



600 NE Grand Ave.  
Portland, OR 97232-2736

## Joint Policy Advisory Committee on Transportation (JPACT) agenda

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Thursday, June 16, 2022

7:30 AM

<https://zoom.us/j/91720995437> (Webinar  
ID: 917 2099 5437) or 877-853-5257 (Toll  
Free)

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### 1. Call to Order, Declaration of a Quorum & Introductions (7:30 AM)

Please note: To limit the spread of COVID-19, Metro Regional Center is now closed to the public. This meeting will be held electronically. You can join the meeting on your computer or other device by using this link: <https://zoom.us/j/91720995437> or by calling +1 917 2099 5437 or 888 475 4499 (toll free).

If you wish to attend the meeting, but do not have the ability to attend by phone or computer, please contact the Legislative Coordinator at least 24 hours before the noticed meeting time by phone at 503-813-7591 or email at [legislativecoordinator@oregonmetro.gov](mailto:legislativecoordinator@oregonmetro.gov).

### 2. Public Communications (7:35 AM)

Public comment may be submitted in writing and will also be heard by electronic communication (video conference or telephone). Written comments should be submitted electronically by emailing [legislativecoordinator@oregonmetro.gov](mailto:legislativecoordinator@oregonmetro.gov). Written comments received by 4:00 pm on the Wednesday before the meeting will be provided to the committee prior to the meeting.

Those wishing to testify orally are encouraged to sign up in advance by either: (a) contacting the legislative coordinator by phone at 503-813-7591 and providing your name and the item on which you wish to testify; or (b) registering by email by sending your name and the item on which you wish to testify to [legislativecoordinator@oregonmetro.gov](mailto:legislativecoordinator@oregonmetro.gov). Those requesting to comment during the meeting can do so by using the "Raise Hand" feature in Zoom or emailing the legislative coordinator at [legislativecoordinator@oregonmetro.gov](mailto:legislativecoordinator@oregonmetro.gov). Individuals will have three minutes to testify unless otherwise stated at the meeting.

### 3. Updates from the JPACT Chair (7:40 AM)

### 4. Consent Agenda (7:45 AM)

- 4.1 Resolution No. 22-5271, For the Purpose of Amending and Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) Two Oregon Department of Transportation (ODOT) Projects Enabling Project Phases to Move Forwards and Addressing Funding Shortfalls (JN22-13-JUN1)

[COM](#)  
[22-0571](#)

Attachments: [Worksheet](#)  
[Resolution No. 22-5271](#)  
[Exhibit A](#)  
[JPACT Staff Narrative v060322](#)

- 4.2 Resolution No. 22-5272, For the Purpose of Amending or Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) TriMet's New Willamette Shoreline Rail Repair Project and Addressing Oregon Department of Transportation (ODOT) Needed Project Funding Needs (JN22-14-JUN2)

[COM](#)  
[22-0572](#)

Attachments: [Worksheet](#)  
[Resolution No. 22-5272](#)  
[Exhibit A](#)  
[Staff Narrative](#)

- 4.3 Consideration of the May 19, 2022 JPACT Minutes

[COM](#)  
[22-0579](#)

Attachments: [5.19.22 JPACT Minutes](#)

**5. Action Items (7:50 AM)**

- 5.1 Resolution 22-5273, For the Purpose of Endorsing the Modified Locally Preferred Alternative for the Interstate Bridge Replacement Program

[COM](#)  
[22-0573](#)

Presenter(s): Matt Bihn (he/him), Metro

Attachments: [JPACT Worksheet](#)  
[Draft Resolution No. 22-5273](#)  
[Exhibit A](#)  
[Attachment 1](#)  
[Attachment 2](#)

**6. Information/Discussion Items (8:20 AM)**

- 6.1 Emerging Transportation Trends: Draft results and recommendations

[COM](#)  
[22-0574](#)

Presenter(s): Eliot Rose (he/him), Metro

Attachments: [JPACT Worksheet](#)  
[Emerging Trends Memo](#)  
[Emerging Trends Summary](#)

- 6.2 Freight Commodity Study

[COM](#)  
[22-0575](#)

Presenter(s): Tim Collins (he/him), Metro

Attachments: [JPACT Worksheet](#)

**7. Updates from JPACT Members (9:20 AM)**

**8. Adjourn (9:30 AM)**

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានកម្មប័ណ្ណរើសអើងសូមទូរស័ព្ទទៅលេខ [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights)។

បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃច័ន្ទ) ប្រាំពីរថ្ងៃ ថ្ងៃច្រើន មុនថ្ងៃប្រជុំដើម្បីអាចឱ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក។

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January 2021

## **2022 JPACT Work Program**

*As of 6/9/2022*

*Items in italics are tentative*

<b><u>May 19, 2022</u></b>	<b><u>June 16, 2022</u></b>
<ul style="list-style-type: none"> <li>• <b>Resolution No. 22-5266</b> For the Purpose of Amending the 2021-26 Metropolitan Transportation Improvement Program (MTIP) to Cancel ODOT's OR224, SE17th 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) (<b>consent</b>)</li> <li>• <b>Resolution No. 22-5265</b> For the Purpose of Amending the 2021-26 Metropolitan Transportation Improvement Program (MTIP) to Increase the Construction Phase for the I-205: I-50R 213, Phase 1A Project Allowing the Construction Phase to Move Forward and be Implemented (MY22-11-MAY1) (Ted Leybold, Metro, Mandy Putney (she/her), ODOT; 15 min; <b>action</b>)</li> <li>• <b>Resolution No. 22-5244</b> 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 (John Mermin, Metro; 10 min; <b>action</b>)</li> <li>• Update on JPACT Trip to DC (Tyler Frisbee (she/her), Metro; 10 min)</li> <li>• Regional Flexible Funds Allocation – summarize call for projects, present draft project outcomes evaluation report (Dan Kaempff, Metro; 30 min)</li> <li>• I5BRP- Introduction to the Modified LPA Discussion (Greg Johnson (he/him), I5BRP, Matt Bihn (he/him), Metro; 15 min)</li> </ul> <p>Comments from the chair</p>	<ul style="list-style-type: none"> <li>• <b>Resolution No. 22-5271</b> For the Purpose of Amending and Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) Two ODOT Projects Enabling Project Phases to Move Forwards and Addressing Funding Shortfalls (JN22-13-JUN1) (<b>consent</b>)</li> <li>• <b>Resolution No. 22-5272</b> For the Purpose of Amending or Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) TriMet's New Willamette Shoreline Rail Repair Project and Addressing ODOT Needed Project Funding Needs (JN22-14-JUN2) (<b>consent</b>)</li> <li>• <b>Resolution No. 22-5273</b> For the Purpose of Endorsing the Interstate Bridge Replacement Program Modified Locally Preferred Alternative (IBR Staff, Matt Bihn (he/him), Metro; 30 min; <b>action</b>)</li> <li>• Emerging Transportation Trends: Draft results and recommendations (Eliot Rose (he/him), Metro; 30 min)</li> <li>• Freight Commodity Study (Tim Collins (he/him), Metro; 30 min)</li> </ul> <p><i>June 30th- RTP Council/JPACT Workshop 7:30am-9:30am</i></p> <ul style="list-style-type: none"> <li>• Process, Vision, Goals and Objectives for the 2023 RTP (Kim Ellis, Metro)</li> </ul>

<ul style="list-style-type: none"> <li>• 2024-27 MTIP Financial Forecast Update – Grace Cho</li> </ul>	
<p><b><u>July 21, 2022</u></b></p> <ul style="list-style-type: none"> <li>• RFFA - Present public comment report, initial draft proposal for funding allocations (Dan Kaempff, Metro; 45 min)</li> <li>• <i>Better Bus Program (Matt Bihn (he/him), Metro; 20 min)</i></li> </ul> <p><i>July 28th- RTP Council/JPACT Workshop 7:30am-9:30am</i></p> <ul style="list-style-type: none"> <li>• Regional Congestion Pricing Policy (Alex Oreschak, Metro)</li> <li>• ODOT Oregon Highway Plan Amendment (ODOT presenters TBD, Gareth Prior)</li> </ul>	<p><b><u>August 18, 2022</u></b></p> <ul style="list-style-type: none"> <li>• RFFA - Present refined draft proposal, discussion of coordinating committee priorities (Dan Kaempff, Metro)</li> <li>• 2023 RTP Vision &amp; Goals</li> <li>• Regional Mobility Policy Update – Draft Policy for 2023 RTP (Kim Ellis (she/her), Metro)</li> <li>• Burnside Bridge-Intro (Alex Oreschak, Metro; Megan Neil, Multnomah County; 20 min)</li> <li>• RTP - High Capacity Transit Strategy Update for 2023 RTP (Ally Holmqvist, Metro; 20 min)</li> </ul> <p><i>August 25th- RTP Council/JPACT Workshop 7:30am-9:30am</i></p> <ul style="list-style-type: none"> <li>• Safe and Healthy Urban Arterials (John Mermin &amp; Lake McTighe, Metro)</li> </ul>
<p><b><u>September 15, 2022</u></b></p> <ul style="list-style-type: none"> <li>• RFFA - ACTION on TPAC recommended project list (Dan Kaempff, Metro)</li> <li>• <i>Regional Mobility Policy Update Discussion - Recommended Policy for 2023 RTP (Kim Ellis, Metro and ODOT staff; 30 min)</i></li> <li>• Regional Congestion Pricing Policy (Alex Oreschak, Metro; 45 min)</li> <li>• ODOT Oregon Highway Plan Amendment (ODOT presenters TBD, Gareth Prior)</li> <li>• <i>Transit Oriented Development</i></li> <li>• Burnside Bridge- Vote (Alex Oreschak, Metro; Megan Neil, Multnomah County)</li> </ul> <p><i>September 22nd- RTP Council/JPACT Workshop 7:30am-9:30am</i></p>	<p><b><u>October 20, 2022</u></b></p> <ul style="list-style-type: none"> <li>• Sunrise Community Vision Project – <i>Tentative (Clackamas County)</i></li> <li>• 2023 RTP – Finance Plan &amp; Equitable funding Research (Lake McTighe &amp; Ted Leybold, Metro)</li> <li>• Regional Mobility Policy Update – Recommended Policy for 2023 RTP (Kim Ellis (she/her), Metro)</li> </ul> <p><i>October 27th- RTP Council/JPACT Workshop 7:30am-9:30am</i></p> <ul style="list-style-type: none"> <li>• Climate Smart Strategy Update (Kim Ellis, Eliot Rose &amp; Thaya Patton, Metro)</li> </ul>

<ul style="list-style-type: none"> <li>• High Capacity Transit Strategy Update/Future of Transit in the Region (Ally Holmqvist, Metro)</li> </ul>	
<p><b><u>November 17, 2022</u></b></p> <ul style="list-style-type: none"> <li>• RTP - Call for Projects for 2023 RTP (Kim Ellis, Metro)</li> <li>• RTP Financial Plan: Revenue Forecast (Ted Leybold (he/him), Metro; 45 min)</li> <li>• Freight Commodity Study (Tim Collins, Metro)</li> </ul>	<p><b><u>December 15, 2022</u></b></p>

**4.1 Resolution No. 22-5271, For the Purpose of Amending and Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) Two Oregon Department of Transportation (ODOT) Projects Enabling Project Phases to Move Forwards and Addressing Funding Shortfalls (JN22-13-JUN1)**

*Consent Agenda*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022

# JPACT Worksheet

- **Agenda Item Title: June #1 2022 MTIP Formal Amendment & Resolution 22-5271 Approval Request**
- **Presenters:** N/A – JPACT Consent Calendar inclusion request
- **Contact for this worksheet/presentation:** Ken Lobeck, Metro Funding Programs Lead, [ken.lobeck@oregonmetro.gov](mailto:ken.lobeck@oregonmetro.gov)

## Purpose/Objective

**FOR THE PURPOSE OF AMENDING AND ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO ODOT PROJECTS ENABLING PROJECT PHASES TO MOVE FORWARD AND ADDRESSING FUNDING SHORTFALLS (JN22-13-JUN1)**

## Outcome

- Approval of Resolution 22-5271 and approval recommendation to Metro Council enabling :
  - The amendment to add to the MTIP the I-405 Fremont Bridge (Willamette River) West Ramps painting project Preliminary Engineering and Right-of-Way phases (ODOT project Key #22603)
  - The ability to amend the existing OR141/OR217 Curb Ramps ADA improvement project to address required PE and ROW phase cost increases and slip the construction phase to FFY 2024 (ODOT Key #22431)

## What has changed since JPACT last considered this issue/item?

- Key 22603: I-405 Fremont Bridge (Willamette River) West Ramps painting project is considered a new project to the MTIP. ODOT is the lead agency. PE and ROW phase/funding is being added now to allow the project Preliminary Engineering phase to move forward. Other details include:
  - The construction phase will be added to the next STIP (2024-27 STIP) and next MTIP most likely next year.
  - PE funding is \$11.6 million with ROW funding at \$127,000
  - The estimated construction phase funding need is \$103 million
  - The total project cost estimate currently is \$115.7 million
  - Final OTC approval is required which is scheduled for July 14, 2021. Metro Council approval is requested for July 21, 2022.
- Key 22431: OR141/OR217 Curb Ramps is an ADA improvement project for ODOT.
  - The project is located on OR 141 (Hall Blvd) and SW 72nd Ave in the Tigard area, construct ADA compliant curbs and ramps.
  - The amendment is addressing a needed cost increase (inflation adjustment) and scope change that shifts the OR 217 portion over to the OR217 project in Key 18841,
  - The amendment add funding to PE and ROW phases resulting in a total project cost increases from \$2,736,658 to \$4,662,297 = 70.4% increase
  - The amendment also slips the construction phase to FFY 2024
  - The cost increases require OTC approval which is scheduled for July 14, 2022
  - Metro Council scheduled for July 21, 2022

## What packet material do you plan to include?

- Draft Resolution 22-5271
- Exhibit A to Resolution 22-5271 (MTIP worksheet) providing the programming changes
- Staff Narrative with applicable attachments
- Note: TPAC approval recommendation to JPACT occurred on June 3, 2022. There was no significant discussion of the amendment by TPAC members.



BEFORE THE METRO COUNCIL

**FOR THE PURPOSE OF AMENDING AND ) RESOLUTION NO. 22-5271**  
**ADDING TO THE 2021-26 METROPOLITAN )**  
**TRANSPORTATION IMPROVEMENT PROGRAM )**  
**(MTIP) TWO ODOT PROJECTS ENABLING ) Introduced by: Chief Operating Officer**  
**PROJECT PHASES TO MOVE FORWARD AND ) Marissa Madrigal in concurrence with**  
**ADDRESSING FUNDING SHORTFALLS (JN22-13- ) Council President Lynn Peterson**  
**JUN1) )**

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, the June 2022 Formal MTIP Amendment adds the I-405 Fremont Bridge (Willamette River) West Ramps painting project Preliminary Engineering and Right-of-Way phases enabling the project to commence in early October 2022 with the Construction planned to be added as part of the 2024-27 STIP update; and

WHEREAS, the June 2022 Formal MTIP Amendment adds funding to the Preliminary Engineering and Right-of-Way to the OR141/OR217 American with Disabilities Act (ADA) Curb Ramps improvement project to address exiting funding shortfalls ; 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 June 3, 2022; and

WHEREAS, both projects still require final approval from the Oregon Transportation Commission which is scheduled to occur on July 14, 2022 in order for final approval to occur from Metro Council

WHEREAS, JPACT approved Resolution 22-5271 consisting of I-405 Fremont Bridge Painting and OR141/OR217 ADA Curbs and Ramps Formal MTIP Amendments on June 16, 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 July 21, 2022 through Resolution 22-5271 to formally amend the 2021-26 MTIP to add the I-405 Fremont Bridge Painting project and add funding to the OR141/OR217 ADA Curbs and Ramps Improvement project.

