Region 1 Unit Mobility Office requires approval from the Oregon Transportation Commission (OTC) for the added funding for the project; and

WHEREAS, a formal/full MTIP amendment is required to address the funding increase which includes proof of funding validation, plus fiscal constraint verification, and is contingent upon OTC approval for the added funds for the project; and

WHEREAS, Metro also will complete a special amendment performance evaluation as the project exceeds \$100 million, is capacity enhancing, and is regionally significant; and

WHEREAS, the project scope and limits remain unchanged as a result of the cost increase; and

WHEREAS, the a review of the proposed project changes has been completed against the current approved Regional Transportation Plan to ensure the projects remain consistent with the goals and strategies identified in the Regional Transportation Plan; and

WHEREAS, Regional Transportation Plan consistency check areas included financial/fiscal constraint verification, an assessment of possible air quality impacts, consistency with regional approved goals and strategies, and a reconfirmation that the MTIP's financial constraint finding is maintained a result of this amendment; and

WHEREAS, Metro's Transportation Policy and Alternatives Committee (TPAC) received their notification plus amendment summary overview, and recommended approval to Metro's Joint Policy Advisory Committee on Transportation (JPACT) on May 6, 2022; and

WHEREAS, OTC approved ODOT's revised funding approach to secure the additional funds for the project on May 12, 2022; and

WHEREAS, JPACT approved Resolution 22-5265 consisting of the I-205 I-5 to OR 213, Phase IA Project cost increase Formal MTIP Amendment on May 21, 2022 and provided their approval recommendation to Metro Council; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT on June 9, 2022 through Resolution 22-5265 to formally amend the 2021-26 MTIP to complete the cost increase for the I-205 I-5 to OR 213, Phase IA Project.

ADOPTED by the Metro Council this _____ day of ______ 2022.

Approved as to Form:

Lynn Peterson, Council President

Carrie MacLaren, Metro Attorney



2021-2026 Metropolitan Transportation Improvement Program

	Exhibit A to Resolution 22-5265						
Proposed May 2022 Formal Amendment Bundle Key 22467, I-205: I-5 - OR 213, Phase 1A Project Amendment Amendment Type: Formal/Full Amendment #: MY 22-11-MAY1 Total Number of Projects: 1							
Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action			
Project #1 ODOT Key 22467 MTIP ID 71251	ODOT	I-205: I-5 - OR 213, Phase 1A Project Amendment	Abernethy Bridge segment to include bridge reconstruction/widening, lane widening, roundabout at I-205/OR43 IC construction, OR99 IC reconstruction, sound walls, stormwater improvements, and various paving, signage, and landscaping	COST INCREASE: Add \$135,800,000 to the constructon phase based on updated submitted construction phase bids to cover the phase funding shortfall.			

Formal/Full MTIP Amendment MY22-11-MAY1



Metro 20121-24 Metropolitan Transportation Improvement Program (MTIP) PROJECT AMENDMENT DETAIL WORKSHEET

Formal/Full Amendment COST INCREASE Add \$135,800,000 to Construction

Lead Agency: ODOT		Project Type:	Capital		ODOT Key:	22467
Project Name:		ODOT Type	Modern		MTIP ID:	71251
1 20E LE OR 212 Phase 1A	1	Performance Meas:	Yes		Status:	6
1-205: 1-5 - OR 215, Phase 1A		Capacity Enhancing:	Yes		Comp Date:	1/31/2026
Project Status: 6 = Pre-construction activities (pre-bid, construction management		Conformity Exempt:	No		RTP ID:	11969
oversight, etc.).		On State Hwy Sys:	I-205		RFFA ID:	N/A
		Mile Post Begin:	8.30		RFFA Cycle:	N/A
Short Description: Abornothy Bridge segment to include bridge		Mile Post End:	11.09		UPWP:	No
reconstruction/widening, lane widening, roundabout at 1,205/OP421C		Length:	2.79		UPWP Cycle:	N/A
construction, OP00 IC reconstruction, sound walls, stormwater improvements, and		Flex Transfer to FTA	No		Transfer Code	N/A
various paving, signage, and landscaping		1st Year Program'd:	2022		Past Amend:	3
		Years Active:	1		OTC Approval:	Yes
		STIP Amend #: 21-24-2042			MTIP #: MY22-1	1-MAY1

Detailed Description: On I-205 from MP 8.30 to 11.09, complete the Abernethy Bridge improvement segment which includes constructing ground improvements, new foundations, sub-structure and superstructure and adding a lane in both directions of I-205. The I-205 NB and OR 43 IC will be reconstructed and include a roundabout. The OR 99 IC will be reconstructed to accommodate the bridge widening. Additional scope elements include a sound walls in the vicinity of SB I-205 at Exit 9, stormwater mitigation, landscaping, paving, striping, signing and lighting improvements.

STIP Description: This segment of the project will seismically retrofit and widen the Abernethy Bridge by constructing ground improvements, new foundations, sub-structure and superstructure and adding a lane in both directions of I-205. The interchange at I-205 NB and OR 43 will be reconstructed and include a roundabout. The interchange at OR 99 will be reconstructed to accommodate the bridge widening. The project includes a noise wall in the vicinity of SB I-205 at Exit 9. Stormwater, landscaping, paving, striping, signing and lighting are also included as part of this project.

Last Amendment of Modification: Administrative - October 2021 - AM22-02-OCT2- Minor correction to the project name.

	PROJECT FUNDING DETAILS									
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	(Construction	Other		Total
Federal Fund	s									
ADVCON	ACP0	2022				\$	<u>359,200,000</u>		\$	-
ADVCON	ACP0	2022				\$	379,942,669		\$	379,942,669
NHFP	Z46E	2022				\$	1,000,000		\$	1,000,000
									\$	-
									\$	-
Notes: ADVCON =	Advance C	onstruction	programmatic fund ty	pe code				Federal Totals:	\$	380,942,669
Federal	Fund Oblig	gations \$:						\$ -		Federal Aid ID
	EA	Number:						C0031501		S064(063)
Ini	tial Obligat	tion Date:						11/3/2021		
	EA	End Date:						6/30/2023		
Kr	own Expe	nditures:						N/A		
				.1				1		
State Funds										
State	\$010	2022						\$ 350,000	\$	-
HB3055	S090	2022						\$ 350,000	\$	350,000
State (AC)	Match	2022				\$	94,985,667		\$	94,985,667
State (NHFP)	Match	2022				\$	250,000		\$	250,000
									\$	-
		1						State Total:	\$	95,585,667
Local Funds										
Other	OTH0	2022				\$	18,821,664		\$	18,821,664
									\$	-
		1						Local Total	\$	18,821,664
Phase Tot	als Before	Amend:	\$-	\$-	\$-	<u>\$</u>	359,200,000	\$ 350,000	<u>\$</u>	359,550,000
Phase To	otals After	Amend:	\$ -	\$ -	\$ -	\$	495,000,000	\$ 350,000	\$	495,350,000
				I	1		Year Of Ex	penditure (YOE):	\$	495,350,000
Net Phase F	unding Cl	nange:	\$-	\$ -	\$ -	\$	135,800,000	\$ -	\$	135,800,000
Phase Pe	Phase Percent Change:		0.0%	0.0%	0.0%		37.8%	0.0%		37.8%

Notes and Summary of Changes:

> Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.
> What are we changing? \$135,800,000 of new funds from ODOT are being added to the project to support the revised construction phase cost estimate. The cost increase results from construction phase bids received for the project which were much greater than expected.

Amendment Summary:

The formal amendment increases the construction from \$359,200,000 to \$495,000,000 due to receipt of higher than expected construction phase bids. The cost increase represent a 39.8% increase to the project. Four complete bids (technical and cost submissions) were received and scored. All of the bids were over \$490 million and three of the four were within 4% of the selected bid. Based on the Multi-Parameter scoring criteria Kiewit Infrastructure West Co was selected as the apparent best value contractor, with a bid of \$512 million. The most significant reason for higher than expected bids is current market conditions including, supply chain uncertainty, steel and concrete material costs, and market volatility and risk. OTC approval is required to secure the additional funding for the project. OTC action appears is planned for their May meeting (scheduled for Thursday, May 12, 2022 in Salem). It is possible OTC may convene a special meeting for this item as well. Either way, a copy of the OTC staff item will be included as the proof-of-funding validation and fiscal constraint demonstration for the added funding.

> Will Performance Measurements Apply: Yes, safety, bridge, and pavement

RTP References:

- > RTP ID: 11969 I-205 Abernethy Bridge (CON)
- > RTP Description: Widen both directions of the I-205 Abernethy Bridge and approaches to address recurring bottlenecks on the bridge. Install Active Traffic Management (ATM) on northbound and southbound I-205. Preliminary Engineering (PE) and Right-of-Way (ROW) phase.
- > Regional Significant Project: Yes (Federal funds, + bridge + capacity enhancing + modeled project + located on primary network)
- > UPWP amendment: No
- > RTP Goals: Goal 10 Fiscal Stewardship
- > Goal Description: Plan, build and maintain regional transportation assets to maximize their useful life, minimize project construction and maintenance costs and eliminate maintenance backlogs.
- > Proof of Funding Verification: No. The amendment is moving concurrently with OTC action. Draft and final OTC items are expected soon from ODOT.
- > Scope changes included: No. The cost increase does not result from a change in scope.
- > Limit changes included: No. The cost change does not change the project limits.
- > Formal/full amendment requirement under Matrix: Cost changes for \$5 million and greater projects which exceed a 20% increase threshold. The cost increase for this project is 39.8%
- > Add Special Performance Evaluation assessment required to be completed: Under review
- > Exempt or Capacity Project: Capacity enhancing project. The project is not exempt from air quality and transportation demand management analysis (modeling)
- > Exemption reference: N/A

Fund Codes:

- > ADVCON = A Federal fund code placeholder used until the actual federal fund code is known and committed to the project.
- > NHFP = Federal National Highway Freight Program funds. These funds are apportioned to the state DOT to support eligible freight/goods movement type improvements
- > HB3055 = State funds that originate from Oregon House Bill HB3055.
- > State = General state funds provided by the lead agency as part of the required match to t federal funds
- > Other = General local funds committed to the project above the required federal match. Often referred to local overmatching funds.

<u>Other</u>

- > On NHS: Yes. I-205 is identified as a component on the Eisenhower Interstate System
- > Metro Model: Yes Motor Vehicle Network
- > Model category and type: The project limits are identified as a "Throughways" in the Motor Vehicle modeling network
- > TCM project: No
- > Located on the CMP: Yes

	Fund Codes											
Phase	Fund Code	Description	ICA P	Percent of Phase	Total Amount	Federal Percent	Federal Amount	State Percent	State Amount	Local Percent	Local Amount	
	ACP0	CP0 ADVANCE CONSTRUCT PR		95.95%	474,928,335.93	80.00%	379,942,668.74	20.00%	94,985,667.19	0.00%	0.00	
	OTH0	OTHER THAN STATE OR		3.80%	18,821,664.07	0.00%	0.00	0.00%	0.00	100.00%	18,821,664.07	
CN	Z46E	National highway freight program FAST Y ext		0.25%	1,250,000.00	80.00%	1,000,000.00	20.00%	250,000.00	0.00%	0.00	
	CN Totals			100.00%	495,000,000.00		380,942,668.74		95,235,667.19		18,821,664.07	
от	S090 HB3055 Funding Package			100.00%	350,000.00	0.00%	0.00	100.00%	350,000.00	0.00%	0.00	
	OT Tot	als		100.00%	350,000.00		0.00		350,000.00		0.00	
	Grand Totals				495,350,000.00		380,942,668.74		95,585,667.19		18,821,664.07	



Abernethy Other Bridge Improvements

Improvements will strengthen the Abernethy Bridge to withstand a major earthquake and help improve congestion by adding a third travel lane. Once complete, the bridge will be the first earthquake-ready interstate structure across the Willamette River and will have three travel lanes in each direction plus one auxiliary lane for people entering and exiting I-205.



Memo



Date:	April 26, 2022
То:	TPAC and Interested Parties
From:	Ken Lobeck, Funding Programs Lead
Subject:	May #1 2022 MTIP Formal Amendment & Resolution 22-5265 Notification and Approval Request
	I-205: I-5 - OR 213, Phase 1A Project Amendment (Abernethy Bridge segment)

FORMAL AMENDMENT STAFF REPORT

FOR THE PURPOSE OF AMENDING THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO INCREASE THE CONSTRUCTION PHASE FOR THE I-205, I-5 to OR 213, PHASE IA PROJECT ALLOWING THE CONSTRUCTION PHASE TO MOVE FORWARD AND BE IMPLEMENTED (MY22-11-MAY1)

BACKROUND

What This Is:

The May #1 2022 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment contains two projects Both projects are being submitted and processed for final Metro approval under separate resolutions. The first project under MTIP Amendment MY22-11-MAY1is contained in Resolution 22-5265. The project is the I-205: I-5 - OR 213, Phase 1A Project (Abernethy Bridge improvement segment).

What is the requested action?

Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 22-5265 consisting of the I-205, I-5 - OR 213, Phase 1A project which requires a cost increase to the construction phase which will enable the construction phase to then move forward.

Proposed May1 2022 Formal Amendment Amendment Type: Formal/Full Amendment #: MY22-11-MAY1 Total Number of Projects: 1									
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes				
Project #1 Key 22467	71251	ODOT	I-205: I-5 - OR 213, Phase 1A	Abernethy Bridge segment to include bridge reconstruction/ widening, lane widening, roundabout at I-205/OR43 IC construction, OR99 IC reconstruction, sound walls, stormwater improvements, and various paving, signage, and landscaping	COST INCREASE: Add \$135,800,000 to the construction phase based on updated submitted construction phase bids to cover the phase funding shortfall.				

AMENDMENT SUMMARY:

The May #1 2022 Formal MTIP Amendment bundle involves adding \$135.8 million to the construction phase for the I-205, I-5 - OR 213, Phase 1A project (Abernethy Bridge improvement segment). The added funding increases the project's construction phase cost from \$359.2 million to \$495 million and represents a 39.8% cost increase to the project. The cost increase results from higher than expected submitted construction phase bids for the project. Oregon Transportation Commission (OTC) approval is required for commit the additional funding. The MTIP amendment is being processed concurrently with pending OTC action. OTC action is scheduled for May 12, 2022. Final Metro approval of the MTIP amendment is conditioned by OTC approval that must occur first to satisfy the proof-of-funding verification and fiscal constraint validation.

A more detailed overview of both projects follows the acronym list

Below is a summary list of transportation acronyms used in the report:

- I-205 = Interstate 205
- ADVCON = Generic Advance Construction fund type code where the future federal fund code is not yet known.
- Cons or CN = Construction phase
- FFY = Federal Fiscal Year (e.g. October 1 through September 30)
- FHWA = Federal Highways Administration
- FMIS = FHWA's Financial Management Information System
- HB3055 = State funds from Oregon approved HB3055
- MP = Mile Post limit markers on the State Highway system
- NHFP = Federal National Highway Freight Program funds
- ODOT = Oregon Department of Transportation
- OTC = Oregon Transportation Commission
- PE = Preliminary Engineering
- ROW/RW = Right of Way phase
- SFY = State Fiscal Year (July 1 through June 30 of each calendar year)
- State = General state funds used as the match requirement for federal funds committed to a
 project. Also may be committed as stand-alone funding (state only funds) for a project.

A detailed overview of each project amendment in the bundle begins on the next page.

Project 1	I-205: I-5 - OR 213	, Phase 1A
Lead Agency:	Metro	
ODOT Key Number:	22467	MTIP ID Number: 71251
Projects Description:	 Project Snapshot: Quick Amendar million to the move forward Metro UPWP Pr This a large cap Proposed impr Key 22476 is al will include bri roundabout at I sound walls, sta and landscapin Source: Existing Amendment Act o Adds the funding s o Updates to NHFP fed o Updates to o Increases Additional Ame Upon additiona deemed require Funding: The current fun Advance Const of the project fit Freight (NHFP) is anticipated v FTA Conversion The federal fun Location, Limit o Location; o Overall I 2.79 mil 	nent Summary: The amendment adds \$135.8 construction phase enabling construction to now "roject: No bital, capacity enhancing project being implemented ovements: Iso referred to as the Abernethy Bridge segment and dge reconstruction/widening, lane widening, 1-205/0R43 IC construction, OR99 IC reconstruction, ormwater improvements, and various paving, signage, g. g project <u>tion</u> : The amendment: \$135.8 million to the construction phase to address the hortfall from the higher bids one of the programmatic fund type codes to reflect the leral contribution to the project. the "Other" phase funding source from HB3055 : the revised total cost to be \$495,350,350 <u>endment Evaluation Required:</u> Yes. I review, a special amendment evaluation update was ed. nding for the project primarily relies on the federal ruction fund code for programming purposes. A portion unding be sourced from available National Highway) federal funds. Adding bonding capacity from HB3055 vill later replace the Advance Construction fund code. n <u>Code</u> : Not applicable. No transit funds are involved. ds will not be flex transferred to FTA. <u>s and Mile Posts:</u> t: 1-205 reet Limits: About a mile + before and after the hy Bridge on 1-205 Mile Post Limits: MP 8.30 to MP 11.09 (approximately es total)

	 SEISMC UPGRADES LOS LANE ADDITION SOUND WALLS SOUND WALLS INTERCHANGE IMPROVEMENTS MPROVEMENTS FOR PEOPLE WHENCHANGE IMPROVEMENTS MPROVEMENTS FOR PEOPLE WELKING, BIKING AND ROLLING Current Status Code: 6 = Pre-construction activities (pre-bid, construction management oversight, etc.). Air Conformity/Capacity Status: Key 22467 is a capacity enhancing improvement project. It is not exempt from air quality conformity and transportation demand modeling analysis per 40 CFR 93.126, Table 2. Both actions were completed as part of the 2018 Regional Transportation Plan Update. Regional Significance Status: The project is considered a regionally significant as it contains federal funds, involves major system bridge crossing, is capacity enhancing, and addresses a key Metro goal of safety. MTIP Amendment Number: 21-24-2042 MTIP Amendment Number: MY22-11-MAY1 OTC approval required: Yes. Scheduled for May 12, 2022 Metro approval date: Not specified yet. However, Metro's
	AMENDMENT ACTION: COST INCREASE:
	Key 22467 received higher than expected construction bids creating the construction phase shortfall phase funding shortfall.
What is changing?	Per ODOT's 4/12/2022 correspondence concerning the amendment:
triat is changing:	Explanation of Cost Increase
	Four complete bids (technical and cost submissions) were received and scored. All of the bids were over \$490 million and three of the four were
	within 4% of the selected bid. Based on the Multi-Parameter scoring
	criteria Kiewit Infrastructure West Co was selected as the apparent best value contractor, with a bid of \$512 million. The most significant reason for
	higher than expected bids is current market conditions including, supply

chain uncertainty, steel and concrete material costs, and market volatility and risk. Following negotiations, the final project amount (including contract value, ODOT construction engineering, and contingency costs) is \$495 million. *Project Scope:* This segment of the project will seismically retrofit and widen the Abernethy Bridge by constructing new foundations, sub-structure and superstructure and adding a lane in both directions of I-205. The interchange at I-205 NB and OR 43 will be reconstructed and include a roundabout. The interchange at OR 99 will be reconstructed to accommodate the bridge widening. The project includes a noise wall in the vicinity of SB I-205 at Exit 9. Stormwater, landscaping, paving, striping, signing and lighting are also included as part of this project. The project limits remain the same. Two sign structures and ground improvements will be deferred to future contracts, both of which will go to bid by fiscal year 2024. Funding Sources In the 2021 Legislative Session, the Oregon State Legislature passed HB 3055 to provide this gap financing through a combination of cash, bonding and short-term borrowing. The legislation increased ODOT's short-term borrowing cap to \$600 million and allows for five year maturities, allowing ODOT to take out short-term debt that will be repaid by toll revenue or the proceeds of bonds, pending the conclusion of the I-205 Tolling NEPA process. This provide a means to interim fund Phase 1A of the I-205 OR213 to Stafford Road project before toll revenue becomes available. ODOT will finance Phase 1A ODOT by initially using a combination of cash on hand and short-term borrowing. The scheduled obligation of the construction phase funding remains as FFY 2022. To address the repayment of the short-term borrowing, the Oregon State Legislature has identified future toll revenue as the primary source of funding for this project and directed ODOT to develop a toll program for the I-5 and I-205 corridors. The process to implement a toll program is lengthy and it will take several years before any revenues are available to finance the project in total. Tolling is currently being evaluated under the National Environmental Policy Act (NEPA) process. The earliest tolling could be implemented is late 2024 and toll revenue will not be available until that time.



Why a Formal amendment is required?	Cost changes for projects above 20% for projects above \$5 million require a formal/full amendment per the approved FHWA/FTA/ODOT/MPO Amendment Matrix. The cost increase equals
Total Programmed Amount:	Key 22467 total programming (construction and other phases) increases from \$359,550,000 to \$495,350,000
Added Notes:	1 Attachment: I-205 Improvements Fact Sheet



Note: The Amendment Matrix located on the next page included as a reference for the rules and justifications governing Formal Amendments and Administrative Modifications to the MTIP that the MPOs and ODOT must follow.

METRO REQUIRED PROJECT AMENDMENT REVIEWS

In accordance with 23 CFR 450.316-328, Metro is responsible for reviewing and ensuring MTIP amendments comply with all federal programming requirements. Each project and their requested changes are evaluated against multiple MTIP programming review factors that originate from 23 CFR 450.316-328. The programming factors include:

- Verification as required to programmed in the MTIP:
 - Awarded federal funds and is considered a transportation projection
 - Identified as a regionally significant project.
 - Identified on and impacts Metro transportation modeling networks.
 - Requires any sort of federal approvals which the MTIP is involved.
- Passes fiscal constraint verification:
 - Project eligibility for the use of the funds
 - Proof and verification of funding commitment
 - Requires the MPO to establish a documented process proving MTIP

	ODOT-FTA-FHWA Amendment Matrix
	Ivna of Changa
	Adding or cancelling a federally funded, and regionally significant project to the STIP and state
	unded projects which will potentially be federalized
	Major change in project scope. Major scope change includes:
	Change in project termini - greater than .25 mile in any direction
	Changes to the approved environmental footprint
	Impacts to AQ conformity
	Adding capacity per FHWA Standards
	Adding or deleting worktype
	3. Changes in Fiscal Constraint by the following criteria:
	FHWA project cost increase/decrease:
	 Projects under \$500K – increase/decrease over 50%
	 Projects \$500K to \$1M – increase/decrease over 30%
	 Projects \$1M and over – increase/decrease over 20%
	All FTA project changes – increase/decrease over 30%
	4. Adding an emergency relief permanent repair project that involves substantial change in
ſ	unction and location.
1	ADMINISTRATIVE/TECHNICAL ADJUSTMENTS
	1. Advancing or Slipping an approved project/phase within the current STIP (If slipping outside
(current STIP, see Full Amendments #2)
2	2. Adding or deleting any phase (except CN) of an approved project below Full Amendment #3
	B. Combining two or more approved projects into one or splitting an approved project into two o
	nore, or splitting part of an approved project to a new one.
	 Splitting a new project out of an approved program-specific pool of funds (but not reserves for
f	uture projects) or adding funds to an existing project from a bucket or reserve if the project was
5	selected through a specific process (i.e. ARTS, Local Bridge)
Ş	5. Minor technical corrections to make the printed STIP consistent with prior approvals, such as
t	ypos or missing data.
	B. Changing name of project due to change in scope, combining or splitting of projects, or to
ł	better conform to naming convention. (For major change in scope, see Full Amendments #2)
1	7. Adding a temporary emergency repair and relief project that does not involve substantial
0	change in function and location.

programming does not exceed the allocated funding for each year of the four year MTIP and for all funds identified in the MTIP.

- Passes the RTP consistency review: Identified in the current approved constrained RTP either as a stand- alone project or in an approved project grouping bucket
- \circ $\,$ RTP project cost consistent with requested programming amount in the MTIP $\,$
- If a capacity enhancing project is identified in the approved Metro modeling network
- Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
- If not directly identified in the RTP's constrained project list, the project is verified to be part of the MPO's annual Unified Planning Work Program (UPWP) if federally funded and a regionally significant planning study that addresses RTP goals and strategies and/or will contribute or impact RTP performance measure targets.
- Determined the project is eligible to be added to the MTIP, or can be legally amended as required without violating provisions of 23 CFR450.300-338 either as a formal Amendment or administrative modification:
 - Does not violate supplemental directive guidance from FHWA/FTA's approved Amendment Matrix.
 - Adheres to conditions and limitation for completing technical corrections, administrative modifications, or formal amendments in the MTIP.
 - Is eligible for special programming exceptions periodically negotiated with USDOT.
 - Programming determined to be reasonable of phase obligation timing and is consistent with project delivery schedule timing.

- Reviewed and initially assessed for Performance Measurement impacts.
- MPO responsibilities completion:
 - Completion of the required 30 day Public Notification period:
 - Project monitoring, fund obligations, and expenditure of allocated funds in a timely fashion.
 - Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

APPROVAL STEPS AND TIMING

Metro's approval process for formal amendment includes multiple steps. The required approvals for the May #1 2022 Formal MTIP amendment (MY22-11-MAY1) will include the following:

	Action	Target Date
•	Initiate the required 30-day public notification process	April 29, 2022
•	TPAC notification and approval recommendation	May 6, 2022
•	Completion of public notification process	May 16, 2022
•	JPACT approval and recommendation to Council	May 21, 2022
•	Metro Council approval	Decision Pending

Notes:

- * The above dates are estimates. JPACT and Council meeting dates could change.
- ** If any notable comments are received during the public comment period requiring follow-on discussions, they will be addressed by JPACT.

USDOT Approval Steps (The below time line is an estimation only):

	Action	<u>Target Date</u>
-	Final amondment nealizes submission to ODOT 9 UCDOT	תחש

Final amendment package submission to ODOT & USDOT...... TBD
USDOT clarification and final amendment approval...... TBD

ANALYSIS/INFORMATION

- 1. **Known Opposition:** None known at this time.
- 2. Legal Antecedents:
 - a. Amends the 2021-24 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 20-5110 on July 23, 2020 (FOR THE PURPOSE OF ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA).
 - b. Oregon Governor approval of the 2021-24 MTIP: July 23, 2020
 - c. 2021-2024 Statewide Transportation Improvement Program (STIP) Approval and 2021 Federal Planning Finding: September 30, 2020
- 3. **Anticipated Effects:** Enables the projects to obligate and expend awarded federal funds, or obtain the next required federal approval step as part of the federal transportation delivery process.
- 4. Metro Budget Impacts: None to Metro

RECOMMENDED ACTION:

Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 22-5265 consisting of the I-205, I-5 - OR 213, Phase 1A project which requires a cost increase to the construction phase which will enable the construction phase to then move forward.

2 Attachments:

- 1. I-205 Improvements Fact Sheet
- 2. May 12 2022 OTC Letter

I-205 IMPROVEMENTS Stafford Road to OR 213



JULY 2021

WWW.I205CORRIDOR.ORG

CONSTRUCTION BEGINS IN 2022

The I-205 Improvements Project will improve our economy by providing Oregonians safer, more reliable access to work and critical services, even after an earthquake or other major disaster. We are constructing the project in phases, with the first phase (Phase 1A) beginning in late spring/early summer of 2022. Learn more about project phasing at **www.i205corridor.org**.

KEY PHASE 1A IMPROVEMENTS INCLUDE:

- Earthquake-ready improvements to the Abernethy Bridge.
- Removing the current I-205 northbound on-ramp from OR 43 and replacing it with a roundabout.
- Realigning or widening the on- and off-ramps at OR 99E.

- Improvements for people who walk and bike on OR 43, Clackamette Drive and OR 99E.
- Sound wall near the southbound lanes of I-205 at exit 9.
- Widening I-205 in the Phase 1A project area to allow a third travel lane in each direction. The final lane configuration will be completed in a future phase.

Tree removal will occur on each bank of the Willamette River underneath the Abernethy Bridge in Oregon City and West Linn to provide construction access for Phase 1A. This work will occur in the fall of 2021 to avoid nesting birds and heavy rain.



Attachment 1: I-205 Improvements Fact Sheet

Visit **www.i205corridor.org** to sign up for email updates and learn about any traffic impacts or route detours once construction begins. Anticipated impacts include:

- Full weekend, nighttime directional closures and on- and off-ramp width restrictions.
- Full nighttime freeway closures later in the construction process, anticipated in 2024.
- Detours for I-205 northbound and southbound travelers and those traveling to local destinations in and around Oregon City and West Linn during freeway closures.

SCHEDULE

2020			20	21		2022	2022	2024	2025	2026	2027
Fall	Winter	Spring	Summer	Fall	Winter	2022	2023	2024	2025	2020	2027
			PHASE 1 a	and PHASE 2	Local Agency	Coordination	and Public E	ngagement			
	PHASE 1	DESIGN					PHASE 1A	CONSTRUCTIO	N		
		P Open House		Site Prepar	ation Work	Open House					
							PH	ASES 1B-1D	CONSTRUCTI	ON*	
Right of Way and Utility Coordination											
	Environmental Permitting										

*Scheduling of Phases 1B, 1C and 1D is currently tentative and will be refined spring 2022.

STAY INVOLVED



Submit a comment online or sign up for project updates: **www.i205Corridor.org**

Questions and comments can be submitted at any time to the project team at: 205improvements@odot.state.or.us | 503-731-8276

For ADA (Americans with Disabilities Act) 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.

Si desea obtener información sobre este proyecto traducida al español, sírvase llamar al 503-731-4128.

Если вы хотите, чтобы информация об этом проекте была переведена на русский язык, пожалуйста, звоните по телефону 503-731-4128.

如果您想瞭解這個項目翻譯成繁體中文的相關資訊,請致電(503)731-4128.

如果您想了解这个项目翻译成简体中文的相关信息,请致电 503-731-4128.

이 프로젝트에 관한 한국어로 된 자료 신청방법 전화: 503-731-4128.

Nếu quý vị muốn thông tin về dự án này được dịch sang tiếng Việt, xin gọi 503-731-4128.




Oregon Transportation Commission Office of the Director, MS 11 355 Capitol St NE Salem, OR 97301-3871

DATE: April 26, 2022

TO: Oregon Transportation Commission

- **FROM:** Kristopher W. Strickler Director
- **SUBJECT:** Amend the 2021-2024 Statewide Transportation Improvement Program (STIP) to increase funding for the *I-205: I-5 to OR213, Phase 1A (I-205 Improvements Phase 1A Abernethy Bridge Widening)* project.

Requested Action:

Approve amending the 2021-2024 Statewide Transportation Improvement Program (STIP) to increase construction funding for the *I-205: I-5 to OR213, Phase 1A (I-205 Improvements - Phase 1A Abernethy Bridge Widening)* project from \$375,350,000 to \$495,350,000 for a total increase of \$120,000,000. The increase will be paid for using the financial tools provided in House Bill 3055.

Project to increase funding:

I-205: I-5 - OR213, Phase 1A Construction (KN 22467)					
DILACE	VEAD	COST			
PHASE	ILAK	Current	Proposed		
Planning	N/A	\$0	\$0		
Preliminary Engineering	N/A	\$0	\$0		
Right of Way	N/A	\$0	\$0		
Utility Relocation	N/A	\$0	\$0		
Other	2022	\$350,000	\$350,000		
Construction	2022	\$375,000,000	\$495,000,000		
	TOTAL	\$375,350,000	\$495,350,000		

Background:

The I-205 Improvements Project improves the congested seven-mile section of Interstate 205 between OR 213 and Stafford Rd. by widening and seismically retrofitting the Abernethy Bridge, adding a third general purpose lane (northbound and southbound), and creating safer options to enter and exit the corridor with an auxiliary lane from OR 43 to OR 213, and combining the OR 43 ramps. Once the project is complete, congestion will be reduced from 6.75 to 2 hours a day, the Abernethy Bridge will

Oregon Transportation Commission April 26, 2022 Page 2

be the first earthquake-ready state crossing of the Willamette River and eight other bridges will be rebuilt or seismically retrofitted.

The I-205 project will be constructed in phases and the schedule is driven by the allowable in-water work windows. Missing the first in-water work window would result in an estimated \$24 million cost of delay. Multiple construction contracts will deliver the rest of the project, starting with Phase 1A. This phase was advertised for bid in December 2021, to allow construction to begin during the allowable in-water work window in summer 2022. Phase 1A includes Abernethy Bridge widening, highway construction, OR 43 roundabout construction and ramp improvements, OR 99E interchange improvements, stormwater treatment, retaining walls, signing, striping, sign structures, illumination, and construction of a sound wall at Exit 9. Locally funded water and sewer line improvements are also included in this phase. Construction of Phase 1A is expected to end after 4 in-water work cycles.

Phase 1A was delivered for bid with an alternative procurement method that scores technical qualifications, approach, and cost. Technical experience has been sought to match the complexities associated with the project including bridge construction/widening, drilled shafts, marine access, temporary traffic control and traffic maintenance, and permit compliance. ODOT worked with FHWA to supplement the Diversity Program goals in the contract for Disadvantaged Business Enterprises (DBEs), on the job training, and Tribal Employment Rights Ordinance (TERO) program, and added a preferential zip code hiring goal.

After review of technical and cost submissions, Kiewit Infrastructure West Co was determined to be the best value contractor. ODOT entered into negotiations with the contractor and jointly agreed to a contract value of approximately \$447 million.

Cost Increase Analysis:

The technical bids were opened on February 1, 2022 and cost submissions were opened on March 1, 2022. All bids were over \$490 million. Based on the Multi Parameter scoring criteria, the apparent best value contractor was Kiewit Infrastructure West Co with a bid of \$512 million.

The primary reason for the higher than anticipated bids are the escalation of the steel and high performance concrete unit prices, as identified in the Project Controls Office review. Significant items of note are:

• Steel: Steel cost came in significantly higher than anticipated due to fear of continued escalation and inflation due to the geopolitical risks and expected USA inflation rates. High costs are associated with reinforcement, bridge steel, and fabricated steel structures such as signs and fences.

- Concrete: Concrete came in significantly higher than estimated due to limited supplier options and availability. There were limited suppliers available and equipment necessary to facilitate nitrogen injection for concrete on the project.
- Deep soil mixing: Deep soil mixing presented high risk as the depth and size of the stabilization is unknown. The stabilization is a performance specification in which the agency translates risk to the contractor to procure and install ground improvements to the performance specifications in the contract. Deferring this item will reduce contract costs and will allow ODOT to bid this work after a pilot test program is completed to provide more assurances to the contractor that the performance criteria can be met.

The apparent best value contractor was found to have submitted a responsive bid, and the Urban Mobility Office entered into negotiations with the contractor. Negotiations resulted in reduced bid due to reallocation of risk, adjustment of some specification language, and deferral of the deep soil mixing and two sign structures. The deferred items will be bid as future contracts.

Negotiations resulted in a total project cost of \$495 million (contractor costs, engineering, anticipated items, and contingency included), an increase of \$120 million over the previous amount programmed in the STIP.

Financial Plan

In the 2021 Legislative Session, the Oregon State Legislature passed HB 3055 to provide financing through a combination of cash, bonding and short-term borrowing. The legislation increased ODOT's short-term borrowing cap to \$600 million and allows for five year maturities, allowing ODOT to take out short-term debt that will be repaid by toll revenue or the proceeds of bonds, pending the conclusion of the I-205 Tolling NEPA process. In addition, bonding on the \$30 million provided by HB 2017 (2017 Session) is available starting in 2022. Combined these provide a means to interim fund Phase 1A of the I-205 OR213 to Stafford Road project before toll revenue becomes available. ODOT will finance Phase 1A by initially using a combination of bonding on the \$30 million, cash on hand, and short-term borrowing. The scheduled obligation of the construction phase funding remains as FFY 2022.

To address the repayment of the short-term borrowing, the Oregon State Legislature has identified future toll revenue as the primary source of funding for this project and directed ODOT to develop a toll program for the I-5 and I-205 corridors. The process to implement a toll program is lengthy and it will take several years before any revenues are available to finance the project in total. Tolling is currently being evaluated under the National Environmental Policy Act (NEPA) process. The earliest tolling could be implemented is late 2024 and toll revenue will not be available until that time.

Oregon Transportation Commission April 26, 2022 Page 4

Options:

With approval, ODOT will proceed to fund, award, and construct this project.

Without approval, ODOT will not award this project at this time and construction will not begin as planned in 2022.

Attachments:

• Attachment 1 – Vicinity and Location Maps

Copies to:				
Travis Brouwer	Cooper Brown	MacGregor Lynde	Brendan Finn	L
Amanda Sandvig	Della Mosier	Mandy Putney	Jeff Flowers	Daniel Porter
Rian Windsheimer	Lindsay Baker	Talena Adams	Chris Ford	Adriana Antelo

I-205 IMPROVEMENTS Stafford Road to OR 213



JULY 2021

WWW.I205CORRIDOR.ORG

CONSTRUCTION BEGINS IN 2022

The I-205 Improvements Project will improve our economy by providing Oregonians safer, more reliable access to work and critical services, even after an earthquake or other major disaster. We are constructing the project in phases, with the first phase (Phase 1A) beginning in late spring/early summer of 2022. Learn more about project phasing at **www.i205corridor.org**.

KEY PHASE 1A IMPROVEMENTS INCLUDE:

- Earthquake-ready improvements to the Abernethy Bridge.
- Removing the current I-205 northbound on-ramp from OR 43 and replacing it with a roundabout.
- Realigning or widening the on- and off-ramps at OR 99E.

- Improvements for people who walk and bike on OR 43, Clackamette Drive and OR 99E.
- Sound wall near the southbound lanes of I-205 at exit 9.
- Widening I-205 in the Phase 1A project area to allow a third travel lane in each direction. The final lane configuration will be completed in a future phase.

Tree removal will occur on each bank of the Willamette River underneath the Abernethy Bridge in Oregon City and West Linn to provide construction access for Phase 1A. This work will occur in the fall of 2021 to avoid nesting birds and heavy rain.



Attachment 1: I-205 Improvements Fact Sheet

Visit **www.i205corridor.org** to sign up for email updates and learn about any traffic impacts or route detours once construction begins. Anticipated impacts include:

- Full weekend, nighttime directional closures and on- and off-ramp width restrictions.
- Full nighttime freeway closures later in the construction process, anticipated in 2024.
- Detours for I-205 northbound and southbound travelers and those traveling to local destinations in and around Oregon City and West Linn during freeway closures.

SCHEDULE

2020		2021				2022	2022	2024	2025	2026	2027
Fall	Winter	Spring	Summer	Fall	Winter	2022	2025	2024	2025	2020	2027
			PHASE 1 a	and PHASE 2	Local Agency	Coordination	and Public E	ngagement			
	PHASE 1	DESIGN					PHASE 1A	CONSTRUCTIO	N		
		P Open House		Site Prepar	ation Work	Open House					
							PH	ASES 1B-1D	CONSTRUCTI	ON*	
		Right of Wa	y and Utility C	oordination							
		Environment	al Permitting								

*Scheduling of Phases 1B, 1C and 1D is currently tentative and will be refined spring 2022.

STAY INVOLVED



Submit a comment online or sign up for project updates: **www.i205Corridor.org**

Questions and comments can be submitted at any time to the project team at: 205improvements@odot.state.or.us | 503-731-8276

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Если вы хотите, чтобы информация об этом проекте была переведена на русский язык, пожалуйста, звоните по телефону 503-731-4128.

如果您想瞭解這個項目翻譯成繁體中文的相關資訊,請致電(503)731-4128.

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이 프로젝트에 관한 한국어로 된 자료 신청방법 전화: 503-731-4128.

Nếu quý vị muốn thông tin về dự án này được dịch sang tiếng Việt, xin gọi 503-731-4128.





Oregon Transportation Commission Office of the Director, MS 11 355 Capitol St NE Salem, OR 97301-3871

DATE: April 26, 2022

TO: Oregon Transportation Commission

- **FROM:** Kristopher W. Strickler Director
- **SUBJECT:** Amend the 2021-2024 Statewide Transportation Improvement Program (STIP) to increase funding for the *I-205: I-5 to OR213, Phase 1A (I-205 Improvements Phase 1A Abernethy Bridge Widening)* project.

Requested Action:

Approve amending the 2021-2024 Statewide Transportation Improvement Program (STIP) to increase construction funding for the *I-205: I-5 to OR213, Phase 1A (I-205 Improvements - Phase 1A Abernethy Bridge Widening)* project from \$375,350,000 to \$495,350,000 for a total increase of \$120,000,000. The increase will be paid for using the financial tools provided in House Bill 3055.

Project to increase funding:

I-205: I-5 - OR213, Phase 1A Construction (KN 22467)					
DILACE	VEAD	COST			
PHASE	ILAK	Current	Proposed		
Planning	N/A	\$0	\$0		
Preliminary Engineering	N/A	\$0	\$0		
Right of Way	N/A	\$0	\$0		
Utility Relocation	N/A	\$0	\$0		
Other	2022	\$350,000	\$350,000		
Construction	2022	\$375,000,000	\$495,000,000		
	TOTAL	\$375,350,000	\$495,350,000		

Background:

The I-205 Improvements Project improves the congested seven-mile section of Interstate 205 between OR 213 and Stafford Rd. by widening and seismically retrofitting the Abernethy Bridge, adding a third general purpose lane (northbound and southbound), and creating safer options to enter and exit the corridor with an auxiliary lane from OR 43 to OR 213, and combining the OR 43 ramps. Once the project is complete, congestion will be reduced from 6.75 to 2 hours a day, the Abernethy Bridge will

Oregon Transportation Commission April 26, 2022 Page 2

be the first earthquake-ready state crossing of the Willamette River and eight other bridges will be rebuilt or seismically retrofitted.

The I-205 project will be constructed in phases and the schedule is driven by the allowable in-water work windows. Missing the first in-water work window would result in an estimated \$24 million cost of delay. Multiple construction contracts will deliver the rest of the project, starting with Phase 1A. This phase was advertised for bid in December 2021, to allow construction to begin during the allowable in-water work window in summer 2022. Phase 1A includes Abernethy Bridge widening, highway construction, OR 43 roundabout construction and ramp improvements, OR 99E interchange improvements, stormwater treatment, retaining walls, signing, striping, sign structures, illumination, and construction of a sound wall at Exit 9. Locally funded water and sewer line improvements are also included in this phase. Construction of Phase 1A is expected to end after 4 in-water work cycles.

Phase 1A was delivered for bid with an alternative procurement method that scores technical qualifications, approach, and cost. Technical experience has been sought to match the complexities associated with the project including bridge construction/widening, drilled shafts, marine access, temporary traffic control and traffic maintenance, and permit compliance. ODOT worked with FHWA to supplement the Diversity Program goals in the contract for Disadvantaged Business Enterprises (DBEs), on the job training, and Tribal Employment Rights Ordinance (TERO) program, and added a preferential zip code hiring goal.

After review of technical and cost submissions, Kiewit Infrastructure West Co was determined to be the best value contractor. ODOT entered into negotiations with the contractor and jointly agreed to a contract value of approximately \$447 million.

Cost Increase Analysis:

The technical bids were opened on February 1, 2022 and cost submissions were opened on March 1, 2022. All bids were over \$490 million. Based on the Multi Parameter scoring criteria, the apparent best value contractor was Kiewit Infrastructure West Co with a bid of \$512 million.

The primary reason for the higher than anticipated bids are the escalation of the steel and high performance concrete unit prices, as identified in the Project Controls Office review. Significant items of note are:

• Steel: Steel cost came in significantly higher than anticipated due to fear of continued escalation and inflation due to the geopolitical risks and expected USA inflation rates. High costs are associated with reinforcement, bridge steel, and fabricated steel structures such as signs and fences.

- Concrete: Concrete came in significantly higher than estimated due to limited supplier options and availability. There were limited suppliers available and equipment necessary to facilitate nitrogen injection for concrete on the project.
- Deep soil mixing: Deep soil mixing presented high risk as the depth and size of the stabilization is unknown. The stabilization is a performance specification in which the agency translates risk to the contractor to procure and install ground improvements to the performance specifications in the contract. Deferring this item will reduce contract costs and will allow ODOT to bid this work after a pilot test program is completed to provide more assurances to the contractor that the performance criteria can be met.

The apparent best value contractor was found to have submitted a responsive bid, and the Urban Mobility Office entered into negotiations with the contractor. Negotiations resulted in reduced bid due to reallocation of risk, adjustment of some specification language, and deferral of the deep soil mixing and two sign structures. The deferred items will be bid as future contracts.

Negotiations resulted in a total project cost of \$495 million (contractor costs, engineering, anticipated items, and contingency included), an increase of \$120 million over the previous amount programmed in the STIP.

Financial Plan

In the 2021 Legislative Session, the Oregon State Legislature passed HB 3055 to provide financing through a combination of cash, bonding and short-term borrowing. The legislation increased ODOT's short-term borrowing cap to \$600 million and allows for five year maturities, allowing ODOT to take out short-term debt that will be repaid by toll revenue or the proceeds of bonds, pending the conclusion of the I-205 Tolling NEPA process. In addition, bonding on the \$30 million provided by HB 2017 (2017 Session) is available starting in 2022. Combined these provide a means to interim fund Phase 1A of the I-205 OR213 to Stafford Road project before toll revenue becomes available. ODOT will finance Phase 1A by initially using a combination of bonding on the \$30 million, cash on hand, and short-term borrowing. The scheduled obligation of the construction phase funding remains as FFY 2022.

To address the repayment of the short-term borrowing, the Oregon State Legislature has identified future toll revenue as the primary source of funding for this project and directed ODOT to develop a toll program for the I-5 and I-205 corridors. The process to implement a toll program is lengthy and it will take several years before any revenues are available to finance the project in total. Tolling is currently being evaluated under the National Environmental Policy Act (NEPA) process. The earliest tolling could be implemented is late 2024 and toll revenue will not be available until that time.

Oregon Transportation Commission April 26, 2022 Page 4

Options:

With approval, ODOT will proceed to fund, award, and construct this project.

Without approval, ODOT will not award this project at this time and construction will not begin as planned in 2022.

Attachments:

• Attachment 1 – Vicinity and Location Maps

Copies to:				
Travis Brouwer	Cooper Brown	MacGregor Lynde	Brendan Finn	L
Amanda Sandvig	Della Mosier	Mandy Putney	Jeff Flowers	Daniel Porter
Rian Windsheimer	Lindsay Baker	Talena Adams	Chris Ford	Adriana Antelo

Date:	April 29, 2022
To:	Transportation Policy Alternatives Committee and Interested Parties
From:	Matt Bihn, Principal Transportation Planner
Subject:	Interstate Bridge Replacement Project (IBR) Locally Preferred Alternative

Purpose

This meeting is to:

- 1. Provide TPAC an update on IBR
- 2. Introduce the modified Draft Locally Preferred Alternative (LPA)
- 3. Inform TPAC of next steps for the project, including the upcoming resolution to endorse the LPA

Request to TPAC

In June, TPAC will be asked to recommend JPACT approve and submit to the Metro Council a resolution that endorses the IBR modified LPA. On May 6, IBR staff is providing an update on the program and briefing TPAC on the components of the modified LPA.

Project Overview and History

The Interstate 5 (I-5) Bridge is a critical connection linking Oregon and Washington across the Columbia River as part of a vital regional, national and international trade route. With one span now 104 years old, it is at risk for collapse in the event of a major earthquake and no longer satisfies the needs of modern commerce and travel. Replacing the aging Interstate Bridge across the Columbia River with a modern, seismically resilient, multimodal structure that provides improved mobility for people, goods and services is a high priority for Oregon and Washington. The Interstate Bridge Replacement (IBR) program centers equity and follows a transparent, data-driven process that includes collaboration with local, state, federal, and tribal partners.

Since 1999 regional leaders have identified the need to address the I-5 corridor, including the Interstate Bridge, through bi-state, long-range planning studies. In 2004, WDOT and ODOT formed the joint Columbia River Crossing (CRC) project. The intent of this project was to improve safety, reduce congestion and increase mobility of motorists, freight traffic, transit riders, bicyclists and pedestrians. This project was active between 2005 and 2014 and successfully completed the federal environmental review process and received a federal Record of Decision in December 2011. However, the CRC project did not secure adequate state funding to advance to construction and was discontinued in 2014.

The IBR program began in 2019 as a partnership between ODOT, WSDOT, the City of Portland, the City of Vancouver, Metro, RTC, Port of Portland, Port of Vancouver, TriMet, CTRAN, and federal partners. Many of these partners also sit on JPACT and have been engaged extensively by the IBR program in the development of the project LPA. The program is working with stakeholders to leverage work from previous planning efforts and to integrate new data, regional changes in transportation, land use and demographic conditions and public input to inform program development work, which includes:

- Completing the federal environmental review process
- Obtaining necessary state and federal permits
- Finalizing project design
- Developing a finance plan
- Securing adequate funding
- Completing right of way acquisition
- Advertising for construction

More general information on the IBR program is provided in *Attachment 1: IBR Factsheet*, and more information about the program's commitment to equity in included in *Attachment 2: Center Equity*. Currently the program is preparing to enter the federal environmental review process. More information on the IBR program's current status in provided in *Attachment 3: Interstate Bridge Replacement Program Update, March 2022*.

Modified Draft Locally Preferred Alternative

Guided by the Bi-State legislative Committee, the Executive Steering Group, the Equity Advisory Group, and the Community Advisory Group, the IBR program has identified a modified Draft LPA. While many details of the propose project will be determined through the impending environmental study, the Draft LPA identifies critical components including the replacement bridge and number of lanes on the bridge, interchange treatments, and the high capacity transit mode, alignment, and terminus.

Next Steps

Over the next months, project partners will consider the modified LPA for adoption. In June, TPAC will review a draft JPACT resolution to endorse the modified LPA. By summer of 2022, the goal is to submit the modified LPA for environmental review. During the environmental review phase, the IBR team will continue to advance a preliminary design, acquire permits, and update the cost and funding analysis. Construction is estimated to begin in late 2025.

May 5	IBR Program narrows to a single LPA – share with ESG
May 6	TPAC Meeting: IBR Team Draft Modified LPA
May 10	Portland City Council work session: Modified LPA briefing
May 11	Port of Portland Board of Commissioners: Modified LPA briefing
May 12	Metro Council Work Session to Discuss Modified LPA
May 24	Metro Council Work Session to Discuss Modified LPA
(tentative)	
May 26	TriMet Board of Directors: Modified LPA briefing
May/June	Portland City Council advisory committee meetings
June 3	TPAC Meeting: IBR LPA Resolution
June 6	Vancouver City Council workshop: Review draft resolution on modified LPA
June 7	RTC Board of Directors: Modified LPA briefing
Early June	Portland City Council: Endorse Modified LPA
June 14	CTRAN Board of Directors: Modified LPA briefing
June 15	Port of Portland Board of Commissioners: Modified LPA briefing
June 16	JPACT: Endorse Modified LPA
June 22	TriMet Board of Directors: Endorse Modified LPA
June 27	Vancouver City Council: Endorse Modified LPA
June 28	Port of Vancouver Board of Directors: Share and endorse Modified LPA
June 30	Metro Council: Endorse Modified LPA
(tentative)	
July 5	RTC Board of Directors: Endorse Modified LPA
July 12	CTRAN Board of Directors: Endorse Modified LPA

Anticipated Schedule for LPA Briefings and Adoption - dates subject to change

Attachments:

Attachment 1: IBR Factsheet Attachment 2: Center Equity Attachment 3: Interstate Bridge Replacement Program Update, March 2022.



A modern connection for a growing community

Replacing the aging Interstate Bridge with a modern, earthquake resilient, multimodal structure is a high priority for Oregon and Washington. The bridge connects tens of thousands of people daily to offices, industries, schools, sporting events, places of worship, stores, restaurants and entertainment venues. As the only continuous northsouth freeway between Canada and Mexico, the Interstate Bridge is part of a critical trade route for regional, national, and international commerce.

The IBR program seeks to improve mobility for all travelers crossing the Columbia River, whether traveling by vehicle, public transit, or active transportation. **A regionally supported solution must prioritize safety, reflect community values, and address identified problems.**

Program partners

To provide coordinated regional leadership, the Oregon and Washington Departments of Transportation are jointly leading the Interstate Bridge Replacement program work in collaboration with eight other bi-state public agencies.

The eight agencies are:

- TriMet
- C-Tran
- Oregon Metro
- Southwest Washington Regional Transportation Council
- Cities of Portland and Vancouver
- Ports of Portland and Vancouver

Current problems

- In a major earthquake, the existing bridge would likely be damaged, potentially beyond repair.
- ✗ Bridge lifts slow down freight carrying goods along I-5, a critical economic trade route on the west coast.
- Safety issues in the corridor, along with the over 143,000 vehicles crossing the bridge each weekday in 2019, resulted in 7-10 hours of congestion during peak travel periods.
- ✗ Buses are stuck in the same traffic as everyone else.
- ✗ Interchanges within the Interstate Bridge corridor are closely spaced, contributing to congestion and traffic accidents.
- Current bike/pedestrian lanes are about 4 feet wide, near vehicle traffic, and hard to access.
- ★ Large transportation infrastructure projects have historically harmed many low-income communities and communities of color.
- ✗ The transportation sector is one of the largest contributors of greenhouse gases in the United States.

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Solutions

- A replacement bridge will be built to meet current seismic standards. The North Portland Harbor bridge, connecting North Portland to Hayden Island on I-5, will also be replaced to meet seismic standards.
- A replacement bridge will be built tall enough to eliminate the need for bridge lifts.
- Equitable tolling and pricing strategies will be used to help improve reliability within the corridor and fund bridge construction.
- High-capacity transit (e.g., light rail) will be on a dedicated guideway across the bridge separate from vehicle traffic.
- A replacement bridge will include safety shoulders and ramp-to-ramp connections, known as auxiliary lanes, to optimize traffic flow and improve safety by giving drivers more space to merge safely.
- A new shared-use path will be at least 10 feet wide and improve low-stress connectivity for people, walking, biking, or rolling across the bridge.
- The program's Equity Advisory Group provides input and makes recommendations regarding processes, policies, and decisions that have the potential to affect equity-priority communities
- An Equity Framework outlines the program's approach to equity and the resources it will use to advance equity.
- The IBR program is proud to support state climate goals, including reducing greenhouse gas emissions and improving air quality by:
 - Increasing access to high-capacity transit
 - Improving low-stress active transportation options
 - Improve reliability through equitable tolling and pricing strategies
 - Use of low-carbon equipment, construction materials, and other innovative construction methods

A bi-state commitment to mobility

Leaders from both states recognize that regional transportation issues and necessary improvements to the Interstate Bridge remain unaddressed. As of March 2022, both states have dedicated a combined \$90 million for initial Interstate Bridge replacement planning work. A bistate legislative committee, composed of 16 Oregon and Washington lawmakers, provides additional guidance and oversight for the program. The recently passed Move Ahead Washington transportation revenue package allocates \$1 billion to fund Washington's share of the anticipated costs needed to complete the IBR program. Given the funding reality for large transportation projects nationwide, it is assumed that construction of a bridge replacement will require revenue from a diverse range of sources, including federal funds, state funds from both Oregon and Washington, and tolling.

Equity leads our process and outcomes

The IBR program is committed to centering equity in all aspects of work to not only avoid further harm to equitypriority communities, but also ensure they have a voice to help shape program work and realize economic and transportation benefits. Equity-priority communities for the IBR program include:

- BIPOC (Black, Indigenous, and people of color)
- People with disabilities
- Communities with limited English proficiency (LEP)
- Persons with lower income
- Houseless individuals and families
- Immigrants and refugees
- Young people
- Older adults

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Centering Equity

Large transportation infrastructure projects have historically harmed many low-income communities and communities of color. The Interstate Bridge Replacement program (IBR) is committed to centering equity in all aspects of work to not only avoid further harm to equitypriority communities, but also ensure they have a voice to help shape program work and realize economic and transportation benefits.

Equity-priority communities for the IBR program include:

- Black, Indigenous, and People of Color (BIPOC)
- People with disabilities
- Communities with limited English proficiency (LEP)
- Lower income and houseless individuals and families
- Immigrants and refugees
- Young people and older adults

"Equity is the center of what we are advancing in the Interstate Bridge Replacement program. It is the way in which we are outreaching and engaging with our diverse communities."



- Johnell Bell, Principal Equity Officer

Ongoing, extensive, and inclusive public dialogue is critical to developing a bridge solution that best serves the complex needs of communities in Washington and Oregon. To support these goals, the program formed three advisory groups to provide feedback and recommendations: the Executive Steering Group, Equity Advisory Group, and Community Advisory Group.

Equity Advisory Group

The Equity Advisory Group (EAG) makes recommendations to program leadership regarding processes, policies, and decisions that have the potential to affect equity-priority communities. Membership includes partner agency staff, community-based organization representatives, and community members from Oregon and Washington with diverse backgrounds, abilities, and perspectives.



"The amount of effort that people are putting into thinking about equity and committing to acting with that in mind is a major milestone."

– Dr. Roberta Hunte, EAG Facilitator

EAG Milestones

- Jan. 2021: Group convenes with the purpose of ensuring the program remains centered on equity.
- Apr. 2021: Established an operable definition of equity for the program in terms of both process and outcomes.
- Sept. 2021: Delivered recommended equity-focused screening criteria to be used in evaluation of design options.
- Oct. 2021: Developed a draft Equity Framework, outlining the program's approach to equity and the resources it will use to advance equity.

Process Equity is prioritizing access, influence, and decisionmaking power, for historically disenfranchised communities throughout the program, in establishing objectives, design, implementation, and evaluation of success.

Outcome Equity is the result of successful Process Equity and is demonstrated by tangible transportation and economic benefits for equity-priority communities.







Equity-Centered Community Engagement

Beyond the EAG, the IBR program applies an equity lens for all community engagement activities. This means meeting people where they are, if not physically then virtually, and reducing barriers to participation.

Examples of equity-centered community engagement practices include:

- Live closed captioning services in English and Spanish, and American Sign Language interpretation provided at public meeting and engagement events
- > Multilingual event options with simultaneous translation
- Survey user testing with blind and low-vision communities
- Translation of materials into 8 languages; additional translation provided as requested

- ADA remediation of documents and presentations—to ensure compatibility with screen reader software
- Listening session opportunities in affinity spaces on a variety of days and times
- Partnerships with community-based organizations serving equity-priority communities in Oregon and Washington
- Incentives for participation provided to equity-priority participants engaging with the program
- Production of 3-D physical models to assist blind and visually impaired community members

Through comprehensive and equitable community engagement, the IBR program pursues a solution that prioritizes safety, reflects community values, addresses community concerns, and fosters broad regional support.

Community Partnerships

Partnerships with Oregon and Washington communitybased organizations help the program reach equitypriority community members who have historically been excluded from the public input process on large infrastructure projects. These organizations have deep connections to local communities and existing strong relationships that allow the program to gather meaningful and targeted feedback.

In August 2021, a small-scale, low-barrier grant program was announced and applications solicited from community-based organizations who serve or represent equity-priority communities, have an office or members located in the region, have multiple modes of engagement with their members, have experience in community organizing, and are an incorporated nonprofit organization. Eleven organizations received grant funding for coordinating with the IBR program in outreach and engagement activities.

Current community partners include:

- Activate Inclusion
- Washington Advocates of the Deaf and Hard of Hearing
- Partners in Career
- The Street Trust
- Next Up!
- Coalition of Communities of Color

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- Brown Hope
- Somali American
 Council of Oregon
- Unite Oregon
- Slavic Community Center of NW
- NW Association of Blind Athletes

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Community Engagement Milestones

APR 2021 - AUG 2021

FEB 2021

Community survey completed by over **9,000 individuals** with over 14,000 comments submitted regarding transportation values and priorities. **Hosted 15 listening sessions** for specific user groups (active transportation, multimodal commuter, freight movement), potential impact concerns (downtown Vancouver, Hayden Island/Marine Drive, sustainability and climate), and equity-priority communities including sessions held in multiple languages. Over 300 community members participate.

SEP 2021

Established four community working

groups (Active Transportation, Multimodal Commuter, Downtown Vancouver, and Hayden Island/Marine Drive) to act as program focus groups with 81 participants representing a variety of ages, income levels, and identities across both sides of the Columbia River.

Awarded 11 community-based organizations small-scale, low-barrier grants to help bolster engagement efforts in partnership with the IBR program.

NOV 2021 - JAN 2022

Community survey completed by over **9,600 individuals**,

providing feedback on preferences and priorities associated with the user experience and attributes of design options. Extended survey deadline to allow for additional outreach to equity-priority communities, including refining survey and outreach materials to meet needs of people living with disabilities and/or those who use screen readers and visual aids.

MAR 2021

Hosted four listening sessions

for youth and equity-priority communities—including BIPOC, houseless individuals and families, and people living with a disability—in an effort to address demographic gaps in survey responses. Received feedback that equity-priority communities value engagement opportunities in affinity spaces.

MAY 2021

Launched the IBR Accountability

Dashboard, a transparency tool updated quarterly with community engagement, funding, expenditure, and disadvantaged business participation metrics. Comprehensive reports detailing community engagement tactics and outcomes are produced in conjunction with key program milestones and available on the Accountability Dashboard.

NOV 2021

Co-hosted four listening sessions with community-based organization partners for 300+ equity-priority community members, sharing information and gathering feedback around design options.

Hosted two youth press conferences for Washington and Oregon high school and college journalists.



Interstate Bridge Replacement program | March 2022



Program Update

The Interstate 5 Bridge is a critical connection linking Oregon and Washington across the Columbia River as part of a vital regional, national and international trade route. With one span now 105 years old, it is at risk for collapse in the event of a major earthquake and no longer satisfies the needs of modern commerce and travel. Replacing the Interstate Bridge with a modern, seismically resilient, multimodal structure that provides improved mobility for people, goods and services is a high priority for Oregon and Washington. As of September 2021, leaders from both states have dedicated a combined \$80 million to the Interstate Bridge Replacement (IBR) program, which centers equity and follows a transparent, data-driven process that includes collaboration with local, state, federal, and tribal partners.

We cannot wait any longer to address critical safety issues:

- The Interstate Bridge is built on wood piles in sandy soil, making them vulnerable to failure in the event of an earthquake.
- Closely spaced interchanges, narrow lanes, limited sight distance, lack of safety shoulders and bridge lifts that occur up to 350 times a year on average all contribute to an increase in vehicle crashes that result in injuries, fatalities, vehicles and infrastructure damage and increased traffic congestion.

Our community and the environment are not well served by the current Interstate Bridge:

- ► The shared-use paths on the bridges are not safe for travelers who walk, bike, or roll, and are not compliant with the Americans with Disabilities Act.
- Stormwater runoff from the current bridge drains directly into the river instead of going through a water filtration system.
- Growing congestion in the corridor reduces public transit service reliability, which can discourage reliance on transit and increases transportation costs, further impacting the 15% of households in the program area that do not own a vehicle.
- Slow travel times and congestion (idling vehicles) contribute to increased air pollution.







The Interstate Bridge links a vital west coast trade route and is critical to our regional economy:

- Interstate 5 is part of the National Truck Network and is the most important freight highway on the West Coast; linking regional, national and international markets in Canada, Mexico and the Pacific Rim with destinations throughout the western United States.
- The bridge and program area provide direct connections to the Port of Vancouver and Port of Portland, located along the Columbia River, as well as the area's freight consolidation facilities and distribution terminals.
- Over 13,500 trucks crossed the Interstate Bridge daily in 2019, just under 10% of daily traffic across the bridge.
- \$71 million in freight commodity value crossed the Interstate Bridge daily in 2017.
- The cost of congestion on I-5 increased by 18% between 2015 and 2017, to nearly three quarters of a million dollars each day in 2017.

Program t	imeline		• 10	dentify Draft Modified LPA	_ Cons	Begin •
		Planning		Factor and a		
Prior Planning Efforts	Program Launch	Planning	E	Invironmentat	Pre-Construc	tion
Community Engagement		Comm	unity Engage	ement		
2004-2014	2019- 2020	2021	2022	2023	2024	2025

Next steps

Reviews of design options related to the river crossing, Hayden Island and Marine Drive, transit and downtown Vancouver interchanges are currently underway. Technical experts, in collaboration with partner agencies, are evaluating design options based on community input, travel demand modeling data, and additional screening criteria, looking at each option's equity, climate, land use, and other performance measures. There is an ongoing commitment to verifying design options are aligned with

the program's equity and climate goals.

In spring of 2022, the program will seek feedback from its Community Advisory Group, Equity Advisory Group, and Executive Steering Group. This evaluation process will result in a recommendation for a Modified LPA (Locally Preferred Alternative). The Bi-state Legislative Committee will then review the recommendation for endorsement. The goal is to identify a Modified LPA by summer 2022 to submit for environmental review.

During the environmental review phase, the IBR team will continue to advance a preliminary design, acquire permits, and update the cost and funding analysis. Construction is estimated to begin in late 2025.

Cost to maintain

Both spans of the Interstate Bridge are considered functionally obsolete by the Federal Highway Administration. The longer they go without replacement, the more their condition will deteriorate.

The current bridge costs **\$1.2 million per year** for operations and maintenance and will require an estimated **\$270 million in capital** *maintenance work by 2040.*

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MEMORANDUM: OVERVIEW OF PROGRAM RECOMMENDATION FOR MODIFIED LOCALLY PREFERRED ALTERNATIVE

MAY 5, 2022

INTRODUCTION

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

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

PROGRAM RECOMMENDATION FOR MODIFIED LPA





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

TRANSIT RECOMMENDATION:

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

SUPPORTING RATIONALE:

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

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

TECHNICAL TAKEAWAYS:

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

*COMMUNITY FEEDBACK:

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



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

HAYDEN ISLAND/MARINE DRIVE CONFIGURATION RECOMMENDATION:

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

SUPPORTING RATIONALE:

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

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

TECHNICAL TAKEAWAYS:

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

*COMMUNITY FEEDBACK:

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



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

AUXILIARY LANE RECOMMENDATION:

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

SUPPORTING RATIONALE:

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

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

TECHNICAL TAKEAWAYS:

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

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

*COMMUNITY FEEDBACK:

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



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

ADDITIONAL CONSIDERATIONS

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

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

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

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

NEXT STEPS

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



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

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

IBR MODIFIED LPA BRIEFING PACKET PURPOSE AND OVERVIEW

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





IBR Modified Locally Preferred Alternative Briefing Packet

May 2022

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IBR Modified Locally Preferred Alternative Briefing Packet

Prepared for:



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ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
AM	Rush-hour period before noon
BIA	Bridge Influence Area
BIPOC	Black, Indigenous, and People of Color
BRT	Bus Rapid Transit
CAG	Community Advisory Group
СВО	Community-Based Organization
CRC	Columbia River Crossing
EAG	Equity Advisory Group
EIS	Environmental Impact Statement
ESG	Executive Steering Group
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
НСТ	High-Capacity Transit
IBR	Interstate Bridge Replacement
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
MAX	Metropolitan Area Express
МРО	Metropolitan Planning Organizations
NEPA	National Environmental Policy Act
O&M	Operation and Maintenance
ODOT	Oregon Department of Transportation
PM	Rush-Hour Period After Noon
ROD	Record of Decision
RTC	Regional Transportation Council
RTP	Regional Transportation Plan
SDEIS	Supplemental Draft Environmental Impact Statement
SUP	Shared-Use Path

IBR Modified Locally Preferred Alternative Briefing Packet



USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transporation
WSDOT	Washington State Department of Transportation



1. INTRODUCTION

The Interstate Bridge Replacement (IBR) program would replace the aging Interstate 5 (I-5) bridge across the Columbia River with a modern, seismically resilient, multimodal structure. The IBR program has reinitiated work stopped nearly 10 years ago. This work, the Columbia River Crossing (CRC) project, received a Record of Decision (ROD) from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) in 2011 and permits from multiple federal agencies. The CRC project was included in regional transportation plans on both sides of the river. Current work addresses physical, regulatory, and contextual changes that have occurred in the program area since 2013 and builds upon the previous planning efforts.

To address these changes, the IBR program, in coordination with program partners and the community, developed desired outcomes, design concepts, program transit investments, and other elements to propose a draft modified locally preferred alternative (LPA) and conduct supplemental environmental analysis. The IBR program's draft modified LPA will be evaluated in a supplemental draft environmental impact statement (SDEIS) beginning in fall 2022.

The IBR program's recommended modified LPA is based on public engagement, design, planning, and evaluation work that has occurred since the program started in 2019. In conjunction with program partners and the community, these concepts and transit investments were screened against criteria to evaluate their ability to meet the program's Purpose and Need statement and desired outcomes, including equity and climate objectives. The modified LPA helps create a framework for an environmental evaluation but does not include every element of the IBR program, which will be developed and refined over the next several years. The IBR program has relied on feedback from its Community Advisory Group (CAG), Equity Advisory Group (EAG), Executive Steering Group (ESG), Bi-State Legislative Committee, partner agency staff, and the larger community to identify a modified LPA for advancement into the SDEIS process.

This briefing book provides an overview of the work that was completed to develop the modified LPA, including the advancement of design concepts and transit investments, screening results and data, and community and advisory group engagement.

This document outlines the process and options considered in the development of the modified LPA, leading with a description of the identified Purpose and Need, and an overview of the climate and equity priorities grounding the program's work, followed by a brief overview of community and agency engagement and the screening process. Specific elements of the modified LPA include: the Hayden Island and Marine Drive interchanges, transit investments, auxiliary lanes on the river bridge, and variable rate tolling on the river bridge. Two IBR program scenarios are presented to show how the elements of the draft modified LPA could work together to support and serve local and regional goals. Finally, an outline of next steps is provided. Appendices provide additional data and background information.


2. PROGRAM MILESTONES

The IBR program team is working in collaboration with local, state, federal and tribal partners, and the community to complete the federal environmental review process over the next 18 months.

Figure 1 shows the key program milestones from program launch to the development of draft environmental documentation.

Figure 1. IBR Program Milestones





3. PURPOSE AND NEED, CLIMATE, EQUITY

The IBR program confirmed that the previous project's (CRC) Purpose and Need statement was still valid as the problems identified as part of CRC still exist. The CRC Purpose and Need can be found in <u>Chapter 1 of the Final EIS</u>.

The purpose of the IBR program is to improve I-5 corridor mobility by addressing present and future travel demand and mobility needs in the I-5 bridge corridor, from approximately Columbia Boulevard in the south to SR 500 in the north. The IBR program is intended to meet the following objectives:

- Improve multimodal travel safety and traffic operations on the I-5 crossing's bridges and associated interchanges.
- Improve connectivity, reliability, travel times, and operations of public transportation alternatives in the bridge corridor.
- Improve highway freight mobility and address interstate travel and commerce needs in the bridge corridor.
- Improve the I-5 river crossing's structural integrity (seismic stability).

Community engagement and input from the program partners and stakeholder also confirmed that the transportation needs identified in the CRC Purpose and Need statement above remain valid, and climate and equity should also be prioritized during the process. As key program objectives, climate and equity remain focal points in the development and evaluation of program elements, and are prominent in the program's desired outcomes (Table 1 and Table 2). With partners and advisory groups, the IBR program established a process for developing and implementing "frameworks" focused on equity and climate.

3.1 Equity Framework

The IBR program is committed to centering equity by maximizing benefits and minimizing burdens for Equity-Priority Populations (i.e., Black, Indigenous, and People of Color (BIPOC); people with disabilities; communities with limited English proficiency; persons with lower income; houseless individuals and families; immigrants and refugees; young people, and older adults). By focusing benefits on the populations and communities where there is the greatest need and where the greatest harm has been done, the program will also be able to achieve the greatest overall benefits for the region.

The components of this commitment to equity are outlined in the IBR Equity Framework, which was informed by the EAG, community input, program staff, best practices and language from other projects, equity frameworks, and equity toolkits in the Pacific Northwest. The Equity Framework



guides every element of the program, from planning and design to environmental review, construction, and community engagement.

At the core of the Equity Framework are a program-specific equity definition, a set of equity principles, and six equity objectives. It focuses on equity in both process and outcomes and includes accountability mechanisms to ensure its use throughout the program. See the program website for a copy of the Equity Framework.

3.2 Climate Framework

In the United States, the transportation sector is one of the largest contributors of greenhouse gases. Greenhouse gas emissions from transportation account for about 29 percent of total U.S. greenhouse gas emissions, making it the largest contributor of U.S. greenhouse gas emissions. Between 1990 and 2019, greenhouse gas emissions in the transportation sector increased more in absolute terms than any other sector (USEPA, 2022). Curbing the effects of climate change requires a collective effort to reduce dependence on fossil fuels, develop walkable communities, and provide local access to jobs, affordable housing, and essential services.

Current climate challenges within the program area include limited capacity for low-emissions travel (e.g., walking, biking, and rolling), constrained transit options, and significant congestion resulting in idling vehicles that contribute to greenhouse gas emissions. As shown in the desired outcomes (Table 2), the IBR program is committed to seeking outcomes that reduce greenhouse gas emissions within the program area, minimize operational and embodied carbon during construction, produce structures resilient to climate disruptions, and limit environmental impacts that exacerbate the effects of climate change. The program's climate framework guides program work, including desired outcomes, screening criteria, program-level performance measures, intergovernmental and community benefits agreements, and construction specifications and procurement strategies.

The IBR program aims to address climate impacts by building resilient infrastructure that contributes to the reduction of greenhouse gas emissions, in accordance with local, regional, and state goals. The IBR program supports these goals and objectives by identifying safe, efficient, and accessible multimodal solutions for people traveling across the Interstate Bridge. Climate considerations guide all areas of work, including design, construction, operations, and maintenance. Screening criteria were included in the program evaluation to address climate objectives.

See Appendix A for a policy matrix of local, regional, and state climate policies and goals, and an initial evaluation of the IBR program's consistency with and support of each agency's policies.



3.3 Desired Outcomes

Using the established Purpose and Need, and the Climate and Equity Frameworks, the IBR program developed desired outcomes and screening criteria to evaluate and refine design concepts and program transit investments – including the Hayden Island/Marine Drive interchanges, auxiliary lanes over the river crossing, and high-capacity transit (HCT) investments.

Desired outcomes are observable and measurable accomplishments that the IBR program aspires to achieve at a program level. Input from partners,¹ the public, and CAG and EAG was used to identify the program's desired outcomes. The desired outcomes align with the program's Purpose and Need statement, as well as with the community priorities and values adopted by the CAG, the equity objectives adopted by the EAG, and the IBR program's climate objectives.

Table 1 identifies desired outcomes that are associated with the program's Purpose and Need statement, and Table 2 identifies additional desired outcomes in alignment with the program values, including desired outcomes specific to equity and climate resiliency. Because equity and climate are inherently tied to transportation projects, many of the desired outcomes for the Purpose and Need statement also relate equity and climate objectives. Desired outcomes were only developed for program values that are applicable to the screening of high-level design options, (e.g., "foster leadership and cooperation" does not apply).

¹ ODOT and WSDOT's local partner agencies include Metro, the Southwest Washington Regional Transportation Committee (RTC), TriMet, C-TRAN, the City of Portland, the City of Vancouver, the Port of Portland, and the Port of Vancouver.

Table 1. Desired Outcomes Associated with the Purpose and Need Statement

Purpose and Need for the Program	Desired Outcomes
Growing travel demand and	More people can move through the program area.
congestion	People of all ages, abilities, and incomes have access to move through the program area, regardless of mode.
	Regional trips stay on I-5.
	Travel times through the program area are faster and more predictable.
	Increase transportation choices and efficient travel patterns through coordinated land use and transportation planning.
Impaired freight movement	Freight travel through the program area is more reliable.
	Freight travel times through the program area are faster.
	Accommodates high, wide, and heavy cargo in existing and future routes.
Limited public transportation operations, connectivity, and	More people have access to high-quality, affordable, and reliable transit.
reliability	Transit connects people to their origins and destinations.
	Travel by transit is competitive with other modes.
	More people use transit.
	Travel by transit is predictable, reliable, and consistent.



Purpose and Need for the Program	Desired Outcomes
Safety and vulnerability to accidents	Reduce overall crashes on I-5, including severe injury and fatal crashes.
	Reduce overall crashes, including severe injury and fatal crashes, on I-5 ramps, local streets, and active transportation networks in the program area.
	Safety is reflected in the design of all modes.
	Fewer diverted trips from I-5 to local streets.
Substandard bicycle and pedestrian facilities	Active transportation is an attractive mode, and more people walk and cycle, both to access transit and instead of travelling by autos.
	More people have access to high-quality active transportation facilities.
	Traveling by walking, biking, and rolling feels safe because facilities are separated from moving vehicles and the shared use path environment is visible and connected.
	The high-quality networks for walking/biking/rolling are convenient and connect destinations that are important for most trips.
Seismic	Bridges will be designed and constructed so that they will not collapse and will remain operable in a Cascadia subduction zone earthquake.



Table 2. Additional Desired Outcomes

Additional Desired Outcome Category	Desired Outcomes
Climate change and resiliency	Reduce greenhouse gas emissions in support of state climate goals.
	Minimize operational and embodied carbon during construction.
	All structures are resilient to and operable following anticipated climate disruptions (e.g., heat events, flooding, sea level rise).
	Program limits other environmental impacts that exacerbate effects of climate change (e.g., heat island, runoff).
Equity	Improved mobility, accessibility, and connectivity especially for lower income travelers, people with disabilities, and communities who experience transportation barriers.
	Fewer identity-based disparities in travel time, access, transportation costs, and exposure to air pollution, road noise, and traffic crashes.
	Local community improvements are implemented in addition to required mitigations.
	Economic opportunities generated by the program benefit minority and women owned firms, BIPOC workers, workers with disabilities, and young people.
	Equity priority communities have access, influence, and decision- making power throughout the program in establishing objectives, design, implementation, and evaluation of success.
	Disproportionate impacts on equity priority communities are avoided rather than simply mitigated.



Additional Desired Outcome Category	Desired Outcomes
Cost effectiveness and financial resources	Pursue and leverage any and all federal, state, and other funding sources that support all modes and address long-term needs.
	Identify equitable tolling and pricing strategies supporting multimodal construction costs and improved operations and access, in coordination with statewide tolling program and in support of each state's climate goals.
	Ensure fiscal responsibility across the program and into the future, including new technology to solve future problems.

The draft desired outcomes were presented to the ESG on October 21, 2021, and to the Bi-State Legislative Committee on October 27, 2021. The list above reflects the suggestions and discussion from those groups. The ESG concurred on the process for developing desired outcomes.

3.4 Transportation and Land Use

As part of the IBR program's Supplemental Environmental Impact Statement a Land Use Technical Report will be prepared. The Land Use Technical Report will include an assessment of the Modified LPA's consistency with state, regional and local land use plans, including comprehensive plans, subarea plans and zoning ordinances. Specifically, the evaluation of land use consistency will evaluate how the Modified LPA is:

- Supportive of Oregon Statewide Goal Number 14, which requires defining an Urban Growth Boundary where urban-level zoning, infrastructure and development may occur.
- Supportive of Oregon Statewide Goal Number 12, Transportation Planning, which is implemented by Metro's Regional Transportation Plan.
- Supportive of Washington State's Growth Management Act, which requires local jurisdictions to define and implement a land use policy framework that reduces the conversion of land to sprawling, low-density development and encourages in-fill development in areas where urban level services and infrastructure are already in place.

Within the IBR program area, the long-range land use planning requirements of Oregon Statewide Goal Number 14 is implemented by Metro's 2040 Growth Concept and the Regional Framework Plan,



and the Growth Management Act is implemented by RTC's Regional Transportation Plan and the City of Vancouver's Comprehensive Plan.

The assessment of land use plan consistency, together with the IBR program's design for the year 2045, will support a Modified LPA that is future compatible with the long-range vision for land use in the region. Urban-level services, such as HCT stations, will be in areas where the existing and future land use density will support land use patterns such as transit-oriented development and encourage transit ridership. The Modified LPA's future compatibility with the region's long-range land use vision will also serve to meet other IBR program objectives such as a reduction in greenhouse gas emissions and equity, as more people will be in proximity to frequent and reliable public transit that would more affordably provide access to destinations throughout the region, reducing the need to rely on traveling by car.



4. COMMUNITY AND AGENCY ENGAGEMENT

The IBR program has been engaging with partner agencies, tribal governments, the community, and stakeholders. This engagement has helped shape communications strategy and implementation, the environmental process, and the development of design options—all of which are critical to identifying a multimodal bridge replacement solution that meets the needs and priorities of the region. The IBR program has solicited input and exchanged information with the public, agency, and tribal representatives. This section briefly lists the different groups that have been engaged and contributed to the advancement of the IBR program, as well as the substantial community engagement efforts that have ensured that public voices are heard and incorporated into the program.

4.1 Technical Coordination with Partner Agencies

The IBR program worked in tandem with partner agency technical staff through focused technical working groups to develop, evaluate, refine, and identify design concepts, transit investments, and modeling and analytical approaches. Descriptions of these efforts with partner agencies follow.

4.1.1 Task Forces

The IBR program's design team worked in tandem with partner agency technical staff through focused technical task forces to develop, evaluate, refine, and identify design concepts and transit investments for consideration by the community, steering and advisory groups. These meetings served as a venue for developing a shared understanding of local conditions, needs, and planned transportation improvements. The task forces identified design options for screening, contributed to desired outcomes, developed screening criteria, considered tradeoffs, and were engaged in the process of developing the modified LPA.

The task forces included technical staff from the IBR program and the following agencies:

- The Oregon Department of Transportation (ODOT)
- The Washington Department of Transportation (WSDOT)
- The local transit agencies: Clark County Public Transportation Benefit Area (C-TRAN) and Tri-County Metropolitan Transportation District (TriMet)
- The regional metropolitan planning organizations Oregon Metro (Metro) and Southwest Washington Regional Transportation Council (RTC)
- The Cities of Portland and Vancouver
- The Ports of Portland and Vancouver



4.1.2 Travel Demand Modeling Working Group

Representatives from the IBR program, C-TRAN, TriMet, the Cities of Vancouver and Portland, the Ports of Vancouver, Metro, and RTC met to review and discuss methods and assumptions related to travel demand modeling being used in support of analysis for the IBR program. This group met approximately monthly starting in June 2021 to discuss many aspects of the demand model process including data collection, land use, travel markets, big data analysis, tolling (for IBR as well as modeling coordination with the Oregon Toll Program), definition of model assumptions for screening of highway and transit options and post-processing for traffic analysis. The group also reviewed screening criteria and analysis related to modeling to support the evaluation of options.

4.1.3 Transit Options Technical Session

Representatives from the IBR program, C-TRAN, TriMet, the Cities of Vancouver and Portland, Metro, and RTC developed and refined an array of transit scenarios (including mode, alignment, stations, and operations) and their varying performance and operating measures. This technical team was convened under the name of the Transit Options Technical Session and met eight times between October 2021 and February 2022.

4.1.4 Climate Technical Working Group

The IBR program invited climate and planning staff from each of the partner agencies to join ODOT and WSDOT climate specialists to convene for discussions and strategies to support shared climate goals. The climate techncial work group meetings are held monthly and cover topics such as methods to assess greenhouse gas emissions associated with the program, greenhouse gas reduction goals and targets, and the need for mutually supportive policies and programs to support shared climate goals. Future meetings will address design refinements, the environmental study, construction means and methods, and investigate potential mitigation or offsets.

4.2 Community and Equity Advisory Groups

The CAG is composed of community members from both Oregon and Washington. The IBR program shares information with the CAG, which then discusses and provides input in a public forum to help ensure program outcomes reflect community needs, issues, and concerns. CAG members and the program team engage in dialogue with a commitment to meaningful, two-way feedback. The CAG generally meets monthly. Two co-chairs, one representing each state, lead the group's diverse and inclusive membership. These co-chairs also sit on the Executive Steering Group. For more information on the CAG, see <u>CAG | I-5 Bridge Replacement Program (interstatebridge.org)</u>



The EAG helps ensure that the Interstate Bridge Replacement (IBR) program remains centered on equity. The group refined equity-focused screening criteria and has made recommendations to IBR program leadership on the components of the modified LPA, evaluating options through an equity lens to advance the program's equity objectives. The EAG developed multiple screening criteria for the different design components (see Section 5.3). The EAG meets monthly. For more information on the EAG, see EAG | I-5 Bridge Replacement Program (interstatebridge.org).

4.3 Executive Steering Group

The ESG directly supports IBR program progress. The Oregon and Washington State Departments of Transportation convened the 12-member group to provide regional leadership support on key program issues. Members of the ESG include representatives from the 10 bi-state partner agencies with direct delivery or operational roles in the integrated, multimodal transportation system around the Interstate Bridge, as well as a community representative from each state. The two community representatives serve as the co-chairs of the CAG.

4.4 Federal Agencies

The coordination between the IBR program and federal agencies is formalized through the environmental review process. Federal statute 23 United States Code (USC) 139 requires that agencies that have jurisdiction by law or a special interest in a project are provided an opportunity to formally participate in a program's environmental review process. The NEPA Coordination Plan is in development and will outline the roles and responsibilities of federal and other agency partners for the duration of the NEPA process.

4.5 Tribes

The IBR tribal consultation process is designed to encourage early and continuous feedback from, and involvement by, tribes potentially affected by the IBR program, and to ensure that their input is incorporated into the decision-making process. Although tribal coordination and government-to-government tribal consultation is being undertaken as a distinct outreach effort, tribal involvement is also occurring during agency coordination. A tribal consultation plan is currently in development and will outline consultation milestones and strategy. To date, tribal concerns are similar to those expressed on the CRC project—impacts to natural and cultural resources, in particular fisheries and habitat loss and mitigation, as well cultural sites in and around the Fort Vancouver area. Tribes have asked to be deeply engaged throughout the program lifecycle, and the IBR program is committed to that engagement.



4.6 Community Engagement

The IBR program offers continual opportunities for the community at large to provide input and feedback. Methods used to share information and solicit feedback include online open houses, digital surveys, equity-priority listening sessions, community briefings, community working groups, and public comment submission via email and phone. These opportunities are advertised via the program website, social media, mailed postcards, media advisories, in-person canvassing, multilingual community liaison outreach, program newsletters, and partnerships with local community-based organizations. Engagement efforts have resulted in nearly 30,000 touch points with the community in 2021 alone, including receiving more than 18,000 online survey responses and 16,000 comments. The program's spring 2021 community engagement efforts were recognized with a national TransComm 2021 Skills Award for Public Involvement Approach (with a consultant).

Between early February and mid-March 2021, the IBR program held a targeted period of community engagement to gather specific feedback from the public regarding the transportation problems they experience with the Interstate Bridge and to understand the community priorities and values that should help shape the program. A comprehensive <u>community engagement report</u> details all feedback received. Key takeaways included:

- Widespread agreement that the six previously identified transportation problems still exist: congestion and travel reliability, safety, earthquake vulnerability, impaired freight movement, inadequate bicycle and pedestrian pathways, and limited public transportation.
- Solutions that address climate change, minimize impacts on neighboring communities, and address transportation needs of low-income travelers, people with disabilities, and non-drivers are valued.
- Congestion and travel reliability consistently ranked or expressed as the highest concern, with safety and earthquake vulnerability both ranked second and mentioned frequently.
- Notable concerns about transportation safety including earthquake vulnerability and the impacts of substandard interstate design on drivers.
- Strong desire for an improved public transit connection between Portland and Vancouver.
- Concerns regarding tolling include potential impacts on equity-priority communities and the distribution of the cost burden.
- Value a cost-effective program with funding support that builds on previous work.

In the fall and winter of 2021–2022, the program held a second period of targeted community engagement to gather feedback and input on the design options and weigh in on the priorities that inform elements of the modified LPA. A comprehensive <u>community engagement report</u> details all feedback. Key takeaways included:



- Design options and program elements that improve travel times, relieve congestion, improve safety, and mitigate negative impacts to people and the environment are preferred.
- Equity-priority communities rely on transit for a diverse range of needs.
- Trip time is the most influential factor when choosing how to make trips in the future. Ease of trip and avoiding a toll were the second and third most influential factors, respectively.
- While preferences for how to access Hayden Island and Marine Drive is heavily influenced by a respondents' geographic location, when asked to identify the priority for any Hayden Island Interchange design, nearly 70 percent of all survey respondents agreed that congestion relief on I-5 near Hayden Island is most important.
- Survey results indicate Washington residents prefer direct access to Hayden Island from I-5, while Oregon residents prefer to access Hayden Island via Marine Drive and new arterial bridges.
- The top three preferences for transit station locations include: (1) Vancouver waterfront, (2) near Clark College, and (3) Expo Center.

The IBR program offers real-time engagement in online and in-person community meetings to address specific geographic areas, issues of concern, and program priorities. Since February 2022, the program has hosted or attended more than a dozen community engagement events, including an online Black History Month Roundtable, multiple virtual and in-person meetings with the freight community, and presentations to and discussions with program area Neighborhood Associations, including Bridgeton, Shumway, HiNoon, Arnada, and Rose Village, among others.

This feedback is important input that the IBR program will continue to consider and integrate throughout the planning and design process.

4.7 Engagement with Freight Stakeholders

4.7.1 Freight Movement Public Listening Session

On May 27, 2021, the IBR program hosted a Freight Movement Listening Session with members of the public. There were 46 participants including representatives of marine and freight interests, ports, industry associations, and the Oregon and Washington legislatures. The purpose of this engagement was to provide information regarding the IBR program and to hear from the freight community regarding their issues and concerns regarding the bridge. The key themes and takeaways included the following:

- Inability to use interstate bridge due to height and weight limitations
- Concerns regarding congestion negatively impacting freight operations around Marine Drive



- Concerns regarding unreliability, narrow turns, safety, and bridge lifts
- Desire for more freight capacity on and around the bridge
- Challenges regarding travel path and turning radius

4.7.2 Freight Leadership Meetings

In partnership with the Ports of Vancouver and Portland, the IBR program hosted two freight engagement sessions in the fall 2021 and winter 2022 with leaders of the regional freight community and IBR program leadership. Attendees from the freight community included representatives from regional ports, industry associations, freight retail, and the Oregon and Washington legislatures. The key themes and takeaways included the following:

- Unimpaired freight movement is important to the local, regional, national, and international economies.
- Congestion through the I-5 corridor increases freight operational costs and negatively impacts ability to attract and retain employees.
- Trucks avoid peak travel times if possible (6 to 9 a.m. and 3 to 9 p.m.)
- Suggestions for improvement include:
 - > Truck-only lanes
 - Reduce the number of on/off-ramps
 - > Remove current height restrictions and bridge lifts
- Desire that road and pathway alignment be designed with consideration for optimal freight movement.
- Consider high, wide, and heavy freight movement, including bridge and overpass heights.
- Interest in learning about impacts to freight connectivity including on/off-ramp locations and east/west access to Terminal 6 in North Portland.
- Interest in future engagement regarding alignment and number of lanes through the program area.
- Concern that current exponential freight volume growth may increase congestion connected with I-205.



5. SCREENING PROCESS

5.1 Overview of Process

The IBR program, in collaboration with agency partners and advisory groups, used an iterative process to develop the modified LPA. This involved first identifying relevant physical and contextual changes that have occurred since 2013. To address these changes in accordance with Purpose and Need and with an equity and climate lens, the IBR program developed and refined desired outcomes, screening criteria, design concepts, and transit investments. These components were developed and refined through the engagement avenues highlighted in Section 4. This development process provided a continual feedback loop to advance work while incorporating input, allowing the IBR program to arrive at a modified LPA that truly encompasses the values and priorities of partner agencies and the community.

5.2 Screening Metrics

Screening metrics that reflect the program's Purpose and Need and desired outcomes were developed in Fall 2021. Screening metrics are specific, measurable metrics that provide differentiating data between the design options for a given program component (e.g., the river crossing). The metrics were used during screening to identify the benefits and trade-offs between the design options and ultimately assessed how well a design option met the Purpose and Need and desired outcomes (see Table 1 and Table 2).

Working in collaboration with partners, the IBR design and environmental teams developed a menu of potential screening metrics for design components through an iterative process, including input from the EAG, who reviewed and identified screening metrics that could be used to advance the program's equity objectives. See Section 5.3 for a description of how equity and climate were embedded in the screening process.

To align with Purpose and Need and desired outcomes, the metrics were organized into the following categories:

- Climate Impacts/Adaptation
- Natural Environment
- Built Environment
- Active Transportation
- Transit Access
- Vehicles



- Freight
- Cost
- Seismic

As screening metrics were developed, IBR staff, partner agencies, and the EAG identified whether a metric was representative of a desired outcome, an equity objective, or a climate objective; in many cases, a metric was representative of more than one desired outcome or objective. Additional metrics were identified to help assess a design option's effects on the natural and built environment. Metrics were modified during the evaluation process if it became apparent that additional differentiators were needed or if the selected metrics were not highlighting differences among the options.

5.3 Equity and Climate Lenses

The task forces and the EAG identified whether a screening metric was related to or could be used to measure the design option's equity and/or climate performance. The following equity objectives apply to the screening of high-level design options, and were subsequently included in the screening process:

- AH Avoid further harm: Avoid rather than simply mitigate disproportionate impacts on equity priority groups.
- CB Community benefits: Find opportunities for and implement local community improvements in addition to required mitigations.
- EO Economic opportunity: Ensure that economic opportunities generated by the program benefit minority and women owned firms, BIPOC workers, workers with disabilities, and young people.
- MA Mobility and accessibility: Improve mobility, accessibility, and connectivity, especially for lower income travelers, people with disabilities, and communities who experience transportation barriers.
- PD Integrate equity, area history, and culture into the physical design elements of the program, including bridge aesthetics, artwork, amenities, and impacts on adjacent land uses.

The IBR program's climate objectives were developed in collaboration with agency partners, advisory groups, and the community. The following climate objectives were included in the screening process for consideration of design options:

- ACT Supports mode shift to low or no emission travel (i.e., active transportation: walking, rolling, biking)
- CC Supports complete communities



- CONST compatible with low carbon construction
- ITS Supports intelligent transportation systems
- O&M Supports low emission operations and maintenance
- RES Improves resilience to uncertain climatic conditions
- RID Reduces idling of vehicles (freight, single-occupancy vehicles, transit)
- TRA Supports mode shift to transit (i.e., improves access, travel time, reliability, etc.)

During screening, each design option received a rating under the "Equity Lens" and "Climate Lens". These ratings range from low to high and are based on how a design option scored on equity-specific and climate-specific metrics, as well as other metrics that were correlated to equity and/or climate objectives.



6. HAYDEN ISLAND AND MARINE DRIVE

The primary design considerations for Hayden Island and Marine Drive were the interchange type on Hayden Island and resulting multimodal connections with Marine Drive and I-5. The IBR program evaluated multiple concepts, ultimately advancing full, partial, and no interchange options for Hayden Island into the screening process. All design options included a full interchange at I-5/Marine Drive, an arterial bridge across North Portland Harbor to serve local traffic, a shared-use path for active transportation connecting north Portland, Hayden Island and the 40-mile loop, and the realignment of N Tomahawk Island Drive to provide an additional east-west local street connection on Hayden Island.

6.1 Identifying Changes and Community Priorities

The IBR program identified the following changes in conditions since 2013 and current community priorities related to Marine Drive and Hayden Island through advisory group input, community feedback, and input from agency partners serving on the Hayden Island/Marine Drive task force. These changes necessitated the development of design options for the Marine Drive and Hayden Island interchanges.

6.1.1 Changes since 2013

- North Portland Harbor Bridge Over the past decade, the need to replace this seismically deficient structure has increased. The IBR program will replace the North Portland Harbor Bridge to improve seismic resiliency in the corridor.
- **Levee** USACE, in partnership with the Multnomah County Drainage District, is planning improvements to the existing levee along the south side of the harbor. It is anticipated that the new levee design will require any improvements associated with the IBR program to stay above a 40-foot elevation (North American Vertical Datum of 1988).
- **Land use** Changes in planned land use at the west end of Hayden Island (a marine terminal is no longer planned for Hayden Island).
- **Traffic** Increased auto and freight volumes in the project area and updated the design year for the program from 2030 to 2045.



6.1.2 Community Input

Feedback from the CAG on the Hayden Island and Marine Drive interchange area changes and needs included:

- Congestion relief and safety are priorities.
- A desire for a local connection between north Portland and Hayden Island
- A need for active transportation facilities and multimodal connections in the program area between north Portland and Hayden Island and the I-5 bridge over the Columbia River
- The desire to maintain and/or improve east-west connectivity across Hayden Island.

6.1.3 Climate and Equity Considerations

6.1.3.1 Equity

To evaluate the IBR program through an equity lens, the following input was received from the EAG:

- The desire to maintain and/or improve east-west connectivity across Hayden Island.
- Access to the significant number of retail and service industry jobs located in the area.
- The high proportion of older adults and people with disabilities living on Hayden Island.
- The relationship between the program's footprint and opportunities for ancillary development.
- The need to minimize displacement or other impacts to the houseless population.

6.1.3.2 Climate

To evaluate the IBR program through a climate lens, the following changes and considerations were incorporated during development of the design options:

- The design options should raise the I-5 mainline and local streets above the 100-year flood elevation to protect them from sea-level and water rise associated with climate change.
- The North Portland Harbor bridge has aged beyond the point that seismic retrofitting is feasible as was proposed in the 2013 design. Replacing this bridge would improve the community's resiliency to sea level rise.
- The design options should improve multimodal connectivity to, from, and through Hayden Island and encourage a shift from vehicle trips to low or no emissions travel (i.e., bike, walk, roll).

Project Elements incorporated into all options:

• Replacement of the North Portland Harbor bridge



- An arterial roadway connection between North Portland and Hayden Island
- An additional east-west local connection on Hayden Island
- Separated multi-use pathway for active transportation
- An HCT station on Hayden Island
- A full interchange at I-5/Marine Drive.

6.2 Task Force Review

The purpose of the Hayden Island/Marine Drive task force was to have focused, detailed technical discussions on what transportation improvements the IBR program could make to Hayden Island and Marine Drive, and to understand local conditions, needs, and planned transportation improvements.

The Hayden Island/Marine Drive task force met 18 times between late spring 2021 and early winter 2022. There was an average of 50 participants per meeting, with staff from 10 partner agencies and technical staff from the IBR program. The task force discussions covered a wide variety of topics, including the interchange compatibility and function, integration of active transportation improvements, connections to the local street network, and reducing environmental impacts. These discussions assisted in the identification of site-specific needs and refining metrics for screening design options.

The IBR design team developed eight preliminary design concepts based on numerous design iterations and in fall 2021, completed a tradeoffs matrix with the task force to identify design options to be advanced into screening.

The IBR team developed the tradeoffs matrix with the goal of advancing one full interchange design option, one partial interchange design option, and one no-interchange design option at Hayden Island through screening. The tradeoffs matrix listed features and challenges based on design work for task forces in summer/fall of 2021. Features and challenges included footprint, safety, mobility, access & connectivity for auto, freight, transit, and active transportation, constructability, seismic resiliency, compatibility with other project components.

Each of the four full interchange design options (including the 2013 design) received a plus or minus for each feature/challenge relative to other full interchange design options (but not relative to partial and no interchange design options). This was also completed for each of the three partial interchange design options, and for the one no interchange option. Based on the features and challenges, the IBR team prepared a draft recommendation on whether to advance or not advance each design option into screening and provided supporting documentation to support each recommendation.



The IBR team received feedback from the task force on the tradeoff matrix features/challenges, pluses/minuses, and the recommendation/rationale. An additional partial interchange option was developed at this stage to address the traffic, safety, and design issues identified with the other partial interchange options.

6.3 Design Options Selected for Screening

Following agency and public input, the Hayden Island/Marine Drive task force identified five design options, in addition to the 2013 Design, to advance for screening:

- Design Option 1: Full Interchange
- Design Option 2: Partial Interchange 1
- Design Option 3: Partial Interchange 2
- Design Option 4: No Interchange
- Design Option 5: Partial Interchange 3

All options above included a full interchange at Marine Drive.

The 2013 Design was included in the screening and compared to the design options. Each design option is described and illustrated below. Following the screening process, model graphics were created for design options that advanced into LPA discussion with project partners. High-level line drawings are provided for the design options that were not advanced. The line drawings show roadway networks beyond the anticipated project limits; the extended network is provided for illustrative purposes.

6.3.1 Design Option 0: 2013 Design

The 2013 Design, as documented in the CRC Project's Final EIS and Record of Decision, includes full interchanges on both Hayden Island and Marine Drive (Figure 2). The design includes local vehicular access between Marine Drive and Hayden Island on a local multimodal bridge.

The proposed configuration at Marine Drive was a single-point urban interchange. With this configuration, the four ramps of the interchange would converge at a single signal-controlled intersection on Marine Drive over the I-5 mainline. Local traffic between Martin Luther King Jr. Boulevard/Marine Drive and Hayden Island would travel via a local multimodal bridge over North Portland Harbor, located to the west of I-5. A shared-use path west of I-5 would connect the river-crossing bridge to the 40-mile loop trail, with connections on Hayden Island. Improvements would include realignment of Expo Road.



The Hayden Island interchange would be reconfigured to improve safety for traffic merging on I-5 by providing sufficient ramp lengths parallel to I-5. Improvements would be included for Jantzen Drive and Hayden Island Drive; the roadways would be improved from a three-lane to a five-lane configuration to facilitate traffic using the interchange.

Figure 2. Design Option 0: 2013 Design





6.3.2 Design Option 1: Full Interchange

Like the 2013 LPA, Design Option 1 includes full interchanges on both Hayden Island and Marine Drive (Figure 3). This option would have a full, split tight diamond interchange at Hayden Island and a single-point urban interchange at Marine Drive. A shared-use path west of I-5 would connect the river-crossing bridge to the 40-mile loop trail, with connections on Hayden Island.

Local street connections on Hayden Island would be maintained under I-5 with some variations, including a third crossing under I-5 for Tomahawk Island Drive. An arterial bridge would connect Hayden Island to Expo Road (west of I-5) and Pier 99 Street. Roadway infrastructure would be farther west in comparison with the 2013 LPA to accommodate the replacement of the North Portland Harbor Bridge.



Figure 3. Design Option 1: Full Interchange



6.3.3 Design Option 2: Partial Interchange 1

Design Option 2 would include a folded diamond interchange at Marine Drive and a half diamond interchange on Hayden Island (Figure 4). The partial interchange on Hayden Island would provide direct ramp connections between Jantzen Drive and I-5 north of Hayden Island. Hayden Island traffic travelling to/from the south would access I-5 by at the Marine Drive interchange through an arterial bridge that connects Tomahawk Island Drive and Marine Drive. A shared-use path west of I-5 would connect the river-crossing bridge to the 40-mile loop trail, with connections on Hayden Island.