ADOPTED by the Metro Council this \_\_\_\_ day of \_\_\_\_\_ 2022.

\_\_\_\_\_  
Lynn Peterson, Council President

Approved as to Form:

\_\_\_\_\_  
Carrie MacLaren, Metro Attorney

DRAFT

2021-2026 Metropolitan Transportation Improvement Program  
Public Notification of Submitted New and Proposed Amended Existing Projects  
**Exhibit A to Resolutions 22-5271 and 22-5272**



Amendment Purpose Statement for Resolution 22-52-71 (Amendment Number JN22-13-JUN1)

FOR THE PURPOSE OF AMENDING AND ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO ODOT PROJECTS ENABLING PROJECT PHASES TO MOVE FORWARD AND ADDRESSING FUNDING SHORTFALLS (JN22-13-JUN1)

Amendment Purpose Statement for Resolution 22-5272 (Amendment Number JN22-14-JUN2)

FOR THE PURPOSE OF AMENDING OR ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TRIMET'S NEW WILLAMETTE SHORELINE RAIL REPAIR PROJECT AND ADDRESSING ODOT NEEDED PROJECT FUNDING INCREASES (JN22-14-JUN2)

About MTIP Formal/Full Amendments:

Formal MTIP amendments represent a significant change to a project from the original funding or scope of improvement activities. The various required process steps are intended to demonstrate that as a result of the required changes, no impact upon air conformity is present, plus fiscal constraint is still maintained, and/or the priorities, policies, and goals established in the approved Regional Transportation Plan (RTP) have not changed. Formal MTIP amendments normally fall into one or more of the following categories: (1) Significantly adds, revises, reduces, or changes the project scope of improvement activities. (2) Requires a significant change to the project limits limit (greater than 0.25 miles). (3) Involves a significant cost change (increase or decrease normally 20% or greater). (4) Adds or cancels a project from the MTIP.

Proposed June 2022 Formal Amendment Bundle #1

Resolution Number: **22-5271**  
 Amendment Type: **Formal/Full**  
 Amendment #: **JN22-13-JUN1**  
 Total Number of Projects: 2

ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key <b>22603</b>  <b>New Project</b>	New TBD	ODOT	I-405 Fremont Bridge (Willamette River) West Ramps	Paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland.	<b><u>ADD NEW PROJECT:</u></b>  The formal amendment adds ODOT's new I-405 Fremont Bridge O&M painting project with PE and ROW phases to the MTIP.
Project #2 Key <b>22431</b>	71247	ODOT	OR141/OR217 Curb Ramps	At various location on OR 141 (Hall Blvd) and SW 72nd Ave in the Tigard area, construct ADA compliant curbs and ramps.	<b><u>COST INCREASE</u></b>  Add funding to the PE and ROW phases to address funding shortfalls. Slip Construction to FFY 2024



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

**Formal/Full Amendment**  
**ADD NEW PROJECT**  
 Add the new Fremont Bridge O&M project to the MTIP

<b>Lead Agency:</b> ODOT		Project Type:	O&M	<b>ODOT Key:</b>	<b>22603</b>
<b>Project Name:</b> <b>I-405 Fremont Bridge (Willamette River) West Ramps</b>	<b>1</b>	ODOT Type	Maint	<b>MTIP ID:</b>	<b>NEW-TBD</b>
		Performance Meas:	No	<b>Status:</b>	<b>1</b>
<b>Project Status:</b> 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.).	US30	Capacity Enhancing:	No	<b>Comp Date:</b>	<b>12/31/2028</b>
		Conformity Exempt:	Yes	RTP ID:	12092
<b>Short Description:</b> Paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland.	1.24	On State Hwy Sys:	I-405	RFFA ID:	N/A
	1.26	Mile Post Begin:	2.84	RFFA Cycle:	N/A
	0.02	Mile Post End:	3.10	UPWP:	No
		Length:	0.26	UPWP Cycle:	N/A
		Flex Transfer to FTA	No	Transfer Code	N/A
		1st Year Program'd:	2022	Past Amend:	0
		Years Active:	0	OTC Approval:	<b>Yes</b>
STIP Amend #: 21-24-2100			MTIP #: <b>JN22-13-JUN1</b>		

**Detailed Description:** On I-405 at MP 2.84 to MP 3.10 and US 30 from MP 1.24 to MP 1.26, paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland. (Note: Construction planned for FFY 2025 & 24-27 STIP, estimate at \$103.73 million)

**STIP Description:** Paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland.

**Programming Notes or Conditions:** OTC approval has been indicated in the STIP Impacts Worksheet with approval planned for their June 2022 meeting. The OTC item is required to meet the proof funding and fiscal constraint requirement. Concurrent processing is approved to meet FY 2022 EOY PE obligation needs

Last Amendment of Modification: None. Initial MTIP programming

**PROJECT FUNDING DETAILS**

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
<b>Federal Funds</b>								
AC-STBGS (89.73%)	ACPO	2023		\$ 10,437,394				\$ 10,437,394
AC-STBGS (89.73%)	ACPO	2024			\$ 113,957			\$ 113,957
								\$ -
Notes: AC-STBGS= Advance Construction State STBG conversion projection. Construction proposed for FFY 2025							<b>Federal Totals:</b>	<b>\$ 10,551,351</b>
<b>Federal Fund Obligations \$:</b>								Federal Aid ID
<b>EA Number:</b>								
<b>Initial Obligation Date:</b>								
<b>EA End Date:</b>								
<b>Known Expenditures:</b>								
<b>State Funds</b>								
State	Match	2023		\$ 1,194,606				\$ 1,194,606
State	Match	2024			\$ 13,043			\$ 13,043
								\$ -
							<b>State Total:</b>	<b>\$ 1,207,649</b>
<b>Local Funds</b>								
								\$ -
								\$ -
							<b>Local Total</b>	<b>\$ -</b>
Phase Totals Before Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phase Totals After Amend:			\$ -	\$ 11,632,000	\$ 127,000	\$ -	\$ -	\$ 11,759,000
							Year Of Expenditure (YOE):	\$ 115,489,000
Net Phase Funding Change:			\$ -	\$ 11,632,000	\$ 127,000	\$ -	\$ -	\$ 11,759,000
Phase Percent Change:			0.0%	100.0%	100.0%	0.0%	0.0%	10.2%



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**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? Adding a new ODOT fund bridge rehab project to the MTIP.

**Amendment Summary:**

The formal amendment adds the PE and ROW phase to the 2021-26 MTIP. This is new project. The two phases total \$11,759,000. The construction phase estimate is \$103,730,000. The construction phase will be added to the MTIP through the 2024-27 STIP Update and 2024-29 MTIP Update. The phase estimates were developed as part of the scoping effort. ODOT summarizes the project need as follows: Top paint coat is peeling; some rusting, pack rust, and minor section loss on steel members. If distresses are not addressed in a timely manner, it is hard to catch up due to the size of the bridge. This is a large bridge with an extensive ramp system at each end, so the painting will be done in phases. This business case concentrates on the ramps on the west end of the bridge, 09268, 09268A, 09268B, 09268E, 09268N, 09268S and 09268W.

Painting projects support equity goals by helping to protect steel bridges against corrosion, avoiding costly repairs in the future and lowering life cycle costs, which in turn minimizes transportation user fees needed for maintaining the asset. Raising user fees has a larger negative impact on lower income individuals. Maintaining assets at the lowest life cycle cost frees up transportation revenues for other purposes, such as Active and Public Transportation, Safety, or Enhancement for the 25-27 STIP.

- > OTC approval is required to approve the funds. The funding request is scheduled to go before the OTC during their July 14, 2022 Meeting. The MTIP amendment approval is conditioned upon OTC approval that first must occur. Otherwise, the proof-of-funding verification and fiscal constraint demonstration as required by 23 CFR 450.300-338 will not be properly demonstrated. The MTIP amendment cannot proceed to Metro Council until OTC approval occurs. Therefore, the project will have to progress as a stand-alone project under a separate resolution number and approval timing. Metro Council approval will be requested for their July 21, 2022 meeting.
- > Will Performance Measurements Apply: Safety and Bridge

**RTP References:**

- > RTP ID: 12092 - Bridge Rehabilitation & Repair
- > RTP Description: Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.
- > Regional Significant Project: Yes. Federal funds plus Bridge improvements are considered regionally significant
- > UPWP amendment: No
- > RTP Goals: Goal 10 - Fiscal Stewardship
- > Goal Objective: 10.1 Infrastructure Condition
- > 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: OTC approval required. Schedule for Jul 14, 2022 OTC meeting. Requires delay to Metro Council as a result until OTC approval occurs.
- > Scope changes included: No
- > Limit changes included: No
- > Formal/full amendment requirement under Matrix: Adding a new project to the MTIP requires a formal/full amendment
- > Add Special Performance Evaluation assessment required to be completed: No. The project does exceed the \$100 million threshold, but is an exempt and non-capacity enhancing project. Therefore, the amendment special assessment requirement is not required
- > Exempt or Capacity Project: Exempt project
- > Exemption Reference: 40 CFR 93.126, Table 2 - Safety - Widening narrow pavements or reconstructing bridges (no additional travel lanes).

**Fund Codes:**

- > AC-STBGS = Federal Advance Construction placeholder funds with the estimated final conversion to be State STBGS .
- > State = General state funds provided by the lead agency as part of the required match.

**Other**

- > On NHS: Yes - ID as part of the Eisenhower Interstate System
- > Metro Model: Yes - Motor Vehicle Network
- > Model category and type: Throughways
- > TCM project: No
- > Located on the CMP: Yes



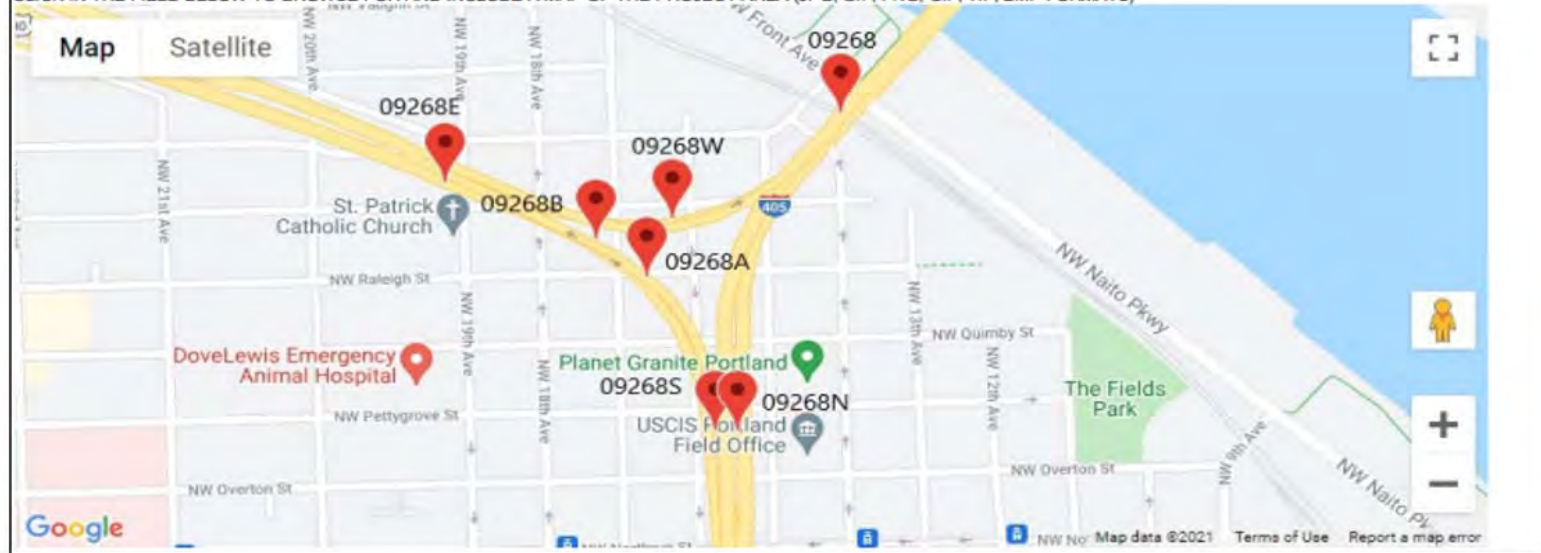
Fund Codes											
Phase	Fund Code	Description	ICA P	Percent of Phase	Total Amount	Federal Percent	Federal Amount	State Percent	State Amount	Local Percent	Local Amount
PE	ACPO	ADVANCE CONSTRUCT PR		100.00%	11,632,000.00	89.73%	10,437,393.60	10.27%	1,194,606.40	0.00%	0.00
	<b>PE Totals</b>			<b>100.00%</b>	<b>11,632,000.00</b>		<b>10,437,393.60</b>		<b>1,194,606.40</b>		<b>0.00</b>
RW	ACPO	ADVANCE CONSTRUCT PR		100.00%	127,000.00	89.73%	113,957.10	10.27%	13,042.90	0.00%	0.00
	<b>RW Totals</b>			<b>100.00%</b>	<b>127,000.00</b>		<b>113,957.10</b>		<b>13,042.90</b>		<b>0.00</b>
<b>Grand Totals</b>					<b>11,759,000.00</b>		<b>10,551,350.70</b>		<b>1,207,649.30</b>		<b>0.00</b>

**Project Location (Program Manager) i**

ROUTE NAME	HIGHWAY ID	BEGIN MP	END MP	LOCAL STREET / NON-HIGHWAY LOCATION
I-405	061	2.84	3.53	
US30	092	1.24	3.24	

PASTE LINK TO MAP OR PHOTO OF THE PROJECT AREA

CLICK IN THE FIELD BELOW TO BROWSE FOR AND INCLUDE A MAP OF THE PROJECT AREA (JPG, GIF, PNG, GIF, TIF, BMP FORMATS)





Metro  
2021-24 Metropolitan Transportation Improvement Program (MTIP)  
PROJECT AMENDMENT DETAIL WORKSHEET

**Formal/Full Amendment  
COST INCREASE**  
Add approved OTC funding to the PE  
and ROW phases

<b>Lead Agency:</b> ODOT		Project Type:	O&M	<b>ODOT Key:</b>	<b>22431</b>
<b>Project Name:</b> OR141/OR217 Curb Ramps	<b>2</b>	ODOT Type	Maint	<b>MTIP ID:</b>	<b>71247</b>
		Performance Meas:	No	<b>Status:</b>	<b>4</b>
<b>Project Status:</b> 4 = (PS&E) Planning Specifications, & Estimates (final design 30%, 60%, 90% design activities initiated).		Capacity Enhancing:	No	<b>Comp Date:</b>	<b>12/31/2028</b>
		Conformity Exempt:	Yes	RTP ID:	12095
<b>Short Description:</b> At various location on OR 141 (Hall Blvd) and SW 72nd Ave in the Tigard area, construct ADA compliant curbs and ramps.		On State Hwy Sys:	OR141	RFFA ID:	N/A
		Mile Post Begin:	<del>2.57</del> 4.97	RFFA Cycle:	N/A
		Mile Post End:	7.07	UPWP:	Yes
		Length:	2.10	UPWP Cycle:	N/A
		Flex Transfer to FTA	No	Transfer Code	N/A
		1st Year Program'd:	2022	Past Amend:	1
		Years Active:	0	OTC Approval:	7/12/2022
		STIP Amend #:	21-24-2105	MTIP #:	JN22-13-JUN1

**Detailed Description:** On OR 141 (Hall Blvd ~~at two location between MP 2.57 to 7.07~~ **MP 4.97 to MP 7.07**) and on SW 72nd Ave (between SW Beveland Rd to SW Varnes St) in the Tigard area, construct ADA compliant curbs and ramps for safety improvements. (ADA PGB)

**STIP Description:** Construct curb ramps to meet compliance with the Americans with Disabilities Act (ADA) standards.

Programming Notes: OTC approval is cited as required per the CMR as part of the ODOT annual amendment. Per the CMR, the amendment will be presented to the OTC for approval during their July 14 2022 meeting.