Local street connections on Hayden Island would be maintained under I-5 with some variations, including a third crossing under I-5 for Tomahawk Island Drive. An arterial bridge would connect Hayden Island to Expo Road (west of I-5) and Pier 99 Street. Roadway infrastructure would be farther west in comparison with the 2013 LPA to accommodate the replacement of the North Portland Harbor Bridge.



Figure 4. Design Option 2: Partial Interchange 1



6.3.4 Design Option 3: Partial Interchange 2

Design Option 3 would also have a folded diamond interchange at Marine Drive and a half diamond interchange on Hayden Island (Figure 5). Design Option 3 would have the same west arterial bridge configuration as Design Option 2, and an additional arterial bridge east of I-5. The arterial bridge east of I-5 would provide a connection between Tomahawk Island Drive and Vancouver Way. A shared-use path would connect the river-crossing bridge to the 40-mile loop trail via the east arterial bridge, with connections on Hayden Island.

Local street connections on Hayden Island would be maintained under I-5 with some variations, including a third crossing under I-5 for Tomahawk Island Drive. An arterial bridge would connect Hayden Island to Expo Road (east of I-5) and Pier 99 Street. Roadway infrastructure would extend farther west in comparison with the 2013 LPA to accommodate the replacement of the North Portland Harbor Bridge.



Figure 5. Design Option 3: Partial Interchange 2



6.3.5 Design Option 4: No Interchange

Under this design option, there would be no interchange on Hayden Island (Figure 6). Similar to Design Options 2 and 3, a folded diamond interchange would be located be at Marine Drive. All access to/from Hayden Island would be provided through the Marine Drive interchange with two arterial bridges that connect Tomahawk Island Drive to Marine Drive. A shared-use path would connect the river-crossing bridge to the 40-mile loop trail via the east arterial bridge, with connections on Hayden Island.

Local street connections on Hayden Island would be maintained under I-5 with some variations, including a third crossing under I-5 for Tomahawk Island Drive. An arterial bridge would connect Hayden Island to Expo Road (east of I-5) and Pier 99 Street. Roadway infrastructure would extend farther west in comparison with the 2013 LPA to accommodate the replacement of the North Portland Harbor Bridge.



Figure 6. Design Option 4: No Interchange



6.3.6 Design Option 5: Partial Interchange 3

During the screening process, the Hayden Island/Marine Drive task force identified design and operational flaws in Design Options 2 and 3 (Partial Interchange) that made them infeasible. In particular, routing all Hayden Island traffic to/from the south through Marine Drive folded diamond interchange resulted in heavy traffic volumes on Marine Drive ramps that could not be accommodated in a safe manner. As a result, the task force developed a new partial interchange option (Design Option 5) that would address the issues identified in Design Options 2 and 3.

Similar to Design Options 2 and 3, the partial interchange configuration under Design Option 5 would provide I-5 ramps to/from the north to Hayden Island via Jantzen Drive (Figure 7). However, Design Option 5 would use single point urban interchange at Marine Drive similar to Design Option 1 to counter some of the challenges posed by the folded diamond interchange configuration.



Figure 7. Design Option 5: Partial Interchange 3

Hayden Island traffic to/from the south would use an arterial bridge east of I-5 between Tomahawk Island Drive and Vancouver Way to connect to two new I-5 ramps. The new I-5 ramps would cross under Marine Drive and connect to the arterial bridge through new interchange ramp terminals on



Pier 99 Street. Similar to Design Option 3, a shared-use path would connect the river-crossing bridge to the 40-mile loop trail via the east arterial bridge, with connections on Hayden Island.

Local street connections on Hayden Island would be maintained under I-5 with some variations, including a third crossing under I-5 for Tomahawk Island Drive. An arterial bridge would connect Hayden Island to Expo Road (east of I-5) and Pier 99 Street. Roadway infrastructure would extend farther west in comparison with the 2013 LPA to accommodate the replacement of the North Portland Harbor Bridge.

6.4 Hayden Island and Marine Drive Results

The five design options described in Section 6.3, in addition to the 2013 design, advanced from initial task force discussions to screening. During screening, the task force collected data for approximately 90 metrics and scored each design option against each other for a given metric. As described below, the task force recommended two design options for further consideration (Sections 6.4.2 and 6.4.1) The results are based on conceptual design and intended for a high-level screening effort; more precise estimates of impacts will be developed as the design is refined further.

6.4.1 Design Options Not Recommended for Consideration in the Draft Modified LPA

6.4.1.1 Design Options 2 and 3

During the screening process, the task force identified traffic and design flaws in Design Options 2, 3, and 4. From a traffic perspective, high off-ramp volumes (1,600 to 2,000 vehicles per hour during the AM peak in 2045; 18 percent of which are trucks) would exceed the southbound I-5 loop ramp capacity under Design Options 2 and 3.

From a design perspective, the location of the loop ramp would not provide sufficient room to provide the distance required to navigate multiple lanes on a steep curve in a safe manner. The steep grade from I-5 to Marine Drive is also not preferable for freight traffic. The curve of the loop ramp, the steep grade, and limited sight distance for vehicles precluded the design from providing sufficient storage length for the high traffic volumes accessing the intersection on Marine Drive.

Design Options 2 and 3 were not advanced to the LPA discussion since they would not serve the high traffic and freight volumes in a safe manner and would not meet the Purpose and Need.



6.4.1.2 Design Option 4

Based on preliminary traffic data, Design Option 4 (No Interchange on Hayden Island) was expected to have similar issues as Design Options 2 and 3. The magnitude of the traffic impacts would be greater because all Hayden Island traffic would have to use the Marine Drive Interchange. This would result in substantial traffic/freight impacts on Marine Drive and the ramp terminal intersections. The resulting ramp queueing from Marine Drive onto I-5 would also create unsafe conditions related to speed differences in merging traffic. These findings are consistent with previous planning studies that investigated combining the Hayden Island and Marine Drive interchanges into one interchange. For these reasons, Design Option 4 would not serve the high traffic/freight volumes and would not meet the Purpose and Need. Therefore, this option was not advanced.

6.4.2 Design Options Recommended for Consideration in the Draft Modified LPA

The task force recommended Design Options 1 and 5 for Hayden Island/Marine Drive. The 2013 LPA (Design Option 0) was included in the screening for comparison to Design Options 1 and 5, but it is not recommended to be advanced for inclusion in the Draft Modified LPA. The 2013 LPA was not recommended for several reasons, including that it would retain the aging North Portland Harbor bridge, which does not meet the seismic resiliency desired across the Columbia River. Furthermore, it does not include a Tomahawk Island Drive or Vancouver Way extension and results in a larger footprint on Hayden Island.

Figure 8 shows the screening summaries side-by-side for each of the three design options.

Figure 8. Hayden Island/Marine Drive – Relative Design Option Comparison



Table 3, Table 4, and Table 5 provide additional detail on the tradeoffs and benefits associated with Design Options 0, 1, and 5, respectively.

Table 2	Marino	Drivo/Hay	idon Island	Docian	Option 0	Scrooning	Summary
Table J.	Manne	Dirve/ria	yuen island	i Desigir	option o	- Screening	Summary

Screening Category	Score	Design Option 0 Tradeoffs/Benefits
Climate Impacts/Adaptation	•	 Larger construction footprint (comparison is not based on expected user emissions) Addresses future river elevation and integrates with new Levee Ready Columbia flood protection improvements (RES)
Natural Environment	•	Larger footprint over aquatic habitatLarger footprint over terrestrial habitat



Screening Category	Score	Design Option 0 Tradeoffs/Benefits
Built Environment	•	 Most non-residential building impacts (AH) More floating home displacements (AH) Large scale and complexity of I-5 structures over Hayden Island challenge for local placemaking opportunities (AH, CB, CC) Greater extent of local streets subject to IAMP restrictions (CC) Does not include Tomahawk Island Drive crossing (CC)
Active Transportation	•	 Less direct north-south shared use path (MA, ME) Lower quality of active transportation experience on east-west streets (MA, ME) Higher number of SUP road/transit crossings (MA)
Transit Access	0	 Less east-west island connectivity because it does not include Tomahawk Island Drive (MA, ME) Wider highway footprint (ME)
Vehicles	•	 Intersection traffic operations meet ODOT and City of Portland performance standards at Hayden Island and Marine Drive study area intersections (RI)
Freight		• Freight to/from Marine Drive area operates acceptably with minimal delay through the interchange (RID)
Cost	•	Lower construction costHigher estimated O&M cost
Seismic	0	• Seismic retrofits North Portland Harbor Bridge; does not replace



Screening Category Score Design Option 0 Tradeoffs/Benefits

Equity Objectives

AH = Avoid further harm; CB = Community benefits; EO = Economic opportunity; MA = Mobility and accessibility; ME = Multimodal environmental

Climate Objectives

ACT = Supports mode shift to low or no emission travel (i.e., active transportation: walking, rolling, biking); CC = Supports complete communities; CONST = Compatible with low carbon construction; ITS = Supports intelligent transportation systems; O&M = Supports low emission operations and maintenance; RES = Improves resilience to uncertain climatic conditions; RID = Reduces idling of vehicles (freight, single-occupancy vehicles, transit); TRA = Supports mode shift to transit (i.e., improves access, travel time, reliability, etc.)

Abbreviations

IAMP = interchange area management plan; ODOT = Oregon Department of Transportation; O&M = operation and maintenance; SUP = shared-use path

Scoring System

 $\mathsf{Good} \rightarrow \mathsf{Best}$



Screening Category	Score	Design Option 1 Tradeoffs/Benefits
Climate Impacts/Adaptation	•	 Larger construction footprint (comparison is not based on expected user emissions) Addresses future river elevation and integrates with new Levee Ready Columbia flood protection improvements (RES)
Natural Environment	•	Larger footprint over aquatic habitatLarger footprint over terrestrial habitat
Built Environment	•	 Fewer non-residential building impacts (AH) Most floating home displacements (AH) Large scale and complexity of I-5 structures over Hayden Island challenge for local placemaking opportunities (AH, CB, CC) Greater extent of local streets subject to IAMP restrictions (CC) Includes Tomahawk Island Drive crossing (CC)

Table 4. Marine Drive/Hayden Island Design Option 1 – Full Interchange Screening Summary



Screening Category	Score	Design Option 1 Tradeoffs/Benefits
Active Transportation	٩	 More direct north-south shared use path (MA, ME) Lower quality of active transportation experience on east-west streets (MA, ME) Higher number of shared use path (SUP) road/transit crossings (MA)
Transit Access	•	 Inclusion of Tomahawk Island Drive improves east-west island connectivity (MA, ME) Wider highway footprint (ME)
Vehicles	•	 Intersection traffic operations meet ODOT and City of Portland performance standards at Hayden Island and Marine Drive study area intersections (RID)
Freight	•	• Freight to/from Marine Drive area operates acceptably with minimal delay through the interchange (RID)
Cost	•	Higher construction cost
Seismic	•	Replaces North Portland Harbor Bridge

Equity Objectives

AH = Avoid further harm; CB = Community benefits; EO = Economic opportunity; MA = Mobility and accessibility; ME = Multimodal environmental

Climate Objectives

ACT = Supports mode shift to low or no emission travel (i.e., active transportation: walking, rolling, biking); CC = Supports complete communities; CONST = Compatible with low carbon construction; ITS = Supports intelligent transportation systems; O&M = Supports low emission operations and maintenance; RES = Improves resilience to uncertain climatic conditions; RID = Reduces idling of vehicles (freight, single-occupancy vehicles, transit); TRA = Supports mode shift to transit (i.e., improves access, travel time, reliability, etc.)

Abbreviations

IAMP = interchange area management plan; ODOT = Oregon Department of Transportation; O&M = operation and maintenance; SUP = shared-use path

Scoring System



Table 5. Marine Drive/Hayden Island Design Option 5 – Partial Interchange Screening Summary

Screening Category	Score	Design Option 5 Tradeoffs/Benefits
Climate Impacts/Adaptation	•	 Smaller construction footprint (comparison is not based on expected user emissions) Addresses future river elevation and integrates with new Levee Ready Columbia flood protection improvements (RES)
Natural Environment	•	 Smaller footprint over aquatic habitat Smaller footprint over terrestrial habitat Levee closure structure part of freeway interchange ramps
Built Environment	•	 Fewer non-residential building impacts (AH) Least floating home displacements (AH) Smaller scale and complexity of I-5 structures over Hayden Island is less challenging for local placemaking opportunities (AH, CB, CC) Lesser extent of local streets subject to IAMP restrictions (CC) Includes Tomahawk Island Drive crossing (CC)
Active Transportation	•	 Most direct north-south shared use path (MA, ME) Higher quality of active transportation experience on east-west streets (MA, ME) Lower number of shared use path (SUP) road/transit crossings (MA)
Transit Access	•	 Inclusion of Tomahawk Island Drive improves east-west island connectivity (MA, ME) Narrower highway footprint (ME)
Vehicles	•	 Intersection traffic operations meet ODOT and City of Portland performance standards at Hayden Island and Marine Drive study area intersections (RID) Longer routing and more challenging wayfinding for Hayden Island traffic to/from Portland via I-5 and/or Interstate Ave.



Screening Category	Score	Design Option 5 Tradeoffs/Benefits
Freight	•	 Freight to/from Marine Drive area operates acceptably with minimal delay through the interchange (RID)
Cost	0	Higher construction cost
Seismic	•	Replaces North Portland Harbor Bridge

Equity Objectives

AH = Avoid further harm; CB = Community benefits; EO = Economic opportunity; MA = Mobility and accessibility; ME = Multimodal environmental

Climate Objectives

ACT = Supports mode shift to low or no emission travel (i.e., active transportation: walking, rolling, biking); CC = Supports complete communities; CONST = Compatible with low carbon construction; ITS = Supports intelligent transportation systems; O&M = Supports low emission operations and maintenance; RES = Improves resilience to uncertain climatic conditions; RID = Reduces idling of vehicles (freight, single-occupancy vehicles, transit); TRA = Supports mode shift to transit (i.e., improves access, travel time, reliability, etc.)

Abbreviations

IAMP = interchange area management plan; ODOT = Oregon Department of Transportation; O&M = operation and maintenance; SUP = shared-use path

Scoring

Good → Best

Design Options 1 and 5 performed best out of all Design Options. They have similar freight/vehicle traffic performance on Marine Drive, including ramp terminal intersections. Design Options 1 and 5 are compatible with all transit investments currently under consideration. Table 6 shows additional benefits and tradeoffs between Design Options 1 and 5 side-by-side.

Table 6. Marine Drive/Hayden Island Interchange Design Options 1 and 5 Tradeoffs and Benefits

Design Option 1: Full Interchange	Design Option 5: Hybrid/Partial Interchange
Larger footprint over North Portland Harbor	Smaller footprint over North Portland Harbor
More floating home impacts	Fewer floating home impacts


Design Option 1: Full Interchange	Design Option 5: Hybrid/Partial Interchange
Larger scale/complexity of I-5 over Hayden Island	Smaller scale/complexity of I-5 over Hayden
provides lower quality experience for active	Island provides higher quality experience for
transportation and transit access on east-west	active transportation and transit access on east-
streets	west streets
Hayden Island vehicle/freight access to/from Portland via Hayden Island Drive I-5 ramps	Hayden Island vehicle/freight access to/from Portland via local roads and I-5 ramps that cross under Marine Drive
Hayden Island vehicle/freight access to/from	Hayden Island vehicle/freight access to/from
Vancouver via Jantzen Drive I-5 ramps	Vancouver via Jantzen Drive I-5 ramps

The screening was also considered through an equity lens and through a climate lens (Figure 9). Design Option 1 scored medium from an equity perspective and Design Option 5 scored high. Design Option 1 scored medium-high from a climate perspective and Design Option 5 scored high. The criteria that were considered in the equity and climate lenses are indicated in Table 5 and Table 6, above.

Figure 9. Hayden Island/Marine Drive Design Options 1 and 5 Equity and Climate Lens





Based on the screening results, the task force **recommended** advancing Design Options 1 and 5 for consideration in the Modified Draft LPA.

Option 5 was added later in the evaluation process, in response to preliminary screening results on the other partial interchange options. It will be further studied and refined in the environmental process. Specific areas for further study and design refinement include but are not limited to:

- Moving interchange ramp terminals onto a local street, and the associated change in access
- Implications of having Pier 99 Street levee between the east and west ramp terminals
- Lack of separation between local and interstate traffic on the proposed arterial bridge
- Safety issues associated with the I-5 southbound on-ramp loop from Hayden Island (configuration and active transportation connections)
- Wayfinding that is contrary to drive expectations (unconventional interchange splits and multiple turns)
- Additional traffic from Hayden Island on Expo Road (vehicle access, potential improvements, lack of interstate connection between Hayden Island and Victory Boulevard)
- Potential Vanport wetlands impacts from the proposed loop ramp/braid at Marine Drive
- Potential Delta Park 4(f) impacts from the proposed I-5 northbound off-ramp

6.5 Advisory Group Feedback

Feedback from the CAG and EAG on the Hayden Island and Marine Drive interchange configurations and screening results included:

- Wayfinding signage needs to be the priority given complexity (particularly for the partial interchange).
- Crucial to focus on the human experience and impact.
- Screening summaries demonstrate equity was incorporated into the process; however, it is still difficult to understand all the information and tradeoffs.
- Making data driven decisions is important.
- The interchange option that reduces traffic congestion the most is what should be built.
- Active transportation safety and access should be considered a priority.
- Keeping the commercial/freight industry up to date and hearing their concerns should be ongoing.
- The size of the bridge footprint over Hayden Island should be considered in decision-making.
- The ability to access Hayden Island without I-5 is important.



7. TRANSIT – MODE, GENERAL ALIGNMENT, AND TERMINI

7.1 Transit Setting

In the years since the suspension of the CRC project, transit system enhancements have been advanced in both Oregon and Washington. Notably, C-TRAN has implemented bus rapid transit (BRT) service, The Vine, in Clark County that provides service from downtown Vancouver east to Vancouver Mall along Fourth Plain Boulevard. Another line is currently under construction which will also serve downtown and extend east along Mill Plain Boulevard. Figure 10 shows the regional transit network today.



Figure 10. Regional Transit Network



Source: TriMet, C-TRAN



7.2 Transit Options Evaluated

An array of potential transit investments was developed by the IBR program and the partner agency transit technical teams to better understand how different combinations of *mode* (BRT, light rail transit [LRT]), *alignment, station locations, termini* (end points), and *park and ride locations* could perform relative to each other. Each of the representative transit investments were run through the regional travel demand model to arrive at forecasts for the year 2045. Transit demand (e.g., ridership, access mode), travel time, and access for equity-priority communities are some of the transit performance measures developed for each of the potential transit investments.

Table 7 lists the 13 representative transit investments considered to help evaluate the tradeoffs associated with choices around mode, alignment, and terminus. Appendix B includes results from the modeled representative transit investments.

Representative Transit Investment	General Description
A – No Build	The No Build reflects planned systemwide increases in background transit service by both TriMet and C-TRAN as adopted by both Metro and RTC in their Regional Transportation Plans, but reflects no replacement of the current I-5 bridge, no reconstructed interchanges, no tolls on the I-5 bridge, and no extension of additional high capacity transit service north from the existing MAX Yellow Line alignment into Vancouver.
B – 2045 CRC ROD	2013 CRC LPA project assumes fully dedicated LRT guideway extending from MAX Expo station to a terminus near McLoughlin / I-5 via the Vancouver central business district. Includes five new stations and three park and rides.
C – Bus on Shoulder	Express bus operating as Bus on Shoulder in BIA (both directions). Route 60 in auxiliary lanes between the Vancouver central business district and Hayden Island, Delta Park. No new stations or park and rides.
D – BRT Turtle Place to Expo	Dedicated BRT guideway between the MAX Expo Center Station and a terminus at Turtle Place in downtown Vancouver. Includes three initial stations: Expo, Hayden Island, Turtle Place.

Table 7. Representative Transit Investment Descriptions



Representative Transit Investment	General Description
E – BRT I-5 to Kiggins	Fully dedicated BRT guideway between the MAX Expo Center Station and a terminus near McLoughlin Blvd./I-5. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a dedicated connection to Hayden Island and Expo station similar to 2013 LPA. Includes six initial stations: Kiggins, E 33rd, McLoughlin Blvd., Evergreen Blvd., Hayden Island, Expo Center.
F – BRT in ROD Alignment	Fully dedicated BRT guideway between MAX Expo Center Station and a terminus near McLoughlin Blvd./I-5 to Expo station with alignment and station locations similar to 2013 ROD project. Includes six initial stations: I-5/McLoughlin, McLoughlin and Washington St. (SB)/16th and Broadway (NB), 12th and Washington (SB)/ 13th and Broadway (NB), Turtle Place, Hayden Island, Expo Center.
G – Hybrid	Fully dedicated LRT guideway between MAX Expo Center Station and a new station at Hayden Island and fully dedicated BRT guideway between Hayden Island and Turtle Place. Includes two initial stations (Hayden Island and the Expo Center).
H – LRT One Station in Vancouver	Fully dedicated LRT guideway between the MAX Expo Center Station and a terminus near Turtle Place in downtown Vancouver. Includes two initial stations (Hayden Island and Turtle Place).
I – LRT I-5 to McLoughlin	Fully dedicated LRT guideway between the MAX Expo Center Station and a terminus near McLoughlin Blvd./ I-5. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a dedicated connection to Hayden Island and Expo Center Station similar to 2013 LPA. Includes three initial stations: I-5/McLoughlin, Evergreen, Hayden Island.
J – LRT I-5 to Kiggins	Fully dedicated LRT guideway between MAX Expo Center Station to a terminus near I-5/Kiggins Bowl. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a dedicated connection to Hayden Island and Expo Center Station similar to 2013 LPA. Includes five initial stations: Kiggins Bowl, 33rd, I-5/McLoughlin, Evergreen, Hayden Island.



Representative Transit Investment	General Description
K – LRT Delta Park to McLoughlin	Fully dedicated LRT Extension from Delta Park (Joint Hayden Island / Expo Station) to a Terminus near McLoughlin / I-5 on an I-5 Adjacent Alignment (Center / West Side of I-5). This option was infeasible and removed from consideration early in the decision process.
L – LRT I-5 to McLoughlin with Columbia	Fully dedicated LRT guideway between MAX Expo Center Station to a terminus near McLoughlin Blvd./I-5. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a dedicated connection to Hayden Island and Expo Center Station similar to 2013 LPA. Includes four initial stations: I-5/McLoughlin, Evergreen, Waterfront, Hayden Island.
M – LRT I-5 to Evergreen with Columbia	Fully dedicated LRT guideway between MAX Expo Center Station to a terminus near I-5/Evergreen. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a dedicated connection to Hayden Island and Expo Center Station similar to 2013 LPA. Includes three initial stations: Evergreen, Waterfront, Hayden Island.

Community feedback was collected in an online survey in the fall of 2021 to understand the community's values and priorities around transit improvements, and specific preferences and travel patterns of transit users. Survey participants prioritized improved travel time as the top priority for any new transit connection across the river. Reliability, safety, and ease of use were also noted as important considerations. Survey responses also indicated that access via a park and ride would make any transit option be more likely to be used. When survey participants were asked what two potential transit stations they most anticipated using in the future, transit stations near the Vancouver Waterfront, Clark College, Expo Center Transit Station, Hayden Island, and the Vancouver Library (C Street and E Evergreen Boulevard), were the five most noted locations, with the Vancouver Waterfront ranked most often. Participants showed noted interest in the topic of transit by commenting in the open-ended comment section of the survey. With over 1,700 open ended comments received, almost half of those comments mentioned public transit, and 67 percent of those comments expressed support for expanded transit options across the bridge.



7.3 Findings

The IBR team developed measures with project partners to better understand how the representative transit investments would perform relative to each other. The measures included:

- Multiple measures of ridership demand in 2045
 - > Includes river crossings by mode
 - > Ridership by time of day
 - Mode of access
 - Walk access
 - Transfer from other transit (bus/rail)
 - Park and ride access
- Access for equity priority communities
- Relative costs
 - Capital cost
 - > Operations and maintenance cost
- Potential impacts

The IBR team found that all the build options would substantially improve transit demand over the no build option. The modeling results indicated that there is very strong demand for cross river transit service and therefore capacity, for both the representative transit investment and other routes in the program corridor, are important considerations for identifying a modified LPA To accommodate the high level of demand, it is suggested that the project include a combination of BRT, LRT, and express bus. Any option considered would include the provision of bus on shoulder capability. The high transit demand and mode diversification needed to meet that demand would require efficient and comfortable connections in the C-TRAN and TriMet systems. When comparing the same representative alignment, LRT options would have higher ridership than BRT options. When comparing the same representative alignment, LRT options would have higher capital cost and lower operations cost per rider than BRT options.

The IBR team found that representative transit investments that include more stations would serve a higher number of residents within walking distance, including BIPOC and low-income populations. All transit investments would improve access to jobs, including BIPOC and low-income populations. LRT investments would improve access to jobs to a greater degree than BRT investments. Park and ride demand is robust in all the representative transit investment scenarios, with the greatest demand attributed to those that are largest and provide the most convenient access from I-5.



7.4 Mode Considerations

The program is considering three transit modes to meet transit demand: Bus on Shoulder, BRT, and LRT. As stated above, a transit investment that serves the identified markets and attempts to serve demand, would need to include a combination of BRT, LRT, and express bus. Bus on Shoulder capability was included in all representative transit investments and was removed as a standalone transit option. When considering the specific needs of the HCT investment for the IBR program, the project recommends LRT as the locally preferred mode.

LRT provides the following benefits over BRT:

- Capacity on LRT options allows the program to maximize trips provided across the river.
- LRT allows for preservation of the C-TRAN Vine and express bus current and future system while providing convenient connections to new LRT stations.
- LRT also offers more competitive travel time compared with trips that require a transfer at Expo.
- An LRT extension of the Max Yellow Line from the Expo Center into Vancouver best integrates existing transit investment in the region.
- Projects with predominant LRT features are typically more competitive for FTA discretionary funding.

7.5 Alignment Considerations

The program needs to integrate new transit investments while considering the existing and planned transit networks of TriMet and C-TRAN. C-TRAN has developed and begun implementation of The Vine BRT network with one BRT line in operation, one is construction, and one in planning. The Vine and C-TRAN express bus service provide frequent and reliable service within Clark County and to downtown Portland, respectively. Any transit investment should be made with a desire to complement The Vine system, including existing and planned service.

The City of Vancouver has worked with C-TRAN to design station environments for The Vine system on Broadway and Washington in the Central Business District. With these investments in mind, it is desirable to adjust the alignment to provide more efficient functionality within the larger transit network and respective operating environments. Given these considerations, the program recommends the I-5 general alignment (See Recommended General Alignment in Figure 11 below).



Figure 11. Representative Alignments and Recommended General Alignment for the IBR Program

Representative Alignments



Recommended General Alignment



To/Through Broadway/Washington	
Transit Couplet	I-5 Running/Adjacent
Expo to Turtle Place	Expo to Evergreen
2013 LPA (Expo to Clark College)	Expo to I-5 McLoughlin
	Expo to Kiggins

I-5 Running/Adjacent
Expo to Evergreen
Expo to I-5 McLoughlin
Expo to Kiggins



7.6 Terminus Considerations

A terminus near Evergreen Blvd. is proposed as the final of three new light rail stations connecting Portland and Vancouver. Considerations for the Evergreen terminus include:

- Evergreen terminus has fewer potential property impacts
- Connects directly to downtown library, jobs, services and amenities
- Evergreen terminus supports transit-oriented development opportunities at Library Square and on nearby City-owned parcels
- Evergreen terminus maximizes transfer opportunities given direct connections to several local routes as well as planned BRT routes
- Evergreen connects east over I-5 to the Historic Reserve, and west through downtown to Main Street and Esther Short Park via planned 9th Street pedestrian way

Figure 12 shows the proposed alignment of the LRT with the planned transit system connections.



Figure 12. Proposed LRT Alignment with Planned Transit System Connections



7.7 Advisory Group Feedback

Feedback from the CAG and EAG on the transit analysis included:

- Rely on data, especially potential rider demographics.
 - > A one-seat ride is desirable, and the fewer transfers riders need to make the better, especially considering impacts on people with disabilities.
 - > The Equity Framework needs to be front and center in evaluating options.
 - > Gentrification and displacement are major concerns.
 - There needs to be strong coordination between TriMet and C-TRAN to ensure the functionality of the overall transit system.
- Improving travel time and reducing congestion is a priority.
- Bicycle and active transportation improvements are important.
- Seismic resiliency (of the transit mode) is important.
- More options to cross the river are needed.
- Climate considerations are important.
- Reliability of mode is important.
- Crime statistics on different transit modes would be good to see.
- Bi-state cooperation is considered when deciding a mode.
- Protect and honor cultural history when looking at impacts and design.
- Including The Vine in all transit options is a good idea.
- BRT less desirable especially if ending at Delta Park.
- LRT is most dependable and has greater ridership capacity.
- LRT is a signal of where transit-oriented development should be focused.
- From a freight perspective, the investment that leads to less traffic is best, which points to LRT.
- Predictive modeling is needed.
- Consensus for LRT is desirable.
- Having park and rides is important
- For LRT, the terminus is important.
- Equity perspective is needed extend terminus further than Evergreen.
- Express bus is important, so glad to see that its staying.



8. AUXILIARY LANES

8.1 What are Auxiliary Lanes?

Auxiliary lanes are ramp-to-ramp connections that allow vehicles to enter and exit the roadway outside of through traffic lanes (see Figure 13). These connections currently exist on I-5 in the program area and various other locations in the Portland Metro region (e.g., Highway 217 off-ramp to the Lower Boones Ferry Road off-ramp near Tualatin, Oregon). For a video overview of auxiliary lanes in the Interstate Bridge program area, see: <u>https://www.youtube.com/watch?v=edNXrvcvAFI</u>.

Compared to a no build scenario, adding an auxiliary lane(s) will provide substantial safety benefits, as well as some congestion relief. Congestion relief will help reduce cars idling in traffic and associated greenhouse gas emissions. Congestion relief will also improve travel time reliability, increasing equitable outcomes for those populations that depend on cars and transit to access jobs. Auxiliary lanes also help meet freight needs to allow for better movement of goods through the program area. While the extension of HCT from Portland to Vancouver will increase transit ridership, models show that people will continue to traverse the bridge in vehicles, and auxiliary lanes are an important part of improving mobility and safety to meet the needs of current and future travelers.

The use of auxiliary lanes improves traffic safety and reliability by providing sufficient merge, diverge, and weaving lengths. Through traffic is able to maintain fuel-efficient driving speeds. Vehicles entering and exiting the highway have space to accelerate and decelerate without impeding traffic flow.





Figure 13. Auxiliary Lanes (Ramp-to-Ramp Connections)

As seen in Figure 14, auxiliary lanes are prevalent throughout the existing IBR program area. The following existing interchange locations within the IBR program area (from south to north) contain auxiliary lanes:

- To/from Interstate Avenue/ Victory Boulevard
- To/from Marine Drive
- To/from Hayden Island
- To/from SR 14
- To/from Mill Plain Boulevard
- To/From Fourth Plain Boulevard
- To/from SR 500/39th Street
- To/from 39th Street
- To/from Main Street



Figure 14. Existing Auxiliary Lanes in the IBR Program



Northbound I-5 at Marine Drive on-ramp auxiliary lane



Southbound I-5 at Mill Plain Boulevard off-ramp auxiliary lane





A best practice is to space interchanges at least one mile apart in urban areas. As seen in Figure 15, all seven of the interchanges within the IBR program area are spaced below minimum standards of 1 mile between interchanges, which is the distance that safely allows for merging and diverging.



Figure 15. Existing Interchange Spacing

Standard spacing – Desirable = 2 miles, Minimum = 1 mile

From 2015 to 2019, 55 percent of vehicle crashes within the IBR program area were the result of rearend collisions and 19 percent were sideswipe crashes. Rear-end collisions are usually a result of traffic congestion and a large difference in vehicle speeds. Short interchange spacing contributes to unsafe sideswipe crashes. Auxiliary lanes will help address these issues by providing separation between through traffic and ramp-ramp traffic, and providing sufficient acceleration and deceleration areas, resulting in a decrease in conflicts between high and low-speed traffic.

8.2 Design Options

It is assumed that IBR would maintain the existing through-lanes across the bridge to match the context of the roadway on either side of the bridge, which also has three through-lanes. As part of the modified LPA process, the program is reviewing the addition of one or two auxiliary lanes across the bridge. Future discussions will occur around possible auxiliary lanes to the north and south of the bridge. Three through-lanes will also be necessary to maintain across the bridge throughout construction to avoid further impacting mobility within the corridor and reliability for travelers on I-5.

The IBR program is investigating ways to implement auxiliary lanes to accommodate the close interchange spacing, short merges, weaves and diverges, and better accommodate high on-ramp and off-ramp volumes. These improvements would result in improved safety, a decrease in vehicle



crashes, and more balanced travel lanes. Project design solution considerations for auxiliary lanes include:

- Solutions for substandard ramp spacing include adding auxiliary lanes, collector-distributor lanes, and braided ramps
- Heavy volume ramps and lane balance
- Through traffic vs entering/exiting traffic speed differential
- Freight needs (volumes, grades, ramp design)

8.3 Auxiliary Lane Analysis for Modified LPA

Auxiliary lane analysis was completed by modeling 2045 forecast traffic volumes for the following Design Options:

- No Build in 2045
- Three through and two auxiliary lanes in 2045
- Three through and one auxiliary lane in 2045

Traffic volume modeling completed by the program shows an increase of merging vehicles in the 2045 Build Scenario. More vehicles merging onto the mainline creates more conflicts and safety issues at highway ramps. There will be a greater need for auxiliary lanes to minimize those conflicts and create safer traffic operations at the bridge.

Compared to the No Build, building a multimodal project with either one or two auxiliary lanes will provide:

- Mode choice benefits (HCT, bus on shoulder and active transportation)
- Reduces overall congestion
- Off-peak benefits, including weekends
- Less diversion to local streets
- Faster congestion recovery from crashes and incidents
- Fewer lane changes required (i.e., lane balance)
- Large safety improvements
- Lane widths to allow for current vehicle widths, turning, and comfort
- Fewer sideswipe crashes
- Anticipated greenhouse gas reduction due to less congestion



Supplemental benefits of providing one auxiliary lane include:

- Travel time improvements compared to No Build
 - Southbound AM travel time is reduced by 3 minutes (5 percent faster) between I-5/I-205 split and I-405.
 - Northbound PM travel time is reduced by 11 minutes (30 percent faster) between Broadway Avenue and SR 500.

Supplemental benefits of providing two auxiliary lanes include:

- Travel time improvements compared to No Build
 - Southbound AM travel time is reduced by 6 minutes (10 percent faster) between I-5/I-205 split and I-405.
 - Northbound PM travel time is reduced by 25 minutes (70 percent faster) between Broadway Avenue and SR 500.
- Reduced congestion compared to No Build
 - > Congestion reduces 20 percent during the 8-hour AM/PM peak period.

Figure 16 through Figure 19 present the results of the Auxiliary Lane analysis.



Figure 16. Auxiliary Lanes – Traffic Summary



Note: Transit demand exceeds peak 1-hour capacity on all modes of transit crossing the river. The mode share numbers shown assume excess peak 1-hour demand cannot be accommodated and therefore has been shifted back to the auto mode.





Figure 17. Auxiliary Lanes – No Build

Note: Transit demand exceeds peak 1-hour capacity on all modes of transit crossing the river. The mode share numbers shown assume excess peak 1-hour demand cannot be accommodated and therefore has been shifted back to the auto mode. Travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.





Figure 18. Auxiliary Lanes – One Auxiliary Lane

Note: Transit demand exceeds peak 1-hour capacity on all modes of transit crossing the river. The mode share numbers shown assume excess peak 1-hour demand cannot be accommodated and therefore has been shifted back to the auto mode. Travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.





Figure 19. Auxiliary Lanes – Two Auxiliary Lanes

Note: Transit demand exceeds peak 1-hour capacity on all modes of transit crossing the river. The mode share numbers shown assume excess peak 1-hour demand cannot be accommodated and therefore has been shifted back to the auto mode. Travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.



8.4 Advisory Group Feedback

Feedback from the CAG and EAG on the auxiliary lanes analysis included:

- Want to understand differences in property impacts, cultural costs, and displacements between one and two auxiliary lanes
- Both travel time and environmental impacts are important from an equity standpoint
 - Consider projected demographic changes (e.g., increasing number of seniors and people with disabilities means fewer and fewer people driving)
- How does the program measure damage to the community; cultural costs and sacrifices made for more auxiliary lanes
- Consider the safety constraints and trade-offs for merging lanes vs. auxiliary lanes
- Prefer the option that maximizes capacity and minimizes congestion
- User operation of auxiliary lanes could cause confusion and complications
- Combined with transit considerations, one auxiliary lane is appropriate
- Congestion and safety are major CAG values and priorities, having auxiliary lanes addresses these priorities
- Two auxiliary lanes address congestion and is the best value; southbound morning congestion is persistent



9. IBR TOLLING SENSITIVITY ANALYSIS

In late 2021, the program received a letter (see Appendix C) from Metro and City of Portland requesting that the program analyze the impact congestion pricing and full transit capacity would have on the holistic program design, including transportation demand and the possible mode shift achievable. To address this request, the program completed a tolling sensitivity analysis.

The purpose of the tolling sensitivity work completed during screening was to understand the highlevel impacts of different toll scenarios on traffic/transit volumes on I-5 and I-205. The sensitivity testing is not to be used to generate a recommendation for toll rate structure or revenue generation along the corridor, or address toll administration. The program will complete additional analysis in the next few years to review possible toll discounts, and exemptions, and estimate possible revenue generation. Toll rates will be set by the Transportation Commissions in the 2025 timeframe. Scenarios considered in this work assumed the following:

- Tolling the Interstate Bridge only, at different levels.
- Tolling the Interstate Bridge along with a reflection of congestion pricing south of the Columbia River on I-5 and I-205 through the Portland Metro area meant to represent what is being considered ODOT's Regional Mobility Pricing Program. This program is not currently in the RTP, so was not accounted for in other modeling.

Some high-level takeaways and conclusions of this analysis are covered below. More detail on the initial results will be provided in Appendix D, anticipated to be complete by mid-May 2022. These are draft sensitivity tests that will be updated between this round of modeling (screening) and upcoming future modeling (environmental, traffic and revenue work) as additional details and refinements to assumptions are developed.

Initial takeaways of tolling sensitivity analysis:

Tolling at different rates of increase on I-5 does reduce volumes on I-5, with some trips diverting to I-205. It also results in an overall reduction in trips across the river on both I-5 and I-205. The largest reduction in cross-river travel is seen in discretionary trips rather than commute trips. There is limited impact to commute trips (e.g., home to work, or work to home, during the peak travel periods). Tolling at any level on I-5 increases transit demand. When tolling on I-5 is added along with a representation of tolling that is being studied as part of the Oregon Regional Mobility Pricing Program, more trips stay on I-5 during peak periods, rather than diverting to I-205. The addition of congestion pricing south of the river on I-5 and I-205 also results in a reduction of discretionary trips, which primarily show up in off-peak periods.



However, since tolling, and increased rates, do not significantly reduce peak period auto trips even with higher mode shares going to transit, safety improvements that include auxiliary lanes (ramp to ramp connections) are still needed to address the numerous safety issues experienced by travelers in the corridor. These safety issues include close interchange spacing that does not allow drivers adequate time to make on/off decisions, short merge, weave, and diverge spacing that does not allow space needed to accelerate to freeway speeds, and high on and off ramp volumes all entering the freeway in short distances between ramps.



10. IBR PROGRAM DEVELOPMENT OF THE MODIFIED LPA

Following screening and evaluation of the design options and transit investments, the IBR program began to develop a modified LPA for additional design and evaluation. The first step was to begin to package together options from the screening phase that address Purpose and Need, meet equity and climate objectives, and support regional and local priorities and desired outcomes. These scenarios form a conceptual foundation for the modified LPA.

10.1 Scenarios

Following screening and modeling, multiple program elements were packaged together in scenarios to evaluate the program and support decision-making for the modified LPA. The scenarios are conceptual and demonstrate how the different program-level decisions, design components, and transit investments work together to meet the IBR program's Purpose and Need and desired objectives.

The program team developed a range of scenarios to evaluate program components using traffic modeling data, transit performance measures, and Hayden Island/Marine Drive screening results and then examined using an equity and climate lens. Key variables in the scenarios are the number of auxiliary lanes (one or two), and the Hayden Island/Marine Drive interchange (full or partial). LRT as the HCT mode and system demand management (variable rate tolling) were constants across the two scenarios. The results are captured in Figure 20 through Figure 22. Additional detail on the climate and equity outcomes anticipated for the program are included in Sections 10.3 and 10.4.

The IBR scenarios include:

- A replacement river crossing
- Hayden Island/Marine Drive interchange (full or partial)
- LRT from Expo to Evergreen, with a station on Hayden Island and a waterfront station in Vancouver
- Bus on shoulder
- Variable rate tolling
- Auxiliary lanes across the bridge (one or two)
- Improved active transportation facilities on the bridge and associated local connections



Figure 20. Scenario A Results



Notes: The results are based on conceptual design and intended for a high-level screening effort; more precise estimates of impacts will be developed as the design is refined further. For illustration purposes only; not representative of specific property impacts. These travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.





Figure 21. Scenario B Results



Notes: The results are based on conceptual design and intended for a high-level screening effort; more precise estimates of impacts will be developed as the design is refined further. For illustration purposes only; not representative of specific property impacts. These travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.



Figure 22. Comparison of Scenario A and Scenario B Results



Notes: The results are based on conceptual design and intended for a high-level screening effort; more precise estimates of impacts will be developed as the design is refined further. For illustration purposes only; not representative of specific property impacts. These travel time pairs coincide with express bus routing providing comparable locations for travel time analysis.



10.2 Desired Outcomes

Table 8 and Table 9 show how the IBR program's modified LPA would meet the desired outcomes introduced in Section 3.3.

Table 8. IBR Responses to Desired Outcomes Associated with the Purpose and Need Statement

Purpose and Need for the Program	Desired Outcomes	IBR Recommendation Meets Desired Outcomes
Growing travel demand and congestion More people can move through the program area. People of all ages, abilities, and incomes have access to move through the program area, regardless of mode.	With the addition of LRT, a shared use path with many local street and existing facilities connections, and improved highway safety, more people could move through the program area more efficiently. No Build: avg. 19,400 transit crossings per weekday (8% of total crossings) LRT to Evergreen: avg. 29,500 transit crossings per weekday (13% of total crossings)	
	People of all ages, abilities, and incomes have access to move through the program area, regardless of mode.	Active transportation improvements and ADA compliance will enable pedestrians, bikers, and rollers to traverse the program area easily and safely. They will also connect with existing systems and trails. With three additional transit stations and new park and rides and the addition of both LRT and bus on shoulder on the bridge, more people will be able to access



Purpose and Need for the Program	Desired Outcomes	IBR Recommendation Meets Desired Outcomes
		transit to travel between Portland and Vancouver.
	Regional trips stay on I-5.	Improved traffic flow on I-5 will reduce trips diverted to local streets and encourage regional trips to stay on I-5.
	Travel times through the program area are faster and more predictable.	Adding an auxiliary lane to both the southbound and northbound through-lanes across the bridge, moving drivers to transit, and improving Hayden Island/Marine Drive interchange configurations will reduce idling and allow vehicles to travel more reliably through the program area.
	Increase transportation choices and efficient travel patterns through coordinated land use and transportation planning.	The IBR program is working with partner agencies to confirm that transit, highway, and active transportation improvements are consistent with regional land use and transportation planning, including planned future growth.
Impaired freight movement	Freight travel through the program area is more reliable.	Freight is a primary consideration for design. All interchanges and auxiliary lane configuration will reflect freight's needs for movement and reliability.
	Freight travel times through the program area are faster.	Freight is a primary consideration for design. All Interchanges, auxiliary lane configuration, and



Purpose and Need for the Program	Desired Outcomes	IBR Recommendation Meets Desired Outcomes
		tolling will be designed to reflect the needs of freight movement.
	Accommodates high, wide, and heavy cargo in existing and future routes.	The I-5 mainline and the program area interchanges will be designed to accommodate high, wide, and heavy cargo.
Limited public transportation operations, connectivity, and reliability	More people have access to high-quality, affordable, and reliable transit.	Light rail will be extended to Evergreen.
	Transit connects people to their origins and destinations.	A combination of light rail, connecting bus service provided by partners, and park and rides will provide more access to all for better connections to origins and destinations.
	Travel by transit is competitive with other modes.	LRT to Evergreen: avg. 29,500 transit crossings per weekday (13% of total crossings)
	More people use transit.	No Build: avg 19,400 transit crossings per weekday (8% of total crossings) LRT to Evergreen: avg. 29,500 transit crossings per weekday (13% of total crossings)
	Travel by transit is predictable, reliable, and consistent.	Light rail will be provided in a dedicated alignment with a connection between Vancouver and the Expo station in Portland. Bus reliability will be improved



Purpose and Need for the Program	Desired Outcomes	IBR Recommendation Meets Desired Outcomes
		with bus-on-shoulder capabilities in the program area.
Safety and vulnerability to accidents	Reduce overall crashes on I-5, including severe injury and fatal crashes.	Highway improvements to ramp design, shoulders, and auxiliary lanes on the river crossing bridge will reduce conflicts and improve roadway safety.
	Reduce overall crashes, including severe injury and fatal crashes, on I-5 ramps, local streets, and active transportation networks in the program area.	The I-5 facility will be designed to meet current standards. Local streets and intersections will be designed to current standards for improved safety of vehicles, pedestrians, and bicycles.
	Safety is reflected in the design of all modes.	Safety is a primary consideration for all modes of travel, reflected in the design standards, addition of shoulders and improved interchanges on the highway, and provision of improved active transportation facilities.
	Fewer diverted trips from I-5 to local streets.	Improved flow on I-5 will reduce trips that are currently being diverted to local streets.
Substandard bicycle and pedestrian facilities	Active transportation is an attractive mode, and more people walk and cycle, both to access transit and instead of travelling by autos.	The IBR program is committed to improving active transportation facilities to attract more pedestrians and cyclists. A smaller interchange at Hayden Island/Marine Drive means a more comfortable pedestrian environment.



Purpose and Need for the Program	Desired Outcomes	IBR Recommendation Meets Desired Outcomes
		The shared use path will connect to existing routes in Vancouver and north Portland. Local street enhancements in the project area will provide active transportation connections to and through the program area.
	More people have access to high- quality active transportation facilities.	The shared use path will connect to existing routes in Vancouver and north Portland. Local street enhancements will provide active transportation connections to and through the program area.
	Traveling by walking, biking, and rolling feels safe because facilities are separated from moving vehicles and the shared use path environment is visible and connected.	Active transportation facilities will be separated from vehicles on separated shared use paths and protected bike lanes. Facilities design will consider user experience, including visibility and protection from the elements.
	The high-quality networks for walking/biking/rolling are convenient and connect destinations that are important for most trips.	Primary connections will include the Renaissance Trail, Columbia Way, Hayden Island, 40-mile loop, Delta Park, and Expo Road.
Seismic	Bridges will be designed and constructed so that they will not collapse and will remain operable in a Cascadia subduction zone earthquake.	The aging North Portland Harbor bridge and the Columbia River bridge will be replaced. All structures will be designed to current seismic standards, improving resiliency to a seismic event



Additional Desired Outcome Category	Desired Outcomes	IBR Recommendation meets Desired Outcomes
Climate change and resiliency	Reduce greenhouse gas emissions in support of state climate goals.	The IBR program will support mode shift, improved operations, and will employ demand management (e.g., tolling) to reduce greenhouse gas emissions in support of state goals
	Minimize operational and embodied carbon during construction.	Low-carbon materials and reduced emissions from equipment will be used in construction
	All structures are resilient to and operable following anticipated climate disruptions (e.g., heat events, flooding, sea level rise).	The project will be constructed to accommodate the higher levee elevations, will consider height and design related to sea-level rise, and will be consistent with state and federal standards.
	Program limits other environmental impacts that exacerbate effects of climate change (e.g., heat island, runoff).	The program will study these outcomes in future design; for example, by considering shading, reflectivity of the structures, and potential for increased stormwater runoff or heat events.
Equity	Fewer identity-based disparities in travel time, access, transportation costs, and exposure to air pollution, road noise, and traffic crashes.	The IBR program will improve access to HCT and active transportation facilities, and will be considering tolling programs that could reduce the cost burden on low-income travelers. Improved transit, active transportation facilities, and highway design (including the addition of auxiliary lanes) will address these desired outcomes.

Table 9. IBR Responses to Additional Desired Outcomes


Additional Desired Outcome Category	Desired Outcomes	IBR Recommendation meets Desired Outcomes
	Improved mobility, accessibility, and connectivity especially for lower income travelers, people with disabilities, and communities who experience transportation barriers.	With congestion relief from highway improvements, active transportation improvements, and the addition of three LRT stations between Expo and Evergreen, mobility, accessibility, and connectivity will improve for all modes of travel. An estimated 800 BIPOC residents and 1,000 low-income residents will be able to access these stations within a half-mile walk. Tolling programs will consider discounts for lower-income populations to reduce the cost burden on traveling by vehicle.
	Local community improvements are implemented in addition to required mitigations.	Active transportation facilities will provide local connections, and local street improvements will improve community experience. Green spaces and other community improvements will be studied as design progresses.
	Economic opportunities generated by the program benefit minority and women owned firms, BIPOC workers, workers with disabilities, and young people.	The following data represent increases relative to a no build option. Jobs accessible from the IBR program area within a 45-minute transit ride will be increased by an estimated 73% for BIPOC populations, by 59% for low-income populations, and by 71% for people with disabilities as a result of transit improvements (on average). Jobs accessible from the IBR program area within a 45-minute drive (car) will be increased by 4% for BIPOC



Additional Desired Outcome Category	Desired Outcomes	IBR Recommendation meets Desired Outcomes
		populations, by 4% for low-income populations, and by 5% for people with disabilities (on average). The program will implement strategies to promote equitable access to economic opportunities throughout design and construction, including: -Setting ambitious goals for contracting with minority- and women- owned companies -Local hiring and workforce development
	Equity priority communities have access, influence, and decision- making power throughout the program in establishing objectives, design, implementation, and evaluation of success.	Thus far the program worked to engage equity priority communities through the formation of an Equity Advisory Group, targeted communications, and partnerships with CBOs to hold a series of affinity listening sessions. The EAG will be leading the creation of program-level performance measures to gauge progress toward the six equity objectives.
	Disproportionate impacts on equity priority communities are avoided rather than simply mitigated.	The program will analyze potential property impacts during the environmental analysis with a focus on equity priority communities as defined by the IBR EAG, along with an environmental justice analysis to comply with federal requirements.



Additional Desired Outcome Category	Desired Outcomes	IBR Recommendation meets Desired Outcomes
	Pursue and leverage any and all federal, state, and other funding sources that support all modes and address long-term needs.	The program is well positioned and pursuing federal funds for transit, highway, and structures.
Cost effectiveness and financial resources	Identify equitable tolling and pricing strategies supporting multimodal construction costs and improved operations and access, in coordination with statewide tolling program and in support of each state's climate goals.	Tolling and pricing will be studied with climate and equity in mind. Equity considerations may include discounts for low-income travelers. Variable rate tolling's effects on congestion and possible revenue generation, will be studied. Congestion relief may be associated with a reduction in greenhouse gas emissions.
	Ensure fiscal responsibility across the program and into the future, including new technology to solve future problems.	The program is seeking federal and state funds, applying to federal grant programs. To supplement any gap between federal and state funding and program costs, and to support future facility operations and maintenance costs. Variable rate tolling programs will also be studied.

10.3 Anticipated Equity Outcomes

10.3.1 Understanding the Context

The population of the Portland-Vancouver Metro region is growing and diversifying. Of the four-county metro region, Clark County experienced the greatest rate of growth over the past decade. The population in Clark County increase by nearly 78,000 residents between 2010 and 2020, 76 percent of whom were people of color.



Rising costs of housing are forcing lower income people to live farther from jobs and in areas with less access to transit. This results in increased time spent commuting in and additional costs associated with accessing jobs.

10.3.2 Transit Analysis

An equity analysis of the transit investments was conducted in the Spring of 2022. The analysis looked at the total BIPOC and low-income residents within a half-mile walk from the transit alignment. (see Table 10) The analysis also looked at the number of accessible jobs within a 45-minute (midday) transit ride (see Table 11) and a 45-minute (midday) drive for people living with disabilities, BIPOC, and low-income residents (see Table 12).

Table 10. Access to HCT Service

			BIPOC (w/in hal	Residents f mile walk)	Low-Income Residents (w/in half mile walk)		
Transit Investment	Number of Stations	Total Residents (w/in half mile walk)	Number	Percentage of Total Population	Number	Percentage of Total Population	
LRT Expo to Evergreen	4	3,171	817	26	971	41	

Sources: 2020 Census and 2015-2019 American Community Survey

Table 11. Average Number of Jobs Accessible from the IBR Program Area within a 45 -Minute Midday Transit Ride

Transit Investment	General Population		BIPOC Po	opulation	Low-Income Population		People with Disabilities	
No Build (Baseline) Jobs	24,951		25,717		25,894		24,5276	
LRT Expo to Evergreen Increase in Jobs	16,979	68%	14,598	73%	15,270	59%	17,392	71%

Sources: 2020 Census, 2015-2019 ACS, Metro 2045 Model



Table 12. Average Number of Jobs Accessible from the IBR Program Area within a 45-Minute Midday Drive

Transit Investment	General Population		BIPOC Po	opulation	Low-Income Population		People with Disabilities	
No Build (Baseline) Jobs	1,206	5,791	1,229	9,495	1,187	7,132	1,284	1,895
LRT Expo to Evergreen Increase in Jobs	54,043	5%	54,650	4%	51,245	4%	57,921	5%

Sources: 2020 Census, 2015-2019 ACS, Metro 2045 Model

In every scenario analyzed, the transit improvements resulted in an increase in access to transit for BIPOC and the low-income population over what exists today or doing nothing. Access to jobs both for drivers and transit users increased for BIPOC, low-income, and people with disabilities populations. LRT options performed better than BRT options.

10.3.3 Hayden Island/Marine Drive Equity Screening Results (Half Interchange)

Equity metrics for Hayden Island/Marine Drive were developed as part of the screening process. Analysis of the partial interchange option for Hayden Island and Marine Drive performed optimally from an equity perspective. It would increase east-west connectivity on the island with the extension of Tomahawk Island Drive, and it would have a smaller interchange footprint; this would result in a more comfortable pedestrian environment on Hayden Island and provide opportunities for potential equitable development and placemaking.

10.3.4 Next Steps to Ensure Equitable Outcomes

The program is developing equity performance measures in tandem with the EAG. These measures will keep the program accountable by gauging program effectiveness at working toward the six equity objectives (see the IBR Equity Framework).



The program will implement strategies to promote equitable access to economic opportunities throughout design and construction, including:

- Setting ambitious goals for contracting with minority- and women-owned companies
- Local hiring and workforce development

A Community Benefits Agreement is being developed to ensure that the IBR program has a positive impact on surrounding communities beyond the transportation improvements. Analysis of any potential property impacts will occur during the environmental phase with a particular focus on low-income and BIPOC communities.

10.4 Anticipated Climate Outcomes

Project partners have expressed interest in tangible measured outcomes related to climate change and the IBR program. For example, Metro requested that the program contribute to state greenhouse gas emission goals by evaluating at least one program alternative that results in a substantial mode shift from cars to transit. The City of Vancouver has a Zero Emissions by 2050 initiative and seeks to understand how the IBR program supports that aim.

There are multiple ways to decrease greenhouse gas emissions associated with transportation: reduce the carbon in fuels or electricity used to move people and goods (e.g., electric vehicles, renewable diesel, green hydrogen, fuel efficiency) and change how and how far we travel and transport goods using gasoline and diesel powered-vehicles (e.g., shift to transit and electrified rail freight). Further, nearly every major auto manufacturer in the world has declared that they sell all electric vehicles by 2025–2040. The IBR program seeks to modernize a crucial link of our regional infrastructure thereby enabling shifts to a cleaner future.

Oregon and Washington, along with California and Vancouver, B.C., have laws, guidance, and policy that are requiring the transition to near zero use of greenhouse gas fuels and energy sources by 2050; the transition is underway in both the vehicle fleet and the electricity grid. The transition will not be complete until the end of the IBR modeling period. For the construction of the bridge, many advanced greenhouse gas–reducing practices will be deployed to target fuel and embodied emissions in materials, with some greenhouse gas emissions being unavoidable.

The Modified LPA includes elements that promote mode shift, reduce demand, and improve transportation network efficiencies—all of which could result in the decrease of greenhouse gas emissions in the region.



10.4.1 Greenhouse Gas Reductions from Mode Shift, Demand Reduction, and Transportation Efficiencies

Greenhouse gas reductions are anticipated from the program affecting operations in the project corridor and the region:

- Mode shift to transit.
- Demand management methods such as tolling. Variable rate tolling in the corridor could be used to promote mode shifts and reductions in travel during the peak commuting periods.
- Traffic operation improvements (e.g., ramp metering, auxiliary lanes, provision of shoulders, etc.). The reduction of congestion and disruptions due to vehicle crashes and other incidents would allow vehicles to operate more efficiently than in idling traffic.
- Mode shift from cars to active transportation options due to improvements in facilities in the corridor.

An analysis of the transit ridership potential from connecting current high-capacity transit networks across the river, by expanding LRT from Portland to Vancouver, would promote a mode shift (i.e., increase in mode share) of approximately 4 percent for trips crossing the river and would add 11,000 new transit trips on a daily basis in the system. Assuming these new transit riders were formerly driving in cars, this mode shift would result in displaced (avoided) emissions by approximately 36,000 metric tons of CO2e per year. This is the equivalent of 4 million gallons of gas or the average energy use of 7,000 homes for one year.²

Further emission reductions are anticipated from changes that are controlled, funded, and deployed from outside the program, or could be supported by local and state policies, such as:

- Accelerated adoption of electric vehicles and decarbonization of the grid
- Changes in land use policies
- Investments in regional transit systems
- Development of housing and jobs with access to transit or otherwise reducing need for car trips

² Sources for greenhouse gas calculations: FTA model to calculate CO2e from expanded transit systems (<u>FTA's</u> <u>Transit Greenhouse Gas Emissions Estimator v3.0 | FTA (dot.gov)</u>) and the EPA's <u>Greenhouse Gas Equivalencies</u> <u>Calculator | US EPA</u>.



The IBR program is committed to work with partners to optimize the benefits from the program and support the progress toward local and state goals.

10.4.2 Next Steps

Climate outcomes relate to three program elements:

- Design for resilience and adaptation
- Construction and embodied greenhouse gas emissions
- Operational emissions from cars, trucks, and transit greenhouse gas emissions

Evaluation of IBR program's performance against targets will be phased at different stages of the program's development. The Modified LPA, by including an HCT link, active transportation improvements, and commitment to variable rate tolling, will lead to reductions in operational emissions compared to the No Build. Decisions to reduce embodied emissions in construction, and continued refinement of the design of the infrastructure to be resilient and adaptable in the face of climate change, will be addressed in the NEPA and future phases of the program. In addition, the IBR program will identify third-party rating systems to document sustainability and climate outcomes.



11. NEXT STEPS

11.1 Developing the Modified LPA for the IBR Program

The IBR program in coordination with partners, EAG, CAG, and the public over the past 18 months, identified and considered physical and contextual changes in the program area and developed design options and transit investments with a focus on climate and equity to propose a Modified LPA. The IBR program is seeking consensus on a proposed modified LPA and to obtain approvals by Boards and Councils in summer 2022.

11.2 NEPA and Additional Studies

Adoption of a Modified LPA demonstrates regional consensus about continuing project development and refining the design of a corridor-wide program alternative. The adoption of the modified LPA by local agencies does not represent a formal decision by the federal agencies leading the NEPA process or any federal funding commitment. A formal decision by FHWA and FTA regarding the preferred alternative and its design and mitigation is formalized in a National Environmental Policy Act (NEPA) ROD. FHWA and FTA selected an LPA in the 2011 ROD for the CRC project. An amended ROD is anticipated for the IBR program upon completion of a Supplemental EIS that will evaluate a modified corridor-wide program alternative, based on the Modified LPA, in comparison to an updated No Build Alternative.

Further studies will be used to evaluate the program alternative. Figure 23 shows how the modified LPA provides the foundational elements of the program, and how future studies, plans, and authorizations will build upon that foundation. A critical part of upcoming work will be the development and distribution of a Supplemental Draft Environmental Impact Statement (SDEIS) for public review and comment. The SDEIS will include evaluation of adverse and beneficial impacts on a range of resources. As part of the NEPA evaluation, the program will work to avoid, minimize, and mitigate adverse impacts to the extent practicable. Those impacts would include displacements, noise and vibration, effects on historic and other cultural resources, impacts to ecosystem resources, and other benefits and impacts to the community and environment. After the public review of the SDEIS, a combined Supplemental Final EIS and ROD will be prepared in compliance with NEPA and other federal regulations.



Figure 23. Next Steps



11.3 Program Funding and Financing Including Tolling Analyses

In a late 2020 conceptual cost estimate created by the program, a preliminary range of costs for the program of \$3.2 to \$4.8 billion was identified. We know that transportation projects of this size require multiple sources of funding including federal, state, and tolling revenue. As of April 2022, the program has \$90 million in program development funding, with half coming from each state. In the 2022 legislative session, Washington allocated \$1 billion for their share of program funding. During the previous project, it was assumed that one third of total costs would be covered by state funding, one third from federal funding, and one third from toll revenue. However, with inflation, and the new effort to replace the bridge, the current program estimate is greater than the costs identified for the previous project. Since that time, new federal legislation has also passed, creating more potential opportunity for federal funding.

The program is well positioned to be competitive for federal grant opportunities from the Infrastructure Investment and Jobs Act. The FTA Capital Investment Grants Program, along with the FHWA Competitive Bridge Investment Program and/or the USDOT National Infrastructure Project Assistance Program appear to be the best fit for IBR to apply. IBR anticipates applying for federal grant funding in 2023. The program's cost estimate and finance plan will be refined as additional detail on grant programs is known, and as program details are determined as part of the modified LPA. Securing the local match (including state funding) is an important step to successfully secure federal grants, given the preference to be the "last dollar in." It is not yet known how much will be able be



obtained from the new grant programs until they begin handing out awards next year. We anticipate tolling would be needed in addition to state and federal sources.

The soonest tolling would begin on the I-5 bridge is late 2025/early 2026, pending legislative authority to toll the facility. The program and local agency partners assume that IBR will include variable rate tolling with the goal to support:

- Revenue generation to fund construction and facility operations and maintenance
- Reduce congestion and manage demand
- Improve mobility through the corridor

Future tolling analysis will consider possible discounts, including those for low-income travelers, and analyze possible revenue generation. The initial traffic and revenue study completed by the program will begin in mid-2022, with the goal to complete it by mid-2023. This level 2 toll traffic and revenue study will test policies and multiple toll rate scenarios and how they affect demand in the corridor, in coordination with both state's Transportation Commissions. In past discussions, Metro Council has requested that the program complete an Investment Grade Traffic and Revenue Analysis. This analysis is needed for toll bond financing and must be completed close to the beginning of toll operations to meet the needs of investors. The program agrees that this is necessary, and anticipates completing this analysis in 2025, shortly before tolling is estimated to begin on the facility.

The Washington State Transportation and Oregon Transportation Commissions are the toll rate setting authorities in each state. The program will provide them with information to inform the rate setting decision, which is not anticipated to occur until 2025, shortly before tolling is estimated to begin on the facility. The SDEIS will include additional analysis around overall program financing, as well as toll revenue.



12. GLOSSARY OF TERMS

Term	Definition
Active Transportation	Human-powered modes of transportation, such as walking, biking, or using a wheelchair.
Auxiliary lanes	Ramp-to-ramp connections adjoining through-lanes that allow for better access to and from on-/off-ramps. This improves speed changes, turning, weaving, and truck climbing, resulting in better safety and congestion relief.
BLSC	Bi-State Legislative Committee, a panel composed of eight Washington and eight Oregon legislators who provide the IBR program guidance and feedback on key program decisions.
BRT	Bus rapid transit, a term for bus-based transit systems that deliver fast and efficient service that <i>may include</i> dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms and enhanced stations. They are usually larger and can carry more riders per vehicles than standard busses. Bus Rapid Transit currently runs in several corridors throughout Clark County, and is operated by C-Tran.
C-TRAN	The Clark County Public Transit Benefit Area Authority, is a public transit agency serving Clark County, Washington and an IBR program partner agency.
CAG	Community Advisory Group, a group of community members from the greater Portland and Vancouver region that provides advice and recommendations to the Executive Steering Group and IBR program administrator on issues of importance to the community.
СВО	Community-based organizations, groups representing varied local interests and concerns, such as the environment, business, labor, social services, affordable housing, recreation, transit, etc.
Central Business District	A central business district is an area of densely concentrated commercial and business activity within a city, sometimes referred to as downtown.



Term	Definition
Community engagement	The IBR program's ongoing efforts to hear community concerns, values and interests, maintain open, two-way communications, and reflect community interests in key program decisions.
Community Survey	A data-driven IBR public survey of diverse community members and organizations to assess public concerns and interests related to the region's transportation system.
CRC	Columbia River Crossing, a 2005–2014 multimodal project conducted by the states of Oregon and Washington that studied options for replacing the Interstate Bridge. The project completed the federal environmental review process and reached a Record of Decision on a locally preferred alternative. It did not move into construction due to lack of funding.
Disability	Defined by the Americans with Disabilities Act (ADA) as a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.
Diversity	Includes all the ways in which people differ, and it encompasses all the different characteristics that make one individual or group different from one another.
Demographics	Statistical data relating to the population and particular groups within it. The IBR program uses demographic data to understand the general characteristics and geographic locations of communities potentially affected by the program, and to inform community engagement strategies.
DOT	Department of Transportation – Washington (WSDOT) and Oregon (ODOT)
EIS	Environmental Impact Statement, a document that outlines the effects a proposed project has on the surrounding natural and built environment; it describes ways to reduce or mitigate those effects.
ESG	Executive Steering Group, a panel of representatives from regional partner agency and Community Advisory Group co-chairs that provides guidance and recommendations on key IBR program development issues.



Term	Definition
EAG	Equity Advisory Group, a diverse group of community members who will make recommendations to IBR program leadership regarding processes, policies and decisions that potentially could affect historically underrepresented and underserved communities.
Equity	A core value for the IBR program centered on elevating the voices of historically marginalized communities and ensuring they can realize the program's economic and transportation benefits, and not suffer further harm from transportation decisions. Broadly, equity is achieved when one's identity cannot predict the outcome. It is the absence of inequities and injustices in social sectors that are required for all to thrive, and it is both an outcome and a process.
Equity-Priority Populations	Equity-priority populations for the IBR program include Black, Indigenous, and people of color (BIPOC), people with disabilities, communities with limited English proficiency, lower income and houseless individuals and families, immigrants and refugees, young people, and older adults
Equity vs. Equality	Equity involves trying to understand and give people what they need to enjoy full, healthy lives. Equality, in contrast, aims to ensure that everyone gets the same things in order to enjoy full, healthy lives. Like equity, equality aims to promote fairness and justice, but it can only work if everyone starts from the same place and needs the same things. <i>–Annie E. Casey Foundation</i>
Ethnicity	The fact or state of belonging to a social group that has a common national or cultural tradition.
FAA	Federal Aviation Administration, the agency that regulates air traffic in the U.S.
FEIS	The Final Environmental Impact Statement (FEIS) incorporate the draft EIS with changes made to reflect the selection of an alternative, modifications to the project, updated information on the affected environment, changes in the assessment of impacts, the selection of mitigation measures, the results of coordination, comments received on the draft EIS and responses to these comments, etc.



Term	Definition
FHWA	Federal Highway Administration, an agency that supports state and local governments in the design, construction and maintenance of the highway system.
FTA	Federal Transit Administration, an agency that provides financial and technical assistance to local public transit systems, including bus, subway, light rail, commuter rail, trolley and ferry systems. The FTA also oversees safety measures.
Greenhouse gases	Gases such as carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere. This heat trapping alters climate and weather patterns at global and regional scales. In the United States, the transportation sector is one of the largest contributors of greenhouse gases.
НСТ	High-capacity transit encompasses different transit options, such as BRT and LRT, that will be explored during alternatives development.
I-5	Interstate 5
IBR	Interstate Bridge Replacement program, a joint effort by the states of Oregon and Washington to replace the aging, structurally vulnerable Interstate Bridge over the Columbia River with a modern, seismically resilient, multimodal structure that can reliably serve the Portland-Vancouver region into the next century.
Inclusion	Elimination of barriers that prevent the full participation of all people.
LRT	Light rail transit is a form of high-capacity transit that operates in its own fixed guideway and is powered by overhead electrical current. Currently light rail connects Portland City Center with Beaverton, Clackamas, Gresham, Hillsboro, Milwaukie, North/Northeast Portland and Portland International Airport and is operated by TriMet.
LPA	Locally preferred alternative, the highest-ranked design solution for improving a transportation system; the LPA is selected with the community after a thorough, lengthy screening process of transportation options.



Term	Definition					
Members of the	Washington legislative members:					
Bi-State	Co-Chair, Senator Annette Cleveland					
Committee	Representative Jake Fey					
	Representative Paul Harris					
	Senator Steve Hobbs					
	Senator Ann Rivers					
	Co-Chair, Representative Brandon Vick					
	Co-Chair, Senator Lynda Wilson					
	Co-Chair, Representative Sharon Wylie					
	Oregon legislative members:					
	Co-Chair, Senator Lee Beyer					
	Senator Brian Boquist					
	Senator Lynn Findley					
	Senator Lew Frederick					
	Representative Shelly Boshart Davis					
	Representative Greg Smith					
	Co-Chair, Representative Susan McLain					
	Representative Karin Powers					
Minimum Operable Segment (MOS)	In accordance with FTA's Capital Investment Grants Program guidance, a project that would construct a minimum operable segment "must be able to function as a stand-alone project and not be dependent on any future segments being constructed." (FTA Circular C-9300.1B)					
Modified LPA	High-level identification of proposed changes to a previously agreed upon LPA. The 2022 Modified LPA may include elements such as: the number of auxiliary lanes over the bridge; transit mode, alignment, and stations; Hayden Island/Marine Drive interchange configuration; active transportation improvements; North Portland Harbor Bridge replacement; Variable Rate Tolling to fund and improve congestion; and a commitment to study interchanges; commitment to climate and equity.					



Term	Definition
NEPA	National Environmental Policy Act, a 1970 federal law that requires federal agencies to assess and disclose the environmental effects of proposed projects or actions prior to making project decisions.
No Build Alternative	An alternative that serves as the baseline to which other alternatives are compared, as required by the National Environmental Policy Act. For the IBR program, the No Build would include the implementation of planned improvements in the region (e.g., the Rose Quarter Improvement Project and planned transit expansions) but would not include any of investments associated with the IBR program.
NOI	Notice of Intent, a published document informing the public of an upcoming environmental analysis for a proposed project.
Online Open House	A virtual "meeting," held online, to provide the public with information and solicit public feedback on a project.
Open house	An in-person meeting for providing the public with information on a project and responding directly, one on one, to questions meeting participants may have.
OR	Highway designation in Oregon, e.g., OR 140
Project scoping	The process of identifying and documenting a project's goals, outcomes, milestones, tasks, costs and timelines.
Purpose and Need	A written statement that identifies the key transportation problems that must be addressed by the IBR program.
Race	Race is a socially constructed system of categorizing humans largely based on observable physical features (phenotypes), such as skin color, and on ancestry. There is no scientific basis for or discernible distinction between racial categories. The ideology of race has become embedded in our identities, institutions and culture and is used as a basis for discrimination and domination. Annie E. Casey Foundation
Range of alternatives	A set of preliminary project options that can be analyzed as part of the Supplemental Environmental Impact Statement process.



Term	Definition
RMPP	Regional Mobility Pricing Project, a project led by the Oregon Department of Transportation that would apply congestion pricing (using variable-rate tolls) on all lanes of I-5 and I-205 in the Portland metro area to manage traffic congestion and raise revenue for priority transportation projects that improve mobility.
Regulatory Agencies	 Federal, state and local agencies that can monitor and enforce laws and regulations affecting a capital project. For the IBR program, key regulatory agencies include: Washington State Department of Ecology Oregon Department of Environmental Quality Regional Native American tribes Federal Highway Administration Federal Transit Administration Oregon and Washington State Historic Preservation Office(s) – SHPO U.S. Fish and Wildlife Service National Marine Fisheries Service U.S. Army Corps of Engineers Oregon and Washington Departments of Fish and Wildlife Cities of Portland and Vancouver Multnomah County Clark County
Record of Decision or ROD	A document that records a federal agency's decision regarding a planned project for which an environmental impact statement was prepared. For the IBR program, the Federal Highway Administration would issue the Record of Decision for a Supplemental EIS.
Agency Partners	 Regional partner agencies have a direct role in any future improvements due to their position as an owner, operator, policymaker, regulatory agency or public economic development entity reliant on direct access to operations within the Interstate Bridge area. For IBR, the following regional agencies make-up our regional partners: TriMet C-TRAN



Term	Definition
	 Oregon Metro Southwest Washington Regional Transportation Council City of Portland City of Vancouver Port of Portland Port of Vancouver
Screening criteria	A set of transportation components used to evaluate and score the effectiveness of various transportation improvement options, usually weighed against a no build option.
SDEIS	Supplemental Draft Environmental Impact Statement, a preliminary review of findings related to new or changed conditions or planned improvement options that have occurred, often years after the prior EIS was completed.
SEIS	Supplemental Environmental Impact Statement, a review of the findings of an existing EIS, including the introduction of new or changed conditions or planned improvement options that have occurred, often years after the prior EIS was completed.
SR	State route, a Washington state highway designation (e.g., SR 20)
Travel Demand	The amount and type of travel people would choose under specific conditions, taking account factors such as the quality of transport options available and their prices.
TDM	Transportation Demand Management, the application of strategies and policies to reduce travel demand, or to redistribute this demand in time or location to increase overall transportation efficiency
Terminus	The end of a transportation line or travel route.
Transit Dependent	Describes someone whose only means of transportation is public transit (i.e., TriMet, C-TRAN). It generally refers to those who do not have the choice to drive a personal vehicle, due to income, age, ability, access, and/or legal restrictions. Transit dependence can be a temporary circumstance.



Term	Definition
Transportation Modeling	Transportation modeling uses a computer model to estimate travel behavior and travel demand for a specific future time frame, based on empirical data and foreseeable circumstances. The transportation modeling used in the Portland metro region is peer-reviewed and validated against observed data. Metro acts as the regional clearinghouse for land information and coordinates data and research activities with government partners, academic institutions and the private sector.
Tribes	IBR program tribal consultation includes engagement with the Confederated Tribes of the Colville Reservation, Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, Confederated Tribes and Bands of the Yakama Nation, Cowlitz Indian Tribe, Nez Perce Tribe, Nisqually Tribe of Indians, Spokane Tribe, and Chinook Tribe.
TriMet	The Tri-County Metropolitan Transportation District of Oregon, is a public transit agency serving the Portland metropolitan area, and an IBR program partner agency.
Vision & Values	A written statement that identifies community values and goals related to potential transportation improvements.

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Appendix A. IBR Alignment with Partner Climate Goals and Policies

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IBR Climate Goals – Alignment with Partner Climate Goals and Policies

Note for Reviewers: This document provides a summary of the partners' climate planning, policies and goals and shows where and how the Interstate Bridge Replacement Program climate framework and desired outcomes (as well as other program initiatives, efforts and goals – such as equity and public engagement) are aligned.

Aligned: IBRP goals are in alignment and in some cases directly contributes to achieving this partner goal. (Full circle)

Partial: IBRP goals may not directly relate but are not in conflict. (Half circle)

No: IBRP goals are not aligned with this partner goal. (Empty circle)

Not Applicable: Partner goal does not apply to IBRP; however, IBRP is not in conflict with this goal. (N/A)

To Be Decided (TBD): IBRP has not arrived at a decision, commitment, or goal for this topic yet.

Partner Climate Plans and Policies Referenced – Updated 4/29/22

Note for Reviewers: If there are missing documents that guide your climate goals and policies, please let the team know and provide a link or file so that it can be included.

Sources		Jump Link
WSDOT	 WSDOT Secretary's Executive Order 1113: Sustainability https://wsdot.wa.gov/sites/default/files/2020/11/05/WSDOT-EO-1113.pdf Washington State Legislature RCW 70A.45.020: Greenhouse gas emissions reductions – Reporting requirements https://app.leg.wa.gov/rcw/default.aspx?cite=70A.45.020 	Page 4 WSDOT
ODOT	 Strategic Action Plan <u>https://www.oregon.gov/odot/Pages/SAP.aspx</u> Climate Action Plan 2021-2026 <u>https://www.oregon.gov/odot/Programs/Documents/Climate Action Plan 2021-2026.pdf</u> Statewide Transportation Strategy (STS) <u>https://www.oregon.gov/odot/Planning/Pages/STS.aspx</u> State GHG Emission Reduction Goals <u>https://www.oregon.gov/gov/Pages/carbonpolicy_climatechange.aspx</u> DRAFT: Oregon Dept of Land Conservation and Development (DLCD) Updated Transportation Planning Rules (Draft March 2022) <u>https://www.oregon.gov/lcd/LAR/Pages/CFEC.aspx</u> 	Page 6 ODOT

REVIEW DRAFT: Executive Steering Group April 29, 2022

Interstate Bridge Replacement Program | Climate Framework Alignment with Partner Agency Goals & Plans

Sources		Jump Link
City of Portland	 Climate Action Plan (2015) https://www.portland.gov/bps/climateaction https://www.portland.gov/sites/default/files/2020-06/2015-climate-action-plan-final-progress-report-single-pages-v8.pdf Climate Emergency Declaration (2020) https://www.portland.gov/sites/default/files/2021/climate-emergency-declaration-resolution-37494-june-30-2020.pdf Transportation System Plan: Goals and Policies (2020) https://www.portland.gov/transportation/planning/tsp-document-downloads Pricing Options for Equitable Mobility (2021) https://www.portland.gov/transportation/planning/pricing-options-equitable-mobility-poem 	Page 8 City of Portland
Oregon Metro	 Climate Smart Strategy (2014) <u>https://www.oregonmetro.gov/climate-smart-strategy</u> Regional Transportation Plan (2018) and Appendix J: Climate Smart Strategy Implementation and Monitoring <u>https://www.oregonmetro.gov/regional-transportation-plan</u> <u>https://www.oregonmetro.gov/sites/default/files/2019/04/02/RTP- Appendix_J_Climate_Smart_Strategy_Monitoring181206.pdf</u> Regional Congestion Pricing Study (2021) <u>https://www.oregonmetro.gov/regional-congestion-pricing-study</u> 	Page 18 Metro
TriMet	 Cleaner Environment & Sustainability <u>https://trimet.org/bettertransit/environment.htm</u> TriMet News: TriMet announces major actions to reduce its carbon footprint <u>https://news.trimet.org/2019/12/trimet-announces-major-actions-to-reduce-its-carbon-footprint/</u> 	Page 22 TriMet
Port of Portland	 Environment: Climate Change Strategy <u>https://www.portofportland.com/Environment</u> Environmental Objectives and Targets (2016-2017) <u>http://cdn.portofportland.com/pdfs/Env_Home_16_17_ObjTrgts.pdf</u> 	Page 23 Port of Portland

Sources		Jump Link
City of Vancouver	 Vancouver City Council zero emissions goal (August 2021) Climate Action Plan – anticipated in spring 2022. Sustainable Vancouver https://www.cityofvancouver.us/publicworks/page/sustainable-vancouver 	Page 26 City of Vancouver
C-TRAN	Mission and Vision <u>https://www.c-tran.com/about-c-tran/mission-and-vision</u>	Page 31 C-TRAN
Port of Vancouver	Climate Action Plan <u>https://www.portvanusa.com/environmental-services/climate-action-plan/</u>	Page 32 Port of Vancouver
SW Washington Regional Transportation Council (RTC)	• None.	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
WSDOT		Replacement Program (IBRP) Goals	
WSDOT Secretary's Executive Order 1113: GHG Reduction Goals	GHG Reduction Target . By 2030, reduce overall emissions of greenhouse gases in the state to fifty million metric tons, or 45% below 1990 levels;	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG. In areas where emissions cannot be reduced, IBRP is considering offsets.	
	GHG Reduction Target . By 2040, reduce overall emissions of greenhouse gases in the state to twenty-seven million metric tons, or seventy percent below 1990 levels;	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
	GHG Reduction Target . By 2050, reduce overall emissions of greenhouse gases in the state to five million metric tons, or ninety-five percent below 1990 levels.	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
	Energy efficiency	Yes – Aligned. IBRP climate goals include using a renewable power supply, high efficiency lighting, and an electric vehicle	

Partner Agency – WSDOT	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
		maintenance fleet, all of which contribute to the IBR's energy efficiency. Reducing Climate Impacts – Maintenance and Operations	
	Reducing pollution	Yes – Aligned. IBRP climate goal to reduce GHG, which contributes to the reduction of pollution.	
	Enhanced resilience	Yes – Aligned. IBRP includes climate resiliency goals, such as designing for performance in a range of environmental conditions resulting from evolving climate, and considering climate impacts to future growth and population centers	•

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
ODOT		Replacement Program (IBRP) Goals	
	Equity– Prioritize diversity, equity, and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments.	Yes – Aligned. IBRP prioritization of equity concerns will assist in advancing this goal	
ODOT Strategic Action Plan	Modern Transportation System – Build, maintain and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.	Yes – Aligned. IBRP purpose directly corresponds to this goal. By shifting travel demands to lower GHG modes and improving transportation efficiency the replacement bridge will fit into this goal. <i>Reducing Climate Impacts – Transportation Options</i>	•
	Sufficient and Reliable Funding – Seek sufficient and reliable funding to support a modern transportation system and a fiscally sound ODOT.	Yes – Aligned. The IBRP seeks sufficient and reliable funding.	
ODOT Climate Action Plan	Reduce emissions from the transportation system. Make the transportation system more resilient to extreme	Yes - Aligned. IBRP aims to reduce vehicle-based GHGemissions.Reducing Climate Impacts - Transportation OptionsReducing Climate Impacts - ConstructionYes - Aligned. IBRP directly addresses this, "Consider changes	•
(2021)	weather events.	in environmental conditions resulting from changes in our climate" with goals to address increased weather extremes in the road surface, and expansion of the bridge. <i>Climate Resiliency- Environmental Changes</i>	٠
Statewide Transportation Strategy (STS)	The Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction (STS) is Oregon's carbon reduction roadmap for transportation and includes strategies for substantially reducing GHG emissions from the transportation sector.	Yes – Aligned . IBRP aims to lower emissions which will contribute to the goal of lowering overall state emissions. <i>Reducing Climate Impacts – Transportation Options</i> <i>Reducing Climate Impacts – Maintenance and Operations</i>	٠
Governor's Executive Order	GHG Reduction Target . Per Executive Order 20-04, achieve State greenhouse gas emission reduction goals to at least 45 percent below 1990 emissions levels by 2035, and at least 80 percent below 1990 levels by 2050.	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals	•

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
ODOT		Replacement Program (IBRP) Goals	
20-04: State GHG Reduction Goals		center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
DLCD: Updated Transportation Planning Rules	 bregon bept. of Land Conservation and Development (DLCD) is proposing updates to the statewide Transportation Planning Rules (TPR). Existing rules are not sufficient to meet the state's <u>Metropolitan GHG Reduction Targets</u>, so updated rules aim to reduce climate pollution. The amended rules would require local governments in metropolitan areas to: Plan for greater development in transit corridors and downtowns, where services are located and less driving is necessary; Prioritize system performance measures that achieve community livability goals; Prioritize investments for reaching destinations without dependency on single occupancy vehicles, including in walking, bicycling, and transit; Plan for and manage parking to meet demonstrated demand, and avoid over-building of parking in areas that need housing and other services; Plan for needed infrastructure for electric vehicle charging; and Regularly monitor and report progress. 	emissions by expanding transportation options for non-auto trips. This includes high capacity transit and safe, comfortable bike and pedestrian infrastructure. It also includes an equitable tolling program. Together the elements of the bridge program contribute to the region's livability and provide alternatives to driving.	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
Climate Action Plan (2015)	GHG Reduction Target . Portland and Multnomah County have committed to reducing local carbon emissions by 80 percent below 1990 levels by 2050, with an interim goal of a 40 percent reduction by 2030.	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
	 The City and County are committed to leveling this playing field. We're working to: Increase access to transit, sidewalks, bike lanes and other transportation options. Reduce exposure to pollution and excessive heat. Improve access to parks and other natural resources. Reduce burdens of housing and energy costs. 	 Yes - Aligned. IBRP will increase access to transit and active transportation amenities. IBRP is exploring ways to mitigate excessive heat through design and increasing tree cover. <i>Reducing Climate Impacts – Transportation Options Climate resiliency- Environmental Changes</i> Not applicable. IBRP climate goals do not directly address air pollution, access to parks, housing and energy costs, but there is no conflict. 	
	By 2030 Reduce the total energy use of all buildings built before 2010 by 25 percent.	Not applicable. As a new structure, this goal does not directly apply to the replacement bridge. IBRP is likely to include a renewable power supply and high efficiency lighting, allowing structures to fit within the energy efficiency parameters.	n/a
	By 2030 Achieve zero net carbon emissions in all new buildings and homes	Yes – Partial. Any buildings associated with IBRP will comply with local standards. Primary elements do not include buildings or homes.	
	By 2030 Supply 50 percent of all energy used in buildings from renewable resources, with 10 percent produced within Multnomah County from on-site renewable sources, such as solar.	Yes – Aligned. IBRP aims to increase renewable power supply for energy needs. IBRP will work with local utilities to access renewable energy sources. The team recognizes that the Clean Energy Transformation Act in WA will change the landscape for purchasing renewable energy; the law will require all electricity	•

Interstate Bridge Replacement Program | Climate Framework Alignment with Partner Agency Goals & Plans

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
		produced in the state to be GHG neutral by 2030 and GHG free	
		by 2045. There may be opportunities for accessing renewable	
		power within this timeframe.	
		Reducing Climate Impacts – Maintenance and Operations	
	Create vibrant neighborhoods where 80 percent of residents can	Yes – Aligned. IBRP includes reducing travel demand, shift	
	easily walk or bicycle to meet all basic daily, non-work needs	travel demand to low GHG modes and improve transportation	•
	and have safe pedestrian or bicycle access to transit. Reduce	efficiency, which will contribute to this goal.	
	daily per capita vehicle miles traveled (VMT) by 30 percent from	Reducing Climate Impacts – Travel Options	•
	2008 levels.		
	Improve the efficiency of freight movement within and through	Yes – Aligned. IBRP will improve transportation efficiency,	•
	the Portland metropolitan area	which will benefit all travelers, including freight.	
		Reducing Climate Impacts – Travel Options	
	Increase the fuel efficiency of passenger vehicles in use to 40	Yes - Partial. IBRP includes the use of electric vehicle	
	miles per gallon and manage the road system to minimize	maintenance fleet; Reducing Climate Impacts- Travel Options,	•
	emissions.	improving transportation efficiency will also minimize	
		emissions.	
		Reducing Climate Impacts – Maintenance and Operations	
	Reduce lifecycle carbon emissions of transportation fuels by 20	Not applicable; no conflict. While none of the IBRP climate	
	percent.	goals contribute or align directly, there is no conflict. IBRP goals	n/2
		to lower emissions and reduce lifecycle emissions from	II/a
		materials and reduce transport distances support this goal.	
	Reduce consumption-related emissions by encouraging	Yes – Aligned. IBRP includes the use of local manufacturers,	
	sustainable consumption and supporting Portland businesses in	sourcing materials locally, and reducing transport which align	
	minimizing the carbon intensity of their supply chains.	well with this goal.	
		Reducing Climate Impacts Construction	
	Reduce food scraps sent to landfills by 90 percent.	Not applicable. As IBRP has no effect on food, this goal doesn't	
		have correlation to IBRP climate goals; however there is no	n/a
		conflict.	1

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
	Recover 90 percent of all waste generated	Yes – Aligned. IBRP has a zero-waste goal for demolition.	
		Reducing Climate Impacts - Construction	
	Reduce the consumption of carbon-intensive foods and support	Not applicable. As IBRP has no effect on food consumption this	n/2
	a community-based food system.	goal doesn't have correlation to IBRP climate goals; no conflict.	II/a
	Sequester carbon through increased green infrastructure (trees,	Yes – Partial. IBRP climate goal for GHG offsets will help to	
	plants, soil) and natural areas. Reduce effective impervious	mitigate construction-related emissions that cannot be	
	areas by 600 acres. Expand the urban forest canopy to cover at	eliminated. Plans to create a robust landscape plan that relies	-
	least one-third of the city, with a minimum canopy cover of 25	on much higher than traditional tree and planting replacement	
	percent of each residential neighborhood and 15 percent of the	rates in the public right of way could also bring Portland closer	
	central city, commercial and industrial areas	to the goal of expanding the urban forest canopy.	
		Reducing Climate Impacts- Offsets	
	Reduce risks and impacts from heat, drought, and wildfire by	Yes – Aligned. IBRP climate goals for adaptive and resilient	•
	preparing for hotter, drier summers with increased incidence of	design are in alignment.	
	extreme heat days.	Climate resiliency- Environmental Changes	•
	Reduce risks and impacts from flooding and landslides by	Yes – Aligned. IBRP climate goals for adaptive and resilient	
	preparing for warmer winters with the potential for more	design are in alignment.	
	intense rain events.	Climate Resiliency- Environmental Changes	
		Reducing Climate Impacts – Construction	
	Build City and County staff and community capacity to prepare	Yes – Aligned. IBRP construction and procurement will support	
	for and respond to the impacts of climate change.	DBE businesses in increasing capacity for climate-responsive	
		practices.	
		Reducing Climate Impacts – Construction	-
		Climate Resiliency – Development and Behavioral Changes	
	Build City and County staff and community capacity to ensure	Yes – Aligned. IBRP engagement and equity efforts are focused	
	effective implementation and equitable outcomes of climate	on equitable process and equitable outcomes, in support of this	
	action efforts.	goal.	
		Climate Resiliency – Development and Behavioral Changes	
	GHG Reduction Target. Be it further resolved, that the City of	Yes – Aligned. IBRP is working with partners to establish GHG	
	Portland adopts a new target of achieving at least a 50%	reduction targets. IBRP has a goal to contribute to reducing GHG	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
Climate Emergency Declaration (2020)	reduction in carbon emissions below 1990 levels by 2030 and net-zero carbon emissions before 2050. These targets will be carried forward into future Climate Action Plan updates and work plans	emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions	
	GHG Reduction Target . To inform future Climate Action Plan updates and workplans, the City of Portland will analyze decarbonization pathways to achieve carbon neutrality by 2050 with clear interim goals, including a commitment to monitoring any remaining emission sources and implementing policies or mechanisms to reduce those emissions, including but not limited to the role of urban sequestration and negative carbon technologies.	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
Transportation System Plan: Policies (2020)	Transportation Policy: Mode share goals and vehicle miles travelled (VMT) reduction: Increase the share of trips made using active and low-carbon transportation modes. Reduce VMT to achieve targets set in the most current Climate Action Plan and Transportation System Plan, and meet or exceed Metro's mode share and VMT targets.	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	•
	Transportation strategy for peoplemovement: Implement a prioritization of modes for peoplemovement by making transportation system decisionsaccording to the following ordered list:• Walking• Bicycling• Transit	Yes – Partial . IBRP serves primarily to improve mobility and access for I-5, part of the interstate highway system, so the modal prioritization is not aligned. Even so, IBRP will improve and expand safe, direct travel options for people walking, biking/rolling and taking transit within the project area.	

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
	 Fleets of electric, fully automated, multiple passenger vehicles Other shared vehicles Low or no occupancy vehicles, fossil-fueled non-transit vehicles When implementing this prioritization, ensure that: The needs and safety of each group of users are considered, and changes do not make existing conditions worse for the most vulnerable users higher on the ordered list. All users' needs are balanced with the intent of optimizing the right-of-way for multiple modes on the same street. When necessary to ensure safety, accommodate some users on parallel streets as part of a multi-street corridor. Land use and system plans, network functionality for all modes, other street functions, and complete street policies, are maintained. Policy-based rationale is provided if modes lower in the ordered list are prioritized. 		
	Transportation Policy - GHG Reduction Target: By 2035,	Yes - Aligned. IBRP is working with partners to establish GHG	
	reduce Portland's transportation-related carbon emissions to	reduction targets. IBRP has a goal to contribute to reducing GHG	
	50% below 1990 levels, at approximately 934,000 metric tons.	emissions. The goals associated with transportation options aim	
		to shift travel demand to low GHG modes, constructions goals	
		center around reducing construction-based emissions, goals for	
		maintenance and operations are all aiming to reduce GHG, and	
		in areas where emissions cannot be reduced goals are included	
		to offset the emissions.	

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
Pricing Options for Equitable Movement (2021)	 We are in a climate crisis. The transportation sector contributes more than 40% of greenhouse gas emissions in the Portland region. Reducing transportation emissions will take a three-pronged approach: Reducing driving by making other options safer and more attractive. Shifting the trips that remain on the road to zero- emission vehicles (including cars, buses and freight). Planning and building connected, inclusive, and complete neighborhoods to reduce the need for long trips. 	 Yes - Partial. IBRP is centering climate and equity outcomes that influence all stages of decision making. Expanding transportation options is one of the most significant means that the IBR program has to reduce driving trips. IBRP supports the transition to zero-emission vehicles. The IBR climate program will explore ways to electrify the fleet used for construction and ongoing operations and maintenance. IBRP is contributing to building connected and complete communities in the project area. 	
	The City should utilize the Equitable Mobility Framework to guide pricing policy deliberations and commit to evaluating equitable mobility impacts of the existing system and any future proposed transportation policy. This includes impacts to moving people and goods, safety, climate and health, and the economy.	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP is committed to evaluating equitable tolling structures.	tbd
	The City must engage community stakeholders , especially those representing BIPOC communities, Portlanders living on low incomes, people with disabilities, multi-lingual and displaced communities in the next stage of pricing policy development, as well as ongoing evaluation.	Yes – Aligned . IBRP will continue to uphold its commitment to meaningfully engage the public and priority equity communities in decision making. Equity and equitable access to travel is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	
	The City must advance complementary strategies alongside pricing to improve equitable mobility outcomes. Pricing is just one policy tool and not a stand-alone solution. Additional transportation demand management programs; multimodal infrastructure, operations and service investments; land use policies; affordable housing; and more must also be prioritized to create a more equitable and sustainable mobility system.	Yes – Aligned . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. Equity and equitable access to travel is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	•
Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
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City of Portland		Replacement Program (IBRP) Goals	
	Prioritize the goal of reducing traffic demand and using the existing transportation system as efficiently as possible to move people and goods in a more climate-friendly and equitable way. While pricing generates revenue and the reinvestment of revenue is a critical way to make pricing strategies equitable, revenue generation should never be the top priority.	Yes – Aligned . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand.	•
	Recognize that a pricing policy is only effective if it reduces traffic demand and/or raises enough revenue to fund effective demand management or multimodal improvements. • Setting rates or surcharges too low to affect demand or fund improvements is inequitable. • Programs should be designed to be data driven and regularly reviewed for impact. Rates and surcharges should be set to meet policy goals.	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand.	tbd
	 Provide exemptions for households living on low incomes. The City should develop one set of income-based policy standards that can be applied to current and future pricing programs to limit administrative costs and complexity. Until a universal basic income can be guaranteed, exempting households living on low- incomes should be the highest priority to avoid exacerbating current inequities. When exemptions are not possible, cash rebates or payments to households living on low incomes is preferred as it allows individuals to make the best transportation decisions for their personal situation. 	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP will continue to uphold its commitment to meaningfully engage priority equity communities in decision making. Equity and equitable access to travel is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	tbd

Partner Agency – City of Portland	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
	 More evaluation and community engagement are needed to determine what specific design would be most equitable and would minimize overall burdens, while still achieving demand management outcomes. Pricing programs should build off existing means-testing systems wherever possible to not add additional program access burdens. 		
	 Center climate and equity outcomes (e.g., reducing greenhouse gas emissions, reducing transportation cost burdens, expanding job access, etc.) throughout pricing program design. This includes evaluating how different variable-rate designs, where prices change based on factors like income, time of day, congestion levels, occupancy, geography, and fuel efficiency may further advance climate and equity goals, with a bias toward equitable outcomes. Evaluation should not unnecessarily delay implementation but should be thorough and focused on understanding impacts to BIPOC community members, Portlanders with low incomes, and people with disabilities. The City should also commit to ongoing evaluation of equity implications of policies once implemented. To move with the urgency required by the climate crisis, pricing policies that focus on managing demand for people with the most options should be prioritized. As stated above, exemptions for drivers with low incomes are critical 	Yes - Aligned . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP centers climate and equity outcomes. Equity and equitable access to travel is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of Portland		Replacement Program (IBRP) Goals	
	 Reinvest revenue generated from pricing in strategies that further expand equitable mobility. Pricing revenue should be reinvested to support frequent, competitive and high-quality multimodal access to areas where pricing is implemented and to mitigate potential negative impacts of traffic diversion. High-priority complementary investment areas include transit service, operations and infrastructure; biking and walking infrastructure; affordable housing near transportation options; and multimodal discounts and financial incentives, including driving options for those without access who need it. Additional investment areas include electrification infrastructure necessary for multimodal mobility. Community stakeholders should always be involved in revenue allocation decisions. 	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP is committed to evaluating equitable tolling structures. Use of the revenues has not yet been examined.	tbd
	 Reduce unequal burdens of technology and enforcement. Technology and payment systems must be designed to reduce barriers for individuals with limited access to bank accounts (e.g., by allowing use of prepaid debit cards). Technology and payment systems should include strong privacy protections. The location of pricing infrastructure should be considered so it doesn't overtly impact BIPOC or communities living on low incomes. Automated enforcement mechanisms should be used to reduce the potential for enforcement bias. 	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP centers climate and equity outcomes. Equity and equitable access to travel is a shared priority, and IBRP is committed to evaluating equitable tolling structures. Technology and enforcement mechanisms have not yet been examined.	tbd

Partner Agency – City of Portland	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
	 Tickets and fines for non-compliance should be means- based (i.e., structured by income level) to mitigate disproportionate impacts. 		