Last Amendment of Modification: Administrative - March 2022 - AM22-13-MAR1 - SLIP PHASE: The administrative modification slips the ROW phase from FFY 2022 to FFY 2023

**PROJECT FUNDING DETAILS**

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
<b>Federal Funds</b>								
State STBG	Z24E	2021		\$ 851,830				\$ 851,830
State STBG - IIJA	Y240	2021		\$ 1,279,257				\$ 1,279,257
<del>AC-STBGS</del>	<del>ACP0</del>	<del>2023</del>			<del>\$ 299,730</del>			\$ -
AC-STBGS	ACP0	2023			\$ 748,348			\$ 748,348
<del>AC-STBGS</del>	<del>ACP0</del>	<del>2023</del>					<del>\$ 1,304,043</del>	\$ -
AC-STBGS	ACP0	2024					\$ 1,304,043	\$ 1,304,043
Notes:							<b>Federal Totals:</b>	<b>\$ 4,183,478</b>
<b>Federal Fund Obligations \$:</b>				\$ 851,830				Federal Aid ID
<b>EA Number:</b>				PE003333				SA00(048)
<b>Initial Obligation Date:</b>				8/31/2021				
<b>EA End Date:</b>				8/31/2026				
<b>Known Expenditures:</b>				Not Available				
<b>State Funds</b>								
State	Match	2021		\$ 97,496				\$ 97,496
State (IIJA)	Match	2021		\$ 146,417				\$ 146,417
<del>State</del>	<del>Match</del>	<del>2023</del>			<del>\$ 34,305</del>			\$ -
State	Match	2023			\$ 85,652			\$ 85,652
<del>State</del>	<del>Match</del>	<del>2023</del>					<del>\$ 149,254</del>	\$ -
State	Match	2024					\$ 149,254	\$ 149,254
							<b>State Total:</b>	<b>\$ 478,819</b>
<b>Local Funds</b>								
								\$ -
								\$ -
							<b>Local Total</b>	<b>\$ -</b>
Phase Totals Before Amend:			\$ -	<del>\$ 949,326</del>	<del>\$ 334,035</del>	\$ -	\$ 1,453,297	\$ 2,736,658
Phase Totals After Amend:			\$ -	\$ 2,375,000	\$ 834,000	\$ -	\$ 1,453,297	\$ 4,662,297
Year Of Expenditure (YOE):							\$	4,662,297
Net Phase Funding Change:			\$ -	\$ 1,425,674	\$ 499,965	\$ -	\$ -	\$ 1,925,639
Phase Percent Change:			0.0%	150.2%	149.7%	0.0%	0.0%	70.4%

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**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? Adding needed funds to PE and ROW, plus slipping Cons to FFY 2024

**Amendment Summary:**

The formal amendment adds funds to PE and ROW phases to address funding shortfalls. Per the Change Management Request: Updated PE estimate to perform the proposed work exceeds the current PE budget in the STIP. The additional ROW is adjusted based on the statewide module. When originally programmed cost estimates were optimistic and had anticipated cost reductions due to maturation of the ADA program, as seen in other DOT programs. However, due to current market conditions and skilled labor shortages these anticipated cost reductions have not come to pass. The cost estimates are therefore being reset.

The ROW phase requires more time than was allowed and this impacts the CN phase. Construction is being slipped as a result.

Scope change: K18841 is in construction and will build the ADA curb ramps as part of this project.

- > Will Performance Measurements Apply: Safety

**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. Federal fund being applied to a project in the modeling network
- > 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: Pending. Approval by the program a manager has occurred. Final approval by OTC schedule for their July 2022 meeting
- > Scope changes included: Yes. Transfer of two site locations to Key 18831. K18841 is in construction and will build the ADA curb ramps as part of this project.
- > Limit changes included: Internal site locations adjusted.
- > Formal/full amendment requirement under Matrix: Cost increase exceeds 30% threshold which triggers the formal amendment.
- > Add Special Performance Evaluation assessment required to be completed: No
- > Exempt or Capacity Project: Exempt project
- > Exemption Reference: 40 CFR 92.126 Table 2 - Air Quality - Bicycle and pedestrian facilities.

**Fund Codes:**

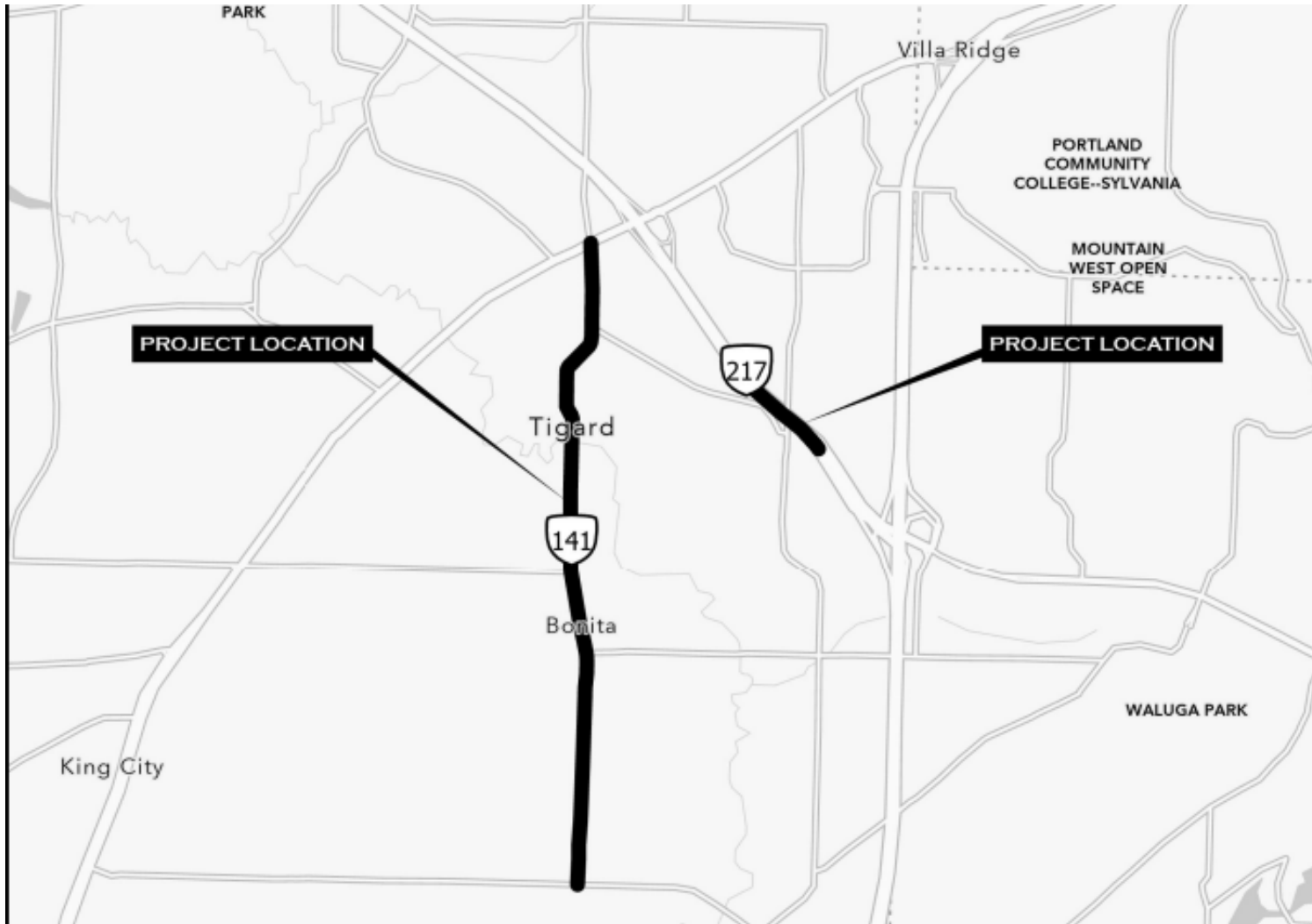
- > State STBG = Federal Surface Transportation Block Grant funds appropriated to the state DOT and applied to various eligible projects .
- > State STBG - IJJA = Federal STBG originating from the IJJA bill and applied to eligible projects
- > AC-STBGS = Federal Advance Construction fund type placeholder used until the final federal fund code is committed to the project. In this case, the future federal fund code that will be committed to the project is State STBGS
- > State = General state funds provided by the lead agency as part of the required match.



**Other**

- > On NHS: No
- > Metro Model: Yes - Motor Vehicle Network
- > Model category and type: Minor Arterials
- > TCM project: No
- > Located on the CMP: No

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	Y240	Surface Transportation Block Grant (STBG) - Flex IJJA		60.03%	1,425,674.00	89.73%	1,279,257.28	10.27%	146,416.72	0.00%	0.00
	Z24E	Surface transportation block grants - flex FAST ext	Y	39.97%	949,326.00	89.73%	851,830.22	10.27%	97,495.78	0.00%	0.00
	<b>PE Totals</b>				<b>100.00%</b>	<b>2,375,000.00</b>		<b>2,131,087.50</b>		<b>243,912.50</b>	
RW	ACPO	ADVANCE CONSTRUCT PR		100.00%	834,000.00	89.73%	748,348.20	10.27%	85,651.80	0.00%	0.00
	<b>RW Totals</b>				<b>100.00%</b>	<b>834,000.00</b>		<b>748,348.20</b>		<b>85,651.80</b>	
CN	ACPO	ADVANCE CONSTRUCT PR		100.00%	1,453,297.00	89.73%	1,304,043.40	10.27%	149,253.60	0.00%	0.00
	<b>CN Totals</b>				<b>100.00%</b>	<b>1,453,297.00</b>		<b>1,304,043.40</b>		<b>149,253.60</b>	
<b>Grand Totals</b>							<b>4,662,297.00</b>		<b>4,183,479.10</b>		<b>0.00</b>



## ODOT - Oregon Transportation Commission Meeting Summary ~ *March 30, 2022 (virtual)*

**Recording and materials:** Listen to the [recorded meeting](#) and [access all support materials](#) for details.

**Commissioners Present:** Chair Van Brocklin, Vice Chair Simpson, Commissioner Brown, Commissioner Burke, Commissioner Smith

**Presenters:** Director Kristopher Strickler, Asst. Director for Operations Cooper Brown, Asst. Director for Finance and Compliance Travis Brouwer, Policy, Data & Analysis Division Administrator Amanda Pietz, Public Transportation Division Administrator Karyn Criswell, Delivery & Operations Interim Administrator Mac Lynde

**Agenda Item Summaries:**

- **Agenda A IIJA Update (Discussion):** ODOT Staff described an electric vehicle (EV) funding plan, to include over \$100 million from state and federal sources, provided an overview of the Innovative Mobility Pilot Program, and outlined the hybrid consensus scenario requested by Commissioners at the March 10 OTC meeting.
- **Agenda A1 IIJA Flexible Funding Allocation (Decision):** Commissioners discussed the proposed hybrid consensus scenario, and voted to reallocate \$5M from the ADA line to the Innovative Mobility Pilot Program. The Commission approved the revised hybrid consensus scenario as follows:

Program Area	Funding (Millions)
Enhance Highway	\$50
Fix-It	\$75
Great Streets	\$50
Safe Routes to School	\$30
Innovative Mobility Pilot	\$10
Local Climate Planning	\$15
Maintenance & Operations	\$40
ADA	\$95
Match for Competitive Grants	\$40
Business & Workforce Development	\$7
<b>Total</b>	<b>\$412</b>

- **Agenda A2 IIJA Bridge Funding (Informational):** Delivery & Operations Interim Administrator Mac Lynde provided an overview of the state of bridge maintenance and operations throughout Oregon, and the initial proposed approach to allocating IIJA Bridge Funding between ODOT and local city/county entities.

**Decisions/Actions:**

- **Approved Revision of Hybrid Consensus Scenario** to reallocate an additional \$5M to the Innovative Mobility Pilot Program; 1<sup>st</sup> Smith, 2<sup>nd</sup>, Burke; Approved unanimously.
- **Approved Revised Hybrid Consensus Scenario;** 1<sup>st</sup> Smith, 2<sup>nd</sup> Simpson; Approved unanimously

**Commission Requests:**

- **ADA Update:** ODOT staff to report details of scope and scale of outstanding work, potential costs, and pace to meet settlement requirements at May, 2022 OTC Meeting.
- **Innovative Mobility Pilot Program:** (1) ODOT staff to identify additional state funding source(s), up to \$10M to supplement program. (2) Approve funding criteria for program elements.
- **IIJA Bridge Funding:** allocation decision anticipated at May, 2022 OTC Meeting.

**Email:** [OTCadmin@odot.oregon.gov](mailto:OTCadmin@odot.oregon.gov) with questions or additional needs.

# Memo



Date: June 3, 2022  
 To: JPACT Members and Interested Parties  
 From: Ken Lobeck, Funding Programs Lead  
 Subject: June 2022 Formal/Full Metropolitan Transportation Improvement Program (MTIP) Amendment Narrative Summary for Resolution 22-5271

## JUNE MTIP FORMAL/FULL AMENDMENTS SUMMARY

The June 2022 Formal/Full MTIP amendment is split into two amendment bundles. The following provides a summary of the projects and the changes occurring within each amendment bundle

### June #1 Formal/Full Amendment Bundle: JN22-13-JUN1, Resolution 22-5271 (2 projects)

Proposed June 2022 Formal Amendment Bundle #1 Resolution Number: <b>22-5271</b> Amendment Type: <b>Formal/Full</b> Amendment #: <b>JN22-13-JUN1</b> Total Number of Projects: <b>2</b>					
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key <b>22603</b> New Project	New TBD	ODOT	I-405 Fremont Bridge (Willamette River) West Ramps	Paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland.	<b>ADD NEW PROJECT:</b> The formal amendment adds ODOT's new I-405 Fremont Bridge O&M painting project with PE and ROW phases to the MTIP.
Project #2 Key <b>22431</b>	71247	ODOT	OR141/OR217 Curb Ramps	At various location on OR 141 (Hall Blvd) and SW 72nd Ave in the Tigard area, construct ADA compliant curbs and ramps.	<b>COST INCREASE</b> Add funding to the PE and ROW phases to address funding shortfalls. Slip Construction to FFY 2024

Purpose Statement:

**FOR THE PURPOSE OF AMENDING AND ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO ODOT PROJECTS ENABLING PROJECT PHASES TO MOVE FORWARD AND ADDRESSING FUNDING SHORTFALLS (JN22-13-JUN1)**

- TPAC June 3, 2022 Meeting Summary: TPAC members received their MTIP amendment notification and provided their approval recommendation to JPACT. There was no significant discussion about the amendment

### **Project #1 - Key 22603: I-405 Fremont Bridge (Willamette River) West Ramps**

- Lead Agency: ODOT
- Project Change(s): **New project being added to the MTIP**
- Project Description: Paint bridge approach ramps, steel members only, on the west end of the Fremont Bridge in Portland.
- Amendment Overview:
  - The June #1 Formal amendment Bundle consists of a single new project being added to the MTIP. The project is ODOT's Fremont Bridge west ramps painting project. This is new project being added to the MTIP. Funding supporting the Preliminary Engineering (PE) and Right-of-Way (ROW) phases are being added now through this amendment. PE totals \$11,632,000 while ROW totals \$127,000 for a programming total of \$11,759,000. PE is schedule to start during FFY 2023 with ROW commencing in FFY 2024
  - The construction phase is planned to start in FFY 2025. The construction phase will be added to the 2024-27 STIP and 2024-29 MTIP Updates. The preliminary construction phase estimate is \$103,730,000. The total project cost estimate currently is \$115,489,000.
  - The project funding requires approval from the Oregon Transportation Commission (OTC). The item is being scheduled for OTC approval during their July 12, 2022 meeting
  - OTC approval is a condition to add the project to the MTIP. The amendment is being processed under the "concurrent amendment processing" logic. However, OTC approval must first occur before the amendment can proceed to Metro Council for final approval. Because of this, the I-405 Fremont Bridge (Willamette River) West Ramps project will be scheduled for Metro Council at their July 21, 2022 meeting.
  - The amendment is proceeding as a separate stand-alone project under resolution 22-5271 due to the adjusted approval timing
- Why a formal/full amendment is required: Adding a new project to the MTIP requires a formal/full amendment to satisfy RTP consistency review, air conformity analysis and transportation demand modeling requirements, plus fiscal constraint requirements.



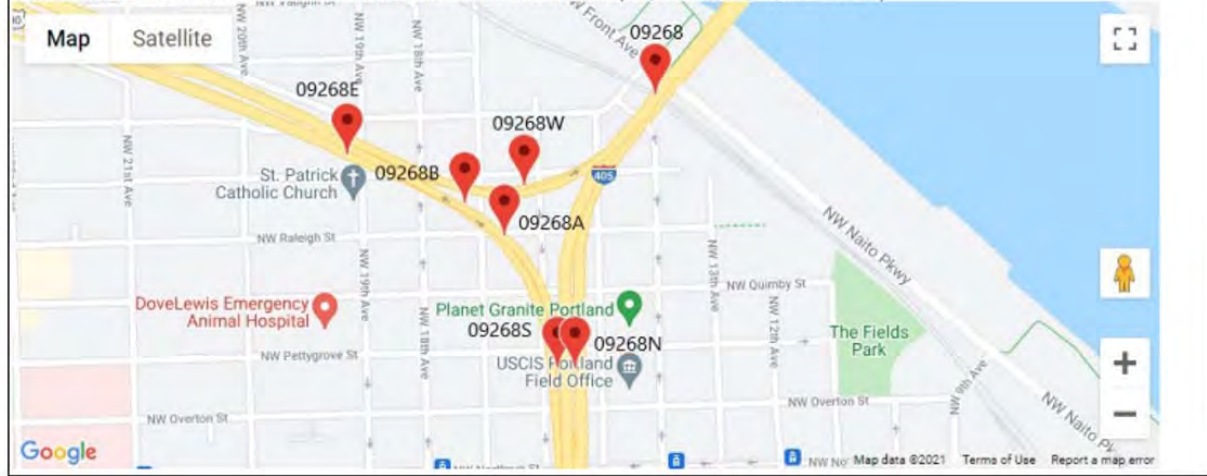


**Project Location (Program Manager)** i

ROUTE NAME	HIGHWAY ID	BEGIN MP	END MP	LOCAL STREET / NON-HIGHWAY LOCATION
I-405	061	2.84	3.53	
US30	092	1.24	3.24	

PASTE LINK TO MAP OR PHOTO OF THE PROJECT AREA

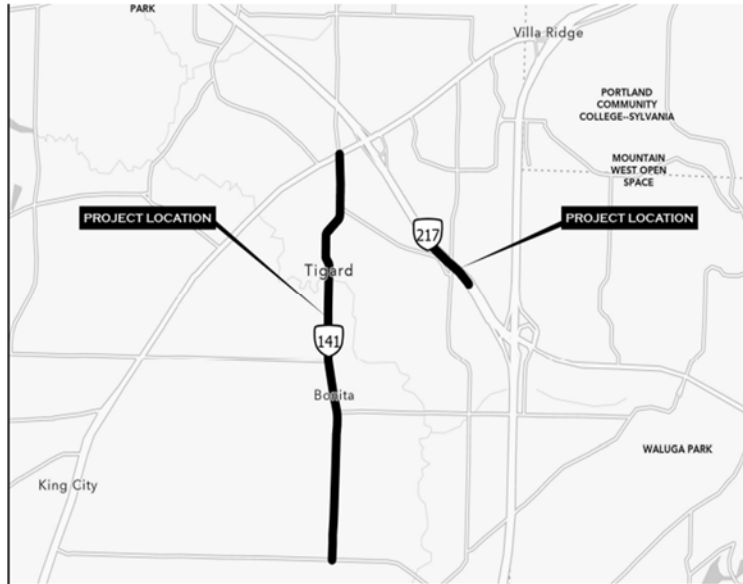
CLICK IN THE FIELD BELOW TO BROWSE FOR AND INCLUDE A MAP OF THE PROJECT AREA (JPG, GIF, PNG, GIF, TIF, BMP FORMATS)



**Project #2 - Key 22431: OR141/OR217 Curb Ramps**

- Lead Agency: ODOT
- Project Change(s): Existing project requiring funding additions to address PE and ROW phase funding shortfalls
- Project Description: At various location on OR 141 (Hall Blvd) and SW 72nd Ave in the Tigard area, construct ADA compliant curbs and ramps.
- Amendment Overview:
  - From the Change Management Request (CMR): Updated PE estimate to perform the proposed work exceeds the current PE budget in the STIP. The additional ROW is adjusted based on the statewide module. When originally programmed cost estimates were optimistic and had anticipated cost reductions due to maturation of the ADA program, as seen in other DOT programs. However, due to current market conditions and skilled labor shortages these anticipated cost reductions have not come to pass. The cost estimates are therefore being reset.
  - \$1,425,674 is being added to the PE phase with \$499,965 added to the ROW phase. This increases the total project cost from \$2,736,658 to \$4,662,297.
  - The ROW phase requires more time than was allowed and this impacts the CN phase. Construction is being slipped as a result.
  - OTC approval is required and is scheduled for the July 12, 2022 meeting
  - The amendment is proceeding as a separate stand-alone project under resolution 22-5271 due to the adjusted approval timing
- Why a formal/full amendment is required: Cost increases above the 30% threshold require a formal/full amendment to complete the change. The cost change for this project adds \$1,925,639 to the project which equals a 70.4% increase.





**ODOT - Oregon Transportation Commission  
Meeting Summary ~ March 30, 2022 (virtual)**

Recording and materials: Listen to the [recorded meeting](#) and [access all support materials](#) for details.

Commissioners Present: Chair Van Brocklin, Vice Chair Simpson, Commissioner Brown, Commissioner Burke, Commissioner Smith

Presenters: Director Kristopher Strickler, Asst. Director for Operations Cooper Brown, Asst. Director for Finance and Compliance Travis Brouwer, Policy, Data & Analysis Division Administrator Amanda Pietz, Public Transportation Division Administrator Karyn Criswell, Delivery & Operations Interim Administrator Mac Lynde

**Agenda Item Summaries:**

- **Agenda A IIJA Update (Discussion):** ODOT Staff described an electric vehicle (EV) funding plan, to include over \$100 million from state and federal sources, provided an overview of the Innovative Mobility Pilot Program, and outlined the hybrid consensus scenario requested by Commissioners at the March 10 OTC meeting.
- **Agenda A1 IIJA Flexible Funding Allocation (Decision):** Commissioners discussed the proposed hybrid consensus scenario, and voted to reallocate \$5M from the ADA line to the Innovative Mobility Pilot Program. The Commission approved the revised hybrid consensus scenario as follows:

Program Area	Funding (Millions)
Enhance Highway	\$50
Fix-It	\$75
Great Streets	\$50
Safe Routes to School	\$30
Innovative Mobility Pilot	\$10
Local Climate Planning	\$15
Maintenance & Operations	\$40
ADA	\$95
Match for Competitive Grants	\$40
Business & Workforce Development	\$7
<b>Total</b>	<b>\$412</b>

- **Agenda A2 IIJA Bridge Funding (Informational):** Delivery & Operations Interim Administrator Mac Lynde provided an overview of the state of bridge maintenance and operations throughout Oregon, and the initial proposed approach to allocating IIJA Bridge Funding between ODOT and local city/county entities.

**Decisions/Actions:**

- **Approved Revision of Hybrid Consensus Scenario** to reallocate an additional \$5M to the Innovative Mobility Pilot Program; 1<sup>st</sup> Smith, 2<sup>nd</sup>, Burke; Approved unanimously.
- **Approved Revised Hybrid Consensus Scenario;** 1<sup>st</sup> Smith, 2<sup>nd</sup> Simpson; Approved unanimously

**Commission Requests:**

- **ADA Update:** ODOT staff to report details of scope and scale of outstanding work, potential costs, and pace to meet settlement requirements at May, 2022 OTC Meeting.
- **Innovative Mobility Pilot Program:** (1) ODOT staff to identify additional state funding source(s), up to \$10M to supplement program. (2) Approve funding criteria for program elements.
- **IIJA Bridge Funding:** allocation decision anticipated at May, 2022 OTC Meeting.

Email: [OTCAdmin@odot.oregon.gov](mailto:OTCAdmin@odot.oregon.gov) with questions or additional needs.

Metro's approval process for formal amendment includes multiple steps. The required approvals for the amendment includes the following:

<u>Action</u>	<u>Target Date</u>
• Initiate the required 30-day public notification process.....	May31, 2022
• <b>TPAC notification and approval recommendation.....</b>	<b>June 3, 2022</b>
• JPACT approval and recommendation to Council.....	June 16, 2022
• Completion of public notification process.....	June 29, 2022
• OTC approval.....	July 14, 2022
• Metro Council approval.....	July 21, 2022

Note: Council dates are tentative and may change

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All projects were reviewed against the MTIP requirements stated in 23 CFR 450.300-338 to ensure all programming actions are properly completed. All projects moving into the Metro amendment approval process have completed their required reviews unless so noted. These review actions included:

- Proof of funding verification.
- Fiscal constraint demonstration.
- Confirming and completing unique financial processing requirements such as the FTA flex transfer process
- Compliance with special approval steps (e.g. OTC approval)
- Determination if the project is exempt for air quality analysis and if the changes the project's capacity or exemption status.
- Consistency with current approved Regional Transportation Plan (RTP) to include:
  - Identification of the project within the approved constrained RTP.
  - Comparison of RTP project entry against MTIP entry and requested changes
  - Review of requested changes (e.g. scope, limits, and funding) and their potential impacts upon air quality analysis and/or transportation demand analysis.
  - Review and Evaluation of requested scope are still consistent with the original RFFA or TSMO awards.
  - Verification of regional significance status against the RTP
  - Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
  - Determination if performance measurements will apply against the RTP strategic goals.
  - Determination if an MTIP Special Performance Evaluation is required as part of the formal MTIP Amendment (applies to capacity enhancing projects above \$100 million)
- Posting and completion of required 30-day public notifications and public opportunities to comment on the MTIP amendment.
  - This includes reviewing all significant comments and developing comment summary logs
  - Providing JPACT and Council with comments summaries for their review and evaluation

- Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

**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:**

**TPAC received their official notification on June 3, 2022 and now recommends JPACT approve Resolution 22-5271 consisting of a new ODOT project and a cost increase adjustment to their OR141 ADA Ramps improvement project**

No attachments



**4.2 Resolution No. 22-5272, For the Purpose of Amending or Adding to the 2021-26 Metropolitan Transportation Improvement Program (MTIP) TriMet's New Willamette Shoreline Rail Repair Project and Addressing Oregon Department of Transportation (ODOT) Needed Project Funding Needs (JN22-14-JUN2)**

*Consent Agenda*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022

# JPACT Worksheet

- **Agenda Item Title: June #2 2022 MTIP Formal Amendment & Resolution 22-5272 Approval Request**
- **Presenters:** N/A – JPACT Consent Calendar inclusion request
- **Contact for this worksheet/presentation:** Ken Lobeck, Metro Funding Programs Lead, [ken.lobeck@oregonmetro.gov](mailto:ken.lobeck@oregonmetro.gov)

## Purpose/Objective

**FOR THE PURPOSE OF AMENDING OR ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TRIMET'S NEW WILLAMETTE SHORELINE RAIL REPAIR PROJECT AND ADDRESSING ODOT NEEDED PROJECT FUNDING INCREASES (JN22-14-JUN2)**

## Outcome

- Approval of Resolution 22-5272 and approval recommendation to Metro Council which will:
  - Add TriMet's new Willamette Shore Line Rail & Trestle Repair-Phase I Congressional earmark project to the MTIP.
  - Complete required cost increases to ODOT's US30BY Curb Ramps project (Key 22432) and OR99E: Clackamas River (McLoughlin) Bridge painting project in Key 20407.

## What has changed since JPACT last considered this issue/item?

- **New TriMet Willamette Shore Line Rail & Trestle Repair-Phase I** project is a \$2 million Congressional earmark. Key details include:
  - The ID is 22-CMPJ-062 and is awarded from Table 20, FY 2022 Transit Infrastructure Grants, Community Project Funding.
  - The project will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety.
  - The estimated total project cost is \$2.4 million.
- **Key 22432 - US30BY Curb Ramps (ODOT):**
  - The project involves various locations on US30 Bypass in the NE Portland area and will construct ADA compliant curbs and ramps.
  - The amendment is addressing required cost increases from inflationary updates resulting in the PE and ROW phases being short funded
  - \$8.3 million is being added to the project: \$6.2 million for PE & \$2.1 million for ROW
  - Total project cost increase from \$17.2 million to \$25.5 million (= 48.4% increase)
  - Added funds from IJA through OTC approval which occurred during their March 2022 meeting.
- **Key 20407 - OR99E: Clackamas River(McLoughlin) Bridge (ODOT):**
  - The project will complete design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.
  - The cost updates are due to inflationary updates resulting in the PE phase being short funded. The amendment also adds funding supporting the ROW phase.
  - \$947,000 is being added to PE and \$52,000 for ROW.
  - Added funds from IJA through OTC approval which occurred during their May 2022 meeting.
- Metro Council scheduled for July 7, 2022 for all three projects.

**What packet material do you plan to include?**

- Draft Resolution 22-5272.
- Exhibit A to Resolution 22-5272 (MTIP worksheet) providing the programming changes.
- Staff Narrative with applicable attachments.
- Note: TPAC approval recommendation to JPACT occurred on June 3, 2022. There was no significant discussion of the amendment by TPAC members.

BEFORE THE METRO COUNCIL

**FOR THE PURPOSE OF AMENDING OR ADDING ) RESOLUTION NO. 22-5272**  
**TO THE 2021-26 METROPOLITAN )**  
**TRANSPORTATION IMPROVEMENT PROGRAM ) Introduced by: Chief Operating Officer**  
**(MTIP) TRIMET’S NEW WILLAMETTE ) Marissa Madrigal in concurrence with**  
**SHORELINE RAIL REPAIR PROJECT AND ) Council President Lynn Peterson**  
**ADDRESSING ODOT NEEDED PROJECT )**  
**FUNDING INCREASES (JN22-14-JUN2) )**

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, TriMet receive a Congressional earmark of \$2 million in support of the Willamette Shoreline Rail & Trestle Repair-Phase I project which is being added to the MTIP now; and

WHEREAS, the June 2022 Formal MTIP amendment is adding available Infrastructure Investment and Jobs Act (IIJA) funds to ODOT’s Preliminary Engineering and Right-of-Way phases to address project funding shortfalls for their US30BY Curb Ramps Americans with Disabilities Act (ADA) improvement project; and

WHEREAS, ODOT is applying similar IIJA funds to help eliminate funding shortfalls to their OR99E - Clackamas River (McLoughlin) Bridge painting project; and

WHEREAS, the added funding for both ODOT projects required approval from the Oregon Transportation Commission (OTC) which occurred during their March 2022 and May 2022 meetings; 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 June 3, 2022; and



WHEREAS, JPACT approved Resolution 22-5272 consisting of the three projects on June 16, 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 July 7, 2022 through Resolution 22-5272 to formally amend the 2021-26 MTIP to add TriMet's Willamette Shoreline Line Rail & Trestle Repair-Phase I project, and complete funding corrections to ODOT's US30BY Curb Ramps ADA Improvements plus their OR99E - Clackamas River (McLoughlin) Bridge painting project.