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Metro		Replacement Program (IBRP) Goals	
Metro Climate Smart Strategy (2014)	Implement adopted local and regional land use plans	Yes – Aligned. IBRP does not have land use authority. However, the program will be designed to align with current land use plans and solutions will be forward compatible with denser, transit-oriented communities. Additionally, IBRP climate goals support finding design solutions that foster complete and walkable communities.	•
	Make transit convenient, frequent, accessible, and affordable	Yes – Aligned. IBRP includes goals to shift travel demand to low GHG modes, which includes high-capacity transit, which will contribute to Metro's goal. <i>Reducing Climate Impacts – Transportation Options</i>	٠
	Make biking and walking safe and convenient	Yes – Aligned. IBRP includes goals to increase and improve accessibility for people who walk, bike, and roll. The IBR solution will include major improvements to bicycle and pedestrian options. <i>Reducing Climate Impacts – Transportation Options</i>	٠
	Make streets and highways safe, reliable, and connected	Yes – Aligned. IBRP goals clearly align with this goal. The IBR solution will improve transportation efficiency, which aims to reduce congestion, design for traffic smoothing, and target moderate speeds. In addition to reducing emissions, it will also improve road safety. <i>Reducing Climate Impacts – Transportation Options</i>	•
	Use technology to actively manage the transportation system	Yes – Aligned. IBRP includes goals to improve transportation efficiency which includes the use of Transportation Management systems and ITS. Reducing Climate Impacts – Transportation Options	
	Provide information and incentives to expand the use of travel options	Yes – Aligned. IBRP climate goals include transportation demand management strategies and increasing range of transportation options. <i>Reducing Climate Impacts – Transportation Options</i>	٠

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Interstate Bridge Replacement Program | Climate Framework Alignment with Partner Agency Goals & Plans

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Metro		Replacement Program (IBRP) Goals	
	Make efficient use of vehicle parking and land dedicated to parking	Yes – Aligned. If Park and Rides are included, this goal will be applied.	
	Support transition to cleaner, low carbon fuels and more fuel- efficient vehicles	Yes – Aligned. IBRP climate goals include an electric vehicle maintenance fleet for ongoing facility maintenance and operations. <i>Reducing Climate Impacts – Maintenance and Operations</i>	•
	Secure adequate funding for transportation investments	Yes – Aligned. IBRP is a transportation investment in itself.	
	GHG Reduction Target. Reduce transportation-related greenhouse gas emissions to at least 20% below 2005 emissions levels by 2035 and 35% below 2005 levels by 2050 for the Portland metropolitan area (<i>Table 2.5: GHG emissions reduction targets</i>)	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	•
Regional Transportation Plan (2018)	Climate Leadership Policy 1: Implement adopted local and regional land use plans.	Yes – Aligned. IBRP recognizes the importance of local and regional land use planning, and its influence on travel patterns and climate outcomes.	
	Climate Leadership Policy 2: Make transit convenient, frequent, accessible, and affordable.	Yes – Aligned. Existing transit options are limited. IBRP will provide high-capacity transit that improves transit service frequency and reliability.	
	Climate Leadership Policy 3: Make biking and walking safe and convenient.	Yes – Aligned. Existing active transportation facilities are inadequate; IBRP will improve the active transportation network and make it easier for people to walk, roll and bike.	
	Climate Leadership Policy 4: Make streets and highways safe, reliable, and connected.	Yes – Aligned. IBRP will improve safety, connectivity and reliability for I-5 and connecting streets. The program will address seismic vulnerability, safety concerns with the existing roadway design, congestion and travel time reliability, limited	•

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Metro		Replacement Program (IBRP) Goals	
		public transit, impaired freight movement, and inadequate active transportation facilities	
	Climate Leadership Policy 5: Use technology to actively manage the transportation system and ensure that new and emerging technology affecting the region's transportation system supports shared trips and other Climate Smart Strategy policies and strategies.	Yes – Aligned. IBRP will incorporate intelligent transportation systems (ITS) and demand management tools to actively manage the roadway network.	•
	Climate Leadership Policy 6: Provide information and incentives to expand the use of travel options.	TBD. IBRP has not yet made decisions regarding information and incentives, but expanding transportation options is a key component of the IBRP climate framework, and there is no conflict.	tbd
	Climate Leadership Policy 7: Make efficient use of vehicle parking spaces through parking management and reducing the amount of land dedicated to parking.	TBD. IBRP does not yet have goals specific to parking management, but there is no conflict.	tbd
	Climate Leadership Policy 8: Support Oregon's transition to cleaner fuels and more fuel-efficient vehicles in recognition of the external impacts of carbon and other vehicle emissions.	Yes – Aligned. IBRP supports the transition to zero-emission vehicles. The IBR climate program will explore ways to electrify the fleet used for construction and ongoing operations and maintenance.	•
	Climate Leadership Policy 9: Secure adequate funding for transportation investments that support the RTP climate leadership goal and objectives.	Yes – Aligned. IBRP is a transportation investment in itself.	
RTP Appendix J: Climate Smart Strategy Implementation	The full list of RTP Climate Smart Strategy performance monitoring targets are shown on <u>page 15 of the document</u> .	TBD. IBRP is working with partners to establish GHG reduction targets. IBRP has not set climate performance targets for operations after construction. The design option screening process incorporates many climate metrics to inform design selection.	tbd
and Monitoring (2018)			

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Metro		Replacement Program (IBRP) Goals	
Regional Congestion Pricing Study	Best Practices for Implementing Congestion Pricing Programs in an Equitable Manner. Pricing program design impact on equity outcomes: A more equitable pricing and investment strategy would include the following components: Variable pricing; Targeted exemption; focus on transit; focus on vulnerable communities. A less equitable pricing and investment strategy would include: 24-hr flat rate pricing; no supportive investments in transit; no focus on vulnerable communities Congestion pricing programs and projects can improve equity outcomes by (1) Reducing harm and increasing benefits if agencies are willing to focus engagement on historically impacted residents and other stakeholders traditionally at a disadvantage and ensure they have a role in decision making at every step in the process.	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. IBRP will continue to uphold its commitment to meaningfully engage priority equity communities in decision making. Equity and equitable access to transportation is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	tbd
(2021)	Congestion pricing programs and projects can improve equity outcomes by (2) Committing to targeted investments of net toll revenues for locally supported improvements such as improved transit infrastructure and services and traffic safety improvements.	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. Transit investment will be key to the overall program. IBRP is currently considering a range of high-capacity transit options, all of which would greatly improve transit frequency and reliability compared to today.	tbd
	Congestion pricing programs and projects can improve equity outcomes by (3) Exploring who pays and to what degree , and considering a suite of affordability programs such as rebates or exemptions for low-income drivers, a "transportation wallet", or other investments that address affordability.	TBD . IBRP has not established details of a pricing program yet, but variable pricing will be a key component to manage demand. Equity and equitable access to transportation is a shared priority, and IBRP is committed to evaluating equitable tolling structures.	tbd

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
TriMet		Replacement Program (IBRP) Goals	
	Convert MAX to 100% wind power in 2020	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict. Similarly, IBRP will be considering integration of renewable power generation.	n/a
	Stop diesel bus purchases after 2025	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
	Convert buses to renewable diesel beginning in April 2020	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
TriMet Sustainability	Convert non-bus fleet to electric & non-bus heavy-duty vehicles to renewable diesel by 2030	Yes – Partial. IBRP climate goals include goals to use low emissions vehicles. Construction goal aims to use low emissions construction equipment and vehicles, and Maintenance and Operations goal aims to have an electric fleet of vehicles for maintenance. These goals support this by setting an example of other agencies using low impact vehicles. <i>Reducing Climate Impacts – Construction Reducing Climate Impacts - Operations and Maintenance</i>	
	Support Youth Pass Program	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
	Conduct a carbon baseline analysis and develop a net zero carbon strategy	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
	Develop a carbon lens	Yes - Aligned. IBRP climate framework aims to put climate at the center of the design process, similar to a "carbon lens."	
	Support regional air quality testing	Not applicable. IBRP climate goals are not in conflict.	n/a

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Interstate Bridge Replacement Program | Climate Framework Alignment with Partner Agency Goals & Plans

Partner Agency:	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Port of Portland		Replacement Program (IBRP) Goals	
Climate Change	Our goal by 2020 is to lower all our carbon emissions by 15 percent below 1990 levels.	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
Strategy	Reduce diesel particulate matter by 75% from Port-controlled operations from 2000 baseline levels by 2020.	Not applicable ; no conflict. Does not apply to IBRP climate goals but has no conflict.	n/a
Environmental	[Need document details]		
Objectives and			
Targets (year)			
Environmental Objectives and Targets (2016- 2017)	Minimize impacts to air quality: The Air Quality Program facilitates implementation of the Port's Air Quality Policy, which has a primary goal of promoting clean air for all who live in airsheds affected by Port activities. To do this, the Port utilizes emissions inventories and aspect/impact analyses of its planned and actual activities that have, or can have, a significant impact on the airshed. Recognizing that not all emission sources are under the Port's direct control, the Port seeks opportunities to improve air quality by facilitating and encouraging partnerships, education, and outreach to assist customers, tenants, and other stakeholders in reducing marine and aviation-related emissions. The Port supports efforts of the International Maritime Organization and International Civil Aviation Organization to set global standards to reduce emissions from marine vessels and aircraft	Yes – Aligned. IBRP climate goals aim to lower emissions which will contribute to the goal of lowering overall state emissions and improving air quality. <i>Reducing Climate Impacts – Transportation Options</i> <i>Reducing Climate Impacts – Construction</i>	
	Reduce energy consumption and carbon emissions: The Port developed the Energy and Carbon Management Master Plan to reduce energy consumption and carbon emissions. The plan aligns closely with the Air Quality program and presents a six-	Yes – Aligned. IBRP climate goals aim to lower emissions which will contribute to the goal of lowering overall state emissions. <i>Reducing Climate Impacts – Transportation Options Reducing Climate Impacts – Construction</i>	•

Partner Agency:	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
Port of Portland		Replacement Program (IBRP) Goals	
	point strategy for reaching the Port's GHG reduction goal. The master plan sets the foundation for establishing targets and a portfolio of projects identified and scheduled for implementation.		
	Minimize impacts and seek opportunities to enhance natural	Yes – Aligned. IBRP climate goals aim to create a robust	
	resources: The Natural Resources Program seeks to ensure the development and maintenance of a consistent, ecosystem- based framework for all decisions involving natural resources at the Port. The Port takes a proactive approach to managing natural resources and is responsible for the long-term management of its mitigation commitments. Engaging with the community to identify opportunities has been an important aspect in target selection to support regional conservation goals and initiatives.	landscape plan that relies on much higher than traditional tree and planting replacement rates in the public right of way. This renews natural resources and supports conservation goals. IBRP additionally will take a proactive approach to natural resources protection and avoiding impacts where possible. <i>Reducing Climate Impacts – Offsets</i>	•
	Minimize impacts to water resources: The Port of Portland's	Yes – Aligned. IBRP design will include elements that managing	
	Stormwater Management Program is designed to prevent, reduce, and eliminate the discharge of polluted stormwater to the Columbia Slough and Willamette and Columbia rivers. In addition, the Port continues to set targets in support of the Water Conservation Strategy developed in 2014 that defines strategies to eliminate waste, improve efficiency and use alternative water sources across the Port. It strives to further integrate water conservation into the Port's daily operations, business planning, maintenance, and capital projects.	stormwater due to increased storm intensities, this will have an overall impact in reducing water pollution. Additionally, the program will be designing additional stormwater treatment beyond what is provided by current facilities. <i>Climate Resiliency- Environmental Changes</i>	
	Reduce waste generation and hazardous materials use: Five	Yes – Aligned. IBRP climate goals include zero waste goals for	
	Years to Zero Waste is the Port of Portland's ambitious plan	demolition, helping to directly support this goal.	
	developed in 2014 to create a guidance framework for the	Reducing Climate Impacts – Construction	
	actions necessary to reach "Zero-Waste" status, which the EPA defines as landfill waste diversion of 90% or greater. This plan		

Partner Agency: Port of Portland	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
	has been developed through an ongoing partnership with Portland State University's Community Environmental Services, as part of the Port's commitment to innovative, industry-leading waste minimization efforts within the broader framework of the Port's EMS. This plan sets out a framework to achieve Zero Waste status by implementing broad strategies in key areas, with specific actions, priorities, and targets. The Port has made great strides toward Zero Waste at Port-owned properties.		

Partner Agency - City of	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
Vancouver			
Climate Action	[Plan forthcoming August 2022]		
Plan: Goals and Policies (2022)			
City Council Statement on GHG Reduction	 GHG Reduction Target. The City will be carbon neutral by 2050. an 80% reduction in GHG emissions by municipal operations by 2025 an 80% reduction in GHG emissions by the Vancouver community by 2030 and the achievement of carbon neutrality by both municipal operations and the Vancouver community by 2040. 	Yes – Aligned. IBRP is working with partners to establish GHG reduction targets. IBRP has a goal to contribute to reducing GHG emissions. The goals associated with transportation options aim to shift travel demand to low GHG modes, constructions goals center around reducing construction-based emissions, goals for maintenance and operations are all aiming to reduce GHG, and in areas where emissions cannot be reduced goals are included to offset the emissions.	
	Greenhouse gas emissions meet existing and emerging state and federal requirements.	Yes – Aligned. IBRP desired outcomes include reducing GHG emissions and will met all state and federal requirements.	
Sustainability Plan	 Environmental health is protected or improved by minimizing and where possible, eliminating: 1. The use of hazardous or toxic materials by residents, businesses, and City operations. 2. The levels of pollutants entering the air, soil, and water. 3. The risks that environmental problems pose to human and ecological health. 	Yes – Aligned. IBRP has set goals for low emissions construction methods, equipment, and vehicles which align with the goals of reducing hazardous or toxic materials. IBRP Climate Resiliency goals consider the impacts that climate change can have on the bridge and the communities around the bridge. These goals are aligned with reducing the risks that environmental problem s pose to human and ecological health. <i>Reducing Climate Impacts – Construction Climate Resiliency – Development and Behavior Change</i>	

Partner Agency – City of Vancouver	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
	No one geographic or socioeconomic group in the City is being unfairly or disproportionately impacted by environmental pollution	Yes – Aligned. IBRP environmental justice and equity commitments to avoid disproportionate harms are aligned with this goal.	•
	Consumption of fresh, locally produced, organic produce and foods increases to promote public health and to minimize resource consumption and negative environmental impacts.	Not applicable; no conflict.	n/a
	City and community consumption - specifically consumption on non-local, nonrenewable, non-recyclable and non-recycled materials, water, energy, and fuels - decrease. City takes a leadership role in encouraging sustainable or green procurement and considers ways to become a zero-waste city over the long term.	Yes – Aligned. IBRP sets the goal to use local manufacturers and source materials locally, this directly aligns and supports this goal. <i>Reducing Climate Impacts – Construction</i>	
	The use of local, non-polluting, renewable, and recycled resources is encouraged	Yes – Aligned. IBRP sets the goal to use local manufacturers and source materials locally, this directly aligns and supports this goal. Additionally, IBRP climate goals include lifecycle analysis for environmental impacts of materials, which will help to support this goal by ensuring that materials used are sustainable. <i>Reducing Climate Impacts – Construction Reducing Climate Impacts – Maintenance and Operations</i>	
	A multi-modal transportation system exists that minimizes and, where possible, eliminates pollution and motor vehicle congestion while ensuring safe mobility and access for all without compromising our ability to protect public health and safety.	Yes – Aligned. IBRP will contribute to this goal. Reducing travel demand, shifting travel demand to low GHG modes, and improving transportation efficiency will all contribute to the outcomes desired in this goal. <i>Reducing Climate Impacts – Transportation Options</i>	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
City of		Replacement Program (IBRP) Goals	
Vancouver			
	Auto dependency is reduced and affordable alternative, sustainable modes of travel are increased.	Yes – Aligned. IBRP will contribute to this goal. IBRP aims to minimize auto travel demand and shift travel demand to low GHG modes such as walking, biking, or transit. <i>Reducing Climate Impacts – Transportation Options</i>	•
	Vancouver has a diverse, vibrant, stable, local economy that supports the basic needs of all segments of the community.	Yes – Aligned. IBRP supports this goal by setting a goal to use local manufacturers. <i>Reducing Climate Impacts – Construction</i>	
	Businesses, organizations, and non-profits within the city work with the City of Vancouver to increase efficient use of resources through sustainable business practices.	Yes – Aligned. IBRP supports this goal by setting a goal to use local manufacturers and provide support for small firms and DBE firms to increase capacity for sustainable practices. <i>Reducing Climate Impacts – Construction</i>	•
	Sustainable or "green" businesses are encouraged to locate in the City of Vancouver.	Yes – Aligned. IBRP plans to utilize local and sustainable manufactures and will act as a reliable transportation option for local businesses but should otherwise have no negative impact on this goal.	
	A sufficient open-space system is developed and maintained so that it is diverse in uses and opportunities and includes natural functions/wildlife habitat, as well as passive and active recreation with equitable distribution of parks, trees, pathways throughout the City.	Yes – Aligned. IBRP includes a goal to create a robust landscape plan that relies on much higher than traditional tree and planting replacement rates in the public right of way. Assisting this goal in that it will increase greenspace and tree cover in the area that mitigation is done. <i>Reducing Climate Impacts – Offsets</i>	
	Land use and transportation planning and policies create compact, mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling and the use of existing or future public transit options.	Yes – Aligned. IBRP includes the goal to minimize travel demand and increase the walkability of the area, and shift travel demand to low GHG modes such as biking, or transit. These goals will support Vancouver's goals by expanding walkability and bikeability within the program area of impact and beyond. <i>Reducing Climate Impacts – Transportation Options</i>	•

Partner Agency – City of Vancouver	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
Vancouver	Residents recognize that we all share the local ecosystem with other living things that warrant respect and responsible stewardship. Vancouver uses land efficiently in order to minimize the need to expand the urban footprint to accommodate growth.	Yes – Partial. IBRP does not have land use authority; however, the program will prioritize transportation solutions that are compatible with more compact, walkable and transit-oriented communities. <i>Reducing Climate Impacts – Transportation Options Reducing Climate Impacts – Offsets</i>	
	All development meets the 2030 Challenge in urban growth areas. Clark County and cities have an integrated approach to achieving sustainability.	Yes – Partial. IBRP is considering options for sustainability certification from third parties such as Greenroads, Envision (ISI), and Living Building Challenge (Living Future). These are similar to the 2030 Challenge, but specifically for infrastructure projects.	
	A mix of affordable, livable, and green housing types is achieved and maintained throughout the City of Vancouver for people of all socio-economic/cultural/household groups, including seniors, singles and the disabled.	Not applicable ; no conflict. The IBRP goals will have no negative impacts on the housing types in the City of Vancouver.	n/a
	LEED-certified or equivalent commercial new buildings are encouraged and promoted.	Yes – Aligned. While IBRP is not focused on building construction it does have goals that include using low emissions methods, materials, equipment, and vehicles during construction. IBRP is looking at infrastructure sustainability rating systems that match or exceed LEED standards	•
	All residents of Vancouver are able to meet their basic needs and are empowered to enhance their quality of life.	Yes – Partial. IBRP climate goals will have no negative impact on this goal. However, having a new sustainable bridge may facilitate this goal. IBRP prioritization of equity concerns will assist in advancing this goal.	
	Community members have access to housing, health and social services, education, economic opportunity, and cultural and recreational resources.	Yes – Aligned. IBRP will increase transportation options and broaden access for people walking, rolling, and taking transit.	

Partner Agency – City of Vancouver	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
		The bridge provides a necessary avenue for access to the listed resources.	
	There is respect and appreciation of the value added to the community by differences among its members in race, religion, gender, age, economic status, sexual orientation, disabilities, immigration status and other special needs.	Yes – Aligned. The IBRP equity program will assist in advancing this goal.	•
	Community members of all ages participate actively and effectively in civic affairs and community improvement efforts.	Yes – Aligned. IBRP equity and engagement programs are in alignment and will assist in advancing this goal.	
	An actively engaged community helps the City of Vancouver to carry out and improve Vancouver's Sustainability Plan	Yes – Partial. IBRP climate goals will have no negative impact on this goal. IBRP prioritization of equity concerns, process equity, and inclusive engagement will assist in advancing this goal.	
	Community members of all ages and cultures understand the basic principles of sustainability and use them to guide their decisions and actions, personally and collectively.	Yes – Partial. IBRP supports community education in sustainability and will have no negative impact on this goal.	

Partner Agency -	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match
C-TRAN		Replacement Program (IBRP) Goals	
C-TRAN	C-TRAN services contribute positively to the region's sustainability, livability, and economic vitality by helping manage traffic congestion, reduce dependence on foreign oil, lower carbon emissions, contain transportation costs for employers and employees, enable denser land use and development of urban areas, and provide essential transport to persons with no other means of travel.	Yes – Aligned. IBRP climate goals aim to shift travel demand to low GHG modes this includes increasing access and connection for high-capacity transit, supporting this goal. <i>Reducing Climate Impacts – Transportation Options</i>	•

Partner Agency –	Partner Agency – Specific Goal	Alignment with Interstate Bridge	Match			
Port of		Replacement Program (IBRP) Goals				
Vancouver						
	Apply sustainability standards to new construction projects	Yes – Aligned. IBRP is evaluating adherence to several				
		sustainability rating systems for substantial project elements.				
	Develop sustainable construction standards such as low-carbon	Yes – Aligned. IBRP climate goals include sustainable materials				
	concrete and asphalt, low-emission construction vehicles,	selection.				
	construction waste reduction, and materials reuse	Reducing Climate Impacts – Construction	_			
	Continue lighting retrofits	Not applicable; no conflict. Does not apply to IBRP but has no				
		conflict. Similarly, IBRP will be designing for energy efficient lighting.	n/a			
	Install occupancy sensors, building controls, programmable	Not applicable; no conflict. IBRP assets will be designed	n/2			
	thermostats and smart meters	including sensors for smart operations	II/a			
Dort of	Replace aging HVAC units with energy efficient technology	Not applicable; no conflict. IBRP assets will be designed	n/2			
FUILUI		including energy efficient technology	II/a			
Vancouver	Explore renewable energy opportunities including onsite solar	Not applicable; no conflict. IBRP assets will be designed to				
Climate Action	power generation, small-scale wind generation, geothermal	optimize access to renewable energy sources.	n/a			
Dlan	energy, and replacement of natural gas		1			
Flaii	Electrify or hybridize diesel and gasoline powered vehicles and	Yes – Aligned. Reducing emissions associated with				
	equipment	maintenance and operations includes a goal to utilize an	-			
		electric vehicle maintenance fleet, the use of an electric vehicle				
		maintenance fleet by a public agency often increases the				
		support/accessibility for other agencies to switch as well.				
	Install EV charging infrastructure	Yes – Aligned. IBRP is looking at integrating charging needs into				
		the transportation system.				
	Replace use of diesel with low carbon fuels such as renewable	Yes - Aligned. Reducing emissions associated with				
	diesel	maintenance and operations includes a goal to utilize a				
		renewable power supply and to use electric vehicles for the				
		maintenance fleet, this goal aligns with that.				

Partner Agency – Port of	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
Vancouver			
	Work with C-Tran to provide transit service to the Port and provide transit subsidies to employees	Not applicable; no conflict.	n/a
	Install bicycle infrastructure such as secure parking and showers to promote bicycle commuting	Yes – Aligned. IBRP includes goals to reduce vehicle-based emissions and shifting to transit and active transportation, including bicycles. If routes that commuters use are accessible to bicycles, it will support this goal.	
	Support effective carpool options	Yes – Aligned. IBRP includes goals to reduce vehicle-based emissions and shifting to transit and active transportation, including a carpool/HOV lane.	
	Promote telecommuting through enhanced virtual work infrastructure and policies	Not applicable; no conflict.	n/a
	Offset emissions from business travel	Not applicable; no conflict.	n/a
	Promote use of low-carbon ground transport options for business travel	Yes – Aligned. IBRP will include high-capacity transit that can serve business travelers across the region. <i>Reducing Climate Impacts – Transportation Options</i>	
	Provide recycling services and infrastructure	Not applicable; no conflict.	n/a
	Develop a waste reduction plan	Yes – Aligned. The IBRP has zero waste goals for demolition, these goals don't support each other, but show an alignment in the area.	
	Promote the use of green infrastructure to manage stormwater	Yes – Aligned. IBRP design will incorporate sustainable stormwater management strategies.	
	Explore water system efficiencies	Yes – Aligned. IBRP design will incorporate sustainable design practices, such as water efficiency.	
	Develop sustainability standards for new construction projects on port property	Not applicable; no conflict.	n/a

Partner Agency – Port of	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
Vancouver			
	Develop sustainable construction standards such as low-carbon concrete and asphalt, low-emission construction vehicles, construction waste reduction, and materials reuse for projects occurring on port property	Yes – Aligned . IBRP aims to reduce construction-related emissions and support	•
	Explore carbon reduction during collaborations on agreements with tenants/customers	Not applicable; no conflict.	n/a
	Pursue partnerships, incentives, and grant opportunities to support tenant/customer energy efficiency, equipment electrification and other carbon reduction initiatives	Yes – Partial. IBRP climate goals aim for similar expansion of energy efficient systems.	
	Emphasize and increase marketing efforts to pursue innovative business opportunities and renewable, clean energy projects	Not applicable; no conflict.	n/a
	Promote lighting retrofits by tenants	Not applicable; no conflict.	n/a
	Promote installation of occupancy sensors, building controls, programmable thermostats and smart meters by tenants	Not applicable; no conflict.	n/a
	Promote replacement of aging HVAC units with energy efficient technology in tenant facilities	Not applicable; no conflict.	n/a
	Support onsite renewable energy generation by tenants	Not applicable; no conflict.	n/a
	Encourage tenants to replace natural gas use with low carbon/renewable alternatives	Not applicable; no conflict.	n/a
	Promote the electrification and hybridization of diesel and gasoline powered vehicles and equipment	Yes – Aligned. Reducing emissions associated with maintenance and operations includes a goal to utilize an electric vehicle maintenance fleet, the use of an electric vehicle maintenance fleet by a public agency often increases the support/accessibility for other agencies to switch as well.	
	Install common use EV charging infrastructure	Yes – Aligned. IBRP is looking at integrating charging facilities into the design.	

Partner Agency – Port of Vancouver	Partner Agency – Specific Goal	Alignment with Interstate Bridge Replacement Program (IBRP) Goals	Match
	Promote the replacement of diesel with low carbon fuels such as biodiesel, renewable diesel, and hydrogen	Yes – Aligned. Reducing emissions associated with maintenance and operations includes a goal to utilize an electric vehicle maintenance fleet, the use of an electric vehicle maintenance fleet by a public agency often increases the support/accessibility for other agencies to switch as well.	
	Evaluate the use of fuel cells for heat and power, mobile equipment, and locomotives	Not applicable; no conflict.	n/a
	Promote the use of clean trucks and low carbon drayage vehicles	Yes – Aligned. Reducing emissions associated with maintenance and operations includes a goal to utilize an electric vehicle maintenance fleet, the use of an electric vehicle maintenance fleet by a public agency often increases the support/accessibility for other agencies to switch as well.	•
	Evaluate the use of shore power options for vessels visiting the Port	Not applicable; no conflict.	n/a
	Facilitate the development of a terminal equipment inventory to help target new investments and grant opportunities	Not applicable; no conflict.	n/a
	Encourage visits by cleaner or more fuel-efficient vessels	Not applicable; no conflict.	n/a
	Explore partnerships to promote shipping via the river system for eastbound cargo	Not applicable; no conflict.	n/a
	Promote idle reduction by rail vehicles/equipment (including locomotives)	Not applicable; no conflict.	n/a
	Evaluate the development of infrastructure to support electric locomotives for on-port switching operation	Not applicable; no conflict.	n/a

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Appendix B. Transit Data

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Transit Performance Evaluation *Transit Options & Performance Measure Descriptions*

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	Option B	Option C	Option D	Option E	Option F	Option G	Option H	Option I	Option J	Option L	Option M
	2045 CRC Loca Preferred Alterna	lly Bus on Shoulder	Extend Vine(s) BRT on a Dedicated Guideway from Turtle Place to Expo Center	Dedicated BRT - Kiggins Bowl to Expo Center on an I-5 Adjacent Dedicated Guideway	Dedicated BRT - McLoughlin/I-5 to Expo Center in a Dedicated Guideway on the 2013 Transit Alignment	Extend Vine(s) BRT on a Dedicated Guideway from Turtle Place to Hayden Island, Extend Yellow Line from Expo Center to Hayden Island	LRT Extension from Expo Center to a terminus near Turtle Place	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus near McLoughlin/I-5	LRT Extension from Expo on an I-5 Adjacent Dedicated Guideway to a Terminus near Kiggins Bowl	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus Near McLoughlin/I-5 with Waterfront Station	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus Near Evergreen/I-5 with Waterfront Station
Alignment Description	2013 CRC LPA proje assumes fully dedi LRT guideway exter from Expo Center to a terminus near McLoughlin/I-5 via Vancouver CBD.	ct Express bus operating as Bus on Shoulder in BIA (both directions). Route 60 in auxiliary lanes between Vancouver CBD and Hayden Island, Delta Park.	Fully dedicated Bus Rapid Transit (BRT) guideway between Expo Center and a terminus at Turtle Place in downtown Vancouver.	Fully dedicated Bus Rapid Transit (BRT) guideway between Expo Center and a terminus Near McLoughlin Blvd. / I-5. Dedicated guideway on Vancouver segment will be adjacent to 1-5 with a connection to Hayden Island and Expo Center similar to 2013 LPA.	Fully dedicated Bus Rapid Transit (BRT) guideway between Expo Center and a terminus near McLoughlin/I-5 with station locations similar to 2013 CRC LPA project.	Fully dedicated LRT guideway between Expo Center and a new station at Hayden Island and fully dedicated Bus Rapid Transit (BRT) guideway between Hayden Island and Turtle Place.	Fully dedicated LRT guideway between Expo Center and a terminus near Turtle Place in downtown Vancouver.	Fully dedicated LRT guideway between Expo Center and a terminus near I-5/McLoughlin. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a connection to Hayden Island and Expo Center similar to 2013 LPA.	Fully dedicated LRT guideway between Expo Center and a terminus near I-5/Kiggins Bowl. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a connection to Hayden Island and Expo Center similar to 2013 LPA.	Fully dedicated LRT guideway between Expo Center and a terminus near I-5/McLoughlin. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a connection to Hayden Island and Expo Center similar to 2013 LPA.	Fully dedicated LRT guideway between Expo Center and a terminus near I-5/ Evergreen. Dedicated guideway on Vancouver segment will be adjacent to I-5 with a connection to Hayden Island and Expo station similar to 2013 LPA.
Proposed Initial Stations	Five(5) - same as 2 CRC LPA alignmer I-5/McLoughlin, Washington/ Broadway & 15th, Washington/Broa & Evergreen, Washington/5th, Hayden Island	1013 None It; dway	Three (3) - Turtle Place, Hayden Island, Expo Center	Six (6) - Kiggins. E 33rd, McLoughlin Blvd., Evergreen Blvd., Hayden Island, Expo Center	Six (6) - similar to 2013 CRC LPA alignment; I-5/McLoughlin, McLoughlin & Washington St (SB)/16t & Broadway (NB), 12th & Washington (SB)/ 13th & Broadway (NB), Turtle Place, Hayden Island, Expo Center	Two (2) - Hayden Island, Expo Center	Two (2) - Hayden Island, Turtle Place	Three (3) I-5/McLough- lin, Evergreen, Hayden Island	Five (5) Kiggins Bowl, 33rd, I-5/McLoughlin, Evergreen, Hayden Island	Four (4) I-5/ McLoughlin, Evergreen, Waterfront, Hayden Island	Three (3) I-5/ Evergreen, Waterfront, Hayden Island
Park & Ride Locations (and Size)	Same as 2013 CR LPA alignment locations and size I-5/McLoughlin (1 spaces), Mill Distr (420 spaces), Sth/ Washington (570 spaces)	S; None s; 910 ct	SR-14 Loop (570)	Kiggins (1,400), I-5/ McLoughlin (1,910), I-5/ Evergreen Blvd. (700)	Same as 2013 CRC LPA alignment locations and sizes; I-5/McLoughlin (1,910 spaces), Mill District. (420 spaces), 5th/ Washington (570 spaces)	SR-14 Loop (570)	SR-14 Loop (570)	I-5/McLoughlin (1,910 spaces), Evergreen (700 spaces)	Kiggins Bowl (1,400 spaces), I-5/ McLoughlin (1,910 spaces), Evergreen (700 spaces)	McLouglin / I-5 (1,910 spaces), Evergreen (700 spaces), SR-14 Loop (570 spaces)	I-5/Evergreen (700 spaces), SR-14 Loop (570 spaces)
Northern Terminus	Near I-5/McLough	lin N/A	Turtle Place	Near I-5/Kiggins Bowl Station	Near I-5/McLoughlin	LRT = Hayden Island BRT = Turtle Place	Turtle Place	Near I-5/McLoughlin	Near I-5/Kiggins Bowl	Near I-5/McLoughlin	Near I-5/Evergreen
Transfer Location	No transfer requir extension of Yellow Line	ed - N/A	Expo Center	Expo Center	Expo Center	Hayden Island	No transfer required - extension of Yellow Line	No transfer required - extension of Yellow Line	No transfer required - extension of Yellow Line	No transfer required - extension of Yellow Line	No transfer required - extension of Yellow Line
Initial Peak Frequency	Yellow Line: 7.5 mir peak/15 min off-pe	Route 101: 15 min peak/30 min off-peak Route 105: 10 min peak only Route 190: 10 min peak only Route 60: 10 min peak/10 min off-peak	Hwy 99 BRT: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT clockwise: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT counterclockwise: 20 min peak/20 min off-peak Combined frequency on dedicated alignment: 6.6 min peak/6.6 min off-peak	Hwy 99 BRT: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT clockwise: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT counterclockwise: 20 min peak/20 min off-peak Frequency between Kiggins Bowl - Evergreen: 20 min peak/20 min off-peak Combined frequency on dedicated alignment south of Evergreen Station: 6.6 min peak/6.6 min off-peak	Hwy 99 BRT: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT clockwise: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT counterclockwise: 20 min peak/20 min off-peak Frequency between Kiggins Bowl - Evergreen: 20 min peak/20 min off-peak Combined frequency on dedicated alignment south of Evergreen Station: 6.6 min peak/6.6 min off-peak	Yellow Line:7.5 min peak/15 min off-peak Hwy 99 BRT: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT clockwise: 20 min peak/20 min off-peak Mill Plain/Fourth Plain BRT counterclockwise: 20 min peak/20 min off-peak Frequency between Kiggins Bowl - Evergreen: 20 min peak/20 min off-peak Combined frequency on dedicated alignment south of Evergreen Station: 6.6 min peak/6.6 min off-peak	Yellow Line: 7.5 min peak/15 min off-peak	Yellow Line: 7.5 min peak/15 min off-peak	Yellow Line: 7.5 min peak/15 min off-peak	Yellow Line: 7.5 min peak/15 min off-peak	Yellow Line: 7.5 min peak/15 min off-peak
Peak Frequency Needed to Meet Demand	Yellow Line: 5 min	Route 101: 5 min Route 105: 5 min Route 190: 10 min	Same as initial frequencies	Hwy 99 BRT: 9 Min Mill Plain/Forth Plain BRT Counter Clockwise: 16 min	Same as initial frequencies	Yellow Line: 8 min BRT: Same as initial frequencies	Yellow Line: 7 min	Yellow Line: 5 min	Yellow Line: 4 min	Yellow Line: 5 min	Yellow Line: 6 min
Project Length	Northbound, 2.76 r Southbound, 2.77 r	niles N/A niles	1.67 miles	3.85 miles	Northbound 2.87 miles Southbound 2.89 miles	LRT45miles BRT - 1.23 miles	1.62 miles	2.45 miles	3.85 miles	2.45 miles	1.87 miles
Travel Time	Northbound 9.1 minutes, Southbou 8.2 minutes	nd N/A	3.98 min	7.65 min	Northbound 9.64 minutes, Southbound 9.51 minutes	LRT - 1.73 min BRT 2.95 min	3.82 minutes	5.76 minutes	8.53 minutes	6.39 minutes	4.68 minutes
Measur Project Rid	re 1 Iership	Project ridership will be develope as routes or portions of routes th of what is being measured. For es benefit from the capital investme	ed as an output from the Re at include capital and/or se (ample, an option that inclu nt. Project trips will be sun	igional Travel Demand Moc rvice investments funded b udes the operation of a new nmarized for both and com	lel. Project ridership is mea by the IBR Program. These i V HCT route in its own right bined to arrive at a total fo	sured as the number of dai may include infrastructure -of-way that also allows for r the option.	ily linked trips (complete tr or service enhancements. 1 Express Bus use of the righ	ips from origin to destinatic The definition of a project t it-of-way would capture Pro	on including transfers) usin ip will be clearly identified ject ridership from both th	g any part of the proposed for each option to allow fo e HCT route as well as the	project. Project is defined r a better understanding Express routes that
Measur New System F	r e 2 Ridership	New system riders will be develo	ped as an output from the F	Regional Travel Demand Mo	odel. This measure is calcul	ated using total daily linke	d transit trips for each build	d option as compared to tot	al daily linked transit trips	from the no build option.	
Measur Station Act Mode of Acces	re 3 ivity & is / Egress	Total boardings at each station w they use to travel from their origi	ill be developed as an outp n to their destination.	ut from the Regional Trave	l Demand Model. A boardii	ng is defined as a single pas	ssenger who boards a trans	it vehicle. Boardings are co	unted each time a passeng	er boards a vehicle no matt	er how many vehicles
Measure 4 / Measur I-5 Columbi Transit Cro	re 5 / Measure 6 ia River ossings	Average weekday person trips cro City of Vancouver and Hayden Isl hroughout the entire day and ca	ossing the Columbia River v and. Person trips will be rep pture non-commute trips t	vill be developed using sele ported by mode. A person t hat may be missed by only	ect link and segment assigr rip is defined as a trip mad looking at peak period der	iments as an output from ti e by one person between a nand. Project volumes of tr	he Regional Travel Demand n origin and destination. M ansit person trip origins an	Model. The specific locatic easuring the average week d destinations, including p	on of this assignment will b day crossings will illustrate ark and rides, will be mapp	e on I-5 at the Columbia Riv the demand for the I-5 Col eed.	/er crossing between the umbia River crossing
Measu Corridor Trar	re 7 nsit Trips	Transit person trips for the IBR cc trips for which transit is the mod be summarized in aggregate and Reported at the corridor level for	prridor will be developed as e. Corridor transit trips are mapped at a Transportatio totals and mapped at the T	an output from the Regior generally defined as trips tl n Analysis Zone (TAZ) level ʿAZ level.	al Travel Demand Model. T nat have a trip end within t for the region with the cor	his measure will be calcula he project area including p ridor outlined to show char	ited as a comparison again: ortions of Clark County, Cit nges compared to the No Bi	st the 2045 No Build condit y of Vancouver, north Portla uild option.	ion. Transit person trips are and, and the Portland Cent	e a subset of all person trip: ral City (see Map 1). The tra	i, focusing only on those nsit trip productions will
Measur Park & Ride I	r e 9 Demand	Total park and ride demand will b users of each assumed parking fa Reported and mapped at the stat	be developed as an output f icility. ion level.	from the Regional Travel De	emand Model. This measu	re will be reported as avera	ge weekday vehicle deman	d at each lot location in the	project corridor. Park and	ride demand will also be m	apped to show origins of
Measur Capital (e 12 Cost	This measure is a quantitative an Reported at the project level.	alysis of the capital cost of	the design option. The met	hodology for developing th	nis measure is TBD based o	n available cost informatio	n at the time of developing	the option summary.		
Measur Operating & Maint	e 13 tenance Costs	n coordination with TriMet and C Reported at the project level.	C-TRAN operations staff, ope	erating costs will be estima	ted.						



Transit Performance Evaluation All Transit Options



Numbers below represent raw data from high-level analysis of scenarios using a regional travel demand model. The model used to develop this information does not account for things such as displacements, more detailed transit operations and transit connectivity along with a number of other important considerations that will be developed in more detail through the use of other tools and analysis during the environmental process.

		Option A	Option B	Option C	Option D	Option E	Option F	Option G	Option H	Option I	Option J	Option L	Option M
		2045 No Build	2045 CRC Locally Preferred Alternative	Bus on Shoulder	Extend Vine(s) BRT on a Dedicated Guideway from Turtle Place to Expo Center	Dedicated BRT - Kiggins Bowl to Expo Center on an I-5 Adjacent Dedicated Guideway	Dedicated BRT - McLoughlin/I-5 to Expo Center in a Dedicated Guideway on the 2013 Transit Alignment	Extend Vine(s) BRT on a Dedicated Guideway from Turtle Place to Hayden Island, Extend Yellow Line from Expo Center to Hayden Island	LRT Extension from Expo Center to a terminus near Turtle Place	LRT Extension from Expo Center on an 1-5 Adjacent Dedicated Guideway to a Terminus near McLoughlin/I-5	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus near Kiggins Bowl	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus Near McLoughlin/I-5 with Waterfront Station	LRT Extension from Expo Center on an I-5 Adjacent Dedicated Guideway to a Terminus Near Evergreen/I-5 with Waterfront Station
Meas Project F	sure 1 Ridership	N / A	26,600	N / A	7,400	15,300	20,600	10,300	12,100	21,100	24,700	24,600	15,900
Measure 2 New System Ridership		N / A	15,600	4,400	7,700	11,40	11,100	7,600	8,700	13,300	15,300	15,200	11,000
Measure 3 Station Activity & Mode of Access / Egress (Average Weekday Boardings + Alightings at New High Capacity Transit Stations)		N / A	29,100	N / A	12.300	23,250	27,800	13,400	12,300	22,000	26,300	26,300	16,300
Measure 4	Transit Crossings*	19,400	33,300	23,900	26,900	30,000	28,700	26,100	27,100	31,500	33,200	33,200	29,500
Average Weekday I-5 Columbia River Crossings	Percentage of Total Crossings	8%	15%	11%	12%	13%	13%	12%	12%	14%	15%	15%	13%
Measure 5 Peak I-5 Columbia	Transit Crossings*	3,600	5,600	4,300	4,700	5,200	5,000	4,700	4,800	5,400	5,700	5,600	5,100
River Crossings (PM 1-Hour)	Percentage of Total Crossings	20%	29%	24%	26%	28%	27%	26%	26%	29%	30%	29%	27%
Measure 6 Peak I-5 Columbia	Transit Crossings*	7,900	13,000	9,700	10,700	11,800	11,400	10,500	10,800	12,400	12,900	12,900	11,700
River Crossings (PM 4-Hour)	Percentage of Total Crossings	12%	20%	16%	17%	19%	18%	17%	18%	20%	20%	20%	19%
Measure 7 Corridor Transit	Transit Riders	454,700	469,500	458,900	461,800	465,400	464,200	461,800	462,800	467,200	469,200	469,200	465,200
Ridership (Average Weekday)	Change vs. No Build	N/A	14,700	4,200	7,100	10,700	10,400	7,000	8,100	12,500	14,500	14,500	10,400

	Walk	N / A	(37%) 10,700	N / A	(33%) 4,100	(21%) 4,900	(29%) 8,200	(34%) 4,500	(39%) 4,800	(29%) 6,300	(32%) 8,300	(30%) 8,000	(37%) 6,000
Measure 8 Station Mode of Access / Egress (Average Weekday)	Transfer	N / A	(42%) 12,200	N / A	(64%) 7,900	(59%) 13,700	(58%) 16,200	(66%) 8,900	(52%) 6,400	(44%) 9,700	(33%) 8,800	(46%) 12,100	(49%) 8,000
	Park & Ride	N / A	(22%) 6,300	N / A	(2%) 300	(20%) 4,600	(13%) 3,500	-	(9%) 1,100	(27%) 6,000	(35%) 9,200	(24%) 6,200	(14%) 2,300
	Total	N/A	29,100	N / A	12,300	23,300	27,900	13,400	12,300	22,000	26,300	26, 300	16,300
Measure 9 Park & Ride Demand		N/A	3,060	N / A	620	4,330	2,850	620	620	2,780	4,460	3,470	1,400
Measure 12 Capital Cost		N/A	Medium	N / A	Low	Medium-Low	Low	Low	Medium-Low	Medium	High	Medium-High	Medium
Measure 13 Operating & Maintenance Costs**		N/A	High	Low	Low	Low	Low	Low	Medium	Medium-High	High	Medium-High	Medium

*Transit numbers presented in these tables assume that demand can be met by the service being provided. Given assumed headways and capacities in the network for these options, some of the demand generated by the model would not be served. Therefore, these numbers reflect more transit demand than could be accommodated based on service levels in the options.

When considering operations and maintenance costs **per rider, LRT is typically less expensive than BRT because LRT vehicles can carry more than 2.5 times as many passengers than BRT vehicles.



Appendix C. City of Portland and Metro Modeling Request and Program Response

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October 21, 2021

Greg Johnson, Program Administrator Interstate Bridge Replacement Program

Re: October 21, 2021 Executive Steering Group Meeting

Dear Mr. Johnson:

Thank you for providing materials for the October 21st Executive Steering Group meeting. We appreciate the hard work you and the team have put into advancing the Interstate Bridge Replacement Program for the region. Given what a critical stage we are in and the items of concurrence proposed on the Agenda, we wanted to provide feedback in writing.

We recognize the goal to identify an IBRP Solution by early 2022. However, we are concerned about the design options analysis. As previously expressed, to get to the IBR Solution we cannot maintain the same highway and toll rate assumptions from the Columbia River Crossing – which is currently the case in the preliminary design options. To understand the effect of holistic design, analysis must include a review of the potential for high quality transit paired with congestion pricing at similar rates to other cities to effect transportation demand. This change in demand should inform bridge and highway design options. We urge the team to fully consider a holistic modeling and analysis approach, to ensure we can advance our shared goals as articulated in the Desired Outcomes, and to produce an evaluation supportive of the needs of decision-makers. Without this analysis, we do not feel we will have enough information to identify the best IBR solution nor answer the questions from our councils. *We need to see analysis that looks at what is possible if we fully invest in transit capacity and access and integrate equitable congestion pricing.* Our staff have previously shared the need for this modeling, analysis, and evaluation and remain prepared to engage and support the effort.

We want to be very clear about what we and our colleagues on the Metro Council and Portland City Council will need to make and support the necessary decisions to get us there:

• **Design Options**: We support the technical work underway to develop and explore individual design options. However, we are concerned that under the current work plan elements will only be analyzed individually as if they do not influence each other (i.e., highway design, tolling, and transit options). Further, the modeling underway is critical to make informed decisions about the IBRP Solution and some significant base assumptions have not been adequately revisited. This will not produce the information we need to make decisions on major elements such as the number of lanes crossing the river. As mentioned above, we need to see analysis that looks at what is possible if we fully invest in transit capacity and access and integrate equitable congestion pricing.

- **Desired Outcomes**: we appreciate the collaboration between the IBR program and partners to gain consensus on Desired Outcomes. These statements are foundational to the work ahead and we look forward to incorporating any additional feedback provided by the Equity Advisory Group.
- Screening Criteria: we look forward to seeing how the screening criteria relate and support our ability to measure success against Desired Outcomes. We will need data from modeling, equity, and climate technical analysis to understand how options perform relative to screening criteria metrics and to identify tradeoffs.

In sum, to reach an IBRP Solution together we need to develop and agree on screening criteria, develop and agree on alternatives, analyze and measure the alternatives against the criteria, and conduct an inclusive public outreach effort - one that gives the public sufficient time to weigh in on the results of the analysis. And agency partners need sufficient time for briefings with elected officials and public boards.

This project is very important to meet our region's needs. We look forward to partnering to move the project forward.

Sincerely,

Horder

Jo Ann Hardesty Commissioner, City of Portland

lynn bot

Lynn Peterson President, Metro Council

Cc: John Willis Frank Green Ray Mabey Chris Regan Debra Nudelman Millicent Williams Johnell Bell



Interstate Bridge Replacement Program 500 East Broadway, Suite 200 Vancouver WA 98660 360-859-0494 WA 503-897-9218 OR 888-503-6735 Toll Free info@interstatebridge.org

November 12, 2021

Dear Commissioner Hardesty and President Peterson,

Thank you for your letter dated October 21, 2021. The IBR team is committed to meeting the needs of our partners and diligently assessing each request with the utmost seriousness as we collectively work to find an IBR solution. We are committed to use the best practices and taking an innovative approach to studying, designing and building a multi-modal Interstate I-5 Bridge. This is a complex project that aims to meet the diverse needs of two busy Ports, commuters, shoppers, students and families across interstate lines.

We understand the important role modeling plays in helping our partners reach important decisions and we commit to working with you to strike the right balance to achieve this mutual goal. To this end, I have directed our team to do the following:

- Develop modeling that looks at what is possible if we fully optimize transit capacity and access and integrate equitable congestion pricing.
- Develop an analysis that considers more dense land use patterns in regard to affordable housing and denser employment options in the North Portland area.
- Provide data from modeling, equity, and climate technical analysis to understand how options perform relative to screening criteria metrics and to identify tradeoffs.
- Develop modeling scenarios that deliver the requested information in a timely manner for decision making by all partners

We understand from your letter that,

"...in order to reach an IBR Solution we need to develop and agree on screening criteria, develop and agree on alternatives, analyze and measure the alternatives against the criteria, and conduct an inclusive public outreach effort..."

We are committed to keeping equity and climate as a goal and a measure of our success on this project, with your input and partnership. We agree with this approach and our teams will continue to work with you to achieve the result that balances the collective needs and expectations of all partners.

Again, we appreciate your willingness to offer your ideas and recommendations, and we look forward to working with you to find a mutually agreeable path forward.

Sincerely,

Greg Johnson U Program Administrator

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Appendix D. Tolling Sensitivity Analysis [Pending]

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Memo



Date:	Friday, Apr. 29, 2022
To:	Transportation Policy Alternatives Committee
From:	Caleb Winter, Senior Transportation Planner and TSMO Program Manager
Subject:	Transportation System Management and Operations Program Update and Regional Implementation

Memo purpose: Report status of projects that are enhancing operator capabilities to manage the system. Share elements going into regional implementation of the 2021 TSMO Strategy

This memo has three pieces:

- 1. TSMO-related project status
- 2. 2021 TSMO Strategy Actions list and link
- 3. TransPort Members and Stakeholders list with a link to TransPort Bylaws

Please browse these materials in advance of the TPAC meeting. They provide context for a discussion on support needed from agencies and partners around the region to implement the 2021 TSMO Strategy.

As the Transportation System Management & Operations (TSMO) Program begins to implement the recently adopted 2021 TSMO Strategy, there are many projects already making improvements. These projects come from prior TSMO planning and reflect the 2018 Regional Transportation policy outcomes: climate, equity, safety and congestion management through reliable transportation.

TSMO supports 2018 RTP Goal 4 for Reliability and Efficiency, through the practice of implementing regional concepts for operations. Sharing innovations and agreeing to standard protocols and processes are part of our regional approach. TSMO involves meeting to share successes and troubleshoot. TransPort, a Subcommittee of TPAC, meets monthly and will help implement half of the TSMO Actions that are near-term (next 3 years) and aligned with the members' and participants' expertise (engineers, researchers and planners). A portion of the remaining actions are long-term. That leaves a portion that could get started soon with some additional coordination. In total, the 2021 TSMO Strategy Actions are ambitious, yet they are realistic with regional agency support.

Joining us for this discussion are:

- Kate Freitag, Chair of TransPort and ODOT Region 1 Traffic Engineer
- A.J. O'Connor, Vice Chair of TransPort and TriMet Director of Intelligent Transportation Systems

Please browse the materials that follow. We look forward to building on this work with you.
1. TSMO Program and TSMO-related Project Status

The following is a summary of projects underway or completed in Clackamas County, East Multnomah County, Portland, Washington County and cities within these counties. It is not an exhaustive list. The projects illustrate how the capabilities of the region are growing on arterials through a variety of resources with benefits to multimodal travel and policy outcomes. Regional policy outcomes shown in Venn diagrams are an initial assessment I made that will provide an outline for future summaries and evaluations. I looked for areas of overlap and wrote in the benefit and relationship to policy outcomes. The policy outcome of managing congestion is indicated by Reliability. I welcome your questions and comments.



Acronyms and abbreviations: ATC – Advanced Traffic Controller ATSPM - Automated Traffic Signal Performance Measure HIC – High Injury Corridor ITS – Intelligent Transportation Systems PTZ – Pan-Tilt-Zoom cameras TSMO – Transportation System Management & Operations VMS – Variable Message Sign

Summaries often include a Project ID. More information on those projects can be found through ODOT's interactive STIP project map. ODOT Transportation Project Tracker: <u>https://gis.odot.state.or.us/tpt/</u>

Clackamas County and cities

	Clackamas County fiber expansion projects These projects provide data communications along the Oatfield Rd corridor, 82nd Dr corridor, Sunnybrook Blvd corridor, and Stevens/Bob Schumacher corridor.	Status update: Two signals remaining on Oatfield. All other locations complete on 82nd, Sunnybrook, and Stevens/Bob Schumacher complete. Projects are funded from a variety of sources.	Capabilities of fast data communications include: more situational awareness of crashes and other incidents by operators through traffic cameras; data on the performance of traffic signal timing and the ability to update it remotely; and readiness for innovations such as Next Generation Transit Signal Priority
Image source: DKS			Thomes.
The County is working towards connective Oswego at ~45%; Oregon City at ~56%; V	ity to 100% of signalized intersed Vilsonville at ~67%; Milwaukie a	tions. Progress estimates: t 10%; West Linn at 100%)	Clackamas County at ~86%; Lake).
Climate Rel	iability Safety	Equity	Accountability
delay↓	Incident response1	investing in all communities	operator cost↓

	Clackamas County	Status update:	Capabilities: Radar detection helps truck traffic	
	Regional Freight	Construction	safely navigate by not displaying a yellow light	
	Intelligent	contract	prematurely forcing a driver's go/no-go	
	Transportation Systems	awarded;	decision. This will reduce unnecessary braking	
	(ITS) Project - Phase 2A	construction will	and slow start-up time for our larger truck	
Number 617 Angel Bay san	project will improve	start this year.	traffic, improving safety, reducing delay and	
	reliability and safety for	This project is	emissions. Radar provides vehicle counts.	
	freight vehicles and the	funded by Metro	Cameras will fill gaps in traffic monitoring,	
	travelling public within	RFFA and	reduce incident response times and are shared	
	the Clackamas and	Clackamas	with ODOT's TripCheck.org website. Wireless	
	Wilsonville Industrial	County.	data communications with signals County	
	Areas. (Project ID 18001)		Engineers to make traffic signal changes	
			remotely, in real-time, and be provided with	
			detailed signal operations.	
Improvements will be the construction	on of traffic signal improveme	ents on SW Elligsen l	Road, SW 95th Avenue, SW Wilsonville Road, SE	
Sunnybrook Boulevard, OR224, and SE 82nd Drive in Clackamas County. The improvements include, but are not limited to, installing				
radar detection, installing Pan-Tilt-Zoom (PTZ) cameras, installing wireless data communications, and furnishing traffic signal				

radar detection, inst controllers.



T

	Canby Ferry ITS project will install an "Open/Closed" sign, upgrade existing signs, add cameras and data communications to support them. (Project ID 19641)	Status update: 95% design; construction schedule is for fall 2022. This project is funded by Clackamas County.	Capabilities will provide traveler information on Canby Ferry operations, add cameras to improve situational awareness for County operators and incident responders.
Improvements: Extending fiber optic cable	e to the ferry location to provide c	onnection to new cameras	and upgraded signal controllers;
Adding cameras at the ferry landings for in	nages to be viewed on the website	e and ODOT TripCheck; Up	ograding signs and providing
hardwired electrical connection to display	both open and closed status by u	pgrading signs at the four	locations; Provide ability to
transition fare collection to credit card ins	tead of cash. In 2019, ridership wa	as reported to average 50,	000 per year (Source: OPB).
Source: <u>https://www.clackamas.us/engine</u>	eering/canby-ferry-intelligent-tra	insportation-system-proje	<u>ct</u>
Climate Reli	ability Safety	Equity	Accountability
closed if river	incident		operator cost↓
≥70 feet	response↑		
trave	stor		
liave			
Intor	mation		

	Clackamas County	Status update:	Capabilities are that these
Model 2070-LDX Unit BASIN AT EMERSON	Regional ATC	Completing IGA with	controllers are compliant with
1. putteringer	Controller & Signal	ODOT. This project is	new industry standards, have a
	Optimization	funded by Metro TSMO,	Linux operating system, faster
	Project will install	Clackamas County, City	processor, more memory, allows
	new hardware at up	of Lake Oswego, City of	more phases, signal timing plans
	to 99 signalized	Oregon City, City of	and can be operated securely by
	intersections.	Wilsonville, City of West	traffic engineers from their device
	(Project ID 22367)	Linn, and City of	at any location. Controllers
Image source: City of Portland		Gladstone.	stream data useful to travelers
			and operators.
Improvements: High resolution-data will help track progre	ess on goals related to r	eduction in greenhouse gas	s emissions (split failures, arrivals

on red) and vision zero safety measures such as leading pedestrian interval, pedestrian friendly, adjustment to all red clearance interval (red light running). Crash reduction factors for pedestrian related crashes could range up to 0-46% depending on number of countermeasures implemented. Equips intersections to enable Next Generation Transit Signal Priority. Indirectly supports safer, more reliable movement by pedestrians, bicyclists, freight and all other traffic. On high injury corridors, 23 signals will be upgraded (Source: Metro 2018). Intersections were prioritized based on location of the investment in equity focus areas (Source: Metro 2018 Equity Focus map)



		East Multnomah	Status	Capabilities: adaptive signals
ALLOY ALLOY		Connections ITS added	update:	reduce delay on Kane Rd. and
		adaptive traffic signals on	Completed.	for cross traffic; and operators
		Kane Rd. from Division to	Funded by	can access advanced traffic
	SIGNAL HARDWARE UPGRADES	Palmquist, upgraded data	Metro	signals from operations center
	Ethernet & ATC Upgrade Ethernet Upgrade	communications for advanced	TSMO and	or device.
	Fiber Upgrade Scats Expansion	traffic signal controllers.	City of	
	SIGNAL COMMUNICATIONS CABLE INSTALLATION 96-Strand Fiber Optic	(Project ID 18306)	Gresham.	
	96-Strand Fiber Optic + 6-Pair Copper 12-Strand Fiber Optic			
	VARIABLE MESSAGE SIGN			
	Arterial VMS			

East Multnomah County, Gresham and cities

Improvements: Delay is reduced for travelers on Kane Rd. (and cross traffic) as well as 10 intersections on Burnside, 1 on Division, 1 on 223rd, 3 on 238th, 5 on Halsey and 2 on Fairview Parkway. By operating multiple arterials, Gresham makes more efficient of the existing transportation system in keeping with the East Metro Connections Plan. Improvements are primarily on High Injury Corridors (HIC; Source: Metro 2018)





Portland

Model 2070-LDX Image source: City of Portland	Local Traffic Signal Controller Replacement will install new Advanced Traffic Controller hardware at up to 141 signalized intersections. (Project ID 22448)	Status update: Completing IGA with ODOT. This project is funded by Metro TSMO and City of Portland funds.	Capabilities are that these controllers are compliant with new industry standards, have a Linux operating system, faster processor, more memory, allows more phases, signal timing plans and can be operated securely by traffic engineers from their device at any location. Controllers stream data useful to travelers and operators.
Improvements: High resolution-data will help track progree on red) and vision zero safety measures such as leading pe light running). Crash reduction factors for pedestrian relat implemented. Equips intersections to enable Next Generat pedestrians, bicyclists, freight and all other traffic. Signal h Intersections were prioritized based on location of the invol Climate	ess on goals related to redu edestrian interval, pedestri ed crashes could range up ion Transit Signal Priority. ardware will be upgraded estment in equity focus are Safety Reliability ay↓ crashes↓ HIC in Accountab operator o	iction in greenhouse an friendly, adjustme to 0-46% depending Indirectly supports s on many high injury eas (Source: Metro 20 Equity transit riders	gas emissions (split failures, arrivals ent to all red clearance interval (red on number of countermeasures safer, more reliable movement by corridors (HIC; Source: Metro 2018). 018 Equity Focus map)

	Portland fiber expansion	Status update: N Going	Capabilities of fast data
The select of the	projects These projects	St. is completed and all	communications include: more
	provide data communications	other projects are	situational awareness of crashes
	along N/NE Columbia Blvd.	underway. Projects are	and other incidents by operators
	(Project ID 18308), N Airport	funded from a variety of	through traffic cameras; data on
	Way (Project ID 21496), N.	sources.	the performance of traffic signal
	Going St. (Project ID 19303),		timing and the ability to update
Notes and the second	SW Barbur Blvd. (Project ID		it remotely; and readiness for
	18316) and SE Holgate Blvd.		innovations such as Next
	(Project ID 22530)		Generation Transit Signal
DU/			Priority.
mage source: DKS			

Improvements: All of these projects upgrade or bring new data communications to facilities. Most have additional Intelligent Transportation Systems investments and are described in more detail in other summaries. Expanding data communications along some facilities becomes a stand-alone regional priority in order to keep pace with technology innovation and increase security. SW Barbur Blvd. was identified in 2016 as a regionally important path for data communications that was running at capacity. TransPort prioritized this and the investment will help travelers as well as future capital projects on SW Barbur.







Washington County and cities

Nodel 2070-LDX Image source: City of Portland	Advanced Traffic Controller (ATC) Optimization Project will install new hardware at up to 163 signalized intersections. High resolution-data will help track progress on goals related to reduction in greenhouse gas emissions (split failures, arrivals on red) and vision zero safety measures (red light running violations, pedestrian signal priority).	Status update: Completing IGA with ODOT. This project is funded by Metro TSMO, Washington County and local partners.	Capabilities are that these controllers are compliant with new industry standards, have a Linux operating system, faster processor, more memory, allows more phases, signal timing plans and can be operated securely by traffic engineers from their device at any location. Controllers stream data useful to travelers and operators.
Improvements: Equips intersections to enable Next General pedestrians, bicyclists, freight and all other traffic. The num Intersections were prioritized based on location of the invol	ation Transit Signal Priority. Indire nber of high injury intersections to estment in equity focus areas (Sour Safety Reliability crashes HIC invest1 Accountability operator cost	ctly supports safer, ; be upgraded are # (cce: Metro 2018 Equ	more reliable movement by (Source: Metro 2018). iity Focus map)

Example 2 For the source: Washington County	Grahams Ferry Road Over- height Warning System will use radar to set off warning lights to trucks that are too tall. This will reduce trucks crashing into bridges that carry WES Commuter Rail passengers and freight. Operators alerted in the event of a crash.	Status update: finished design and started construction April 2022. This project is led and funded by Washington County Land Use & Transportation.	Capabilities are to detect vehicle height that does not require an ODOT permit but are too tall for local bridges. The technology is limited: it will sharply reduce crashes but not eliminate all crashes.
Problem addressed: Each year, vehicles	s over the posted 12 feet, 3 inches s	trikes the train track bridge over G	Frahams Ferry Road. One year
saw as many as seven strikes. Incident each incident, typically taking hours to	responders and investigators are s determine if road and WES Commu	ent from Washington County and 'I uter Rail can resume operations.	riMet to inspect damage after
Climate	Reliability Safety	Equity	Accountability
de	elay↓ crashes↓	WES riders; truck drivers	capital cost↓ operator cost↓



EB	WINTER	APRIL 29, 2022
		/ 1112 23) 2022

	Tualatin-Sherwood-99W	Status update: Adaptive	Capabilities are to automate		
	Adaptive The 1.4-miles of	signals are funded by	signal timing plans, in step		
- Internet in the second se	approach to the intersection	Washington County in	with demand for crossing		
	will run new adaptive traffic	partnership with ODOT.	the intersection. Traffic		
	signal system (Q-Free	Modifying cameras to support	engineers from ODOT and		
	MaxTime). This is part of a	adaptive signal hardware and	Washington County can		
	larger capital project that	working with ODOT on	securely and safely monitor		
	includes a section of 99W, a	software. Delayed due to	and modify the signals.		
	High Injury Corridor (HIC;	Tualatin-Sherwood Road			
Image source: Q-Free	Metro 2018).	construction.			
Improvements: Adaptive signal timing all	lows traffic signals to change in r	esponse to traffic. Enhanced bike	detection systems adjust		
traffic signals when a bicyclist is present.	Traveler information displays pr	ovide traffic information to road	users. Remote signal		
monitoring and control systems allow sta	Iff to manually adjust traffic cont	rol as needed. Project page:			
https://www.co.washington.or.us/LUT/7	<u> FransportationProjects/tshw99ii</u>	<u>ntersection.cfm</u>			
Climate Reliability Safety Fourty					
		biovolisto			
	delay↓ crashes↓	Dicyclists			
	99\//				
	HIC				
	Accountabilit	V			
		, ,			
	operator cost				

	OR210: SW Scholls Ferry Rd	Status update:	Capabilities are to
	to SW Hall ITS The project	Contracted	automate signal timing
	totals 5.2 miles of adaptive	consultant is	plans, in step with
	signaling along two facilities:	working on design.	demand for using and
	SW Scholls Ferry Rd from SW	Project is funded by	crossing intersections
and a second sec	Hall Blvd to SW Roy Rogers Rd,	Metro TSMO and	reducing the need for
	and along SW Hall Blvd from	City of Beaverton, in	routine study, response to
	SW Greenway Blvd to SW	partnership with	complaints and
	Scholls Ferry Rd.(Project ID	ODOT.	engineering complex
	21121)		timing plans
Image source: Google streetview			uning plans.

Improvements: Adaptive signal timing allows traffic signals to change in response to traffic demand and changing patterns from railroad crossings (two at-grade crossings of WES Commuter Rail and other trains). This project proposes to expand the current adaptive signal system used on many regional arterials in Beaverton. The project will include 22 additional intersections along SW Scholls Ferry Road and along SW Hall Boulevard between. The Average Daily Traffic (ADT) on SW Scholls Ferry Rd within the project limits is approximately 35,600 vehicles (both directions); and the ADT on SW Hall Blvd is 29,800 (Beaverton estimates from 2016). Each facility has five lanes.



Boones Ferry Road - Typical Section - View facing North	Boones Ferry Road	Status update: All signals	Capabilities include				
Under a after stormade	Improvement	and RRFBs are	new and upgraded				
er lendscape planter Bepanding on location	Project	Project operational. Project is					
Landscope planter	Reconstruction of the	wrapping up on	block Rapid				
	corridor to include	construction and punch-	Rectangular Flashing				
	medians, bike lanes,	list items are being	Beacons and traffic				
55 35 5 11 11 Wedan Web 11 11 5 35 55	improved pedestrian	addressed. New signal	monitoring cameras				
Schweit Bile Trevellane Trevellane Varies Trevellane Trevellane Bile Scheusli	facilities, three new	timing is being evaluated	shared with the public				
	traffic signals, and	to improve flows through	through ODOT				
Image source: Lity of Lake Uswego	two new enhanced	corridor. The project is	TripCheck.org				
	pedestrian crossings.	funded by City of Lake					
	(Project ID 18809)	Oswego and ODOT.					
Improvements: All traffic signals in project corridor are c	onnected to fiber commu	nication to allow remote mo	nitoring and adjustment				
to signal timing as necessary. Cameras are provided on m	ultiple signals to monitor	r signal operations in real tim	e as well as traffic				
conditions along the corridor. Improved streetscape inclu	des wider sidewalks and	ADA improvements along th	e project corridor to				
help accommodate all users. Rapid Rectangular Flashing I	Beacons are provided at r	nid-block crosswalks near co	ommercial areas to				
improve the safety of crossing pedestrians. Project page:	https://www.ci.oswego.c	<u>or.us/bfp/</u>					
Climate Reliability Safety Equity							
	crashes↓						
delav↓	incident Lak	e Grove					
	response1 Ele	mentary					

	Testing computer- vision intersection safety with cameras, infrared cameras and radar sensors. The study is in partnership with Miovision, Street Simplified and FLIR.	Status update: Testing infrared cameras as sensors is nearly complete.at 3 intersections: a) Rock Creek and Park View boulevards, approaching, 185th Avenue b) Park Way approaching Cedar Hills Boulevard c) 85th Avenue approaching Durham Road, across from Hall Boulevard.	Capabilities: Test at NW Rock Creek Blvd reach bike detection of 90%, plus 7% minor errors leaving only a few critical observations now being studied to improve future versions.		
Research presentation: https://trec.pdx.edu/events/professional-development/transportation-data-webinar-02162022					
	Climate				



 GOALS: IMPROVE THE SAFETY AND SECURITY OF OUR TRANSPORTATION SYSTEM. IMPROVE THE EFFICIENCY OF THE TRANSPORTATION SYSTEM. PROVIDE IMPROVED TRAVELER INFORMATION. DEPLOY FUNCTIONAL AND COST EFFICIENT ITS INFRASTRUCTURE. INTEGRATE REGIONAL ITS PROJECTS WITH LOCAL AND DECIONAL DARTMEDS 	Intelligent Transportation System Plan Update Washington County completed an update of the ITS Plan December 2020.	Status update: Completed	ITS Strategies include: Traffic Control and Operations; Bicycle and Pedestrian; Rural; Traveler Information; Emerging Technologies
Image source: Washington County			
There are 43 proposed County projects and ni	ne local agency projects.		
Climate F delay	Reliability Safety ADA transit riders bicyclist peds	Equity Accounts Equity Focus Areas	untability capital cost operator cost

2. 2021 TSMO Strategy Actions list and link

The 2021 TSMO Strategy Actions are grouped in four categories (Chapter 5: <u>www.oregonmetro.gov/tsmo</u>).

Concepts, Capabilities and Infrastructure

- 2. Inventory and manage regional signal and ITS Communication infrastructure.
- 4. Manage transportation assets to secure the network.
- 7. Continue freight technology and ITS deployment.
- 8. Facilitate ground truthing of emerging technologies.
- 9. Establish a Regional Transit Operators TSMO Group.
- 10. Unify and standardize fare subsidies for transit and MOD.
- 11. Develop an ITS travel time information data collection and distribution plan for RDPO regional emergency routes.
- 14. Create continuous improvement process for existing and new signal systems and related performance.
- 15. Deploy regional traveler information systems.
- 16. Implement integrated corridor management and mainstream into corridor planning.
- 17. Create a TSMO safety toolbox.
- 20. Build and use a TSMO Toolbox to connect gaps in bicycle and pedestrian infrastructure.

Planning

- 3. Develop a Mobility on Demand strategy and policy.
- 5. Pilot Origin-Destination data to prioritize TSMO investments.
- 18. Participate in regional public outreach to assist in guiding, listening and learning through TSMO-focused conversations.
- 21. Update the Regional Intelligent Transportation Systems (ITS) Architecture.

Listening & Accountability

- 6. Track and prioritize TSMO Investments for and with Black, Indigenous people of color, and people with low incomes.
- 13. Create a community listening program.
- 19. Improve TSMO data availability to aid in traveler decisions and behavior.

Data Needs

- 1. Establish TSMO performance measures baseline.
- 12. Explore new TSMO data sources

Many of the sub-actions under these are incorporated into TransPort's 2022-2025 Work Plan. We will present an update of what Actions are near-term but not yet coordinated and ask for TPAC input.

3. **TransPort** / Members and Stakeholders Updated April 29, 2022

Voting Members	Lead	Alternates	Alternates
ODOT	Kate Freitag,	Mike Burkart	
	TransPort Chair		
TriMet	A.J. O'Connor, TransPort Vice Chair	Matt Fouts**	Vincent Vu
Metro	Caleb Winter, TSMO Program	Ted Leybold	Eliot Rose
	Manager		
Clackamas County	Carl Olson	Joe Marek	
Multnomah County	Jim Gelhar (proxy)	Rick Buen	Jessica Berry*
Washington County	John Fasana	Matt Dorado	
City of Portland	Bikram Raghubansh***	Alison Tanaka	Peter Koonce

*TPAC member or alternate

**ITS Network Management Team Lead

***ITS Architecture Lead

Non-Voting Key Stakeholders				
FHWA	Nick Fortey			
Port of Portland	Lewis Lem*	Mike Coleman*		
City of Beaverton	Jabra Khasho	Tina Nguyen		
City of Gresham	Jim Gelhar	Chris Strong*		
City of Hillsboro	Dan Hazel	Doug Gresham		
City of Lake Oswego	Will Farley			
City of Tigard				
City of Tualatin	Mike McCarthy			
City of Wilsonville				
Portland State Univ.	Tammy Lee, TREC	Basem Elazzabi, TREC		
City of Vancouver	Chris Christofferson			
Clark County, WA	Rob Klug			
C-Tran	Brad Teed	Taylor Eidt		
SW RTC	Bob Hart*			
WSDOT	Scott Langer	Michael Southwick		

*TPAC member or alternate

TransPort Bylaws were approved by TPAC May 3, 2019. They are posted under "Related Materials" on the TransPort meeting page:

https://www.oregonmetro.gov/regional-leadership/metro-advisory-committees/transportation-policy-alternatives-committee/transpo-0

Memo



Date:	Friday, April 29, 2022
То:	Transportation Policy Alternatives Committee and Interested Parties
From:	Grace Cho, Metro
Subject:	2024-2027 MTIP – Transit Agency Annual Budget Process Update and Programming of Projects

Purpose

To provide TPAC an overview on the transit agencies' programming of federal revenues and local service investment recommendations from their annual budget process.

Introduction and Background

As part of Metro's responsibilities as a metropolitan planning organization, Metro is responsible for developing and implementing the Metropolitan Transportation Improvement Program (MTIP). The MTIP documents the process determining how federal transportation funding gets invested and spent across transportation projects and programs in the greater Portland region over the next four federal fiscal years.

The MTIP, in development looks to identify and outline the schedule of expenditures for federal fiscal years 2024 through 2027. As part of coordination efforts to develop the 2024-2027 MTIP and recognizing TPAC's role in the development and administration of the MTIP investment program, MTIP partners – namely ODOT, TriMet and SMART – provide a periodic update and discuss where federal and relevant state and local funds are planned for investment in the near-term.

Over the course of the next two TPAC meetings (April 1 and May 6, 2022), both TriMet and SMART will give a presentation on the development of the proposed budget. As part of the presentation, the transit agencies will give an overview of the proposed annual budget and the programming of federal funds in the upcoming year fiscal year (fiscal year 2022-2023). The budget presentation also helps to bridge how near-term priorities for the transit agency connect to anticipate investments to be identified in the 2024-2027 MTIP. TPAC and JPACT will be asked to take action on the 2024-2027 MTIP in summer 2023.

SMART 2022-2023 Proposed Budget and Programming of Projects

SMART will present the agency's proposed budget at the May 6th TPAC meeting, outlining the budget themes, budget highlights, challenges, and discuss how the budget priorities advance the goals of the Regional Transportation Plan. Relevant links have been provided below on each of the items.

SMART is also currently taking public comments on both the proposed budget for fiscal year 2022-2023 and the federal programming of projects (POP).

SMART Budget Summary: LINK

SMART Programming of Projects and Opportunity to Comment LINK

Memo



Date:	Friday, April 29, 2022
To:	Transportation Policy Alternatives Committee and Interested Parties
From:	Grace Cho, Senior Transportation Planner Ted Leybold, Resource Development Manager
Subject:	2024-2027 Metropolitan Transportation Improvement Program (MTIP) Revenue Forecast – Updated

Purpose

To provide TPAC an overview of the updated 2024-2027 MTIP revenue forecast.

Metropolitan Transportation Improvement Program (MTIP) Introduction and Background As part of Metro's responsibilities as the metropolitan planning organization (MPO) for the Portland region, the agency is responsible for the development and administration of the Metropolitan Transportation Improvement Program (MTIP). The MTIP is the four-year, near-term capital improvement plan-strategy for the metropolitan region.¹ Within the MTIP document are:

- A list of the transportation investment priorities for the upcoming federal fiscal years;
- A description of the prioritization processes to allocate available funds to transportation projects and programs, and compliance of those processes with regional guidance and federal laws;
- A measurement of the performance of those investments and progress toward federal performance targets and regional goals;
- A demonstration of compliance with federal TIP-related regulations; and
- Instructions, which communicate the monitoring measures and procedures for administering the MTIP.

The development of the MTIP is cooperatively developed by the MPO, state department of transportation, and transit agencies. Therefore, as part of the MTIP development process, key MTIP partners in the Portland region – ODOT (Region 1 and headquarters), TriMet, SMART, and Metro – work closely together to demonstrate how the region is working together to achieve the common goal of implementing the Regional Transportation Plan (RTP) and complying with applicable federal regulations to remain eligible for funding.

MTIP Revenue Forecast – Purpose

In the early phase of developing the 2024-2027 MTIP, a revenue forecast establishes a sense of the financial outlook for the upcoming four federal fiscal years. The revenue forecast is a snapshot estimate based on information known to that date related to federal and various state and local revenue streams. The revenue outlook serves multiple purposes. These include:

- 1) Provide context in the anticipated federal and regionally significant state and local investment in the region's transportation system over the next four federal fiscal years;
- 2) Frame a discussion of the priorities and tradeoffs in the allocation of funds by different fund administrators, including MPOs and State DOTs;
- 3) Help demonstrate fiscal constraint over the course of the next four fiscal years and show the region is not over spending beyond what is expected to be available and can deliver in the MTIP;

¹ The MTIP includes some maintenance-related investments, such as federal transportation monies restricted for the use pavement maintenance activities on the interstate system and transit bus replacement.

4) Help to monitor project delivery, including the challenges to emerge in implementing the MTIP and expending of planned investments in a given year.

The snapshot of the near-term financial outlook provides a look across revenue estimates of federal and relevant state-local funds being administered by ODOT and transit agency partners (TriMet and SMART). The revenue outlook in the broader context plays an important role in discussing near-term transportation priorities, tradeoffs, and goals to be achieved for the regional system with limited investment. The revenue forecast is part of Metro's responsibilities as a metropolitan planning organization and demonstrates the region meeting the necessary federal requirements related to MTIP development.

This forecast is different from the 2023 Regional Transportation Plan revenue forecast which accounts for "reasonably expected" revenues over a 20 year period and includes all sources of local revenues. Whereas the 2024-2027 MTIP revenue forecast is limited to a 4-year period and encompasses expected revenues and a limited amount of local revenues relevant to the regional transportation system.

Update - 2024-2027 MTIP Revenue Forecast

In late 2020 through Spring 2021, Metro staff convened ODOT, TriMet, and SMART staff to develop the revenue forecast for the 2024-2027 MTIP. The revenue forecast was presented to TPAC at the June 4, 2021 meeting. At the TPAC meeting, members provided feedback specifically on potential revenue estimates for the Regional Flexible Funds under three different revenue growth scenarios (e.g. conservative, moderate, and robust). Additionally, feedback around the revenue assumptions for ODOT and transit agencies administered funding were presented. With the feedback provided and working collectively and based on the current information at the time, the four partner agencies developed a revenue estimate for the upcoming four federal fiscal years. The total estimates revenues as of June 2021 was approximately \$1.9 billion dollars.

Since June 2021, the transportation revenue landscape changed enough to revisit and update the 2024-2027 MTIP revenue forecast. With the Bipartisan Infrastructure Law (BIL) – also known as the Infrastructure Investment and Jobs Act (IIJA) – passed into law in November 2021, the transportation system expects to see a "once in a generation" investment in infrastructure, including transportation infrastructure and the largest investment in public transit. The significant increased investment and having annual estimates through federal fiscal year 2026 warranted returning back to the 2024-2027 MTIP revenue forecast to revise it prior to the programming of projects and fiscally constraining the four-year investment program. As a result, the Metro staff reconvened ODOT, TriMet, and SMART staff to revise the revenue forecast for the 2024-2027 MTIP. This was done in parallel with the transit agencies annual budget process discussions as well as the four month Oregon Transportation Commission process to deliberate, gather input, and discuss which funding categories within the 2021-2024 and 2024-2027 STIP to invest the flexible discretionary funding. The update process began in January 2022 and completed in May 2022.

2024-2027 MTIP Revenue Forecast - Summary

Attachments 1 and 2 provide an updated overview of the revenue forecast and the process to determine the estimate of transportation revenues anticipated for the region in federal fiscal years 2024 through 2027. The revenue estimates are summarized in total and by each agency with administrative responsibilities of distributing those revenues to transportation projects and programs: Metro, ODOT, SMART, and TriMet. Attachment 1 provides a simplified summary of the

revenue forecast for federal fiscal years 2024 through 2027 and outlines a handful of key assumptions and factors that drive the revenue forecast. Attachment 2 is the 2024-2027 MTIP revenue forecast report, which provides further detail, such as the breakdown of forecasted revenues by the source revenue program and by the administering agency's funding allocation programs. This is done by fiscal year and in summarized totals. In total, the estimated total revenue of known available federal and relevant state funds to date is approximately \$2.48 billion for federal fiscal years 2024-2027.²

It is important to understand the 2024-2027 MTIP forecast remains an estimate of revenues to be available based on several assumptions pertaining to revenue availability. Factors such as the limitation rates for each year of the federal surface transportation reauthorization and estimates for state revenues dedicated for transportation (i.e. state gas tax, employer and employee tax for transit) shape the forecast of revenues and ultimately what is distributed by agency funding allocation programs. However, the forecast information helps to gauge the amount of revenue available, establishes an approximate budget, and facilitates an informed discussion around transportation investment priorities and tradeoffs.

Table 1. Summary of Portland Metropolitan Region Federal and State Revenue Forecast, FFY2024 – 2027, in millions

2024	2025 2026		2027	TOTAL
\$488.5	\$681.77	\$688.96	\$621.45	\$2,480.68

Revenue estimates for the Portland metropolitan region will be further coordinated with partners throughout the development of the 2024-2027 MTIP. As transportation priorities get selected and programmed by project phase (e.g. planning, preliminary engineer/design, right-of-way, and construction) and assigned a funding type (e.g. STBG, HSIP, etc.), the MTIP will reference the early revenue forecast as the starting point for determining reasonably available revenues and demonstration of fiscal constraint - the balancing of project costs with anticipated revenue.

Next Steps

The following timeline illustrates the next steps for the 2024-2027 MTIP revenue forecast and subsequent funding allocation processes.

Activity	Timeframe	
2024-2027 MTIP Revenue Forecast		
Transit agencies annual budget process	April and May 2022	
ODOT finalizes statewide revenue forecast update and allocation to	April May 2022	
funding programs	April-May 2022	
TPAC presentation on the updated 2024-2027 MTIP revenue forecast	May 6, 2022	
Finalize the 2024-2027 MTIP revenue forecast for allocation purposes	May 2022	
Provide JPACT information on 2024-2027 MTIP revenue forecast	May 19, 2022	
Allocation Process of Federal Funds		

<u>Timeline – 2024-2027 MTIP Revenue Forecast and Allocation of Funding Activities</u>

² Revenue forecasts are provided for federal fiscal years 2024 through 2027 for Metro, SMART, and TriMet. ODOT did not provide a revenue forecast for federal fiscal year 2024 because revenues were allocated in the 2021-2024 MTIP cycle. ODOT's forecast represents new estimated revenues for three federal fiscal years.

2025-2027 ODOT funding program allocations (i.e. Enhance, Fix-It, Bicycle-Pedestrian, Safe Routes to School, etc.)	January 2021 – July 2022
2025-2027 Regional Flexible Funds	July 2021 – October 2022
Transit agencies annual budget process	Annual; spring- summer 2021, 2022, 2023, 2024

	FFY 2024	FFY 2025	FFY 2026	FFY 2027	FYs 2024-27 Total
ODOT Directed ¹	N/A ^{4, 7}	119.2	119.2	119.1	\$357.5
ODOT to Cities/Counties ²	N/A ^{4, 7}	\$15.36	\$15.36	\$15.36	\$46.08
State Trust Fund to Cities/Counties ⁵	\$240.36	\$249.66	\$248.83	\$248.00	\$986.85
Federal Discretionary ⁹	\$74.0	\$74.0	\$74.0	\$0	\$222.0
Metro MPO ^{1,3, 6, 8}	\$13.6 ⁴	\$54.2	\$54.9	\$54.9	\$177.60
SMART	\$2.04	\$2.15	\$2.27	\$2.39	\$8.85
TriMet	\$158.5	\$167.2	\$174.4	\$181.7	\$681.8
Total	\$488.5	\$681.77	\$688.96	\$621.45	\$2,480.68

Attachment 1 – Summary of Forecast of Federal and State Transportation Revenues Portland Metro Area Transportation Federal Fiscal Years 2024 through 2027 (in millions)

¹ Does not included federally dedicated planning funds or funds dedicated to ODOT Administrative costs.

² Directed funding program pass through to local agencies; does not include pass through to MPOs or State Trust Fund pass through to local agencies.

³ Utilizes MPO forecast method that anticipates growth in available funding rather than ODOT forecast method of 10% reduction of current fund levels for those years not under a federal transportation authorization.

⁴ Metro and ODOT forecasted revenues for FFY 2024 have already been allocated. SMART and TriMet forecasted revenues are allocated on an annual basis through their budget processes.

⁵ Funds not typically reflected in the Metropolitan Transportation Improvement Program, unless funds are being used for capital projects deemed as regionally significant.

⁶Total reflects combined revenue for federal fiscal years 2025 through 2027 and under allocated carryover estimated for 2024. See Table 2 for further detail. ⁷Estimates for carryover revenues for FFY 2024 for ODOT funding programs are unavailable for the revenue forecast. Carryover estimates will be made available and used as part of revenue estimates for fiscally constraining the MTIP and the STIP.

⁸Total includes revenues from the new federal Carbon Reduction program, but funds from the program has not been allocated.

⁹ Estimate is based on the Portland region to receive a proportion, based on population, of federal discretionary grant awards estimated for Oregon to receive. The estimate for Oregon is based on the assumption that Oregon will receive approximately 1% of the federal discretionary grant awards available between federal fiscal year 2022 – 2026, divided evenly over each fiscal year. Funding is not guaranteed and would rely on project applications put forward competing well in the grant program.

Summary

• Estimated \$2.48 billion will be invested into transportation projects and programs in the Portland metropolitan region in federal fiscal years 2024 through 2027.

• While federal transportation revenues are an important source for funding transportation projects and programs, state and local revenue sources comprise of a larger and more significant source of investment into the transportation system.¹

Key Assumptions

- All revenue forecasts use historical financial data and information from the current federal surface transportation authorization (i.e. Bipartisan Infrastructure Law) funding levels as starting points for projecting revenue forecasts.
- ODOT revenue forecast for federal fiscal years 2025-2027 assumes a ten percent (10%) reduction in transportation funding being available to allocate to transportation projects and programs. ODOT has stated the 10% reduction assumption roughly translates to \$300 million (out of \$3 billion) not included for allocation purposes in the statewide totals.
- Transit agency revenue forecast does not include local revenues generated for the purpose of service and transit agency operations, such as passenger fares, advertising revenue, or employer tax.
- Revenue forecast estimate does not include local revenues generated by cities and counties, such as a local gas taxes, parking revenues, system development charges, or other user fees, used by local jurisdictions for operations, maintenance, or capital projects.
- ODOT's revenue forecast does include any potential federal discretionary grants and congressional directed spending the Portland region may receive for major capital projects. Estimate is based on the State's historical performance in the grant programs and applying a proportion, based on population that would come to the Portland region. Transit revenue forecast does not include any potential federal discretionary grants. Only those federal discretionary grants which have been secured are reflected in the transit agency revenue forecasts.

¹ Consistent with findings on national research on surface transportation funding and financing.



2024-2027 Metropolitan Transportation Improvement Program (MTIP) Financial Forecast

State and Federal Unallocated Funds

Updated - May 2022

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INTRODUCTION

This report documents the cooperative development of the revenue forecast for the 2024-2027 Metropolitan Transportation Improvement Program (MTIP). It includes a description of the forecast methods and the process by which forecasted revenues were distributed to funding allocation programs administered by the four agencies with federal funding authority within the greater Portland metropolitan area, Oregon Department of Transportation (ODOT), Metro, Tri-County Metropolitan Transportation District of Oregon (TriMet) and the South Metro Area Region Transportation (SMART), that select transportation projects and programs to receive those funds.

The revenue forecast is only for transportation funding that will be programmed in the MTIP, which includes all federal transportation funds and state and local agency funds that will be used on regionally significant transportation projects and programs. Generally, regionally significant projects and programs are those that are located on the regional transportation system as defined in the Metro area Regional Transportation Plan (RTP) or implement a key transportation strategy from the RTP, such as transportation demand management. Therefore, state and local agency funds that will be used to build projects and maintain the local street system are not included in the forecast.

In developing the revenue forecast for the 2024-2027 MTIP, each agency which carries a responsibility to administer federal transportation funding, summarized the methodology for determining the estimated amount of revenue available for transportation projects and programs in federal fiscal years 2024 through 2027 and the process for determining how to allocate the funds. The revenue estimation process does not discuss the allocation of the revenues to transportation projects and programs. Separate documentation is provided about the allocation process, project prioritization criteria, and allocation results.

Recognizing Metro and ODOT use three-year cycles for allocating transportation revenues to projects and programs, the revenue forecast for Metro and ODOT focuses on new revenues available for federal fiscal years 2025, 2026, and 2027. Metro also provides an estimate of unallocated carryover revenues anticipated for federal fiscal year 2024. These unallocated revenues represents a more refined estimate of the anticipated federal revenues available, but had not previously been allocated to transportation projects and programs in the 2021-2024 MTIP. The transit agencies, SMART and TriMet, include estimates for each federal fiscal year (2024-2027) as both agencies conduct their programming of projects annually through their budget processes.

In developing the revenue forecast for the 2024-2027 MTIP, Metro led the coordination efforts by working with partners ODOT, SMART, and TriMet and utilizing information from concurrent revenue forecasting efforts, whether that was a budget process or a funding allocation discussion. Metro provided a template outlining a series of steps in describing the development of the revenue estimates. The template was developed in a manner which would be flexible to each agency and respecting the agency's revenue forecasting processes, while also making the progression towards identifying the estimated revenues in the Portland metropolitan region. Key aspects each partner was expected to address as part of the revenue forecast included baseline starting points for revenue estimates, assumptions 2024-2027 Metropolitan Transportation Improvement Program Financial Forecast | May 2022 1

related to the availability of revenues, and revenue growth rates. Metro coordinated meetings with partner agency staff to review report drafts and forecast methods in preparation to produce this snapshot forecast of anticipated revenues to be invested in the region's transportation system in federal fiscal years 2024 through 2027. The revenue forecast was initially developed over winter-spring 2021 and was discussed at the Transportation Policy Alternatives Committee (TPAC) and provided to the Joint Policy Advisory Committee on Transportation (JPACT). An updated to the 2024-2027 MTIP revenue forecast was untaken in winter-spring 2022 to reflect changes in the current landscape of transportation revenues.

 Table 1. Forecast of Federal and State Generated Transportation Revenues, Portland Metro

 Area Transportation Federal Fiscal Years (FFY) 2024 through 2027 (in millions)

	FFY 2024	FFY 2025	FFY 2026	FFY 2027	FYs 2024-27 Total
ODOT Directed ¹	N/A ^{4, 7}	119.2	119.2	119.1	\$357.5
ODOT to Cities/Counties ²	N/A ^{4, 7}	\$15.36	\$15.36	\$15.36	\$46.08
State Trust Fund to Cities/Counties ⁵	\$240.36	\$249.66	\$248.83	\$248.00	\$986.85
Federal Discretionary ⁹	\$74.0	\$74.0	\$74.0	\$0	\$222.0
Metro MPO ^{1,3, 6, 8}	\$13.6 ⁴	\$54.2	\$54.9	\$54.9	\$177.60
SMART	\$2.04	\$2.15	\$2.27	\$2.39	\$8.85
TriMet	\$158.5	\$167.2	\$174.4	\$181.7	\$681.8
Total	\$488.5	\$607.77	\$614.96	\$621.45	\$2,480.68

¹ Does not included federally dedicated planning funds or funds dedicated to ODOT Administrative costs.

² Directed funding program pass through to local agencies; does not include pass through to MPOs or State Trust Fund pass through to local agencies.

³ Utilizes MPO forecast method that anticipates growth in available funding rather than ODOT forecast method of 10% reduction of current fund levels for those years not under a federal transportation authorization.

⁴ Metro and ODOT forecasted revenues for FFY 2024 have already been allocated. SMART and TriMet forecasted revenues are allocated on an annual basis through their budget processes.

⁵ Funds not typically reflected in the Metropolitan Transportation Improvement Program, unless funds are being used for capital projects deemed as regionally significant.

⁶Total reflects combined revenue for federal fiscal years 2025 through 2027 and under allocated carryover estimated for 2024. See Table 2 for further detail.

⁷ Estimates for carryover revenues for FFY 2024 for ODOT funding programs are unavailable for the revenue forecast. Carryover estimates will be made available and used as part of revenue estimates for fiscally constraining the MTIP and the STIP.

⁸ Total includes revenues from the new federal Carbon Reduction program, but funds from the program has not been allocated.

⁹ Estimate is based on the Portland region to receive a proportion, based on population, of federal discretionary grant awards estimated for Oregon to receive. The estimate for Oregon is based on the assumption that Oregon will receive approximately 1% of the federal discretionary grant awards available between federal fiscal year 2022 – 2026, divided evenly over each fiscal year. Funding is not guaranteed and would rely on project applications put forward competing well in the grant program.
DRAFT

METRO REGIONAL FLEXIBLE FUNDS (RFF) REVENUE FORECAST

Metro's Regional Flexible Fund Allocation (RFFA) is a process that consolidates the distribution of three long-standing federal funding program sources to transportation projects and programs in the Metro region. One new federal funding program as a result of the Bipartisan Infrastructure Law (BIL) also known as the Infrastructure Investment and Jobs Act (IIJA), may eventually become part of the consolidated distribution through the RFFA process, but until federal rulemaking establishes the administration of the funding program, the allocation of funds from the new program remains to be determined. The revenue forecast for the Regional Flexible Funds is coordinated with the Oregon Department of Transportation and Oregon's other Metropolitan Planning Organizations (MPOs).

Step 1: Developing the Statewide Metropolitan Area/Transportation Management Areas (TMA) Revenues Forecast (September 2020 – April 2021; November 2021 – April 2022)

Federal Transportation Funding

The federal government provides revenues from federal fuels taxes and heavy truck taxes to states and local governments. Most federal funding is distributed to states, metropolitan planning organizations, and local governments by funding formulas, with the remainder allocated in competitive application-based programs.

Oregon receives about half a billion dollars in funding from the Federal Highway Administration each year. However, with the passage of the Bipartisan Infrastructure Law (BIL) also known as the Infrastructure Investment and Jobs Act (IIJA), Oregon like many other states anticipates seeing a significant increase – upwards of \$3.4 billion total – for federal fiscal years 2022 through 2026. All federal highway funds flow through ODOT from individual federal funding programs, including new programs created through BIL, that each have their own rules regarding what types of projects are eligible for those funds and what match rates are required.

About one-third of those funds are distributed to local governments either directly by formula (e.g. urban-STBG program funds) or by ODOT (e.g. the sub-allocation of CMAQ funds to MPOs that have had federal air quality compliance violations and implementation plans to address them).

Developing Statewide Forecasts

The statewide forecast of federal funds available for transportation projects and programs during the time period of the 2024-2027 State and Metropolitan Transportation Improvement Programs (TIPs) is coordinated by the Statewide Investment Management Section of the ODOT and updated with new information and events. The forecast is shared with MPOs and Transit agencies in the state through the statewide TIP coordination committee.

Metro staff works with ODOT staff and other Oregon MPOs in the transportation improvement program (TIP) coordination committee to coordinate forecast methodology

options for the federal funding programs provided to the Oregon TMA MPOs: Surface Transportation Block Grant (STBG) – including the Transportation Alternatives (TA) Program set-aside, the Congestion Mitigation – Air Quality (CMAQ) funding program, and the newly created Carbon Reduction Program. The Transportation Management Area (TMA) MPOs in Oregon are apportioned allocation authority over the following federal transportation funding programs:

- **Surface Transportation Block Grant (Urban**): The Surface Transportation Block Grant (STBG) Program provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
- Congestion Mitigation and Air Quality (CMAQ): The Congestion Mitigation and Air Quality program provides a funding source to State and local governments for certain eligible transportation projects and programs to help meet the requirements of the Clean Air Act and local State Implementation Plans (SIPs). Funding is available to areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (referred to as nonattainment areas) and for former nonattainment areas. The goals of the program are to mitigate for congestion and improve air quality by reducing transportation emissions. The scope of a transportation project or program must fit within one or more of the identified project types which are recognized eligible by federal requirements of the program as well as any additional state requirements. These funds are sub-allocated to eligible areas by the Oregon Transportation Commission, which has adopted a statewide formula for this purpose. The Oregon Transportation Commission has also adopted additional state priorities and program guidance for use of CMAQ funds in Oregon.
- Transportation Alternatives (set-aside from Surface Transportation Block Grant): The Bipartisan Infrastructure Law continues the Transportation Alternatives set aside from program the Surface Transportation Block Grant, which the previous authorizations had eliminated the predecessor Transportation Alternatives Program (TAP) and replaced it with a set-aside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives (TA). These set-aside funds are flexible to include all projects and activities that were previously eligible under the old TAP funding program. This encompasses a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to storm water and habitat connectivity. The BIL also increased the set aside amount to 59% to be sub-allocated by population.
- **Carbon Reduction Program:** The Bipartisan Infrastructure Law created the Carbon Reduction Program as a means to fund transportation activities focused on reducing

greenhouse gas emissions from transportation sources. Eligible projects may include public transit and active transportation; street light and traffic control device energy efficiency; tolling, pricing and transportation demand management that shift travel to cleaner modes; freight and port projects; alternative fuels; and congestion management technologies. Additionally, state departments of transportation (DOT), in consultation with MPOs, are required to develop and update at least every four years a carbon reduction strategy and submit it to U.S. DOT for approval. U.S. DOT must certify that a State's strategy meets the statutory requirements.

The TIP coordination committee was provided historical data of revenues for each MPO for use in developing the revenue forecast for their MPO.¹ The TIP coordination committee and ODOT staff did not require MPOs to apply a specific revenue forecasting methodology, leaving the discretion that seemed most appropriate to each MPO. Each MPO decides the way in which to forecast funding for the purpose of allocating forecasted funding to projects. However, for TIP programming, the MPOs are limited in how much funding they can program to project costs in each fiscal year by the amount of committed or reasonably expected revenue to projects within each MPO. Methods for determining committed and reasonably expected revenue for financially constraining the TIP will continue to be coordinated with the statewide committee.²

Step 2: Forecasting the Revenue Allocation Authority to Metro and the Regional Flexible Funds (September 2020 – May 2021; November 2021 – April 2022)

While the work of the TIP committee significantly influences the revenue forecast of MPOs throughout Oregon, the Portland metropolitan region also considers and emphasizes several other factors in developing an appropriate method for forecasting available funding for the allocation of Regional Flexible Funds. These factors include: 1) consideration of federal processes which determine the amount of federal transportation funds distributed to states and MPOs for transportation projects; 2) project readiness and delivery considerations and the federal aid process; 3) management of obligating federal funds in a timely manner; and 4) administration considerations of the RFFA allocation process.

The first factor is the federal process that makes funds available for projects and highly influences the revenue forecast. Every five to six years, federal authorization legislation is passed that sets the budget authority for federal transportation funding, including RFFA

¹ Historical data on revenues sub allocated to MPOs was not provided for the new Carbon Reduction funding program.

² While the TIP coordinators committee and ODOT do not specify a particular forecast of revenues for the purpose of allocating funding to projects, the TIP coordinators committee and ODOT will continue to meet throughout the development of the 2024-2027 MTIPs and STIP to coordinate the revenue forecast which will be used to financially constrain the MTIPs and STIP. The initial financial constraint forecast for the 2024-27 TIP financial constraint purposes is expected to take place in autumn/winter 2022-2023 with updated financial information. Revenue information used to financially constrain the TIP to committed and reasonably available funding is continually updated through the life of the TIP to reflect most up to date revenue data. When the TIP is adopted or amended, financial constraint utilizing the most current revenue and project cost data is utilized.

funds. After authorization, each year funds are apportioned based on actual transportation revenues generated, up to the amounts previously authorized. In recent history, apportionment of funds typically generates about 90-95% of authorized amounts. The percent of apportionment to authorization is known as the limitation rate.

Surface Transportation Block Grant (STBG) funds and the Transportation Alternatives setaside are allocated to Transportation Management Area (TMA) metropolitan planning organizations (MPOs) based on formulas outlined by federal statutes. Metro receives approximately 75% of STBG funding made available to large MPOs in Oregon. In addition to federal formula allocation of STBG, Oregon also receives a state allocation of Congestion Mitigation and Air Quality (CMAQ) funds based on the U.S. Environmental Protection Agency (EPA) air quality designations. Oregon employs a statewide formula allocation for CMAQ funding to the eligible areas. The CMAQ statewide formula allocation was last updated in 2017 and the allocation applies to CMAQ funds through 2024. While the update to the statewide CMAQ funding is expected to take place during the development of the 2024-2027 MTIP, the revenue forecast utilizes a continuation of the current statewide CMAQ sub-allocation formula. Metro as the largest eligible MPO to receive CMAQ funds, receives approximately 73% of the CMAQ funds available to Oregon MPO areas.

The second factor is the potential readiness for the use of forecasted funds and the needs of the local project delivery process of federal transportation funds. Upon award of funds, a local agency coordinates with ODOT and Metro to define a detailed scope of work, budget and schedule that address state and federal requirements (e.g. National Environmental Protection Act (NEPA) process requirements, design requirements) and execute an intergovernmental agreement to document how the project will meet requirements and provide required match funding. The process of executing the agreement typically takes a year or longer. Implementing the agreement through the project phases of planning, preliminary engineering, right of way acquisition, and construction can take up to an additional 4 to 5 years. Recognizing the federal aid process and potential readiness of a transportation project awarded funding can impact the amount of forecasted revenues available year-by-year, the history of readiness of previous projects and complexity of federal aid processes influences whether to take a conservative or aggressive approach to the revenue forecast for allocation purposes.

The third factor is the ODOT and MPO partnership on fund management of federal transportation funds. Each state must contractually obligate all federal transportation funding apportioned to it each federal fiscal year or the unobligated funds will be redistributed to states that have obligated all their funds. As ODOT has a better capability to obligate federal transportation funds quickly on projects or programs, the agency takes on the responsibility to ensure all federal transportation funding authority is obligated, including unobligated MPO funding authority. When ODOT obligates MPO unobligated funding authority, ODOT then provides equivalent funding authority in a future year. This provides flexibility to MPOs and keeps Oregon eligible for redistribution funds from other state's unobligated funding authority. ODOT and the large MPOs have recently entered an agreement for MPOs to meet obligation rates in exchange for the ability to share in a portion of the redistribution funds ODOT receives annually. The management and obligation of

federal transportation funds allocated by MPOs opens a new opportunity for potential increased revenue available to include as part of the forecast.

The fourth and last additional factor is the administrative consideration and impact of the 3year allocation cycle. Through the RFFA process, Metro undertakes a significant administrative effort to run a deliberative and transparent funding allocation process based on the policy objectives and strategy for implementing the region's long-range transportation plan. This process is designed as a thoughtful effort of weighing tradeoffs and advancing progress towards the region's goals for the transportation system. As a result, the RFFA process is not nimble and does not adapt well to allocate additional revenues. Therefore, the forecast of revenues for the Portland region must factor in consideration of the allocation process which cannot quickly allocate unanticipated revenues.

In summary, forecasting and estimating the revenue for the Regional Flexible Funds allocation process has additional unique objectives from other funding allocation programs in the 2024-2027 MTIP and their forecasts of available funds.

With these factors in mind, the goals of estimating the revenue allocation authority are created to achieve the following objectives:

- Select enough projects that prepares an adequate pipeline to be ready to obligate funding as it becomes available each year to achieve the following:
 - o deliver project benefits to the region as soon as possible
 - minimize loss of purchasing power to inflation
 - help ODOT (and subsequently the region) be eligible for federal redistribution funds
 - prevent having to undertake any supplemental allocation processes to distribute available funding that is in excess of earlier forecasts
- Provide a steady flow of funding to projects and programs to avoid shocks to the delivery systems.
- Balance forecasting enough revenues to develop projects in the delivery pipeline to maximize obligation of all funds as they become available without creating an over expectation of projects that can be delivered or excessive conflicts between projects for access to funds as they become available.

Revenue Forecast Methods and Assumptions

In prior RFFA cycles, forecast amounts would be based on funding authorization levels, with an assumed limitation rate based on historic performance. If the allocation cycle extended beyond the authorization period, a growth factor, based on historic performance and factoring in the limitation rate from the last year of authorization, was applied to the final authorization year and extended out to the final year of the RFFA cycle.

During the first iteration of developing the revenue forecast for the 2025-2027 RFFA cycle, the region worked under the status that the region is five (5) years removed from the current federal transportation authorization bill which would expire in September 2021. With the historical precedent of each federal transportation reauthorization resulting in an increase in federal transportation revenues, Metro staff began with the initial assumption that the historical trend in transportation revenues is likely to continue with future legislation to replace the current authorization bill at the time, known as Fixing America's Surface Transportation (FAST) Act. This assumption was also based on the active discussions being reported in media suggesting reauthorization would increase transportation funding levels. The initial assumption, which Metro programming staff called a "moderate growth forecast" reflects the amount of funds that would come to region through the federal formula funding programs based on the Senate Environment and Public Works (EPW) Committee Authorization bill amounts passed with bipartisan support at that time. To forecast how the federal formula funds in the authorization bill would flow to the region by each year, the forecast provided an initial increase of 7% in the first year of authorization (FY 2022) and a 2.2% increase in each subsequent year to reflect typical growth of funds through the period of the authorization bill. This moderate growth forecast was discussed with TPAC in spring 2021 and received a general "thumbs up" to proceed with this approach.