ADOPTED by the Metro Council this \_\_\_\_ day of \_\_\_\_\_ 2022.

\_\_\_\_\_  
Lynn Peterson, Council President

Approved as to Form:

\_\_\_\_\_  
Carrie MacLaren, Metro Attorney

DRAFT

2021-2026 Metropolitan Transportation Improvement Program  
Public Notification of Submitted New and Proposed Amended Existing Projects  
**Exhibit A to Resolutions 22-5271 and 22-5272**



Amendment Purpose Statement for Resolution 22-52-71 (Amendment Number JN22-13-JUN1)

FOR THE PURPOSE OF AMENDING AND ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO ODOT PROJECTS ENABLING PROJECT PHASES TO MOVE FORWARD AND ADDRESSING FUNDING SHORTFALLS (JN22-13-JUN1)

Amendment Purpose Statement for Resolution 22-5272 (Amendment Number JN22-14-JUN2)

FOR THE PURPOSE OF AMENDING OR ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TRIMET'S NEW WILLAMETTE SHORELINE RAIL REPAIR PROJECT AND ADDRESSING ODOT NEEDED PROJECT FUNDING INCREASES (JN22-14-JUN2)

About MTIP Formal/Full Amendments:

Formal MTIP amendments represent a significant change to a project from the original funding or scope of improvement activities. The various required process steps are intended to demonstrate that as a result of the required changes, no impact upon air conformity is present, plus fiscal constraint is still maintained, and/or the priorities, policies, and goals established in the approved Regional Transportation Plan (RTP) have not changed. Formal MTIP amendments normally fall into one or more of the following categories: (1) Significantly adds, revises, reduces, or changes the project scope of improvement activities. (2) Requires a significant change to the project limits limit (greater than 0.25 miles). (3) Involves a significant cost change (increase or decrease normally 20% or greater). (4) Adds or cancels a project from the MTIP.

Proposed June 2022 Formal Amendment Bundle #2

Resolution Number: **22-5272**  
 Amendment Type: **Formal/Full**  
 Amendment #: **JN22-14-JUN2**  
 Total Number of Projects: **3**

ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key <b>TBD</b>  New Project	New TBD	TriMet	Willamette Shore Line Rail & Trestle Repair-Phase I (TriMet)	The WSL Phase I improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety (ID#: 22-CMPJ-062)	<b><u>ADD NEW PROJECT:</u></b>  The formal amendment adds TriMet Willamette Shore Line Rail & Trestle Repair-Phase I project funded by a Congressional Earmark from Table 20 FY 2022 Transit Infrastructure Grants – Community Projects
Project #2 Key <b>22432</b>	71248	ODOT	US30BY Curb Ramps	At various location on US30 Bypass in the NE Portland area, construct ADA compliant curbs and ramps.	<b><u>COST INCREASE</u></b> Add new IIJA funding totaling \$8,333,069 to PE and ROW phases to address phase funding shortfalls. Total project cost increases from \$17,223,368 to \$25,556,437 representing a 48.4% increase to the project
Project #3 Key <b>20472</b>	71000	ODOT	OR99E: Clackamas River (McLoughlin) Bridge	Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.	<b><u>COST INCREASE</u></b> Add \$947k to PE phase based on updated project scoping effort. Add ROW phase with \$52k. Total increase = \$999k. OTC approval occurred May 12, 2022. Construction to be added in 2024-27 STIP in FFY 2024 or 24.

**Formal/Full MTIP Amendment JN22-14-JUN2  
Exhibit A to Resolution 22-5272 (MTIP Worksheets)**



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

**Formal/Full Amendment  
ADD NEW PROJECT**  
Add Table 20 for the Willamette  
Shore Line Improvements

<b>Lead Agency: TriMet</b>		<b>1</b>	Project Type:	Transit	<b>ODOT Key:</b>	<b>NEW - TBD</b>	
<b>Project Name:</b> <b>Willamette Shore Line Rail &amp; Trestle Repair-Phase I (TriMet)</b>	ODOT Type		TBD	<b>MTIP ID:</b>	<b>NEW-TBD</b>		
	Performance Meas:		No	<b>Status:</b>	<b>1</b>		
<b>Project Status:</b> 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.).	Capacity Enhancing:		No	<b>Comp Date:</b>	<b>12/31/2026</b>		
	Conformity Exempt:		Yes	RTP ID:	12096		
	On State Hwy Sys:		No	RFFA ID:	N/A		
	Mile Post Begin:		N/A	RFFA Cycle:	N/A		
	Mile Post End:		N/A	UPWP:	Yes		
	Length:		N/A	UPWP Cycle:	N/A		
	Flex Transfer to FTA		No	Transfer Code	N/A		
	1st Year Program'd:		2022	Past Amend:	0		
	Years Active:		0	OTC Approval:	No		
	STIP Amend #:		TBD	MTIP #:	JN22-14-JUN2		
	<b>Short Description:</b> The WSL Phase I improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety (ID#: 22-CMPJ-062)		<b>Detailed Description:</b> The WSL is a 5.5 mile railroad corridor that supports continued rail operations from Lake Oswego to Portland South Waterfront by trolleys. The project consists of two phases. Phase I Improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements. Phase II will upgrade the S Miles St. crossing, replace Jones trestle, conduct mitigation associated with geotech exploration, and miscellaneous trestle and track improvements and routine maintenance (Earmark ID: 22-CMPJ-062)				
	<b>STIP Description:</b> TBD						

Last Amendment of Modification: None. Initial MTIP programming

**PROJECT FUNDING DETAILS**

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (Transit)	Total	
<b>Federal Funds</b>									
5339		2022		\$ 599,976				\$ 599,976	
5339		2023				\$ 1,400,024		\$ 1,400,024	
								\$ -	
								\$ -	
							<b>Federal Totals:</b>	<b>\$ 2,000,000</b>	
<b>Notes:</b>								Federal Totals:	\$ 2,000,000
<b>Federal Fund Obligations \$:</b>									Federal Aid ID
<b>EA Number:</b>									
<b>Initial Obligation Date:</b>									
<b>EA End Date:</b>									
<b>Known Expenditures:</b>									
<b>State Funds</b>								\$ -	
								\$ -	
							<b>State Total:</b>	<b>\$ -</b>	
<b>Local Funds</b>									
TriMet-GF	Match	2022		\$ 120,024				\$ 120,024	
TriMet-GF	Match	2023				\$ 279,976		\$ 279,976	
								\$ -	
								\$ -	
							<b>Local Total</b>	<b>\$ 400,000</b>	
Phase Totals Before Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Phase Totals After Amend:			\$ -	\$ 720,000	\$ -	\$ 1,680,000	\$ -	\$ 2,400,000	
			Year Of Expenditure (YOE):					\$ 2,400,000	
Net Phase Funding Change:			\$ -	\$ 720,000	\$ -	\$ 1,680,000	\$ -	\$ 2,400,000	
Phase Percent Change:			0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	

**Clarification Request to FTA - Programming Questions**

1. Determine final fund type code for the earmark. Use 5339 or special earmark in support of the Table 20 awards.
2. Confirm that programming will follow roadway capacity improvement approach (Use PE and Construction phases),
3. Determine if pre-award authority comes into play and how.

**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? Adding a new earmark funded project to the MTIP

**Amendment Summary:**

The formal amendment TriMet's new earmark supporting the Willamette Shoreline Rail and Trestle repair project. The funding supports Phase I of the planned repairs. The funding originates from a Congressional apportionment and listed in Table 20, FY 2022 Transit Infrastructure Grants - Community Project funding apportionment. The earmark provides \$2 million dollars to the project. The Willamette Shore Line Rail & Trestle Repair project is divided into two phases. The WSL Phase I improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety benefits.

- > Will Performance Measurements Apply: Transit and Safety

**RTP References:**

- > RTP ID: 12096 - TriMet Operations
- > RTP Description: Operations of transit services, such as drivers, security, facilities and rolling stock maintenance
- > Regional Significant Project: Yes - Preservation of the ROW for a future HCT is considered regionally significant and identified in the current RTP
- > UPWP amendment: No
- > RTP Goals: Goal 10 - Fiscal Stewardship
- > Goal Objective: Objective 10.1 Infrastructure Condition
- > 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: Yes - FTA Table 20 verifying the \$2 million earmark
- > Scope changes included: N/A
- > Limit changes included: N/A
- > Formal/full amendment requirement under Matrix: Adding a new project to the MTIP
- > Add Special Performance Evaluation assessment required to be completed: No. The project is less than \$100 million and is not capacity enhancing
- > Exempt or Capacity Project: Exempt - Mass Transit
- > Exemption reference: Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way.

**Fund Codes:**

- > 5339 = FTA section 5339 provides the funding origin. 5339 is a federal fund type for transit projects that support Buses and Bus Facilities program (49 U.S.C. 5339), makes Federal resources available to States and designated recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.
- > TriMet - GF = TriMet general local fund used in support of the required match to the federal funds.

**Other**

- > On NHS: No
- > Metro Model: Not clearly
- > Model category and type: Does not appear to be included in Transit model
- > TCM project: No
- > Located on the CMP: No

**FEDERAL TRANSIT ADMINISTRATION  
TABLE 20**

**FY2022 Transit Infrastructure Grants-Community Project Funding/Congressionally Directed Spending**

*The amounts allocated in this notice are made available for the purposes, and in the amounts, specified in the explanatory statement accompanying the Consolidated Appropriations Act, 2022 (Pub. L. 117-103, Mar. 15, 2022).*

State	Recipient	Project ID	Project Description	Amount
AZ	City of Phoenix	2022-CMPJ-002	Valley Metro Electric Bus Demonstration	\$1,057,000
AZ	City of Phoenix	2022-CMPJ-003	City of Phoenix Electric Bus Investment	\$2,745,000
AZ	Northern Arizona Public Transportation Authority	2022-CMPJ-001	Northern Arizona Public Transportation Authority Bus Storage Phase 1—CDL Course	\$2,590,000
State	Recipient	Project ID	Project Description	Amount
OR	Lane Transit District	2022-CMPJ-063	Lane Transit District Electric Bus Replacement Project	\$950,000
OR	Lane Transit District	2022-CMPJ-064	Lane Transit District Trip Planner/Mobile Wallet Application	\$600,000
OR	Salem Area Mass Transit District (SAMTD)	2022-CMPJ-065	Salem Area Mass Transit Zero- Emission Bus Fleet Electrification Project	\$6,306,000
<b>OR</b>	<b>Tri-County Metropolitan Transportation District of Oregon</b>	<b>2022-CMPJ-062</b>	<b>Willamette Shore Line Rail &amp; Trestle Repair Project</b>	<b>\$2,000,000</b>
PA	PA Department of Transportation	2022-CMPJ-067	Coatesville Transit Project	\$2,000,000
PA	PA Department of Transportation	2022-CMPJ-068	Harrisburg Transportation Center HVAC Upgrade	\$635,000
PA	Southeastern Pennsylvania	2022-CMPJ-066	Schuylkill River Trail Safety Improvements at	\$222,250

**Formal/Full MTIP Amendment JN22-14-JUN2 (June #2 2022)**  
**Exhibit A to Resolution 22-5272 (MTIP Worksheets)**



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

**Formal/Full Amendment**  
**COST INCREASE**  
 Add approved IJJA funding to support PE and ROW needs

<b>Lead Agency:</b> ODOT		Project Type:	O&M	<b>ODOT Key:</b>	<b>22432</b>
<b>Project Name:</b> <b>US30BY Curb Ramps</b>	<b>2</b>	ODOT Type	ADA	<b>MTIP ID:</b>	<b>71248</b>
		Performance Meas:	Safety	<b>Status:</b>	<b>4</b>
<b>Project Status:</b> 4 = (PS&E) Planning Specifications, & Estimates (final design 30%, 60%, 90% design activities initiated).  <b>Short Description:</b> At various location on US30 Bypass in the NE Portland area, construct ADA compliant curbs and ramps.		Capacity Enhancing:	No	<b>Comp Date:</b>	<b>12/31/2028</b>
		Conformity Exempt:	Yes	RTP ID:	12095
		On State Hwy Sys:	US30BY	RFFA ID:	N/A
		Mile Post Begin:	1.28	RFFA Cycle:	N/A
		Mile Post End:	14.76	UPWP:	No
		Length:	13.48	UPWP Cycle:	N/A
		Flex Transfer to FTA	No	Transfer Code	N/A
		1st Year Program'd:	2021	Past Amend:	1
		Years Active:	0	OTC Approval:	Yes
		STIP Amend #: 21-24-2106		MTIP #:	JN22-14-JUN2
<b>Detailed Description:</b> On US30 Bypass at multiple locations between MP 1.28 to 14.76 in the NE Portland area, construct ADA compliant curbs and ramps for safety improvements. (ADA PGB)					
<b>STIP Description:</b> Construct curb ramps to meet compliance with the Americans with Disabilities Act (ADA) standards.					

Programming Notes: OTC approval was required to allocate the added IJJA funds to the project. OTC approval occurred during their March 30, 2022 IJJA special meeting.

Last Amendment of Modification: Administrative - March 2022 - AM22-14-MAR2 - PHASE SLIP: Slip ROW to FFY 2023



**PROJECT FUNDING DETAILS**

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
<b>Federal Funds</b>								
State STBG	Z24E	2021		\$ 5,361,060				\$ 5,361,060
<b>STBGS-IIJA</b>	<b>Y240</b>	<b>2021</b>		<b>\$ 5,594,973</b>				<b>\$ 5,594,973</b>
AC-STBGS	ACPO	2023			\$ 1,886,370			\$ 1,886,370
<b>STBGS-IIJA</b>	<b>ACPO</b>	<b>2023</b>			<b>\$ 1,882,290</b>			<b>\$ 1,882,290</b>
AC-STBGS	ACPO	2023					\$ 8,207,099	\$ 8,207,099
								\$ -
Notes: STBS-IIJA = State STBG allocated from IIJA resulting in its own fund code							<b>Federal Totals:</b>	<b>\$ 22,931,792</b>
<b>Federal Fund Obligations \$:</b>				\$ 5,361,060				Federal Aid ID
<b>EA Number:</b>				PE003334				
<b>Initial Obligation Date:</b>				9/1/2021				
<b>EA End Date:</b>				8/31/2026				
<b>Known Expenditures:</b>				N/A				
<b>State Funds</b>								
State (STBGS)	Match	2021		\$ 613,597				\$ 613,597
<b>State (IIJA)</b>	<b>Match</b>	<b>2021</b>		<b>\$ 640,370</b>				<b>\$ 640,370</b>
State (AC)	Match	2023			\$ 215,903			\$ 215,903
<b>State (IIJA)</b>	<b>Match</b>	<b>2023</b>			<b>\$ 215,436</b>			<b>\$ 215,436</b>
State (AC)	Match	2023					\$ 939,339	\$ 939,339
								\$ -
							<b>State Total:</b>	<b>\$ 2,624,645</b>
<b>Local Funds</b>								
								\$ -
								\$ -
							<b>Local Total</b>	<b>\$ -</b>
Phase Totals Before Amend:			\$ -	<del>\$ 5,974,657</del>	<del>\$ 2,102,273</del>	\$ -	\$ 9,146,438	<del>\$ 17,223,368</del>
Phase Totals After Amend:			\$ -	<b>\$ 12,210,000</b>	<b>\$ 4,199,999</b>	\$ -	\$ 9,146,438	<b>\$ 25,556,437</b>
Year Of Expenditure (YOE):							\$	25,556,437
Net Phase Funding Change:			\$ -	\$ 6,235,343	\$ 2,097,726	\$ -	\$ -	\$ 8,333,069
Phase Percent Change:			0.0%	104.4%	99.8%	0.0%	0.0%	48.4%

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**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? New IIJA funds are being added to the project's PE and ROW phases to address funding shortfalls.