Since that time, the Bipartisan Infrastructure Law (BIL) passed in November 2021, establishing transportation authorization levels for federal fiscal years 2022 through 2026. For the transportation sector, the BIL is:

- The largest federal investment in public transit ever
- The largest federal investment in passenger rail since the creation of Amtrak
- The largest dedicated bridge investment since the construction of the Interstate System
- The largest investment in electric vehicle infrastructure in history

As a result, Metro staff, in working with ODOT and the TIP coordination committee, updated the revenue estimates for authorization years for the federal funding programs. The forecast utilizes the federal authorization amounts, with a forecasted 90% limitation rate. The final year of the upcoming RFFA of FFY 2027 is outside the final year of the BIL. For this year, the forecast utilizes the same authorization level and limitation amount as the final year of the BIL (FFY 2026). This reflects the common practice in recent times when Congress is facing the expiration of an authorization bill, to use short-term continuing authorization bills at existing authorization levels until a new bill can be agreed to and passed into law.

CMAQ funding is held constant from FFY 2024 forward to reflect guidance from ODOT staff. This is because ODOT expects to reopen the statewide distribution formula for CMAQ funds by FFY 2024 to address any changes brought about by updated population estimates from the 2020 federal census and to revisit possible changes in air quality conformity status for areas within the state and possibly update state policy objectives for the distribution of CMAQ funds. While overall CMAQ revenues to the state are expected to grow at the same rates as other federal funding programs within the time period of the authorization bill, the assumption of a no-growth rate for the Metro areas mitigates some of the risk that a new Oregon sub-allocation formula may reduce the proportion of CMAQ funds sub-allocated to the Metro area.

Additionally, the region is eligible to receive federal redistribution funds from ODOT beginning in FFY2023 if they become available and the region meets its funding obligation targets. To become eligible for these funds, the region needs to utilize the administrative tools to obligate existing RFFA funds on schedule, consistent with the forecast and allocation objectives as described above. The forecast assumes the region will be successful in meeting the funding obligation targets and will be awarded \$1 million per year beginning in FFY 2023. The forecasted \$1 million award amount is a moderate estimate based on what the region would have been eligible to receive in prior years if the redistribution agreement had been in place. Actual awards are expected to fluctuate year to year as redistribution amounts to Oregon depend on the actual funding obligation performance of other states.

Finally, the BIL created a new federal funding category that will sub-allocate funds to the Metro region by federal formula named the Carbon Reduction program. The general purpose of this funding program is for transportation projects and programs that will reduce greenhouse gas emissions. Like the STBG funding program, a portion of the funding authorized for the state is required to be sub-allocated to large MPOs by a prescribed federal formula based on population.

Metro is not incorporating these funds into the existing Regional Flexible Fund Allocation process. These funds have unique eligibility requirements and federal policy purposes distinct from the other federal funding types. Further federal guidance is expected to guide state DOTs and large MPOs on their distribution. Additionally, Metro staff need to coordinate with ODOT staff on the state's process for defining their program direction with the objective that both allocation process are coordinated and complementary, while also optimally addressing state and regional climate goals.

With the forecasting factors and goals described above, and based on the historical performance of federal transportation revenues provided to the Metro MPO, the proposed revenue forecast for the 2025-2027 Regional Flexible Fund is outlined below.

					-
Fund Type	2024	2025	2026	2027	Total
U-STBG		\$32,490,362	\$33,140,169	\$33,140,169	\$99,078,427
ТАР	\$307,727	\$3,030,001	\$3,097,253	\$3,097,253	\$41,399,499
CMAQ		\$13,799,833	\$13,799,833	\$13,799,833	\$9,224,507
Redistribution	\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
RFFA Subtotal	\$2,307,727	\$50,320,196	\$51,037,255	\$51,037,255	\$154,702,433
Carbon	¢11 017 299	¢2 020 722	\$2 007 249	\$2 007 249	¢22 602 917
Reduction	ş11,047,500	<i>33,030,733</i>	<i>33,307,</i> 340	<i>33,507,</i> 546	\$22,092,817

Table 2. 2025-2027 Metro Regional Flexible Funds and Carbon Reduction Funds

The reflected revenue forecast for the 2025-2027 RFFA will guide the deliberation and selection of transportation projects and programs to support the Portland region's effort to implement the long-range transportation plan. However, the revenue forecast provided is for allocation purposes and is intended as a snapshot of estimated revenues as of Spring/early summer 2022. Estimates continue to remain fluid as factors such as annual authorization and limitation rates as well as the federal rulemaking will be necessary to guide the allocation and administration of the new Carbon Reduction program. Metro staff will continue to collaborate with ODOT and the other Oregon MPOs on the methods to determine the funding authority and develop refined revenue estimates that will be utilized in each of the federal fiscal years of 2024 through 2027 for the purpose of establishing fiscal constraint. The funding authority determined in this process will be used in the MTIP programming process to limit the amount of funds that can be utilized by projects in each fiscal year of the 2024-27 MTIP. The MTIP programming is scheduled to be adopted in the summer of 2023 and is subsequently amended on a regular basis to reflect project cost and schedule adjustments and updated revenue amounts.

Step 3: Defining the Regional Flexible Fund Program Direction and Distributing Revenues to Programs (February 2021 – July 2021; February – April 2022)

The 2025-2027 RFFA began in February 2021 at the regular meeting of TPAC. At that meeting a 20-month timeline and process was outlined for the kick-off of the Regional Flexible Fund Allocation. The allocation was split into two processes: the first focuses on defining and refining the program direction for the funding allocation and the second focuses on the competitive capital grant process.

The 2018 Regional Transportation Plan (RTP) policy objectives continue to guide the investment priorities for the RFFA. Those objectives are equity, safety, climate and congestion. The RTP directs that further policy, planning and funding outcomes should advance the region toward its goals in these four areas.

JPACT and Metro Council in further program direction discussions reaffirmed the same twostep process used to award funding since the 2012-2013 RFFA cycle:

- Step 1 continues the region's commitment to repayment of bonds used to develop and construct high-capacity transit and active transportation projects. It also continues investments in region-wide programs to fund system and demand management activities and to invest in transit-oriented development projects near high-capacity transit lines. The region-wide programs are long-standing regional programs which have been established to meet various regional commitments, such as air quality and the Climate Smart Strategy.
- Step 2 focused funding on capital projects. Eligible applicants include agencies capable of entering an inter-governmental agreement with ODOT for funding and administering a federal aid transportation project; cities and counties, park districts, regional and state agencies.

Direction on the distribution of revenues to Step 1 programs and Step 2 project allocations is provided as a part of the 2025-2027 RFFA Program Direction documentation adopted by JPACT and Metro Council in July 2021. Final project and program allocations is scheduled for adoption in autumn 2022 for incorporation into the 2024-2027 MTIP and STIP.

With the passage of the Bipartisan Infrastructure Law (BIL) in November 2021, Metro needed to return to TPAC, JPACT, and the Metro Council to discuss the allocation of new revenues resulting from the federal transportation reauthorization. The initial revenue forecast developed for the 2025-2027 RFFA incorporated an increase of federal transportation revenues based on the current legislative discussions occurring in Congress.³ Therefore, the 2025-2027 RFFA Step 1 and Step 2 processes had incorporated a significant portion of the new federal transportation revenues. However, once the BIL established final annual authorizations for each state and the federal funding programs, Metro's initial revenue forecast for the 2025-2027 RFFA was under by approximately \$10.4 million. In recognition of the recent action to adopt the 2025-2027 RFFA program direction and the Step 1 and Step 2 allocation process, Metro staff returned with a proposal in how to allocate the \$10.4 million among the Step 1 programs and Step 2 project allocations for discussion and deliberation.⁴ The proposal allocates \$4.3 and \$6.1 million to the Step 1 programs and Step 2 projects respectively, based on the estimated overarching funding split from the adopted program direction. From February through April 2022, TPAC members were able to ask questions, provide input, and gather clarification. At the April 2022 meeting TPAC recommended the proposal for approval at JPACT. At the April 2022 meeting of JPACT, the committee approved the allocation proposal and the Metro Council approved in spring 2022. The Step 2 project allocation process remains underway.

Throughout the program direction and RFFA process, Metro staff will also work with the local lead agencies and ODOT Region 1 staff to determine which projects awarded funding have demonstrated that they are ready to obligate funding for their projects and then program the awarded funding as needed by project phase. Many project phases are likely to be temporarily programmed in the illustrative MTIP years of 2028 or 2029 until the project demonstrates it will be ready to obligate funds in an earlier year. Assuming funding capacity is available, the MTIP will be amended to move projects forward at that time with the objective of utilizing as much funding capacity as possible with projects that are prepared to obligate those funds.

Administrative Streamlining of Parks Bond Funding

Historically, millions of Regional Flexible Funds have supported the development and construction of multiple multi-use off-street trails projects in the region. In 2019, Metro put forward and voters affirmed their support to build more trails in the region with the passage of the 2019 Parks and Nature bond measure. The bond measure, paid for by a tax

³ See Revenue Forecast Methods and Assumptions section of Step 2: Forecasting the Revenue Allocation Authority to Metro and the Regional Flexible Funds (September 2020 – May 2021; November 2021 – April 2022).

⁴ The proposal did not include the allocation of the new revenues to emerge from the new federal Carbon Reduction funding program as federal rulemaking and guidance on eligibility and requirements have yet to be established.

assessed on property, contains funding specific to support trails projects and continuing to create a well-connected network of trails throughout the region. The 2019 Parks and Nature bond is administered through Metro's Parks and Nature department.

Recognizing the previous Regional Flexible Fund history funding trail projects, overall increase in available funding for trails, and the administrative burden related to running a deliberative and transparent allocation process, Metro will pilot a streamlined administrative process to combine the allocation of the 2025-2027 Regional Flexible Funds (RFFA) and the trail-specific funding from the 2019 Parks and Nature (P&N) bond measure. The 2025-2027 RFFA Program Direction will acknowledge the pilot and describe the coordination of RFFA and an estimated \$20 million of additional funds for trails available from the P&N bond funds.⁵

Step 4: On-Going Management of Forecast Amount and Programming of Project Costs (July 2021 – September 2026)

Management of the revenue forecast of expected available Regional Flexible Funds is ongoing as federal and state actions will impact the amount of revenues ultimately made available for reimbursement of project costs awarded funding. As these funds are made available each federal fiscal year, final decisions on how much funding is made available to a particular project phase is documented in the MTIP Programming tables. Programming is the balancing and assignment of available revenues for costs incurred by an eligible project.

How Metro staff recommend final programming of funds to project costs is directed by the awarded amount of funding to projects and programs by JPACT and Metro Council, the progress of the lead agency to complete steps to ensure a project is ready and eligible to receive the funds, and state and federal rules regarding TIP programming.

In modern program history, there has not been an occasion where projects that have been awarded funding by JPACT and Metro Council have been ready and requested more RFFA funding than has been available in a particular fiscal year. Should that occur in the future and Metro staff is unable to work out an acceptable solution with the lead agencies involved, Metro staff would provide a recommendation to JPACT and the Metro Council on resolution of such issue, if time allowed. A typical solution would be to delay one or more project phases eligibility to seek project cost reimbursement to the beginning of the subsequent fiscal year when additional funding becomes available. Programming of project costs and funding in subsequent years would potentially need to be adjusted to accommodate this shift.

In actively managing revenue forecasts, the following items are monitored and as activity occurs, used to manage the programming of funds in each year of the RFFA process and to determine a forecasted carryover (or deficit) amount into the subsequent RFFA process.

⁵ Because the 2019 Park Bond funding for trail projects is an administrative pilot, the revenues were not formally included as part of the 2025-2027 RFFA revenue forecast options and it is not included in the overarching 2025-2027 MTIP revenue forecast.

OREGON DEPARTMENT OF TRANSPORTATION (ODOT) REVENUE FORECAST

The revenue forecast for state transportation funding is completed in four phases: Statewide total revenues forecast (August – September 2020; November 2021 – April 2022), Distribution of revenues to Categorical Policy Areas (October 2020 – January 2021; November 2021 – April 2022), Categorical Policy Area sub-allocation distribution of revenues (January – March 2021; March – May 2022), Estimates of Funding Allocation Program revenues by ODOT Region and MPO Areas.

Step 1: Statewide Total Revenues Forecast (August – September 2020; November 2021 – April 2022)

The statewide forecast of funds available for transportation projects and programs during the time period of the 2024-2027 State and Metropolitan Transportation Improvement Programs (TIP) is led by the state Finance and Budget Divisions, Statewide Investments Section of the ODOT. The forecast is shared with MPOs and Transit agencies in the state through the statewide TIP committee.

The forecast of funding is dependent on a federal authorization bill being in place or not in place. With an active federal authorization bill, the forecast includes what is in the bill. When no federal authorization bill is in place, ODOT assumes a 10 percent reduction from current year levels to federal funding across all its funding program types for all TIP years.⁶ In addition ODOT assumes a 10 percent reduction from the authorization levels established in the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure and Investments Jobs Act (IIJA). The revenue estimates, in Tables X-X, reflect the amount available after applying the limitation rate. Funding allocated to the MPOs (e.g. STBG and TAP) have their own forecast methodology described in the Metro MPO forecast section.

Federal Transportation Funding

The federal government provides revenues from federal fuels taxes and heavy truck taxes to states and local governments. Most federal funding is distributed to states and local governments by funding formulas, with the remainder allocated in competitive application-based programs. The current federal transportation authorization which dictates the distribution of federal funding to states is the Bipartisan Infrastructure Law (BIL) also known as the Infrastructure and Investments Job Acts (IIJA).

Oregon receives about \$600 million dollars in funding from the Federal Highway Administration (FHWA) each year for construction projects on the state's roads, including the interstate, as well as planning and engineering. Some funds can also be used for transit and bicycle/pedestrian capital projects. All federal highway funds flow through ODOT from individual federal funding programs that each have their own rules regarding what types of projects are eligible for those funds and what match rates are required. About 30 percent of

 ⁶ Which specifically for the ODOT estimated revenues, applies only to federal fiscal year 2027.
 2024-2027 Metropolitan Transportation Improvement Program Financial Forecast | May 2022
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those funds are distributed to local governments either directly by formula (e.g. urban-STBG program funds) or awarded through competitive application processes (e.g. HSIP program funds through the state ARTS allocation process). Oregon also receives public transportation funding from the Federal Transit Administration (FTA). These FTA funds are primarily used to support public transportation operated/contracted by ODOT or passed through to public transportation operators in small urban and rural areas. FTA works directly with transit agencies in large urban areas to provide funding for operations and projects. Table 3 provides a short description of the various federal funding programs which contribute to the ODOT statewide revenue forecast.

Common Federal Revenue Funding Programs				
Fund	Description			
	The FAST Act converted the long-standing Surface Transportation Program into the Surface Transportation Block Grant Program acknowledging that			
Surface Transportation Program	this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the			
(STBG) Funds – State allocation (includes STBG-TAP set-aside for state) (Formula)	program's name with how FHWA has historically administered it. [FAST Act § 1109(a)]. The BIL/IIJA continues the Surface Transportation Block Grant program. The STBG promotes flexibility in state and local transportation decisions and provides flexible funding to best address State and local transportation needs.			
	The BIL continues the Highway Safety Improvement			
Highway Safety Improvement	traffic fatalities and serious injuries on all public roads			
Program (HSIP)	including non-state-owned public roads and roads on			
(Formula)	tribal lands. The HSIP requires a data-driven, strategic			
	approach to improving highway safety on all public			
	roads that focuses on performance.			
	The BIL continues the Railway-Highway Crossings			
Rail-Highways Crossings (Sec. 130)	program, which provides funds for safety improvements			
(Formula)	to reduce the number of fatalities, injuries, and crashes			
	at public railway-highway grade crossings.			
	The BIL establishes a new National Highway Freight			
National Highway Freight Program	Program to improve the efficient movement of freight			
	on the National Highway Freight Network (NHFN) and			
(Formula)	support several freight related infrastructure			
	improvement goals.			
	The BIL continues the CMAQ program to provide a			
	flexible funding source to state and local governments			
Congestion Mitigation Air Quality	for transportation projects and programs to help meet			
(Civiad) improvement Funds	the requirements of the Clean Air Act. Funding Is			
(Formula)	available to reduce congestion and improve air quality			
	Ouality Standards for ozono, carbon monovido, cr			
	Quality Standards for Ozone, Carbon monoxide, Of			
	particulate matter (nonattainment areas) and for			

Table 3. Federal Revenue Funding Programs Description	Table	3. Federa	Revenue	Funding	Programs	Description
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	former nonattainment areas that are now in
	compliance.
	The BIL continues National Highway Performance
	Program which provides support for the condition and
National Highway Performance	performance of the National Highway System (NHS), for
Program	the construction of new facilities on the NHS, and to
	ensure that investments of Federal-aid funds in highway
(Formula)	construction are directed to support progress toward
	the achievement of performance targets established in
	a state's asset management plan for the NHS.
	The BIL establishes the Carbon Reduction Program
Carbon Reduction Program	(CRP), which provides funds for projects designed to
(Formula)	reduce transportation emissions, defined as carbon
	dioxide (CO2) emissions from on-road highway sources.
	The BIL established the new Promoting Resilience
Promoting Resilience Operations	Operations for Transformative, Efficient, and Cost-
for Transformative. Efficient, and	saving Transportation (PROTECT) Program. The program
Cost-saving Transportation	is intended to provide funding for planning, capital
(PROTECT) Program	resilience improvements, capacity-building for
(Formula)	community resilience, evacuation planning and
	preparation, and other related activities.
	The BIL establishes the Bridge Formula Program (BFP) to
Bridge Program	replace, rehabilitate, preserve, protect, and construct
(Special Appropriations)	highway bridges.
	The BIL establishes a National Electric Vehicle
	Infrastructure Formula Program ("NEVI Formula") to
Electric Vehicle Charging	provide funding to states to strategically deploy electric
(Special Appropriations)	vehicle (EV) charging infrastructure and to establish an
	interconnected network to facilitate data collection,
	access, and reliability.
Less Common Federal Revenue Fun	ding Programs ⁷
Fund	Description
	The BIL continues the Emergency Relief program, which
	provides funds for emergency repairs and permanent
	repairs on federal-aid highways and roads, tribal
Emergency Relief	transportation facilities, and roads on federal lands that
	the U.S. DOT Secretary finds have suffered serious
	damage as a result of natural disasters or catastrophic
	failure from an external cause.
	Provides funds for projects on Federal Lands Access
Fodoral Lands Assass Brogram	Transportation Facilities that are located on or adjacent
Federal Lands Access Flogram	to, or that provide access to federal lands. Funding
	program is a competitive grant program.
	The BIL continues the optional set-aside of Surface
State Recreational Trails Program	Transportation Block Grant (STBG) program funding for
	Recreational Trails Program. Set aside amount is equal
	to the state portion of the Transportation Alternatives

⁷ Not an exhaustive list of federal revenue programs.

²⁰²⁴⁻²⁰²⁷ Metropolitan Transportation Improvement Program Financial Forecast | May 2022 16

	program. Program is at the discretion of the Governor		
	to decide whether to continue State Recreational Trails		
	Program.		
Discretionary Federal Revenue Funding Programs			
Fund	Description		
	Competitive discretionary grant programs with specific		
Existing Federal Miscellaneous	criteria for application and project eligibility.		
Discretionary Grants (e.g. RAISE,	Discretionary grant programs cycles are driven by		
NHFP – Discretionary, FAST Lane,	federal annual budget and transportation		
INFRA, ITS, etc.)	reauthorization. Funds from these discretionary grant		
	programs are not guaranteed.		
	Competitive discretionary grant programs with specific		
	criteria for application and project eligibility. These		
BIL/IIJA Federal Grant Program	programs were created through the passage into law		
(e.g. PROTECT, National	the Bipartisan Infrastructure Law (BIL) (also known as		
Infrastructure Project Assistance	the Infrastructure Investment and Jobs Act).		
Program, Bridge Investment	Discretionary grant programs cycles are driven by		
Program, Wildlife Crossings	federal annual budget and federal rulemaking. These		
Program, Congestion Relief	programs are currently only authorization through the		
Program, Healthy Streets Program)	end of BIL – federal fiscal year 2026. Funds from these		
	discretionary grant programs are not guaranteed.		
Rural Area Specific Federal Revenue	Funding Programs		
Fund	Description		
Clackamas County Surface			
Transportation Block Grant (STBG)	Rural Surface Transportation Block Grant allocated and		
Allocation	administered by ODOT to Clackamas County.		
Multnomah County Surface			
Transportation Block Grant (STBG)	Rural Surface Transportation Block Grant allocated and		
Allocation	administered by ODOT to Multhoman County.		
Washington County Surface	Dural Custo en Trenen entetien Die als Creat alle estad and		
Transportation Block Grant (STBG)	Rural Surface Transportation Block Grant allocated and		
Allocation	administered by ODOT to Wasnington County.		
Planning Specific Federal Revenue F	unding Programs		
Fund	Description		
	The BIL/IIJA continues the Metropolitan Planning		
	program. The Program establishes a cooperative,		
Motropolitan Planning (PL)	continuous, and comprehensive framework for		
Metropolitan Flamming (FL)	transportation planning and making transportation		
Formula	investment decisions in metropolitan areas. Program		
Formula	oversight is a joint Federal Highway		
	Administration/Federal Transit Administration		
	responsibility.		
	The BIL/IIJA continues the statewide and		
Statewide and Non Metropolitan	nonmetropolitan planning process, which establishes a		
Panning (SPR)	cooperative, continuous, and comprehensive		
	framework for making transportation investment		
(FHWA/FTA)	decisions throughout the State. Oversight of this		
Formula	process is a joint responsibility of the Federal Highway		
	Administration and the Federal Transit Administration.		

MPO Specific Federal Revenue Programs (Sub-Allocations from Formula Funds above)			
Fund	Description		
Surface Transportation Program (STBG) Funds – Urban	The Surface Transportation Block Grant (STBG) Program provides flexible funding that may be used by metropolitan planning organizations, and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.		
Transportation Alternatives - Urban	The FAST Act eliminates the MAP-21 Transportation Alternatives Program (TAP) and replaces it with a set- aside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives (TA). These set-aside funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to storm water and habitat connectivity.		

In addition to federal revenue funding programs, Oregon raises revenues for transportation infrastructure, maintenance, operations, and other related activities. Managed and administered by ODOT, the state revenues are generated from a variety of sources, including taxes on the sale of gasoline, vehicle registration fees, and weight-mile fees on trucks. Table 4 provides a short description of the state revenue funding programs.

State Reven	ue Funding Programs
Fund	Description
State Highway Trust Fund	 Oregon's State Highway Trust Fund collects resources from three main sources: Taxes on motor fuels, including gas tax and diesel tax. Taxes on heavy trucks, including the weight mile tax and truck registrations. Driver and vehicle fees, including licenses and vehicle title and registration. Under the Oregon Constitution, State Highway Fund fees and taxes must be spent on roads, including bikeways and walkways within the highway right of way. State funds can be used for both construction projects and the day-to-day maintenance and operations of the state's roads. Formulas set in state statute distribute about 40 percent of State Highway Fund revenues (after deducting the costs of collecting the revenue) to cities and counties.
House Bill (HB) 2017	 <u>House Bill 2017 Transportation Funding Package</u> passed by the 2017 Oregon Legislature created a number of new revenue sources for transportation. A 0.5 percent vehicle dealer privilege tax on new car sales to fund
	rebates for electric vehicles and provide ongoing funding for the multimodal Connect Oregon program.

Table 4. State	Revenue	Funding	Programs	Descriptions
			0	

	 A 0.1 percent employee payroll tax (\$1 for \$1,000 in payroll) to improve public transportation service in both rural and urban communities. A \$15 tax on the sale of new bicycles with tires over 26 inches and cost at least \$200 will go to Connect Oregon for off-road bicycle and pedestrian paths that serve commuters.
Other State Funds	 ODOT also receives revenue from several other state sources, including: Lottery funds, including lottery bond proceeds directed to the Connect Oregon program. Cigarette tax revenues dedicated to transit services for seniors and disabled people. Custom license plate fees, dedicated to operating passenger rail. General fund resources for senior and disabled transit and passenger rail service. A variety of transportation-related permits and fees.

The combined estimated federal and state revenues available statewide for transportation is approximately \$3 billion dollars for federal fiscal years 2025 through 2027. A summary of estimated revenues by year is provided in Table 5.

Also included in Table 5 is also an estimate of federal discretionary grant and congressional directed spending awards to the state of Oregon. The BIL-IIJA increased the amount of funding available through the existing discretionary grant programs and create a suite of new federal discretionary grant programs as well as opened opportunities for congressional directed spending. Acknowledging transportation partners in Oregon are likely to pursue these different discretionary programs for funding, an estimate of revenues by year is provided. The awards are an estimate and are not secured funding distributed to states by formulas set in statues or rules. The estimates are not a guarantee of award. The revenue estimate for the federal discretionary programs are based on historical federal discretionary grant awards to transportation partners in Oregon, which has been on average, about 1 percent of funding.

(All revenues are in millions)				
Program Type	2025	2026	2027	Total
Federal Formula Programs				
National Highway Performance Program (NHPP)	\$336.8	\$343.8	\$309.4	\$990.0
Surface Transportation Block Grant (STBG)	\$169.9	\$173.3	\$155.9	\$499.1
Highway Safety Improvement Program (HSIP)	\$49.0	\$49.8	\$44.9	\$143.7
Rail	\$3.0	\$3.0	\$2.6	\$8.6
Congestion Mitigation Air Quality	\$20.1	\$20.5	\$18.5	\$59.1
Planning (PL)	\$5.0	\$5.1	\$4.6	\$14.7
National Highway Freight Program (NHFP)	\$16.5	\$16.8	\$15.1	\$48.4

\$15.1

\$17.2

\$15.4

\$17.5

\$13.9

\$15.8

\$44.4

\$50.5

Table 5. ODOT Revenue Forecast - Unallocated STIP Revenue, Federal Fiscal Years 2025- 2027
(All revenues are in millions)

Carbon Reduction Program

Promoting Resilience Operations for Transformative,

Efficient, and Cost-saving Transportation (PROTECT) Program

Bridge Program	\$53.6	\$53.6	\$0 ⁸	\$107.2
Electric Vehicle Charging	\$10.4	\$10.4	\$0 ⁹	\$20.8
Federal Formula Program Total	\$696.6	\$709.2	\$580.7	\$1,986.7
Federal Discretionary Grant Programs				
Existing and New Federal Discretionary Grants and				
Congressional Directed Spending (e.g. RAISE, NHFP –				
Discretionary, INFRA, PROTECT, National Infrastructure	\$200.0	\$200.0	\$0 ¹⁰	\$400.0
Project Assistance Program, Bridge Investment Program,	Ŷ200.0	<i>¥</i> 200.0		
Wildlife Crossings Program, Congestion Relief Program,				
Healthy Streets Program, etc.)				
Federal Discretionary Grant Programs Total	\$200.0	\$200.0	\$0	\$400.0
FHWA Apportionment	\$896.6	\$909.2	\$580.7	\$2,386.7
House Bill (HB) 2017				
HB Safety	\$10.0	\$10.0	\$10.0	\$30.0
HB Bridge/Seismic	\$123.3	\$124.4	\$125.2	\$372.9
HB Preservation/Culvert	\$42.2	\$42.6	\$42.9	<u></u> \$127.7
HB 2017 Apportionment	\$175.5	\$177.0	\$178.1	\$530.6
Other Sources				
State Funds ¹¹	\$12.0	\$12.0	\$12.0	\$36.0
Other Federal ¹²	\$15.0	\$15.0	\$15.0	\$45.0
Other Apportionment	\$27.0	\$27.0	\$27.0	\$81.0

If less or additional revenues become available than had been forecasted, ODOT manages actual revenues through the STIP amendment process. Federal revenue authority is made available through and subject to the federal authorization, apportionment/appropriation, obligation authority and rescission processes, so actual amounts will vary year to year. State generated revenue is generated by the conditions associated with the collection of those revenues and also subject to year-to-year fluctuations.

Step 2: Distribution of Revenues to Categorical Policy Areas (October 2020 – January 2021; November 2021 – April 2022)

In July 2020, ODOT staff kicked off the development of the 2024-2027 STIP at the July Oregon Transportation Commission (OTC) meeting. As part of kicking off the discussion, the Commission made two early decisions to shape the revenue forecast of the ODOT

⁸ Assumes the special appropriations bridge program will not continue at the expiration of the Bipartisan Infrastructure Law at the end of federal fiscal year 2026. Therefore, no revenues are assumed in federal fiscal year 2027.

⁹ See Footnote 8.

¹⁰ No revenues assumed as number of the federal discretionary grant programs to emerge from the Bipartisan Infrastructure Law continuing beyond federal fiscal year 2026 is unknown.

¹¹ A significant portion of the state highway fund is used for ODOT's agency operations and as a result are not included as part of the revenue forecast of transportation funds estimated available for transportation projects and programs.

¹² Miscellaneous federal transportation funding from less common federal programs. See Table 3 for a description of some less common federal programs which have previously provided transportation funding in Oregon.

administered funds, as well as shape the categories in which forecasted revenues will get allocated to.

The first decision by the Commission was to assume a 10% reduction in federal funding for federal fiscal years 2024 through 2027. This decision emerged from the absence of a federal authorization bill addressing federal fiscal years 2024 through 2027 and the highly uncertainty of federal revenues in four to seven years from today. By making this revenue assumption early in the development of the 2024-2027 STIP is to ensure ODOT does not over-commit resources, which could result in the cancelation of projects. However, feedback and public comment submitted to the Commission requested ODOT and the OTC reconsider this assumption spurred a deliberate discussion by the Commission. After some deliberation by the Oregon Transportation Commission members, the Commission moved forward with a revenue assumption to assume a 10% reduction in federal funding.

The second decision made by the Commission was to carry forward the same funding categories utilized in the 2021-2024 STIP. These are:

- **Fix-it** provides funding for projects which maintain or fix the state highway system. As part of the development process, ODOT will seek direction from the OTC to continue with the current categories or modify program categories.
- **Enhance** projects which expand or enhance the state owned and operated transportation system
- **Safety** projects that are focused on reducing fatal and serious injury crashes on Oregon's roads
- **Public and Active Transportation** (formerly Non-Highway) funds bicycle, pedestrian, public transportation and transportation options projects and programs
- **Local Programs** provides direct funding to local governments and MPOs so they can fund priority projects
- **Other Functions** provides funding for workforce development, planning and data collection and administrative programs using federal resources

ODOT staff returned to provide the Commission with a broad estimate the 2024-2027 STIP is expected to be around \$2.1 to \$2.2 billion statewide.

The Oregon Transportation Commission was presented options on how to distribute the estimated \$2.1 to \$2.2 billion forecasted revenues to four policy focused topical areas: **Fix-It, State Highway Enhance, Public and Active Transportation, and Safety** (in addition to Local and Administrative topical areas that are held constant across policy options). Different allocation amounts across these four topical areas are based on direction from the Commission and ODOT developed scenarios to illustrate different potential options for allocating resources to the STIP categories for the Commission to deliberate. The options looked at balancing how to advance the state's transportation goals and outcomes.

To assist the Commission with understanding the potential outcomes of different funding scenarios and tradeoffs, ODOT analyzed the scenarios against key outcome areas including congestion relief, multi-modal mobility, social equity, safety, climate change mitigation, climate change adaptation/resilience, and state of good repair. These goal areas were extrapolated from the Commission's Strategic Action Plan and meet requirements of Executive Order 20-04, which requires considering greenhouse gas (GHG) emissions when making STIP decisions. The ODOT Climate Office designed the process to look specifically at climate outcomes (mitigation and adaptation) and then expanded it to show tradeoffs across other outcomes.

In total, the Commission deliberated and gathered public input on eight different allocation scenarios. The scenarios varied the amount of funding in the four categories: Fix-It, State Highway Enhance, Public and Active Transportation, and Safety, while keeping statutory (whether federal or state) minimums in the fix-it, public and active transportation, and safety categories in place. (With the addition of the local programs category staying constant.) Discretionary funding, primarily from the fix-it category and the other functions category were reallocated across state highway enhance, public and active transportation, and safety categories at varying levels and assessed to understand performance around key outcomes. The Commission started with four scenarios and requested ODOT staff gather public input from OTC advisory committees and the general public. With the feedback and direction provided on the initial scenarios, ODOT developed several hybrid scenarios which aimed to satisfy the Commission's direction, address performance on key outcomes, and respond to public comment. After significant debate by the Commissioners with various amendments, the Commission approved the following allocation scenario. (See Table 6) The allocation scenario allows ODOT staff to begin the next steps in the process of proposing revenue levels to specific programs within each category (e.g. bridge program, pavement program, culvert program within the Fix-it category) using the category allocation amount.

Category	Amounts
Fix-it	\$826,839,314
ADA Curb Ramps	\$263,160,686
State Highway Enhance	\$175,000,000
Safety	\$147,000,000
Public and Active Transportation	\$255,000,000
Local Programs	\$404,500,000
Other Functions	\$161,410,568
TOTALS	\$2,232,910,568

Table 6. Allocation to ODOT Funding Categories (Statewide) Combined for FFY 2025-2027

In November 2021, Congress passed the Infrastructure Investment and Jobs Act (IIJA) and President Biden signed the legislation into law on November 15, 2021. The IIJA sets the funding levels for transportation over the next five federal fiscal years starting in federal fiscal year 2022 and running through 2026. In summary, the IIJA will invest \$1 trillion in new federal investment in roads, bridges, transit, water infrastructure, broadband, power grid, etc. over the five year period. Of that total, over \$550 billion is slated for new investment in our roads, bridges, and major projects. This includes:

• \$40 billion in new funding for bridge repair

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- \$39 billion in new investment to modernize America's public transit systems
- \$66 billion in Amtrak and intercity rail investments
- \$7.5 billion for EV investments plus funds to electrify school busses, transit busses, and ferries
- \$17 billion in Port infrastructure and \$25 billion in airports

For the Oregon Department of Transportation, the estimate of transportation funding anticipated to come to Oregon is \$3.0 billion for the five (5) year bill.

The Bipartisan Infrastructure Law (BIL) will provide Oregon about \$1.2 billion in additional federal highway and transit formula funding, as well as opportunities to apply for billions of dollars in competitive grants from the U.S. Department of Transportation. Of the \$1.2 billion in additional formula funding, approximately \$412 million is flexible.

ODOT in conjunction with the Oregon Transportation Commission (OTC) led a process to gather feedback on how best to allocate the flexible \$412 million available over the course of federal fiscal years 2022 through 2026. The process began in December 2021 where ODOT engaged stakeholders to ask how the state could most effectively invest these resources to achieve transportation and community goals. ODOT received feedback at various public forums held, committee meeting presentations (e.g. ODOT Region 1 Area Commission on Transportation, modal committees, etc.), public and written testimony at Commission meetings over the course of three months. Based on the feedback, the direction from the Oregon Transportation Commission's Strategic Action Plan, ODOT obligations, and the ODOT's internal assessment of needs across the multimodal transportation system, ODOT staff developed a handful of funding allocation scenarios which outlined nine recommended program areas to invest in at varying levels. The members of the OTC provided staff feedback which led to a final allocation funding across a number of existing funding programs.

Table 7 reflects the updated allocation amounts according to deliberations undertaken by the OTC, informed by significant input and feedback from advisory committees, MPOs, community advocates, and members of the public.

Category	Amounts
Fix-it	\$822,623,192
ADA Curb Ramps	\$310,660,686
State Highway Enhance	\$200,000,000
Safety	\$187,088,304
Public and Active Transportation	\$313,213,147
Local Programs	\$501,485,806
Other Functions	\$296,390,779
TOTALS	\$2,731,961,914

Table 7. BIL-IIJA Revised Allocation to ODOT Funding Categories (Statewide) Combined for FFY2025-2027

Step 3: Distribution of Revenues to Funding Allocation Programs (January – March 2021; November 2021 – April 2022)

The topical policy areas are made up of individual funding allocation programs. After the OTC decision on the distribution of revenues to the topical policy areas, ODOT staff then distributed the forecasted revenues to the individual funding allocation programs within each topical policy area. The following are the funding allocation programs outlined in Table 8.

Fix-It Category	
Fund/Program	Description
Eiv It Drogram Bridge	The Fix-It Bridge program addresses state bridges and the
FIX-IL PTOGRAFIT - BHUge	maintenance and operations of bridges within ODOT control.
	This is the non-capacity enhancing operations and maintenance
Fix-It Program –	component to ODOT's overall system preservation. The Highway
Highway Pavement	Pavement Maintenance program addresses the maintenance,
Maintenance	operations, and asset management needs of the interstate and
	state-owned network.
Eix It Drogram Culvert	The Culvert program addresses the rehab and replacements of
FIX-IL Program – Cuivert	roadway culverts.
	The Operations program addresses the maintenance, operations,
Fix-It Program –	and asset management of operations equipment, such as traffic
Operations	signals, ramp meters, variable message signs, and other
	communications equipment.
HB2017 – Bridges	
Designates a portion of	Allocates 70% of House Bill 2017 net revenue for bridge/seismic
HB2017 funding for	projects.
Bridge Project	
HB2017 – Pavement	Allocates 24% of House Bill 2017 not revenue for payament and
Preservation and Culvert	Allocates 24% of House Bill 2017 het revenue for pavement and
Maintenance	
ADA Category	
Fund/Program	Description
ADA Curb Ramps	Provides funding for the update of ADA curb ramps statewide.
State Highway Enhance C	ategory
Fund/Program	Description
HB2017 Enhance	Funding for named projects in HB 2017 Sec 71.
	Funding to make operational enhancements to state highways to
	improve the movement of people and goods in order to enhance
State Highway Enhance	the economy. Funds are distributed to eligible projects through a
State Highway Liniance	statewide competitive process (only open for ODOT regions). At
	least 30 percent of the funds must go to rural areas, outside
	Metropolitan Planning Organization (MPO) boundaries.
Safety Category	
Fund/Program	Description
All Roads Transportation	A data-driven, jurisdictionally blind safety program to address
Safety (ARTS)	safety on all public roads.

Table 8. Description of ODOT Funding Programs

	Funds highway grade crossing safety improvement projects to		
Rail Crossing Safety	reduce the number of fatalities, injuries, and crashes at public		
	railway-highway grade crossings.		
	Allocates \$10 million per year for Safety improvements and		
HB2017 funding for	projects. Allocation to projects is discretionary and for small scale,		
Highway Safety quick capital projects in enhance the safety for users.			
Public and Active Transpo	ortation Category		
Fund/Program	Description		
Off-System	Funds bicycle and pedestrian paths or trails outside of the highway		
Bicvcle/Pedestrian	right of way.		
	Funds education and outreach efforts that improve, educate, or		
Safe Routes to School	encourage children safely walking (by foot or mobility device) or		
Education	hiking to school		
	Funds ODOT's Transportation Options program which supports		
	efforts to improve travel choice for Oregonians and improve the		
Transportation Options	efficiency with which people and goods move through the		
	transportation system		
	Brainsportation system.		
Bike-Ped Strategic	the state ewood system		
	The state-owned system.		
ODOT SRTS	Pedestrian and bicycle infrastructure projects which address the		
Infrastructure	needs of students who walk and blke to school, specifically		
-	focused on the state-owned system.		
Iransit Vehicle	Public transportation funding for replacement of transit vehicles		
Replacement	to which ODOT holds title.		
Passenger Rail Facility	Planning design of a passenger train servicing and maintenance		
Plan	facility in Eugene.		
	Program is to address the need for a comprehensive funding		
Great Streets	program for ODOT roadways to improve walking, bicycling and		
	transit access on arterials that also act as main streets through		
	communities.		
	Program will provide grants to community-based organizations		
Innovative Mobility	and government agencies for innovative public and active		
	transportation programs and projects that will enhance		
	sustainable and equitable mobility		
Rec Trails Program	Funds provided to Oregon State Parks for recreational trail		
Rec Trails Program	projects.		
Nacco Transit	Public transportation funding for vehicle replacement for urban		
Mass fransit	fixed-route bus fleets.		
	Public transportation funding for capital, purchased service and		
Transit Elderly &	preventive maintenance projects that serve the mobility needs of		
Disabled	people with disabilities and seniors.		
	Funds bicycle and pedestrian facilities within the right-of-way of		
	public roads, streets or highways open to motor vehicle traffic to		
Bicycle and Pedestrian	meet the requirement for ODOT to spend 1% of State Highway		
	Fund dollars on biking and walking enhancements.		
	Provides \$15 million per vear for the Safe Routes to School		
HB2017 Safe Routes to	Program. This program focuses on infrastructure on making sure		
Schools Program	safe walking and biking routes exist through investments in		

	crossings, sidewalks and bike lanes, flashing beacons, and the like.			
	ODOT administers a competitive infrastructure grant program.			
Local Programs Category				
Fund/Program	Description			
Surface Transportation	STBG Funds allocated to the three (3) Transportation			
Program to large MPOs	Management Area agencies for program and projects.			
Transportation	TAP Funds allocated to the three (3) Transportation Management			
Alternatives Program to	Area agencies for program and projects to address non-roadway			
large MPOs	needs.			
MPO Planning	Funds allocated to the MPOs throughout the state to address			
	federal transportation planning requirements.			
Congestion Mitigation	Funds allocated to MPOs and local agencies in eligible areas to			
and Air Quality	address air quality issues throughout the state.			
Improvements (CMAQ)				
	Funding allocated to address locally owned bridge projects which			
	are located on local facilities.			
	ODOTs Bridge Section coordinates selection and funding of			
	Federal Highway Bridge Program bridges through the Local Agency			
Local Bridge	Bridge Selection Committee, a committee of city, county, and			
	state representatives. Local agency bridges are prioritized using a			
	Technical Ranking System and selected in categories of Large			
	(30,000+ square feet of deck area), Small On-System, and Small			
	Off-System.			
	Funding allocated to local agencies via the Association of			
STBG Allocation to	Counties/League of Cities agreement. Agencies receiving funding			
Cities, MPOs & Counties	are non-TMA MPOs, Counties and Cities above 5,000 population			
	and outside of MPOs.			
Immediate Opportunity	Provides funding to construct and improve streets and roads to			
Fund	serve site-specific economic development projects. Managed in			
	cooperation with the Oregon Business Development Department.			
	The Transportation Growth Management (TGM) program is to			
	support community efforts to expand transportation choices. By			
	linking land use and transportation planning, TGM works with			
	local governments to create vibrant, livable places in which people			
	can walk, bike, take transit or drive where they want to go. The			
	TGM Program awards grants on an annual basis. TGM grants are			
Transportation Growth	for planning work leading to local policy decisions. TGM typically			
Management (TGM)	awards between \$2 and \$2.5 million per cycle. Projects are			
	selected on a competitive basis within each of the five ODOT			
	regions. The regional allocation – funds available for projects - is			
	based on a formula that considers the number of cities and the			
	population within a region. Grants generally have two-years for			
	projects to be negotiated and completed. Award amounts			
	generally range between \$75,000 and \$250,000.			
	The Local Tech Assistance Program (LTAP) provides assistance to			
Local Tech Assistance	employees and volunteers of grant recipients and others to attend			
Program (LTAP)	transit-related trainings. I raining is provided directly by Public			
	I ransit Section staff or at state, regional, and national workshops			
	and conferences. Funds are distributed through competitive and			

	formula processes based on criteria developed by the Public Transit Section. The number of scholarships awarded for a specific event or to an agency may be limited. The Public Transit Section reimburses qualified expenses to the agency (not the individual). Funding is provided through state funding sources and the Federal Transit Administration's Rural Transit Assistance Program (5311(b)(3)). Attendance at the annual Oregon Public Transportation Conference, grant-related trainings (such as trainings prior to a grant application cycle), transit manager topic
	trainings, grant management trainings, compliance trainings,
Other Functions Category	
Fund/Program	Description
State Planning and Research	Funding for statewide planning and research as part of federal requirements.
Climate Office	Funding allocated to address climate impacts on the transportation system.
Workforce Development and On Job Training	Funds allocated to the ODOT Office of Civil Rights.
Indirect Cost Allocation Plan (ICAP)	Funds allocated to recoup overhead costs as approved by FHWA
Carbon Reduction - State	Funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources
PROTECT Planning	Planning activities to support the PROTECT program
Local Climate Planning	Planning activities to assist local governments for meeting the transportation planning rule
Maintenance &	Funds for federalization of eligible ODOT maintenance and
Operations	operational activities
Match for Competitive Grants	Funds for match requirements to federal grants

Table 9. Revenue Allocation Amounts to ODOT Funding Programs (Statewide), Combined forFFY 2025-2027

Category	
Fix-it	
Bridge & Seismic	\$411.6
Preservation	\$330.5
Operations	\$89.6
Culverts	\$90.7
ADA Curb Ramps	
ADA Curb Ramps	\$217.5
ADA Borrow from Fix-It	\$93.1
Enhance	
HB2017 Enhance	\$110.0
Enhance Highway	\$90.0

Safety	
All Roads Transportation Safety	\$148.8
Rail Crossing Safety	\$9.0
HB2017 Safety	\$30.0
Non-Highway	
Off-System Bicycle and Pedestrian	\$49.2
Safe Routes to School Education	\$4.0
Transportation Options	\$7.5
Bicycle-Pedestrian Strategic	\$45.0
ODOT Safe Routes to School Infrastructure	\$25.0
Transit Vehicle Replacement	\$15.0
Passenger Rail Facility Planning	\$1.0
Great Streets	\$25.0
Innovative Mobility	\$5.0
Transportation Alternatives Program – Recreational Trails	\$4.0
Mass transit	\$12.0
Transit Elderly and Disabled	\$50.0
Bicycle-Pedestrian 1%	\$ 2 5.5
HB2017 Safe Routes to School Infrastructure	\$45.0
Local Programs	
Surface Transportation Program to Large MPOs	\$146.2
Transportation Alternatives Program	\$13.2
MPO Planning	\$17.4
Congestion Mitigation and Air Quality	\$70.0
Local Bridge	\$100.6
Surface Transportation Program Allocation to Cities and Counties	\$91.3
Surface Transportation Program Allocation to Small MPOs	\$21.6
Immediate Opportunity Fund	\$10.5
Transportation and Growth Management	\$15.0
Local Technical Assistance Program	\$1.0
Carbon Reduction – TMA	\$14.9
Other Functions	
State Planning and Research	\$73.3
Climate Office	\$4.0
Workforce Development/On the Job Training	\$5.7
511 System Operations	\$0.6
Indirect Cost Allocation Plan (ICAP)	\$134.5
Carbon Reduction – State	\$29.6
PROTECT Planning	\$1.0
Local Climate Planning	\$7.5
Maintenance & Operations	\$20.0
Match for Competitive Grants	\$20.0

Step 4: Estimates of Funding Allocation Program Revenues to ODOT Region 1 and the Portland Metro MPO Area (January – June 2021; November 2021 – March 2022)

Estimates of each ODOT funding allocation program that could be available to the areas encompassed by ODOT Region 1 and for the Metro Metropolitan Planning Area were created, other than for services provided by ODOT as a statewide program. These estimates were made to provide context for MPO areas to understand potential levels of ODOT investment in their area transportation systems so that they could consider strategy of all investments in meeting the areas priority needs, and then communicating those strategies and priorities to ODOT staff and the allocation processes decision making structure.

The key for Table 10 summarizes the methods used to develop a forecast or estimate of the revenues that could flow to transportation projects or services. The ODOT Region 1 allocations and estimates were made based on historic trends from those programs, where available. The historical allocations were calculated to find the estimated percentage of how much of the funding program total was allocated to projects with ODOT Region 1. With funding programs which are new and previous allocation a rough estimated range was identified based on the funding program rules.

Recognizing ODOT Region 1 encompasses areas outside the Portland metropolitan region, a reduced level of funding was estimated for funding coming to the Metro metropolitan planning area within ODOT Region 1. The specific method used for this amount is summarized in the key to Table 10.

These estimates are not to be interpreted as a commitment of an allocation of funds, but only an estimate to provide MPO areas the ability to understand the scale of funding available within programs to inform the development of the MTIP to pursue and advocate to ODOT or the Oregon Transportation Commission on local/regional priorities.

In the Portland metropolitan area, the following estimates were developed for the ODOT funding allocation programs.

Funding Program	Statewide Amount	ODOT Region 1 Estimated Amount	Metro MPA Estimated Amount
Fix-it			
Bridge	\$411.6	\$99.5 [*]	\$79.6 [/]
Preservation	\$330.5	\$36.6 [*]	\$29.1 [/]
Operations	\$89.6	\$25.3 [*]	\$20.3 [/]
Culverts	\$90.7	\$11.1 [*]	\$0
ADA Curb Ramps			
ADA Curb Ramps	\$217.5	\$98.9 [*]	\$79.2
Pay back for 2021-2024 Curb Ramps	\$93.1		
Sub-Total	\$1,233.0	\$271.2	\$208.1
State Highway Enhance			
HB2017 Enhance	\$110.0 ¹³	\$0	\$0
State Highway Enhance	\$90.0	\$15.0	\$15.0
Sub-Total	\$200.0	\$15.0~	\$15.0~

Table 10. ODOT Funding Program Amounts, Federal Fiscal Years 2025-2027

¹³ Remaining funding dedicated to named transportation projects in House Bill 2017.

²⁰²⁴⁻²⁰²⁷ Metropolitan Transportation Improvement Program Financial Forecast | May 2022 29

Safety				
All Roads Transportation Safety	\$148.0	\$37.9 [*]	\$30.3 [/]	
Rail Crossing Safety	\$9.0	\$5.8 [*]	\$4.6 [/]	
HB2017 Safety	\$30.0	\$9.0 [*]	\$7.2	
Sub-Total	\$187.0	\$52.7	\$42.1	
Public & Active Transportation				
Off-System Bike Ped	\$49.2	TBD	\$18.2^	
SRTS Education	\$4.0	TBD	\$1.5^	
Transportation Options	\$7.5	TBD	\$2.8^	
Bike-Ped Strategic	\$45.0	\$14.1~	\$11.3~	
ODOT SRTS Infrastructure	\$25.0	TBD	\$9.3 [^]	
Transit Vehicle Replacement	\$15.0	TBD	\$0	
Passenger Rail Facility Planning	\$1.0	TBD	\$0.37 [^]	
Great Streets	\$25.0	TBD	\$9.3 [^]	
Innovative Mobility Pilot	\$5.0	TBD	\$1.9^	
Transportation Alternatives Program – Recreational	\$4.0	ሩ በ 3*	\$0	
Trails	φ	70.5	ŶŬ	
Mass Transit	\$12.0	\$3.5*	\$2.8^	
Transit Elderly and Disabled	\$50.0	\$16.7*	\$13.3^	
Bike-Ped 1%	\$25.5	\$6.0#	\$4.8/	
HB2017 SRTS Infrastructure	\$45.0	TBD	\$16.7	
Sub-Total	\$313.2	\$40.6	\$92.3	
ODOT Directed Funding Total	\$1,933.2	\$379.5	\$357.5	
Federal Discretionary (FHWA programs only)				
Federal Discretionary Grants and Congressional	\$400.0	TBD	\$148.0 [^]	
Directed Spending				
Sub-Total	\$400.0	IBD	\$148.0	
Local Programs	¢146.2	NI / A	¢00.9	
Surface transportation Program to Large MPOS	\$146.2	N/A	\$99.8	
MDO Disparing	\$13.2	N/A	\$9.2 \$2.0	
Congestion Mitigation and Air Quality	\$17.4 \$70.0	N/A	\$3.0	
Congestion Mitigation and Air Quality	\$70.0	N/A	\$41.4 \$11.6	
Sub Total Local to MPO	\$14.9 \$261 7	N/A	\$11.0 \$165.0	
Sub-Total Local to MPO	\$201.7	א/א ליבת ב*	\$105.U	
Surface Transportation Program Allocation to Cities	\$100.0	229.3	ې۲.۲¢	
and Counties (non MPO areas)	\$91.3	\$6.5 [@]	\$0	
Surface Transportation Program Allocation to small				
MPOs	\$21.6	N/A	N/A	
Immediate Opportunity Fund	\$10.5	\$1 0 [*]	\$0.8 [/]	
Transportation and Growth Management	\$15.0	\$3*	\$2.5	
Local Technical Assistance Program	\$1.0	 N/Δ	ν/Δ	
Sub-Total Local to City/County	\$240.0	\$49.8	\$34.7	
Local Program Sub-Total	\$501.7	\$49.8	\$199.7	
Other Functions	<i>400217</i>	+ 1010	<i><i><i>q</i>=0000</i></i>	
State Planning and Research	\$73.3	\$9.5*	N/A	
Climate Office	\$73.3 \$4.0	\$9.5 [*] N/A	N/A N/A	

511 System	\$0.6	N/A	N/A
Indirect Cost Allocation Plan	\$134.5	N/A	N/A
Carbon Reduction – State	\$29.6	TBD	\$11.0/
PROTECT Planning	\$1.0	TBD	\$0.37 [/]
Local Climate Planning	\$7.5	TBD	TBD
Maintenance and Operations	\$20.0	N/A	N/A
Match for Competitive Grants	\$20.0	TBD	TBD
Other Functions Sub-Total	\$296.2	\$9.5	\$11.4
Grand Total	\$3,131.1	\$438.8	\$716.6



Key for Determining MPO Area Estimates

Forecast Amount to ODOT Region 1								
TBD	Not yet defined how ODOT Region sub-allocation or project allocations will be made.							
	Allocated through competitive, discretionary, or mandated statewide process. Forecast							
۸	37% of funds come to Metro region based on % of state population unless otherwise							
	noted.							
*	Estimate based on historic allocation performance % or direct awards in last STIP cycle.							
#	Actual ODOT Region sub-allocation target.							
@	Estimate based on percentage of statewide long-range funding forecast							
Forecast Amount to Metro area portion of ODOT Region 1								
	Metro area forecast based on estimate of 80% of Region 1 funding allocated to Metro							
/	area projects. Typically used unless historical allocations or program purpose or							
	direction indicates a different percentage more appropriate.							
	Allocated through competitive, discretionary, or mandated statewide process. Forecast							
^	37% of funds come to Metro region based on % of state population unless otherwise							
	noted.							
~	Reflects actual amount awarded in federal fiscal years 2025-2027 from the funding							
	program in the Portland metropolitan region.							