**Amendment Summary:**

The formal amendment adds new IIJA funds to the PE and ROW phases to address phase funding shortfalls. \$8,333,069 is added to the project increasing the project cost from \$17,223,368 to \$25,556,437. The cost increase represents a 48.4% increase to the project. Per ODOT: The original cost estimates were overly optimistic and had anticipated cost reductions from the maturation of the ADA program as seen in other ODOT programs. However, due to the current inflationary market conditions and the existing skilled labor shortages, the anticipated cost reductions have not occurred. A revised cost estimate is now in place for the project. The added funding is being drawn from the new available IIJA funds. OTC approval was required which occurred on March 30, 2022

- > Will Performance Measurements Apply: Safety

**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. The project includes federal funds. US30BY is identified as a Major and minor arterial in the Motor Vehicle network.
- > 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: Yes. OTC approval of IIJA funds on March 30, 2022
- > Scope changes included: No
- > Limit changes included: No
- > Formal/full amendment requirement under Matrix: The added funds result in a cost increase of 48.4% which is well above the 20% threshold
- > Add Special Performance Evaluation assessment required to be completed: No. The project is less than \$100 million and a non-capacity enhancing project
- > Exempt or Capacity Project: The project is exempt for air quality analysis and transportation demand modeling requirements
- > Exemption reference: 40 CFR 93.126, Table 2 - Safety - Projects that correct, improve, or eliminate a hazardous location or feature.

**Fund Codes:**

- > State STBG = Federal Surface Transportation Block Grant funds appropriated to the state DOT with the portion the DOT maintains applied to eligible projects
- > STBGS-IIJA = Federal Surface Transportation Block Grant funds that originated from the Infrastructure Investment and Jobs Act (IIJA)
- > AC-STBGS = Federal Advance Construction fund type code placeholder used until the final federal fund code is committed to the project. The state DOT covers the project costs until the conversion is known. In this case AC-STBGS means that the later conversion code is anticipated to be State STBG.
- > State = General state funds provided by the lead agency (normally the state DOT) as part of the required match to the federal funds.

**Other**

- > On NHS: Yes. The route is identified as part of the "MAP-21 NHS Principal Arterials"
- > Metro Model: Yes - Motor Vehicle Network
- > Model category and type: Major and Minor 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	Y240	Surface Transportation Block Grant (STBG) - Flex IJJA		51.07%	6,235,343.00	89.73%	5,594,973.27	10.27%	640,369.73	0.00%	0.00	
	Z24E	Surface transportation block grants - flex FAST ext	Y	48.93%	5,974,657.00	89.73%	5,361,059.73	10.27%	613,597.27	0.00%	0.00	
	<b>PE Totals</b>				<b>100.00%</b>	<b>12,210,000.00</b>		<b>10,956,033.00</b>		<b>1,253,967.00</b>		<b>0.00</b>
RW	ACPO	ADVANCE CONSTRUCT PR		50.05%	2,102,274.00	89.73%	1,886,370.46	10.27%	215,903.54	0.00%	0.00	
	Y240	Surface Transportation Block Grant (STBG) - Flex IJJA		49.95%	2,097,726.00	89.73%	1,882,289.54	10.27%	215,436.46	0.00%	0.00	
	<b>RW Totals</b>				<b>100.00%</b>	<b>4,200,000.00</b>		<b>3,768,660.00</b>		<b>431,340.00</b>		<b>0.00</b>
CN	ACPO	ADVANCE CONSTRUCT PR		100.00%	9,146,438.00	89.73%	8,207,098.82	10.27%	939,339.18	0.00%	0.00	
	<b>CN Totals</b>				<b>100.00%</b>	<b>9,146,438.00</b>		<b>8,207,098.82</b>		<b>939,339.18</b>		<b>0.00</b>
<b>Grand Totals</b>							<b>25,556,438.00</b>		<b>22,931,791.82</b>		<b>2,624,646.18</b>	<b>0.00</b>

**Formal/Full MTIP Amendment JN22-14-JUN2 (June # 2022)  
Exhibit A to Resolution 22-5272 (MTIP Worksheets)**



**Metro  
2021-24 Metropolitan Transportation Improvement Program (MTIP)  
PROJECT AMENDMENT DETAIL WORKSHEET**

**Formal/Full Amendment  
COST INCREASE**  
Increase PE and add ROW phase

<b>Lead Agency:</b> ODOT		Project Type:	O&M	<b>ODOT Key:</b>	<b>20472</b>
<b>Project Name:</b> <b>OR99E: Clackamas River(McLoughlin) Bridge</b>	<b>3</b>	ODOT Type	Bridge	<b>MTIP ID:</b>	<b>71000</b>
		Performance Meas:	Safety	<b>Status:</b>	<b>4</b>
<b>Project Status:</b> 4 = (PS&E) Planning Specifications, & Estimates (final design 30%, 60%, 90% design activities initiated).		Capacity Enhancing:	No	<b>Comp Date:</b>	<b>12/31/2028</b>
		Conformity Exempt:	Yes	RTP ID:	12092
<b>Short Description:</b> Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.		On State Hwy Sys:	OR99E	RFFA ID:	N/A
		Mile Post Begin:	11.13	RFFA Cycle:	N/A
		Mile Post End:	11.27	UPWP:	Yes
		Length:	0.14	UPWP Cycle:	N/A
		Flex Transfer to FTA	No	Transfer Code	N/A
		1st Year Program'd:	2021	Past Amend:	0
		Years Active:	2	OTC Approval:	Yes
		STIP Amend #:	21-24-2062	MTIP #:	JN22-13-JUN

**Detailed Description:** On OR99E between MP 11.13 and 11.27, at the McLoughlin Bridge across the Clackamas River, design to repaint the bridge. The paint is required to protect this steel structure from corrosion. **Cons to be added on 2024-27 STIP**

**STIP Description:** Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.

Programming Notes: OTC approval was required for approval of the IJJA funds and occurred during their May 12, 2022 meeting

Last Amendment of Modification: None as part of the 2021-24 MTIP. 1 earlier when canceled. Administrative - AB19-18-JUL2, July 2018 - STIP Rebalancing - STIP Re-Balancing Amendment - Cancel Project: The \$250k in the PE phase is de-programmed and committed to other STIP projects. Project is zero programmed and canceled. ODOT determined PE can be delayed until the next STIP. Cancelling a project is authorized as part of the STIP Re-Balancing Amendment.

**PROJECT FUNDING DETAILS**

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (ITS)	Total
<b>Federal Funds</b>								
NHPP	<del>Z001</del> ME01	2021		\$ 224,325				\$ 224,325
AC-NHPP (89.73%)	ACPO	2021		\$ 849,743				\$ 849,743
AC-NHPP (89.73%)	ACPO	2023			\$ 46,660			\$ 46,660
								\$ -
Notes:							<b>Federal Totals:</b>	<b>\$ 1,120,728</b>
<b>Federal Fund Obligations \$:</b>				\$ 224,325				Federal Aid ID
<b>EA Number:</b>				PE002945				S081(079)
<b>Initial Obligation Date:</b>				6/9/2021				
<b>EA End Date:</b>				3/31/2023				
<b>Known Expenditures:</b>				\$ 19,764				
<b>State Funds</b>								
State	Match	2021		\$ 25,675				\$ 25,675
State (AC)	Match	2021		\$ 97,257				\$ 97,257
State (AC)	Match	2023			\$ 5,340			\$ 5,340
								\$ -
							<b>State Total:</b>	<b>\$ 128,272</b>
<b>Local Funds</b>								
								\$ -
								\$ -
							<b>Local Total</b>	<b>\$ -</b>
Phase Totals Before Amend:			\$ -	<del>\$ 250,000</del>	\$ -	\$ -	\$ -	<del>\$ 250,000</del>
Phase Totals After Amend:			\$ -	\$ 1,197,000	\$ 52,000	\$ -	\$ -	\$ 1,249,000
Year Of Expenditure (YOE):								\$ 1,249,000
Net Phase Funding Change:			\$ -	\$ 947,000	\$ 52,000	\$ -	\$ -	\$ 999,000
Phase Percent Change:			0.0%	378.8%	100.0%	0.0%	0.0%	399.6%

**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? Adding OTC approved funding to the PE a=phase and adding the ROW phase to the project with AC funds

**Amendment Summary:**

- The formal amendment increases the PE phase and adds total of \$52k for ROW. PE increase is based on the recent scoping effort to evaluate scope and costs. The construction phase is to be added to the 2024-27 STIP with the construction year either in FFY 2024 or 25. Funding approval is through the Statewide Bridge Funding Program Manager and OTC approval occurred during their May 12, 2022 meeting.
- > Will Performance Measurements Apply: Safety & Bridge

**RTP References:**

- > RTP ID: 12092
- > RTP Description: Bridge Rehabilitation & Repair
- > Regional Significant Project: Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.
- > UPWP amendment: No
- > RTP Goals: Goal 10 - Fiscal Stewardship
- > Goal Objective: Objective 10.1 Infrastructure Condition
- > 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: Yes. OTC approval on May 12, 2022
- > Scope changes included: No
- > Limit changes included: No
- > Formal/full amendment requirement under Matrix: Cost increase is above 50% threshold and adds new implementation phase (ROW)
- > Add Special Performance Evaluation assessment required to be completed: No
- > Exempt or Capacity Project: Exempt project
- > Exemption reference: 40 CFR 93.126, Table 2 - Safety - Widening narrow pavements or reconstructing bridges (no additional travel lanes).

**Fund Codes:**

- > NHPP = Federal National Highway Performance Program funds appropriated to the State DOT
- > AC-NHPP = Federal Advance Construction funds used as a placeholder until the final federal fund code is committed to the project. For this project, NHPP is estimated to be the future federal conversion code.
- > State = General state funds provided by the lead agency as part of the required match.

**Other**

- > On NHS: Yes - ID as a NHS MAP21 Principal Arterial
- > Metro Model: Yes - Motor Vehicle Network
- > Model category and type: Major Arterials
- > TCM project: No
- > Located on the CMP: Yes

**Key Number: 20472**

2021-2024 STIP

**Project Name: OR99E: Clackamas River (McLoughlin) Bridge**

(DRAFT AMENDMENT PROJECT)

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	ACPO	ADVANCE CONSTRUCT PR		79.11%	947,000.00	89.73%	849,743.10	10.27%	97,256.90	0.00%	0.00		
	MOE1	NATIONAL HWY PERF PROGRAM EXT	Y	20.89%	250,000.00	89.73%	224,325.00	10.27%	25,675.00	0.00%	0.00		
	<b>PE Totals</b>				<b>100.00%</b>	<b>1,197,000.00</b>		<b>1,074,068.10</b>		<b>122,931.90</b>		<b>0.00</b>	
RW	ACPO	ADVANCE CONSTRUCT PR		100.00%	52,000.00	89.73%	46,659.60	10.27%	5,340.40	0.00%	0.00		
	<b>RW Totals</b>				<b>100.00%</b>	<b>52,000.00</b>		<b>46,659.60</b>		<b>5,340.40</b>		<b>0.00</b>	
<b>Grand Totals</b>							<b>1,249,000.00</b>		<b>1,120,727.70</b>		<b>128,272.30</b>		<b>0.00</b>

# Memo



Date: June 3, 2022  
 To: TPAC Members and Interested Parties  
 From: Ken Lobeck, Funding Programs Lead  
 Subject: June 2022 Formal/Full Metropolitan Transportation Improvement Program (MTIP) Amendment Narrative Summary for Resolution 22-5272

## JUNE MTIP FORMAL/FULL AMENDMENTS SUMMARY

The June 2022 Formal/Full MTIP amendment is split into two amendment bundles. The following provides a summary of the projects and the changes occurring the second amendment bundle

### June #2 Formal/Full Amendment Bundle: JN22-14-JUN2, Resolution 22-5272 (3 projects)

Proposed June 2022 Formal Amendment Bundle #2					
Resolution Number: <b>22-5272</b>					
Amendment Type: <b>Formal/Full</b>					
Amendment #: <b>JN22-14-JUN2</b>					
Total Number of Projects: <b>3</b>					
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key <b>TBD</b> New Project	New TBD	TriMet	Willamette Shore Line Rail & Trestle Repair-Phase I (TriMet)	The WSL Phase I improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety (ID#: 22-CMPJ-062)	<b>ADD NEW PROJECT:</b> The formal amendment adds TriMet Willamette Shore Line Rail & Trestle Repair-Phase I project funded by a Congressional Earmark from Table 20 FY 2022 Transit Infrastructure Grants – Community Projects
Project #2 Key <b>22432</b>	71248	ODOT	US30BY Curb Ramps	At various location on US30 Bypass in the NE Portland area, construct ADA compliant curbs and ramps.	<b>COST INCREASE</b> Add new IIJA funding totaling \$8,333,069 to PE and ROW phases to address phase funding shortfalls. Total project cost increases from \$17,223,368 to \$25,556,437 representing a 48.4% increase to the project
Project #3 Key <b>20472</b>	71000	ODOT	OR99E: Clackamas River (McLoughlin) Bridge	Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.	<b>COST INCREASE</b> Add \$947k to PE phase based on updated project scoping effort. Add ROW phase with \$52k. Total increase = \$999k. OTC approval occurred May 12, 2022. Construction to be added in 2024-27 STIP in FFY 2024 or 24.

Purpose Statement:

**FOR THE PURPOSE OF AMENDING OR ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TRIMET'S NEW WILLAMETTE SHORELINE RAIL REPAIR PROJECT AND ADDRESSING ODOT NEEDED PROJECT FUNDING INCREASES (JN22-14-JUN2)**



- TPAC June 3, 2022 Meeting Summary: TPAC members received their MTIP amendment notification and provided their approval recommendation to JPACT. There was no significant discussion about the amendment

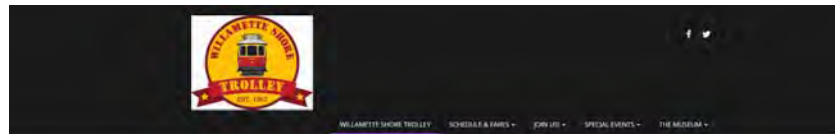
**Project #1. Key – New TBD: Willamette Shore Line Rail & Trestle Repair-Phase I (TriMet)**

- Lead Agency: TriMet
- Project Change(s): [New project being added to the MTIP](#)
- Project Description: The WSL Phase I improvements will repair the existing trestles, conduct routine maintenance, upgrade the Nebraska rail crossing, conduct geotech exploration and miscellaneous trestle and track improvements for increase public safety (ID#: 22-CMPJ-062)
- Amendment Overview:
  - The June #2 Formal amendment Bundle includes a new project being added to the MTIP. The project is TriMet’s Willamette Shore Line Rail & Trestle Repair-Phase I project
  - The funding for the project originates from a Congressional Earmark from the currently is
- Why a formal/full amendment is required: Adding a new project to the MTIP requires a formal/full amendment to satisfy RTP consistency review, air conformity analysis and transportation demand modeling requirements, plus fiscal constraint requirements.