TRANSIT AGENCY REVENUE FORECASTS

The revenue forecast and funding allocation process for transit funding for TriMet and SMART is completed in three phases:

- Estimation of the transit agency revenues (annually, Fall Spring),
- Forecasted distribution of estimated transit agency revenues to transit agency budget programs (annually, Winter Spring), and
- Adoption of final annual budget (Spring Summer of each year for the subsequent fiscal year).

This revenue forecast documents the first two steps of this process. TriMet and SMART provides a presentation and opportunity to comment of the third step with the MPO annually in conjunction with their budget process.

A revenue forecast for transit funding takes place annually as part of the agency's budget process, which differs from the three-year funding cycle allocation undertaken by Metro and ODOT for the allocation of federal, state, and regionally significant local revenues. The transit agencies revenue forecast uses the annual budget process to inform the development of the transit portion of the revenue forecast of the 2024-2027 MTIP.

SOUTH METRO AREA REGIONAL TRANSIT (SMART) REVENUE FORECAST

Step 1: SMART Revenue Forecasting (Fall – Spring – Annually)

As part of SMART's annual budget process, a revenue and expenditure forecast is developed. This MTIP reports on SMART's revenue forecast for the relevant MTIP years of 2024 through 2027. Base assumptions to developing the forecast are based on historical trends and updated with actual appropriations and limitations. SMART begins with a baseline by averaging the most recent 3-year revenues. Anticipated levels of funding are then forecasted from the baseline with an expected increase of 1%-7%. The forecast will be adjusted if changes to revenues or current cost structures change significantly. SMART collaborates with TriMet and C-TRAN to estimate shares of the Urbanized Area Formula Funds from the Federal Transit Administration as they become available.

Non-Federal Operating Revenues

• **Payroll Tax:** SMART's predominant source of ongoing funding is the local payroll tax levied on businesses performing work in Wilsonville assessed on gross payroll and/or self-employment earnings. The payroll tax on local businesses covers employment within city limits and in 2008 the tax rate was raised to its current level of .5 percent (.005). Transit tax funds are used to pay for SMART operations and to leverage funding from federal and state grants. Payroll tax amounts collected by the City typically increase year to year, as companies increase their payroll through wage adjustments or by adding to their payroll and as the economy grows with new businesses relocating to the city.

- **Passenger Fares:** A very small component of local funding includes charges for services, such as fare box and transit pass sale revenue. SMART's commitment to diversity, equity and inclusion is augmented by offering fare free service on nearly all routes. Currently, SMART charges fares for the regional Route 1X that travels between Salem and Wilsonville and a regional Dial-a-Ride program that provides door-to-door medical trips for Wilsonville residents to the greater metro area.
- **Other Revenues:** SMART recognizes a small percentage of other income received by way of investment and donations. These monies are outside of the traditional structure of revenues and may be reinvested or reallocated.
- Statewide Transportation Improvement Fund (STIF): With the passage of House Bill 2017, the Oregon Legislature made a significant investment in transportation to help advance the things that Oregonians value—a vibrant economy, strong communities, high quality of life, a clean environment, and safe, healthy people. SMART is part of that investment, connecting many regional communities through coordination with numerous transportation partners. STIF funds enable SMART to leverage federal funding for capital purchases and expand intercity transit connectivity. SMART seeks plan approval from Wilsonville's City Council and Clackamas and Washington County Advisory Committees before submitting to TriMet's STIF Advisory Committee for regional approval. The plan is then packaged, reviewed by ODOT and approved by the Oregon Transportation Commission.

Federal Grants

- Section 5307 Urbanized Area Formula Program: Eligible activities include: planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement, overhaul and rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, communications, and computer hardware and software. In addition, associated transit improvements and certain expenses associated with mobility management programs are eligible under the program. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs. Urbanized areas of 200,000 or more may not use funds for operating assistance.
- Funding is apportioned on the basis of legislative formulas. For areas with populations of 200,000 and more such as the Portland-Vancouver urbanized area, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles as well as population and population density. These funds are sub-allocated by agreement within the urbanized area between TriMet, C-Tran, and SMART; the three transit agencies that serve the metropolitan area.

- Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities ٠ **Program**: Formula funding to states for the purpose of operating assistance in meeting transportation needs of the elderly and persons with disabilities. In addition of transit agencies being eligible, non-profit organizations are also eligible for 5310 Enhanced Mobility of Seniors and Individuals with Disabilities funding. FTA Section 5310 Elderly and Disabled Capital program funds are funds to be used to make purchases of capital equipment or construction of small facilities. The expenditures must be used to support transportation services for seniors and persons with disabilities. The funds are provided through a competitive grant program on a biennial cycle. As FTA funds, they follow all federal requirements associated with the program. Projects funded with this program are intermittent and on an as-needed basis. A small amount of additional 5310 funds comes to SMART as a result of Wilsonville's status as a "direct recipient" of FTA monies. These funds come to the region and SMART's share is determined through a negotiated process involving SMART, TriMet, and C-Tran.
- Section 5339 Bus & Bus Facilities Formula Grant Program: Provides funding to • states and transit agencies through a statutory formula to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities. In addition to the formula allocation, this program includes two discretionary components: The Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program. The Bus and Bus Facility Discretionary program funds are distributed through a competitive process by the FTA. These fund can be used only for the purchase of rolling stock or the construction of transit facilities that support transit bus operations. The Low or No Emissions Bus Discretionary program provides for the purchase or lease of zero-emission and lowemission transit buses as well as acquisition, construction, and leasing of required supporting facilities. These funds are allocated through a highly competitive process. Future awards are dependent on the specific process outlined by the FTA and the strength of other project proposals competing against SMART's requests for funding. SMART has had a fairly successful track record in securing these and other FTA grant funds for replacement buses, and has been able to modernize the fleet in recent years.

Revenues	FY 2024	FY 2025	FY 2026	FY 2027	Total
Passenger Fares	\$29,000	\$29,000	\$29,000	\$29,000	\$116,000
Payroll Taxes	\$5,600,00	\$5,650,00	\$5,700,00	\$5,750,00	\$22,700,000
Operating Grants*	\$537,000	\$554,000	\$570,000	\$587,000	\$2,248,000
STIF	\$1,500,000	\$1,600,000	\$1,700,000	\$1,800,000	\$6,600,000
Other Funding	\$84,800	\$87,200	\$89,600	\$92,000	\$353,600

Table 11. SMART Revenue Forecast	, Federal Fiscal Years 2024-2027
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*Operating Grants include federal funding revenues listed in more detail below.

Table 12. Federal Grants to SMART Forecast, Federal Fiscal Years 2024-2027 (From the SMARTProgramming of Projects)

Funding Source	FY 2022	FFY 2024	FFY 2025	FFY 2026	FFY 2027
Section 5307					
Urbanized Area	banized Area \$381,770		\$482,000	\$496,000	\$511,000
Formula				l	
Section 5310					
Enhanced Mobility of	62F 012	\$18,000	\$18,500	\$19,000	\$19,500
Seniors & Individuals	\$32,912				
w/Disabilities					
Section 5339(a) Bus	ction 5339(a) Bus			¢55 000	
& Bus Facilities	Ş47,887	\$52,000	\$53,500	\$55,000	şs6,500
Other Federal		TBD – will be programmed if applications for funding are			
Discretionary	\$240,000	 awarded at the discretion of the Federal Transit Administration or other federal agency. 			
Funding Awards					

Step 2: SMART – Distribution of Revenues to Major Budget Categories (Winter – Spring – Annually)

SMART has two main categories of activities in its budget process that are assigned forecasted revenues; operations and capital.

All plans and concepts that SMART utilizes are derived from goals of the Wilsonville City Council, SMART's governing board. Department goals are then used, along with community participation, to create the Transit Master Plan (TMP). Adopted in 2017, the TMP is the primary guiding document that recommends project implementation. Included in the TMP is the Statewide Transportation Improvement Fund (STIF) Plan which, in general, is allocated for route expansion and intercity connectivity. These plans allow SMART staff to forecast the apportionment of funding to specific capital projects and operational expansions.

SMART relies on ODOT's Transit Asset Management Group Plan (TAM) in determining funding for current and future maintenance of transit assets, such as rolling stock, infrastructure, equipment, and facilities. SMART uses the TAM in coordination with the TMP to forecast the funding needed for assets in correlation to future projects.

Operations

This includes total day-to-day operating requirements for all activities required to operate the system (including other post- employment benefits) and debt service (if applicable). Sub-categories, especially categories that are typically assigned federal grant program revenues, include:

• Bus Preventive Maintenance

Description: Labor and materials/services used for on-going maintenance of the SMART Bus fleet. This budget category typically utilizes Section 5307 Urbanized Area Formula Program revenues and local payroll tax revenue sources.

• Bus Purchase

Description: Purchase of buses for fixed route service. This budget category utilizes federal Section 5339(a) Grants for Buses & Bus Facilities Formula Program revenues, Statewide Transportation Improvement Fund revenues, and local payroll tax revenues.

• Services for Seniors and People with Disabilities

Description: To fund mobility management activities and purchase of travel training services for services focused on the elderly and persons with disabilities. This budget category utilizes federal Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities Program revenues.

Capital Improvement Program

This includes the purchase and installation of bus shelters and passenger amenities at bus stops. It may also include construction of administrative and maintenance facilities to support the transit system. This budget category typically utilizes Section 5307 Urbanized Area Formula Program revenues and local payroll tax revenue sources.

Step 3: Adoption of Annual Budget (Spring – early Summer – Annually)

Each year SMART shares with the MPO the proposed budget for the upcoming fiscal year. This takes place at the regular committee meeting of TPAC. The presentation includes the budget themes and categories. It also includes the federal programming of projects. Further information is provided on the budget process and timeline. The MPO has the opportunity to comment on the budget, request information regarding how the proposed budget reflects regional transportation planning priorities and vote on including proposed federal transit fund programming is to be included in the MTIP.

In conjunction with the annual budget process, SMART publishes the federally required "Program of Projects", showing how federal grant funding for the upcoming fiscal year will be proposed for inclusion in the current Metropolitan Transportation Improvement Program. This proposed programming will have the most current forecast of available funds and may include new programming or be an update to existing programming of the federal grant funds. An opportunity for public comment on the Program of Projects is also provided as a part of this process.

The SMART budget process includes a minimum of two public Budget Committee meetings. The City's Budget Committee consists of the five city councilors and five citizens at large. The citizens are appointed by the governing body and serve three-year terms. Once the budget is approved by the committee it is then sent to City Council for final adoption. City Council adopts the budget prior to July 1.

DRAFT
TRIMET – REVENUE FORECAST

Step 1: Developing the Revenue Forecast (Fall – Spring – Annually)

As part of TriMet's annual budget process, a 10-year revenue and expenditure forecast is developed. This MTIP forecast utilizes the 10-year budget forecast and reports on the relevant MTIP years of 2024 through 2027. TriMet has six categories of revenues; passenger fares, payroll taxes, State transit investment funds, other funding, operating grants (federal and non-federal), and capital improvement grants (federal).

A short description of each of the six categories of revenues are provided below.

- 1. Passenger Fare revenues: funds from the sale of passes and individual fares. Fare collection revenue is forecasted to grow at varying rates from a high of 21.4% in 2024 as the region recovers from Covid-19 related ridership reductions to a low of 4.2% in 2027. Forecast factors in a fare increase every other year beginning in 2024.
- 2. Payroll taxes: revenues from a tax on the wages paid by an employer and the net earnings from self-employment for services performed within the TriMet District boundary. The current rate is 0.7937% (2023). Employer tax revenues during this time is expected to increase due to economic recovery. Future tax rate is currently scheduled to increase incrementally through 2026, accounting for additional revenue growth from this source.
- 3. State Transit Investment Fund (STIF): funds from the State of Oregon, who collect several taxes and fees, are passed through to public transit service providers to support transit service in the state. The STIF is primarily funded through a tax on employees. Through legislation that was passed in 2020, some additional small state formula funding programs for public transit, such as the lottery tax funded Special Transportation Fund, were combined into the STIF for administration and grant-making purposes.
- 4. Other Funding: Approximately 28% of other funding is sourced by revenue streams that have equaling expenditures to TriMet and no net gain to the agency (Intergovernmental Agreements/Funding exchange). The remaining 72% of the revenue stream is mostly comprised of transit advertising, cost per ride reimbursements for Oregon Department of Human Services, City of Portland reimbursement for Streetcar personnel, Energy Tax Credit Sales revenues and other smaller, miscellaneous revenues.
- 5. Operating Grants:
 - Non-Federal: Annual revenues are expected from miscellaneous local and state sources, such as ODOT 5310 funds, ODOT Mass Transit program, City of Wilsonville Westside Express Service (WES) operating assistance and other

local contributions.¹⁴ These small contributions account for the limited amount of revenues in TriMet's overall annual budget.

- Federal Grants including:
 - FTA Section 5307 Urbanized Area Formula Program: Funding for public transportation capital, planning, job access and reverse commute projects as well as operating expenses in certain circumstances. This funding is apportioned based on legislative formulas and comes to areas with populations of 200,000 and more, such as the Portland-Vancouver urbanized area (UZA). Formula is based on several factors, including bus & fixed guideway revenue vehicle miles, passenger miles, operating costs, population and population density measures. These funds are sub-allocated by agreement ("split letter") between TriMet, C-Tran (in Washington state) and SMART; the three transit agencies that serve the Portland/Vancouver urbanized area as defined by the Census Bureau and recognized by the FTA for distribution of these funds.
 - Section 5337 State of Good Repair (SGR) Grant Program (High Intensity Motorbus and High Intensity Fixed Guideway): Funding program provides capital assistance for maintenance, replacement, and rehabilitation projects of existing high-intensity fixed guideway and high-intensity motorbus systems to help transit agencies maintain assets in a state of good repair. SGR funds are also eligible for developing and implementing Transit Asset Management (TAM) plans. High Intensity Motorbus funds are suballocated between two transit agencies, TriMet and C-Tran, as formula is based on NTD factors for HIMB only. High Intensity Fixed Guideway funds are not sub-allocated, as TriMet is the only operator of rail services currently.
 - Section 5310 Enhanced Mobility of Seniors & Individuals with
 Disabilities Program: Formula funding is to improve mobility for seniors
 and individuals with disabilities by removing barriers to transportation
 services and expanding the transportation mobility operations available.
 This program requires coordination with other federally assisted program
 and services in order to make the most efficient use of federal resources.
 These funds are sub-allocated between TriMet, C-Tran and SMART and
 formula factors, includes older adult and people with disability populations.
 - Section 5339(a) Grants for Buses & Bus Facilities Formula Program: Funding to states and transit agencies through a statutory formula to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. In addition to this formula allocation, this program includes two discretionary components: the Bus and Bus Facilities

¹⁴ TriMet considers pass through funds from ODOT, such as the FTA 5310 funding, as non-operating revenues because they are passed through the state.

Discretionary Program and the Low or No Emissions Bus Discretionary Program. These funds are sub-allocated between TriMet, C-Tran and SMART and formula factors are based on bus revenue vehicle miles, passenger miles, and operating costs reported to NTD as well as population and population density measures.

- Urban Surface Transportation Block Grant (STBG) or Congestion Mitigation – Air Quality (CMAQ) Programs: Urban Surface Transportation Block Grant funds may be used for a wide range of projects to preserve and improve the conditions and performance of surface transportation, including highway, transit, intercity bus, bicycle and pedestrian projects. Congestion Mitigation Air Quality funds may be used for capital expenditures that demonstrate a reduction of air pollutant emissions therefore providing an air quality benefit. TriMet receives both of these program funds directly from Metro, as committed in prior Regional Flexible Fund Allocation agreements.
- 6. Capital Improvement Grants (CIG): The Federal Transit Administration provides funding through a multi-year competitive process for transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking CIG funding to complete a series of steps over several years to be eligible for funding. The discretionary grant program requires completion of certain project phases depending on the project type and CIG being pursued (New Starts, Core Capacity or Small Starts). At this time, no discretionary or capital improvement grants are secured for receipt within the 2024-2027 time period. TriMet anticipates applying for capital funding, which will be added to the forecast and programmed in the MTIP as funding is secured.

Operating Grants

Non-Federal Operating Grants

Annually is expected from miscellaneous sources, such as ODOT 5310 funds, ODOT Mass Transit program, City of Wilsonville Westside Express Service (WES) operating assistance contribution and a small amount of local contributions.¹⁵

¹⁵ TriMet considers pass through funds from ODOT, such as the FTA 5310 funding, as non-operating revenues because they are passed through the state.

Revenues (Millions of \$)	FY 2024	FY 2025	FY 2026	FY 2027	Total
Passenger Fares	\$73.6	\$80.0	\$86.8	\$90.4	\$330.8
Payroll Taxes	\$503.8	\$527.5	\$558.5	\$585.9	\$2,175.7
STIF	\$36.3	\$43.1	\$48.3	\$53.7	\$181.4
Other Funding	\$33.8	\$34.4	\$34.8	\$35.3	\$138.2
Operating Grants*	\$164.9	\$173.4	\$163.3	\$126.3	\$627.9
Capital Improvement Grants**	No forecast - to be determined on award of grants				

Table 13. Summary of TriMet Forecasted Revenues, Fiscal Years 2024 – 2027

*Operating Grants include federal, state and local funding. Federal revenues are listed in more detail below.

** At this time, there are no capital improvement funds secured for receipt during the 2024-2027 time period.

Table 14. Federal Grants to TriMet, Federal Fiscal Years 2024-2027 (Part of Operating Grants element of Table 12, in millions)

Funding Source	FFY 2024	FFY 2025	FFY 2026	FFY 2027	Total	
Section 5307 Urbanized Area Formula	\$55.3	\$56.4	\$57.5	\$58.6	\$227.8	
Section 5337 State of Good Repair	\$40.5	\$41.3	\$42.2	\$43.0	\$167.0	
Section 5310 Enhanced Mobility of Seniors & Individuals w/Disabilities	\$1.4	\$1.4	\$1.4	\$1.5	\$5.7	
Section 5339(a) Bus & Bus Facilities	\$3.2	\$3.2	\$3.2	\$3.2	\$12.7	
Urban STBG and/or CMAQ Bond payment	\$21.8	\$21.8	\$21.8	\$21.7	\$87.1	
Other Federal Discretionary Funding Awards	TBD – revenues will be programmed if applications for funding are awarded at the discretion of the Federal					
	Transit Administration or other federal agency.					

Step 2: TriMet – Distribution of Revenues to Major Budget Categories (Winter – Spring – Annually)

TriMet has four major categories of activities in its budget process that are assigned forecasted revenues; (1) operations, (2) capital improvement program, (3) pass through and special payments, and (4) contingency and ending fund balance.

- **1. Operations:** Day-to-day activities required to operate the systems, including other post- employment benefits and debt service payments.
 - **Bus & Rail Preventive Maintenance**: Labor and materials/services used for ongoing maintenance of TriMet's Bus and Rail fleets. This budget category typically utilizes Section 5307 Urbanized Area Formula Program revenues, Section 5337 State of Good Repair Program revenues and STBG or CMAQ funds.
 - Vehicle Purchases: Purchase of buses for fixed route service. This budget category utilizes Section 5339(a) Buses & Bus Facilities Formula Program revenues or Section 5339(c) Low or No Emission Bus Competitive Program revenues, when awarded.
 - **Paratransit and E&D services:** The majority of TriMet's direct Section 5310 funds are allocated to a private non-profit organization to provide transportation services for seniors and individuals with disabilities. Remaining funds are used internally to support TriMet's paratransit program; LIFT.
- 2. Capital Improvement Program: TriMet typically seeks Federal Transit Administration (FTA) Capital Improvement Grant (CIG) and other discretionary program funding for large capital projects. A current example is the MAX Red Line Extension & Reliability Improvement Project that received FTA CIG funding in FY2022. At this time, no projects have secured funding for the 2024 through 2027 timeframe. However, if funds are awarded, they will be added to the MTIP through the amendment process.
- **3. Pass Through and Special Payments:** As a Qualified Entity and acting as a passthrough agent, TriMet receives State funds that are required to be passed through to other governmental agencies.

TriMet also receives Federal CMAQ and/or STBG funds from Metro through the Regional Flexible Fund Program and are used for payment of bonded debt that was primarily used for development and match of prior Capital Improvement Grant projects or in exchange for TriMet's General funds. These funds are typically used for TriMet's Bus & Rail Preventive Maintenance activities noted above.

4. Contingency and Ending Fund Balance: Contingency is an appropriated amount of a minimum of 3% of operating requirements and is adjusted for risks and those activities unknown at the time of budget adoption.

Ending Fund Balance is unappropriated and not available for spending in the budget fiscal year. Fund balance includes restricted revenues such as bond proceeds, funds

required to be spent after the budget year, including future debt service payments. Unrestricted fund balance contains between 2.0 and 2.5 months operating reserves as required by the TriMet Board of Directors.

Step 3: Adoption of Annual Budget (Spring – Summer – Annually)

The development, adoption, and implementation of the TriMet budget has five phases as summarized in Figure 1 below.





The TriMet budget process is guided by the agency's Vision, Mission and Values, the annually updated Business Plan with a 5-year horizon, Financial Policies, and a budget process that complies with budget law. The current TriMet budget and a description of the budget process for the next fiscal year is available at https://trimet.org/budget/.

Coordination of the TriMet Budget, Program of Projects and the MTIP

Each year TriMet shares with the MPO the proposed budget for the upcoming fiscal year. This takes place at the regular committee meetings of TPAC and JPACT. The presentation includes the budget themes and categories and the federal programming of projects. Further information is provided on the budget process and timeline. The MPO has the opportunity to comment on the budget, request information regarding how the proposed budget reflects regional transportation planning priorities and vote on including proposed federal transit fund programming is to be included in the MTIP. In conjunction with the annual budget process, TriMet publishes the federally required "Program of Projects" or POP, reporting how FTA grant funds for the upcoming fiscal year, will be proposed for inclusion in the current Metropolitan Transportation Improvement Program. The proposed programming will have the most current forecast of available, upcoming FTA funds and may reference additional FTA funds that have been awarded since last POP.

DRAFT

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro - nice to meet you.

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Auditor

Brian Evans

600 NE Grand Ave Portland, OR 97232-2736 503-797-1700 Materials following this page were distributed at the meeting.

May traffic deaths report for Clackamas, Multnomah and Washington counties *

David Carl Paulsen, 36, motorcycling, SE 208th Ave & SE Stark St, Gresham, Multhomah 5/3/2022 Joseph Dubois, 44, driving, Hwy 30, just south of St. John's Bridge, Portland, Multhomah, 4/30 Andrew Michael Bachman, 21, driving, N Columbia Blvd & N Peninsular Ave, Portland, Multhomah, 4/30 Unidentified, motorcycling, Hwy 47, Forest Grove, Washington, 4/20 Kathleen Hupp, 72, walking, SE Harmony Rd and SE Fuller St, Milwaukie, Clackamas, 4/5 Eric Canty, 43, motorcycling, Hwy 224, near SE Edison Street, Milwaukie, Clackamas, 4/15 Matthew Amaya, 17 & Juan Pacheco Aguilera, 16, driving, SW TV Hwy and SW Murray Blvd, Beaverton, Washington, 4/27 Wendy Falk, 52, driving, Hwy 211 near Eagle Creek, Clackamas, 4/14 Unidentified man, walking (skateboarding), Tualatin Valley Hwy & SW 198th Ave, Aloha, Washington, 4/19 Michael Philip Frainey, 52, walking, SW Barrows Rd/ SW160th St, Beaverton, Washington, 4/11 Angela C. Boyd, 47 walking, SE Powell Blvd/SE 47th Ave, Portland, Multhomah, 4/4

🕅 Metro

*ODOT preliminary fatal crash report as of 5/4/22 and police and news reports, includes updated information

Pamplin Media "Opinion Piece by Paul Edgar", ODOT's proposed Pedestrian Bridge between Oregon City and West Linn is a Consolation Prize, that will be paid for by Tolling Revenue from the I-205 Corridor and I-205 Abernethy Bridge. Printed in the Oregon City News 03/28/2022, submitted to Metro TPAC meeting, May 6, 2022.

Paul Edgar: How many of the more than 100,000 daily crossings of the Willamette River will choose to reroute their trips?

ODOT's proposed bike/pedestrian bridge between Oregon City and West Linn is another example of its non-essential priorities.

What's more important? Having the ability to use the I-205 Abernethy Bridge without paying a toll, or having the ability to walk and/or ride a bike across a new pedestrian bridge? ODOT is studying having a \$2 toll just to cross the I-205 bridge in peak hours. If you had a choice to get across the Willamette River and not pay a toll, would you choose to reroute to the old Oregon City-West Linn Arch Bridge, or get on a bike or walk and use a new pedestrian bridge? How many of the approximately 105,000 to 110,000 average daily crossings of the Willamette River on the I-205 bridge will choose to reroute their trips?

If you need to use more of the I-205 corridor out to the Stafford interchange, the proposed toll would be an additional \$4. Would you reroute to other roads just to stay away all of these proposed tolls? What is called the Toll Diversion Factor is made up of those who will reroute attempting to find a less costly way, which is estimated to be close to 40% -- those who would drive between 10 to 15 miles out of their way to avoid paying a toll.

A non-essential bike/ped bridge could be bonded with a local vote of the people, who would determine if it is important and worth it. We in Clackamas County could play hardball like people in Portland, where they get everything for free, like moving a whole school and capping the I-5 Corridor at the Rose Quarter.

U.S. Sen. Ron Wyden said that it is not fair to toll this section of the I-205 Corridor, but the governor and the Legislature voted to toll us, and it is like they want to give us a consolation prize in a non-essential pedestrian bridge paid for from tolling us to use the I-205 Abernethy Bridge. I hope no one who reads this has a business in and around Clackamas County, as this proposed tolling will hit the economy hard and the brick-and-mortar retail businesses the hardest.

There is not a lot of toll revenue that even can be reinvested. ODOT plans to hire an out-of-state company to administer tolling collection, and they historically get about 30% of the gross revenue off of the top. ODOT and Metro will take between 10% and 15% in new staffing hires, and then the next 10% to 15% will fund investments into non-road, highway or bridge needs; it is to go to things like an Equity and Mobility Advisory Committee for projects to level the playing field for a percentage of the population that has been found to have been inequitably treated in their lives. This also funds bike paths, trails, and yes, the new bike and ped bridges.

ODOT has a team of people determining who are low-income and plans to give them a paid pass to use the toll roads. TriMet proposes building a new Southwest Corridor Light Rail Transit Line and needs local money from our paying these tolls, and that could take between 5% and 10% of the gross toll revenue. We might even see some new bus routes coming into West Linn and Oregon City, so that we don't have to use our cars. Historically all of these things have increases in cost and that drive toll rates up and up. Seattle's toll bridge has shown this ability to squeeze more money out to pay for all of these non-essential, feel-good projects. Whatever is left over from the toll revenue will go to pay for the I-205 Improvement Project and bond interest. However, people who are just citizens like you and I are planning an initiative petition that would require a vote of the people in the immediate area to approve or disapprove of any proposed tolling. So, watch for information on notoll.army.

Paul Edgar is an Oregon City resident.

TPAC Agenda Item



May 2022 Formal MTIP Amendment

Resolutions 22-5266 (OR224) + 22-5265 (I-205 Abernethy)

Amendments# MY22-11-MAY1 + MY22-12-MAY2

Applies to the 2021-26 MTIP

Agenda Support Materials:

- Draft Resolutions 22-5265 + 22-5266
- Exhibit A to Resolution 22-5265 + 22-5266 (amendment tables)
- 2 Staff Reports with attachments

May 6, 2022

Ken Lobeck Metro Funding Programs Lead

May 2022 Formal MTIP Amendment Overview: OR224 Cancelation and I-205 Abernethy Cost Increase

- May 2022 Formal Amendment Overview:
 - 2 projects processing separately as stand-alone amendments
 - Processing timing different for each and I-205
 Abernethy is expected to be pulled for discussion at JPACT
 - Cover each individually and open for discussion as usual
- Seek approval individually of Resolutions 22-5266 and 22-5265

May 2022 Formal MTIP Amendment Project #1: OR224: SE 17th Ave - Rainbow Campground Project Cancelation (Key 21612)

- Key 21612: OR224: SE 17th Ave Rainbow
 Campground Safety Upgrade Project
 - Proposed to provide safety upgrades improvements including signs, stop bars, rumble strips, signals, reflectorized back plates and lighting to increase safety on this section of highway.
 - o Planned to start in FFY 2022
 - Riverside Fire and Recovery effort contained overlapping safety scope improvements with Key 21612

May 2022 Formal MTIP Amendment Project #1: OR224: SE 17th Ave - Rainbow Campground Project Cancelation (Key 21612)

- Key 21612: OR224: SE 17th Ave Rainbow
 Campground Safety Upgrade Project
 - ODOT will now pull back funding and reprogram as part of 2024-27 STIP
 - Work with US Forestry Service to submit FLAP grant to develop the OR224 Corridor Master Plan
 - Include priority safety upgrades
 - o Implement during 2024-27 STIP
 - Project cancelation is a MTIP/STIP administrative action for now

MPO CFR Compliance Requirements MTIP Review Factors

- ✓ Project must be included in and consistent with the current constrained Regional Transportation Plan – (*No significant impact from cancelation*)
- Passes fiscal constraint review and proof of funding verification (No obligations)
- ✓ Passes RTP consistency review (*No significant impacts from cancelation*):
 - Reviewed for possible air quality impacts
 - Verified as a Regionally Significant project status
 - Verified correct location & scope elements in the modeling network
 - Verified RTP and MTIP project costs consistent
 - Satisfies RTP goals and strategies
- ✓ MTIP & STIP programming consistency is maintained against obligations
- ✓ Passes MPO responsibilities verification (No obligations/impacts)
- ✓ Completed public notification requirements plus OTC approval required completed for applicable ODOT funded projects
- ✓ Examined how performance measurements may apply and if initial impact assessments are required. (*Safety upgrades delayed until next STIP*)

May 2022 Formal Amendments OR224 Cancelation Approval Timing & Steps

Action	Target Date	
Start 30-day Public Notification/Comment Period	May 3, 2022	
TPAC Notification and Approval Recommendation	May 6, 2022	
JPACT Approval and Recommendation to Council	May 19, 2022	
End 30-day Public Notification/Comment Period	June 1, 2022	
Metro Council Approval	June 2, 2022	
Amendment Bundle Submission to ODOT and USDOT	June 9, 2022	
Estimated USDOT final approvals	Early July 2022	

Notes:

1. The above target dates are planning estimates only. Changes may occur.

2. Comments via letters or personal testimony still may be submitted at the scheduled committees.

May 2022 Formal Amendment 22-5266 OR224 Approval Recommendation & Questions

TPAC Discussion & Approval Recommendation:

- Open for discussion & comments
- Staff Modified Recommendation:
 - Update materials with necessary corrections
 - Provide an approval recommendation to JPACT for Resolution 22-5266 to cancel from the MTIP the OR224: SE 17th Ave - Rainbow Campground Safety Upgrade project

May 2022 Formal Amendments

May 2022 Formal MTIP Projects #2: I-205: I-5 - OR 213, Phase 1A (Abernethy Bridge segment) cost increase

• Key 22467 - I-205: I-5 - OR 213, Phase 1A:

- The amendment adds \$135.8 million to the construction phase
- Submitted construction phase bids much higher than expected
- Construction phase increases from \$359.2 million to \$495 million
- Cost increase amendment needed to enable construction phase to be obligated
- OTC approval required scheduled for May 12, 2022 meeting

May 2022 Formal MTIP Projects #2: I-205: I-5 - OR 213, Phase 1A (Abernethy Bridge segment) cost increase



MPO CFR Compliance Requirements MTIP Review Factors

- Project must be included in and consistent with the current constrained Regional Transportation Plan
- **!** Passes fiscal constraint review and proof of funding verification
 - Contingent on OTC approval on May 12, 2022
 - Passes RTP consistency review:
 - Reviewed for possible air quality impacts
 - Verified as a Regionally Significant project status
 - Verified correct location & scope elements in the modeling network
 - Verified RTP and MTIP project costs consistent
 - Satisfies RTP goals and strategies
- ✓ MTIP & STIP programming consistency is maintained against obligations
- ✓ Passes MPO responsibilities verification
- ✓ Completed public notification requirements
- Examined how performance measurements may apply and if initial impact assessments are required

May 2022 Formal Amendments I-205 : I-5 - OR 213, Phase 1A Approval Timing & Steps

Action	Target Date		
Start 30-day Public Notification/Comment Period	April 15, 2022		
TPAC Notification and Approval Recommendation	May 6, 2022		
OTC Approval for the Funding Increase	May 12, 2022		
End 30-day Public Notification/Comment Period	May 16, 2022		
JPACT Approval and Recommendation to Council	May 19, 2022		
Metro Council Approval	May 24, 2022		
Amendment Bundle Submission to ODOT and USDOT	May 27, 2022		
Estimated USDOT final approvals	Mid June 2022		

Note: JPACT and Metro approval are contingent upon OTC approval on May 12, 2022

May 2022 Formal Amendment 22-5265 Approval Recommendation & Questions

TPAC Discussion & Approval Recommendation:

- Discussion and Comments
- Staff Recommendation:
 - Update materials with necessary corrections
 - Provide an approval recommendation to JPACT for Resolution 22-5266 approving the cost increase for he I-205: I-5 - OR 213, Phase 1A (Abernethy Bridge segment project)
 - Approval condition: JPACT and Metro approval is contingent upon OTC approval first





IBR Update

Transportation Policy Alternatives Committee May 6, 2022

Agenda

- Project Background
- Modified Locally Preferred Alternative
 - Transit Investment
 - Bridge/Auxiliary Lanes
 - Hayden Island/Marine Drive Interchange
- Timeline/Next Steps





Existing Bridges

- Critical regional, national, international connection
- 143,000 vehicles per day (2019)
- 7 to 10 hours of congestion in the peak
- Antiquated design causes safety issues
- Inadequate bike/ped facilities
- Limited transit options
- Draw bridge blocks traffic (only one on I-5 in US)
- Expensive to maintain (\$270M by 2040)
- At risk of collapse during major earthquake







Project History

- First identified as a problem in 1999
- Bi-state Columbia River Crossing (CRC) started in 2004
- CRC completed environmental review in 2011
 - Identified replacement bridge
 - Included light rail into Vancouver
- CRC lacked funding to advance to construction
- CRC discontinued in 2014
- IBR initiated in 2019







Initiating IBR efforts

- Bi-state Memorandum of Intent signed by Governors Brown and Inslee in November 2019
- \$90 million in combined funding dedicated by OR and WA as of March 2022
 - Washington's recently passed revenue package allocates \$1 billion to fund that state's share of anticipated IBR costs
- Bi-state legislative committee oversight and guidance to shape program work



Photo courtesy of Office of Governor Kate Brown





Project Partners

- ODOT and WSDOT are jointly leading the program work in collaboration with eight other bi-state partner agencies:
 - TriMet
 - C-TRAN
 - Oregon Metro
 - SW WA Regional Transportation Council

- City of Portland
- City of Vancouver
- Port of Portland
- Port of Vancouver



Photo courtesy of Office of Governor Kate Brown





Equity and climate are key priorities

- Center equity-priority community feedback and engagement
- Equity Advisory Group makes recommendations to IBR program
- Support state climate goals of reduction in greenhouse gas emissions and air quality improvements
- Improve infrastructure resilience to future climate disruptions





Modified Locally Preferred Alternative (LPA)

- Transit Investment
- Number of Auxiliary Lanes
- Hayden Island/Marine Drive Interchange
- North Portland Harbor Bridge
- Bike/Ped Facility
- Tolling







Transit Investments



Transit – Key Takeaways

- Modeling shows substantial future demand for cross-river transit service
- Team considered and tested multiple BRT and LRT options
- ► A combination of Vine BRT, LRT, and express buses will be needed
- Transfers from other transit vehicles make up the highest mode of access
- LRT has higher capacity and ridership
- LRT has higher capital cost, lower operating cost per rider than BRT
- LRT provides more competitive travel times than trips requiring a transfer at Expo
- In this corridor, LRT is more competitive for FTA funding



LPA Recommendation: LRT to Evergreen

- The Preferred transit components:
 - Mode: Light Rail
 - Alignment: I-5 Running/Adjacent
 - Terminus: Near Evergreen
- Components to be studied further:
 - General station locations
 - General P&R location and size
 - Operations and Maintenance Facility
 - System improvements to transit speed and reliability





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Transit – Additional Considerations

- Evergreen terminus has fewer potential property impacts and connects directly to the downtown library, the Historic Reserve, jobs, services, and amenities.
- Evergreen terminus provides transfer opportunities to several local routes as well as planned BRT routes.
- The City of Vancouver has worked with C-TRAN to design robust station environments for the Vine system on Broadway and Washington in the Central Business District.
- The City of Vancouver has seen substantial growth in the Waterfront District as planned for in the Waterfront Development Plan.




Auxiliary Lanes



Modified LPA – Auxiliary Lanes

Aux lanes are ramp-to-ramp connections that facilitate acceleration and deceleration, weaving, merging and diverging between intersections



Figure shows typical highway Merge and Diverge conditions, without (top) and with (bottom) Aux Lane



Modified LPA – Auxiliary Lanes



- ► AM Peak Hour 85% of SB traffic to or from 7 interchanges
- PM Peak Hour 75% of NB traffic to or from 7 interchanges
- Intersections closely spaced
- Contributes to crashes and congestion



Modified LPA – Auxiliary Lane Options



All options, have 3 lanes thru traffic Northbound and Southbound



LPA Recommendation – 1 Aux Lane Option

- Benefits of 1 aux lane compared to 2045 No-Build
 - SB AM travel time is reduced by 3 minutes between I-5/I-205 split and I-405
 - NB PM travel time is recued by 11 minutes between Broadway Ave and SR-500
- Reduces overall congestion
 - While congestion is similar in the AM/PM peak, there are off-peak benefits
 - Less diversion to local streets
 - Faster congestion recovery from crashes and incidents
 - Improved safety with decrease in crashes
- Mode shift daily transit share projected to increase from 4% (No-Build) to 11%
- Climate GHG reduction due to less congestion, VMT reduction, mode shift, and tolling
- Large safety improvements
 - Lane widths to allow for current vehicle width, turning, and comfort
 - Fewer sideswipe crashes
 - Full shoulders to recover from breakdowns and allow for emergency vehicle access and Bus on Shoulder
 - Improved visibility





Hayden Island / Marine Drive Interchanges



Modified LPA – Hayden Island/Marine Drive Interchange

Design Assumptions

- North Portland Harbor bridge replacement
- Local auto access on bridge between N. Portland and Hayden Island
- Local ped/bike connections with shared use path
- High Capacity Transit station on Hayden Island







LPA Rec: Partial Interchange Option







Partial Interchange – Key Takeaways

- Smaller footprint over North Portland Harbor.
- Fewer floating home impacts.
- Smaller scale/complexity of I-5 over Hayden Island provides higher quality experience for active transportation and transit access on east-west streets.
- Hayden Island vehicle/freight access to/from Portland via local roads and I-5 ramps that cross under Marine Drive.
- Hayden Island vehicle/freight access to/from Vancouver via Jantzen Drive I-5 ramps.





Program Timeline and Next Steps



- Summer 2022 Mid-2024: Additional analysis and design refinements that result in a Supplemental Environmental Impact Statement (SEIS)
- Mid 2024: Additional design details finalized plus off-site improvements and mitigations
- 2025: Construction begins



Anticipated Schedule for LPA Briefings and Adoption – dates subject to change

LPA Timeline (DRAFT)

....

May 3	Metro Council Work Session: Discuss Aux Lanes
May 5	ESG: narrow to a single LPA
<mark>May 6</mark>	TPAC: IBR Team Draft Modified LPA
May 10	Portland City Council work session: Modified LPA briefing
May 12	Metro Council Work Session to Discuss Modified LPA
May 19	JPACT: IBR Team Draft Modified LPA
May 19	ESG: discussion
May 20	Bi-State Leg: discussion
May 24	Metro Council Work Session to Discuss Modified LPA
(tentative)	
May 25	TriMet Board of Directors: Modified LPA briefing
May/June	Portland City Council advisory committee meetings
<mark>June 3</mark>	TPAC: IBR LPA Resolution
June 6	Vancouver City Council workshop: Review draft resolution on modified LPA
June 7	RTC Board of Directors: Modified LPA briefing
June 14	CTRAN Board of Directors: Modified LPA briefing
June 15	Port of Portland Board of Commissioners: Modified LPA briefing
June 15	ESG: Modified LPA Package to share with Boards and Councils
<mark>June 16</mark>	JPACT: Endorse Modified LPA
June 17	Bi-State Leg: Modified LPA
June 22	TriMet Board of Directors: Endorse modified LPA
June 27	Vancouver City Council: Endorse modified LPA** <u>subect</u> to change**
June 28	Port of Vancouver Board of Directors: Endorse modified LPA
June 29	Portland City Council: Endorse modified LPA
June 30 or July 7	Metro Council: Endorse Modified LPA
July 5	RTC Board of Directors: Endorse modified LPA
July 12	CTRAN Board of Directors: Endorse modified LPA
July 13	Port of Portland Board of Commissioners: Endorse modified LPA
July 21	ESG: Adopt LPA
July 21	Bi-State Leg
July 21	Possible JPACT/Council







Thanks!

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TransPort



Transportation System Management & Operations Program Update and Regional Implementation

Presentation to TPAC May 6, 2022

Kate Freitag, ODOT A.J. O'Connor, TriMet Caleb Winter, Metro



2018 RTP Policy



TSMO outcomes











Source: DKS



Benefits to upgrading signalized intersections

Upgraded intersections linked by data communications means remote traffic engineering. Examples:

- Signal timing "arrival on green"
- Queuing
- Stuck call for a green or walk signal phase
- Faster data speed with low interference
- More performance monitoring
- Lower maintenance

Result: free up Engineer's time for safety and other critical issues.



Image source: Washington County

Growing capabilities





Challenge to TSMO System Completeness

TSM in 2018 RTP Constrained



Adopted January 6, 2022 Resolution 21-5220

2021 Transportation System Management & Operations (TSMO) Strategy Portland Metro Region



Metro



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TSMO

2022-25 TransPort Work Plan

Existing and proposed groups:

TransPort

Signal Timers

Transit Operators TSMO

Traffic Incident Management Team

Portal Users Group

ITS Architecture

ICM Data Sharing Task Force

ITS Network Management Team

Cooperative Telecommunications Infrastructure Committee

2021 TSMO Strategy Actions:

2. Manage intelligent infrastructure

4. Asset security

7. Freight ITS

8. Ground-truthing technologies

9. Establish Transit Operators TSMO Group

11. Travel time info during disasters

14. Continuous improvement/ monitoring

16. Implement Integrated Corridor Management

21. Update ITS Architecture

Coordination opportunities

16. Implement Integrated Corridor Management (ICM) and mainstream ICM in to Corridor Planning

3. 10. 19. Mobility on Demand \rightarrow Mobility as a Service

13. 15. 17. 18. 20.Community listening resulting in actions at intersections and equitable approach to traveler information





Thank you

TransPort Chair

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TSMO Program

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Metropolitan Transportation Improvement Program Coordination

Transportation Policy Alternatives Committee Presentation

May 6, 2022





About SMART



- 21,000+ people employed in Wilsonville
- > 27,000+ people live in Wilsonville
- SMART gave 103,000 rides in FY2021
- Nine routes: Six in town and connections to Canby, Salem, & Tualatin
- Programs: Dial-A-Ride, SMART Options; Vanpool coming soon
- All service is free except to Salem and medical trips out of town





Recognition

- SMART ranked 5th for quality of bus & transit services and 10th for ease of travel
- ▶ SMART received **4.5** stars out of **5** in a 2019 customer satisfaction survey
- SMART received the 2022 System Innovation Award for the successful Bus on Shoulder pilot program





2022



Transit Fund Forecast FY 22-23

Source	Proposed Revenue
Employer Payroll Tax	\$5,600,000
Intergovernmental	\$4,534,416
Passenger Fare	\$104,000
Investment Income	\$41,000
TriMet (upkeep at Wilsonville TC)	\$16,800
TOTAL	\$10,296,216
Beginning fund balance	\$8,265,147





FY 2022/23 Budget Timeline

May 6: Draft Budget open for public comment May 18: Budget Committee, first hearing May 19: Budget Committee, second hearing June 6: City Council to adopt budget July 1: New fiscal year begins





Proposed Program of Projects FY 22/23

To be finalized June 6, 2022

5307 Urbanized Area Formula: \$411,000

Preventive Maintenance, Security Upgrades and Fleet Yard Design

5307 Relief (ARPA): \$2,000,000

► Operations

Surface Transportation Program: \$174,000

- SMART Options Program
- 5310 Urban Formula: \$12,000
 - Demand Response Operations







Fleet Replacement (POP Continued)

5339 Bus and Bus Facilities: \$127,000

Compressed Natural Gas (CNG) Cutaway Vehicle Replacement






Questions/Comments?

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Eric Loomis Operations Manager <u>loomis@ridesmart.com</u> 503-570-1577







2024-27 MTIP Revenue Forecast - Updated

May 6, 2022



MTIP Financial Forecast

- Required element of the MTIP process
- Provides overall funding context for upcoming allocation process decisions
- Not a commitment of funds to allocation programs or specific projects
- Expected federal and state generated revenues only

Summary of forecast

	2024	2025	2026	2027	Total
ODOT Directed ¹	N/A ^{4, 7}	119.2	119.2	119.1	\$357.5
ODOT to Cities/Counties ²	N/A ^{4, 7}	\$15.36	\$15.36	\$15.36	\$46.08
State Trust Fund to Cities/Counties ⁵	\$240.36	\$249.66	\$248.83	\$248.00	\$986.85
Federal Discretionary ⁹	\$74.0	\$74.0	\$74.0	\$0	\$222.0
Metro MPO ^{1,3, 6, 8}	\$13.6 ⁴	\$54.2	\$54.9	\$54.9	\$177.60
SMART	\$2.04	\$2.15	\$2.27	\$2.39	\$8.85
TriMet	\$158.5	\$167.2	\$174.4	\$181.7	\$681.8
Total	\$488.5	\$681.77	\$688.96	\$621.45	\$2,480.68

Top line findings

- A little under **\$2.5 billion** of revenue estimated for the region
 - Approximate 30% increase in estimated revenues
 - Not all revenues included
 MTIP
- Invests across all parts of the transportation system

BIPARTISAN INFRASTRUCTURE LAW





Top line findings

 State generated revenues remain the large majority of estimated transportation revenue, even with BIL





Next Steps

Funding Allocations

- ODOT programs wrapping up autumn 2022
- RFFA JPACT and Metro Council September/October 2022

TPAC updates

- ODOT programs monthly
- RFFA at key milestones
- Transit annual (spring)

oregonmetro.gov



Infrastructure Investment and Jobs Act Flexible Funding Decision

Presentation to TPAC May 2022



IIJA Flexible Funding: Final Decision

	Funding
Program Area	(Millions)
Enhance Highway	\$50
Fix-It	\$75
Great Streets	\$50
Safe Routes to School	\$30
Innovative Mobility Program	\$10
Local Climate Planning	\$15
Maintenance & Operations	\$40
ADA	\$95
Match for Competitive Grants	\$40
Business & Workforce Development	\$7
Total	\$412

100%				
90%				
80%				
70%				
60%				
50%				
40%				
30%				
20%				
10%				
0%				
IIJA Flexible Funds				
Fix-It PAT Chhance				



Innovative Mobility Program

- Improves access and travel options for people walking, biking, rolling, taking transit, and sharing rides
- Federal IIJA and State-funded
- 50% via competitive discretionary grants (\$10M)
- 50% via targeted ODOT convened and partner delivered programs (\$10M)
- Focus on historically excluded groups



Innovative Mobility Program

- Statewide and targeted congestion pricing mitigation projects
- Travel training and encouragement
- Bike safety gear, skills training, and racks
- Urban and rural vanpools for job access
- Pedal and ebike share programs

Innovative Mobility Program: Our Questions for You

- How can we lower barriers to participation?
- How can we make sure our applying entities engage equitably and prioritize the needs of historically excluded groups?
- Who else do we need to partner with to get the most from this new funding?



Great Streets- Background

- Many urban arterials face significant safety, multimodal, and roadway condition needs
- Existing funding pots are split by type roadways, pavement, crossings etc.
- Great Streets brings these pots together.
- \$50M funding through IIJA
- Proof-of-concept/pilot for future work

Great Streets- Funding Criteria

Projects will be scored on:

- Equity
- Safety
- Climate
- Multimodal Accessibility
- Local support and engagement
- Leverage Opportunities
- Project readiness



Great Streets: Our Questions for You

In 2025, when we look back at how \$50M was invested in Great Streets, what does success look like?

Should our project selection process be more centralized and datadriven or should it prioritize high quality applications that demonstrate community buy-in, equitable engagement and good climate mitigation?

What does a Great Street look and feel like from a user's perspective?