FEDERAL TRANSIT ADMINISTRATION				
TABLE 20				
FY2022 Transit Infrastructure Grants-Community Project Funding/Congressionally Directed Spending				
<i>The amounts allocated in this notice are made available for the purposes, and in the amounts, specified in the explanatory statement accompanying the Consolidated Appropriations Act, 2022 (Pub. L. 117-103, Mar. 15, 2022).</i>				
State	Recipient	Project ID	Project Description	Amount
AZ	City of Phoenix	2022-CMPJ-002	Valley Metro Electric Bus Demonstration	\$1,057,000
AZ	City of Phoenix	2022-CMPJ-003	City of Phoenix Electric Bus Investment	\$2,745,000
AZ	Northern Arizona Public Transportation Authority	2022-CMPJ-001	Northern Arizona Public Transportation Authority Bus Storage Phase 1—CDL Course	\$2,590,000

OH	Southwest Ohio Regional Transit Authority (SORTA)	2022-CMPJ-061	SORTA's Bus Stop Infrastructure Enhancement Project	\$3,300,000
OR	Lane Transit District	2022-CMPJ-063	Lane Transit District Electric Bus Replacement Project	\$950,000
OR	Lane Transit District	2022-CMPJ-064	Lane Transit District Trip Planner/Mobile Wallet Application	\$800,000
OR	Salem Area Mass Transit District (SAMTD)	2022-CMPJ-065	Salem Area Mass Transit Zero- Emission Bus Fleet Electrification Project	\$6,306,000
OR	Tri-County Metropolitan Transportation District of Oregon	2022-CMPJ-062	Willamette Shore Line Rail & Trestle Repair Project	\$2,000,000
PA	PA Department of Transportation	2022-CMPJ-067	Coatesville Transit Project	\$2,000,000
PA	PA Department of Transportation	2022-CMPJ-068	Harrisburg Transportation Center HVAC Upgrade	\$635,000



THE TROLLEY STARTS ON MAY 28TH!

**WILLAMETTE SHORE TROLLEY**

Take a scenic trolley along the Willamette River



Ride in a Vintage Trolley from Lake Oswego into a dark tunnel and meander through posh neighborhoods.

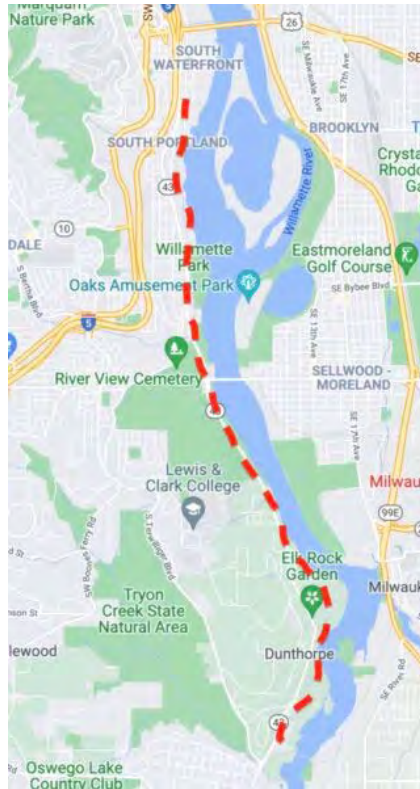
You will be riding on a historic rail line dating from the late 1800s. The tunnel dates from 1912. At one time electrified interurbans ran on this line from Portland to Oswego and on to Hillsboro, McMinnville, and Corvallis. The Vintage Trolley itself is a replica trolley in the style of Portland's own Council Crest cars. Two of the original cars can be found at our museum in Brooks. The Vintage Trolleys formerly ran on the MAX Line and Portland Streetcar before coming to the Willamette Shore Trolley.



Willamette Shore Trolley  
311 N. Stearns Street  
Lake Oswego, OR 97034  
Phone: 503.437.7434

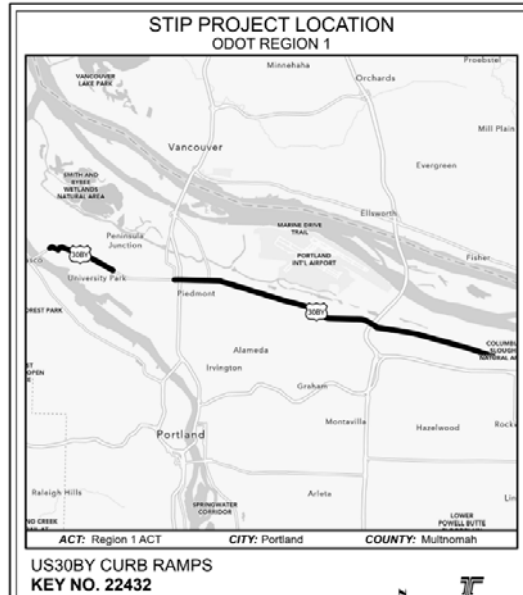
[Click Here for Google Maps Directions](#)





### **Project #2. Key - 22432: US30BY Curb Ramps**

- Lead Agency: ODOT
- Project Change(s): Existing project requires added funding to PE and ROW phases.
- Project Description: At various location on US30 Bypass in the NE Portland area, construct ADA compliant curbs and ramps.
- Amendment Overview:
  - The project requires additional funds to address phase funding shortages impact PE and ROW.
  - The formal amendment adds new IJA funds to the PE and ROW phases to address phase funding shortfalls. \$8,333,069 is added to the project increasing the project cost from \$17,223,368 to \$25,556,437. The cost increase represents a 48.4% increase to the project.
  - Added Background: The original cost estimates were overly optimistic and had anticipated cost reductions from the maturation of the ADA program as seen in other ODOT programs. However, due to the current inflationary market conditions and the existing skilled labor shortages, the anticipated cost reductions have not occurred. A revised cost estimate is now in place for the project. The added funding is being drawn from the new available IJA funds.
  - OTC approval was required which occurred on March 30, 2022
- Why a formal/full amendment is required: The approved amendment matrix limits cost increases that can proceed administratively to 20%. The met cost change for this amendment is 48.4% which is significantly above the 20% threshold.



**ODOT - Oregon Transportation Commission Meeting Summary ~ March 30, 2022 (virtual)**

Recording and materials: Listen to the [recorded meeting](#) and [access all support materials](#) for details.

Commissioners Present: Chair Van Brocklin, Vice Chair Simpson, Commissioner Brown, Commissioner Burke, Commissioner Smith

Presenters: Director Kristopher Strickler, Asst. Director for Operations Cooper Brown, Asst. Director for Finance and Compliance Travis Brouwer, Policy, Data & Analysis Division Administrator Amanda Pietz, Public Transportation Division Administrator Karyn Criswell, Delivery & Operations Interim Administrator Mac Lynde

**Agenda Item Summaries:**

- **Agenda A IIJA Update (Discussion):** ODOT Staff described an electric vehicle (EV) funding plan, to include over \$100 million from state and federal sources, provided an overview of the Innovative Mobility Pilot Program, and outlined the hybrid consensus scenario requested by Commissioners at the March 10 OTC meeting.
- **Agenda A1 IIJA Flexible Funding Allocation (Decision):** Commissioners discussed the proposed hybrid consensus scenario, and voted to reallocate \$5M from the ADA line to the Innovative Mobility Pilot Program. The Commission approved the revised hybrid consensus scenario as follows:

Program Area	Funding (Millions)
Enhance Highway	\$50
Fix-It	\$75
Great Streets	\$50
Safe Routes to School	\$30
Innovative Mobility Pilot	\$10
Local Climate Planning	\$15
Maintenance & Operations	\$40
ADA	\$95
Match for Competitive Grants	\$40
Business & Workforce Development	\$7
Total	\$412

- **Agenda A2 IIJA Bridge Funding (Informational):** Delivery & Operations Interim Administrator Mac Lynde provided an overview of the state of bridge maintenance and operations throughout Oregon, and the initial proposed approach to allocating IIJA Bridge Funding between ODOT and local city/county entities.

**Decisions/Actions:**

- **Approved Revision of Hybrid Consensus Scenario** to reallocate an additional \$5M to the Innovative Mobility Pilot Program; 1<sup>st</sup> Smith, 2<sup>nd</sup>, Burke; Approved unanimously.
- **Approved Revised Hybrid Consensus Scenario;** 1<sup>st</sup> Smith, 2<sup>nd</sup> Simpson; Approved unanimously

**Commission Requests:**

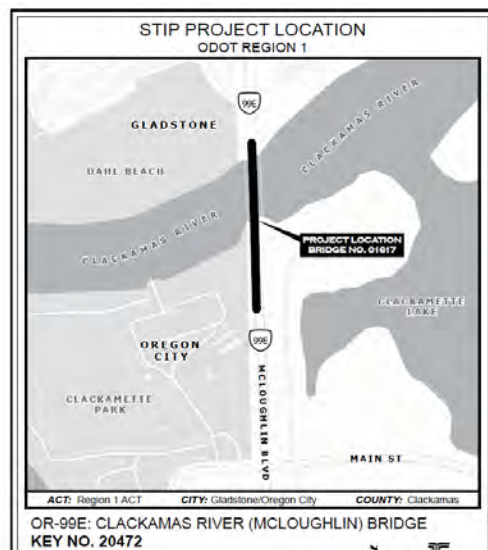
- **ADA Update:** ODOT staff to report details of scope and scale of outstanding work, potential costs, and pace to meet settlement requirements at May, 2022 OTC Meeting.
- **Innovative Mobility Pilot Program:** (1) ODOT staff to identify additional state funding source(s), up to \$10M to supplement program. (2) Approve funding criteria for program elements.
- **IIJA Bridge Funding:** allocation decision anticipated at May, 2022 OTC Meeting.

Email: [OTCadmin@odot.oregon.gov](mailto:OTCadmin@odot.oregon.gov) with questions or additional needs.



### **Project #3 - Key - 20472: OR99E: Clackamas River (McLoughlin) Bridge**

- Lead Agency: ODOT
- Project Change(s): Existing project requires added funding to PE. ROW phase is being added to the project.
- Project Description: Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.
- Amendment Overview:
  - The project requires additional funds to address phase funding shortages impacting the PE phase. Funding supporting the ROW phase also is being added
  - The formal amendment adds \$947,000 to PE and \$52,000 for ROW phase activities.
  - The Phase increases from \$250,000 to \$1,197,000. With the ROW phase funding, the total project cost increases from \$250,000 to \$1,249,000.
  - The Change Management Request (CMR) form indicated an updated re-scoping effort resulting in the higher PE phase cost. However, there does not appear to be any change in the current project scope or limits.
  - The construction phase is expected to be added to the 2024-27 STIP with the construction year either in FFY 2024 or 25.
  - The State Bridge Funding Program Manager approved the increase to the project.
  - OTC approval also was involved which occurred on May 12,2022
- Why a formal/full amendment is required: The approved amendment matrix limits cost increases that can proceed administratively to 50%. The net cost change for this amendment exceeds the 50% threshold.





**Oregon**  
Kate Brown, Governor

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

**DATE:** April 29, 2022  
**TO:** Oregon Transportation Commission

**FROM:** Kristopher W. Strickler  
Director

**SUBJECT:** Agenda Item E3 – IJA STIP Adjustment

**Requested Action:**

Approve the Infrastructure Investment and Jobs Act (IIJA) 2021-2024 Statewide Transportation Improvement Program (STIP) Amendment.

**Background:**

At the March 30, 2022 meeting, the Oregon Transportation Commission (OTC) approved the allocation of the new IJA funding coming to the State of Oregon. With the allocation approval, the funding is now available for programming to projects.

The attached list is the first amendment to add IJA funding to selected projects across various programs in the 21-24 STIP. The additional IJA funding will be amended into the STIP in future actions via the annual STIP update in September or will be incorporated into the Draft 2024-2027 STIP that will be brought to the OTC for review and release for public comment in January 2023.

**Next Steps:**

With approval, ODOT will amend the projects in the 2021-2024 STIP.

Without approval, each project will be approved individually through the appropriate delegated process.

**Attachment:**

- Attachment 1: 2022 Statewide IJA STIP Amendment Project Summary

Key Number	Region	Project name	BMP	EMP	Bridge #	Primary Work Type	Funding Responsibility	Current Total	Proposed total
18794	1	OR8: SW 192nd Ave - SW 110th Ave	2.87	7.04		Safety	IJA Arts	\$5,046,927.68	\$5,808,012.48
20335	1	Central Systemic Signals and Illumination (ODOT)	Var	Var		Safety	IJA Arts	\$5,296,963.70	\$6,046,394.70
20472	1	OR99: Clackamas River (McLoughlin) Bridge	11.13	11.27	01617	Bridge	IJA Bridge	\$250,000.00	\$1,249,000.00
20209	2	OR1268 at 54th St. (Springfield)	6.03	6.03		Safety	IJA Arts	\$1,641,300.00	\$2,141,300.00
21301	2	Cevier St - Lancaster Dr. to 45th Pl. NE				Modernization	IJA Arts	\$2,858,366.00	\$3,258,366.00
21560	2	OR18: SE Cruidchank Rd	48.59	48.59		Safety	IJA Arts	\$1,336,600.00	\$1,386,600.00
21778	2	City of Springfield signal enhancements (state highways)	Var	Var		Safety	IJA Arts	\$994,138.00	\$1,794,138.00
19062	2	I-5: Aurora-Donald Interchange (Exit 276), Phase 1(a)	Var	Var		Modernization	IJA Enhance	\$23,732,053.40	\$27,332,053.40
20166	3	I-5 & OR188E: Variable Message & Curve Warning Signs	Var	Var		Operations - ITS	IJA Arts	\$5,769,328.00	\$7,269,656.00
21676	3	OR99/OR238/OR62: Big X intersection (Medford)	Var	Var	18525,06605A,08821,09590	Preservation	IJA Arts	\$10,662,700.00	\$11,162,700.00
21677	3	OR42: Lookingglass Creek to I-5 (Winston)	72.54	76.95	01986A,01923,01923A,02173A	Preservation	IJA Arts	\$12,360,700.00	\$13,060,372.00
22562	3	I-5: Sexton Pass Curve Warning sign	70.1	70.1		Operations - ITS	IJA Arts	\$1,750,000.00	\$4,050,328.00
22520	4	US97: Dover Ln - Bear Dr Safety Improvements	100.5	97.5		Safety	IJA Arts	\$250,000.00	\$4,750,000.00
21229	4	US97 and US20 Bend North Corridor	Var	Var		Modernization	IJA Enhance (\$14,429,195), 24-27 STIP and Region Federal (\$22,000,000), local and private funds (\$15,366,320)	\$121,951,613.00	\$174,747,126.00
21230	5	US20/OR201: Burns to Ontario	Var	Var		Safety	IJA Arts	\$13,724,610.00	\$16,724,610.00
								\$207,725,299.13	\$281,380,658.53

Metro’s approval process for formal amendment includes multiple steps. The required approvals for the amendment includes the following:

Action

Target Date

- Initiate the required 30-day public notification process..... May31, 2022
- TPAC notification and approval recommendation..... June 3, 2022
- **JPACT approval and recommendation to Council.....June 16, 2022**
- Completion of public notification process..... June 29, 2022
- Metro Council approval..... July 7, 2022

Note: Council dates are tentative and may change

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All projects were reviewed against the MTIP requirements stated in 23 CFR 450.300-338 to ensure all programming actions are properly completed. All projects moving into the Metro amendment approval process have completed their required reviews unless so noted. These review actions included:

- Proof of funding verification.
- Fiscal constraint demonstration.
- Confirming and completing unique financial processing requirements such as the FTA flex transfer process
- Compliance with special approval steps (e.g. OTC approval)
- Determination if the project is exempt for air quality analysis and if the changes the project's capacity or exemption status.
- Consistency with current approved Regional Transportation Plan (RTP) to include:
  - Identification of the project within the approved constrained RTP.
  - Comparison of RTP project entry against MTIP entry and requested changes
  - Review of requested changes (e.g. scope, limits, and funding) and their potential impacts upon air quality analysis and/or transportation demand analysis.
  - Review and Evaluation of requested scope are still consistent with the original RFFA or TSMO awards.
  - Verification of regional significance status against the RTP
  - Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
  - Determination if performance measurements will apply against the RTP strategic goals.
  - Determination if an MTIP Special Performance Evaluation is required as part of the formal MTIP Amendment (applies to capacity enhancing projects above \$100 million)
- Posting and completion of required 30-day public notifications and public opportunities to comment on the MTIP amendment.
  - This includes reviewing all significant comments and developing comment summary logs
  - Providing JPACT and Council with comments summaries for their review and evaluation
  - Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

## 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:

**TPAC received their official notification on June 3, 2022 and now recommends JPACT approve Resolution 22-5272 consisting of TriMet's new Willamette Shore Line earmark project and cost increases to ODOT's US30BY ADA Curbs and Ramps plus OR99E McLoughlin Bridge projects.**

No attachments



#### **4.3 Consideration of the May 19, 2022 JPACT Minutes**

*Consent Agenda*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022



600 NE Grand Ave.  
Portland, OR 97232-2736  
oregonmetro.gov

JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT)

Meeting Minutes

May 19, 2022

Metro Regional Center, Council Chamber

MEMBERS PRESENT

Shirley Craddick (Chair)  
Juan Carlos González  
Christine Lewis  
Nafisa Fai  
Sam Desue  
Temple Lentz  
Carley Francis  
Travis Stovall  
Anne McEnerny-Ogle  
Rian Windsheimer  
Steve Callaway

AFFILIATION

Metro Council  
Metro Council  
Metro Council  
Washington County  
TriMet  
Clark County  
Washington State Department of Transportation  
Cities of Multnomah County  
City of Vancouver  
Oregon Department of Transportation  
Cities of Washington County

MEMBERS EXCUSED

Curtis Robinhold  
Jessica Vega Pederson  
Paul Savas  
Jo Ann Hardesty  
Kathy Hyzy  
Nina DeConcini

AFFILIATION

Port of Portland  
Multnomah County  
Clackamas County  
City of Portland  
Cities of Clackamas County  
Oregon Department of Environmental Quality

ALTERNATES PRESENT

Emerald Bogue  
Michael Orman  
Ty Stober  
Jef Dalin  
Chris Ford  
Brendan Finn

AFFILIATION

Port of Portland  
Oregon Department of Environmental Quality  
City of Vancouver  
Cities of Washington County  
Oregon Department of Transportation  
Oregon Department of Transportation

OTHERS PRESENT: Aaron Deas, Al Bannan, Allison Boyd, André Lightsey-Walker, Brenda Bartlett, Brian Monberg, Chris Deffebach, Chris Fick, Chris Smith, Cody Field, Dave Roth, Don Odermott, Doug Allen, Eric Hesse, Erin Doyle, Glen Bolen, Jamie Snook, Jamie Stasny, Jean

Senechal Biggs, Jeff Gudman, John Williams, Jonathan Maus, Julie Hajduk, Katherine Kelly, Laurie Lebowsky, Maddy Do, Mark Dorn, Mark Gamba, Mark Ottenad, Monica Tellez-Fowler, Patrick Brennan, Pal Comery, Scott Langer, Shilpa Mallem, Steve W., Tara O'brien, Taylor Steenblock, Will Farley, Zach Lindahl

STAFF: Anneliese Koehler, Caleb Winter, Craig Beebe, Dan Kaempff, Grace Cho, Jaye Cromwell, John Mermin, Ken Lobeck, Kim Ellis, Lake McTighe, Lisa Hunrichs, Michelle Bellia, Malu Wilkinson, Matt Bihn, Monica Krueger, Ramona Perrault, Ted Leybold, Tom Kloster, Tyler Frisbee, Connor Ayres, Carrie MaClaren, Elissa Gertler, Stellan Roberts.

### **1. CALL TO ORDER AND DECLARATION OF A QUORUM**

JPACT Chair Shirley Craddick (she/her) called the virtual Zoom meeting to order at 7:30 am.

Chair Craddick called the role and declared a quorum.

### **2. PUBLIC COMMUNICATION ON AGENDA ITEMS**

Chris Smith (he/him) with No More Freeways gave testimony. Chris noted that the Abernathy Bridge project is now similar in price to the price of the Rose Quarter project so for future urban mobility projects, tolling is now being looked at as the main form of funding. Chris asked what will happen when the same cost escalation occurs with the much larger Interstate Replacement Project.

Doug Allen, a citizen residing in southeast Portland, provided testimony, expressing that the current I-205 project is no longer the same project that it was when it was originally proposed on the 2018 Regional Transportation Plan (RTP). Doug explained that today's MTIP amendment should require ODOT to formally separate the phases into two projects and initiate an appropriate environmental analysis. He went on to note that the seven miles of lane widening does not qualify for categorical exclusion and should have required an environmental process.

### **3. UPDATES FROM THE CHAIR**

Chair Craddick announced that the revenue for the Metropolitan Transportation Improvement Program (MTIP) that JPACT reviewed last summer has been updated to reflect the new federal transportation funding bill.

Chair Craddick asked Metro Staff Lake McTighe to read the names of those who have died in traffic accidents in the Clackamas, Multnomah, and Washington Counties.

Lake provided information about how Metro staff compiles the fatal crash data, explained that Metro tracks and analyzes serious crash data trends occurring in the region, and shared the names and ages of victims during the months of April and the beginning of May:

Shane Johnson, 43, David Carl Paulsen, 36, Joseph Dubois, 44, Andrew Michael Backman, 21, Kathleen Hupp, 72, Eric Canty, 43, Mathew Amaya, 17, Wendy Falk, 52, Michael Phillip Frainey, 52, Angela C. Boyd, 47, and three unidentified persons.

#### 4. **CONSENT AGENDA**

**MOTION:** Mayor Anne McEnerny-Ogle (she/her) moved to approve the consent agenda seconded by Mayor Travis Stovall (he/him)

**ACTION:** With all in favor, consent agenda passed.

#### 5. **ACTION ITEMS**

**5.1 Resolution No. 22-5265, 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 1A Project Allowing the Construction Phase to Move Forward and be Implemented (MY22-11-MAY1).**

Chair Craddick introduced Metro staff Ted Leybold (he/him) and Mandy Putney (she/her) with ODOT to present to JPACT.

*Key elements of the presentation included:*

Ted introduced Resolution No. 22-5265.

Mandy Putney explained reasons behind the cost increase for the project which was in large part due to the increased costs of steel and concrete being experienced globally. Mandy reminded JPACT members about what is being done in this project.

Ted explained the Metropolitan Planning Organization (MPO) compliance requirements and described the May 2022 formal amendment timeline/process.

*Member discussion included:*

Councilor Gonzalez (he/him/el) thanked ODOT for the thorough updates in advance of this meeting and invited JPACT members to chime in with their perspective or experience with projects that have increased in price recently.

Mayor Steve Callaway (he/him) responded to Councilor Gonzalez remarks by describing the

difficulties of a few capital projects that have doubled in cost estimates recently.

Rian Windsheimer (he/him) described that this team negotiated to bring the cost of this project as low as possible. Rian went on to note that the OTC approval that is mentioned in the resolution happen on April 29, not May 12 as is stated in the resolution.

Ted agreed with Rian and stated that that change will be made in the materials.

Councilor Lewis (she/her) reflected that this is a project from 2017 and celebrated that the region is moving forward with a large project and highlighted the importance of the Abernathy Bridge to the Clackamas area.

Mayor Stovall agreed with the group that there are concerns about cost escalations but stressed the importance of this project and that the cost will not go down.

Councilor Gonzalez asked how cost increases will affect projects that are currently under construction. He also asked how ODOT prioritizes what projects are postponed or cancelled.

Ted responded by describing that with local projects if these projects have not yet signed a construction contract, adjustments will have to be made to deal with cost increases.

Rian explained that flexibility in funding is what allows a project to move forward and when there is not enough funding for a project ODOT looks to delay or pushout a project instead of cancelling projects.

Metro attorney Carrie MacLaren (she/her) confirmed that the date discrepancy mentioned by Rian Windsheimer earlier in the meeting can be fixed without a formal amendment being made.

Chair Craddick called for a motion on Resolution No. 22-5265.

**MOTION:** Councilor Lewis moved to approve Resolution No. 22-5265. Seconded by Rian Windsheimer.

**ACTION:** With all in favor the motion to approve Resolution No. 22-5265 passed.

## **5.2 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**

Chair Craddick introduced Metro staff John Mermin (he/him) to present to JPACT.

*Key elements of the presentation included:*

John described what the Unified Planning Work Program (UPWP) is, what it isn't, and next steps.

*Member discussion included:*

Chair Craddick called for a motion on Resolution No. 22-5244.

**MOTION:** Mayor Stovall moved to approve Resolution No. 22-5244. Seconded by Mayor McEnery-Ogle.

**ACTION:** With all in favor the motion to approve Resolution No. 22-5244 passed.

## 6. INFORMATION/DISCUSSION ITEMS

### 6.1 Update on JPACT Trip to DC

Chair Craddick introduced Tyler Frisbee (she/her), Metro and Tom Markgraf, TriMet, to present to JPACT.

*Key elements of the presentation included:*

Tyler provided background information on the JPACT trip to Washington DC.

Tom highlighted that JPACT trips have been occurring for almost 40 years, the importance of the trip, and the influence it has. Tom stressed the importance of presenting as one, united body.

Tyler proposed that JPACT present the five policy principles that JPACT approved as their legislative agenda last year.

Tom discussed scheduling logistics of the trip.

*Member discussion included:*

Rian Windsheimer expressed excitement for the trip and thanked Tyler and Tom.

Commissioner Nafisa Fai (she/her) stated that she is unable to attend the trip this year but Commissioner Roy Rodgers will be attending in her place.

### 6.2 Regional Flexibility Funds Allocation (RFFA) - summarize call for projects, present draft project outcomes evaluation report

Chair Craddick introduced Dan Kaempff (he/him), Metro to present to JPACT.

*Key elements of the presentation included:*

Dan explained the two funding sources, federal and local, totaling \$67.3 million. Dan broke down the 29 applications that were received, described the RFFA program direction, RFFA funding criteria, Trails Bond funding criteria, and how criteria areas were used. He explained the four project categories, some project ratings examples, the development process for draft funding proposals, described JPACT's role in funding decisions, and next steps.

*Member discussion included:*

Rian stressed the importance of making sure total costs are taken into account when making grant decisions.

Mayor Callaway asked Dan to describe efforts to ensure that funding distribution reflects population distribution and highlighted Washington County's diversity and JPACT's commitment to serving underserved communities.

Dan described that the project's objectives is to distribute funding around the region and that federal funding does not allow a formulaic funding. He went on to explain that it is up to JPACT to describe what an equitable distribution looks like.

Mayor Callaway highlighted that projects that are not in a neighborhood are sometimes not recognized for the support that they provide to people of color. He gave the example of Brookwood overpass which supports key demographics that Metro and JPACT hope to support but because the project is not in a neighborhood it is not recognized as much as it should be. Mayor Callaway expressed hope that Metro Council and JPACT will take this into consideration.

Dan explained that coordinating committee input and the public comment period are meant to round out the story behind some of these projects that help communities in places where a technical evaluation cannot.

Mayor Callaway followed up by noting that projects in areas of limited public transit options should also be considered.

Councilor Gonzalez voiced support for projects on the West side and appreciated the human element to funding decisions.

## **6.2 Interstate Bridge Replacement Project (IBRP) Introduction to the Modified Locally Preferred Alternative (LPA) Discussion**

Chair Craddick introduce Matt Bihn, Metro, to introduce the Interstate Bridge Replacement (IBR) team.

*Key elements of the presentation included:*

Matt introduced Greg Johnson, IBR, and Raymond Mabey, IBR, to present to JPACT.

Greg recognized the initiating IBR efforts, highlighted the program timeline, oversight and advisory groups, described the purpose and need of this project, highlighted that equity and climate are key priorities, identified what the LPA is and is not and summarized the modified LPA.

Ray described the costs and funding of the project, explained variable rate tolling, next steps and how they fit together, the project's timeline, and Metro's next steps.

*Member discussion included:*

Mayor Callaway asked the IBR team if fewer auxiliary lanes reduces the life expectancy of the corridor and asked what sea-level rise is being assumed in the design of the project.

Greg responded to Mayor Callaway's first question by first highlighting the difficulties around auxiliary lanes. He explained that one auxiliary significantly improves traffic flow but when a second is added there are a number of drawbacks, including costs and property usage. Greg voiced that having one less auxiliary lane will have a minimal impact on the overall lifecycle of the bridge.

Ray explained that the sea-level rise that is being used for planning is three feet at the mouth of the Colombia but by the time you work your way up the Colombia it is about a half a foot rise.

Sam Desue thanked leaders, technical staff, and C-Tran for all the work that has been done with this bridge.

## **7. UPDATES FROM JPACT MEMBERS**

*There was none.*

## **8. ADJORN**

Chair Craddick adjourned the meeting at 9:27 am.

Respectfully Submitted,

*Stellan Roberts*

Stellan Roberts  
Recording Secretary

5/19/2022 JPACT

Minutes 7



**ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF MAY 19, 2022**

<b>ITEM</b>	<b>DOCUMENT TYPE</b>	<b>DATE</b>	<b>DOCUMENT DESCRIPTION</b>	<b>DOCUMENT NO.</b>
2.0	Written Testimony	5/19/2022	Sharon Nasset Written Testimony	05192022-01
2.0	Written Testimony	5/19/2022	Doug Allen Written Testimony	05192022-02
2.0	Written Testimony	5/19/2022	Public Comment Summary Report, Resolution No. 22-5265	05192022-03
3.0	Presentation	5/19/2022	Fatal Crash Slide	05192022-04
5.1	Presentation	5/19/2022	MTIP Resolution No. 22-5265 Slides	05192022-05
5.2	Presentation	5/19/2022	UPWP Resolution No. 22-5244 Slides	05192022-06
6.2	Presentation	5/19/2022	RFFA Draft Project Outcomes Evaluation Report	05192022-07
6.3	Presentation	5/19/2022	IBRP Introduction to the Modified LPA Slides	05192022-08

**5.1 Resolution 22-5273, For the Purpose of Endorsing the Modified Locally Preferred  
Alternative for the Interstate Bridge Replacement Program**

*Action Items*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022

# JPACT Worksheet

**Agenda Item Title:** Resolution 22-5273, For the Purpose of Endorsing the Modified Locally Preferred Alternative for the Interstate Bridge Replacement Program

**Presenters:** Margi Bradway, Deputy Director, Metro Planning, Development, and Research; Greg Johnson, IBR Program Administrator; John Willis, Program Manager; Matt Bihn, Principal Transportation Planner

## **Purpose/Objective**

- Seek JPACT action on Resolution 22-5273.

## **Outcome**

- JPACT action on Resolution 22-5273. If approved, Resolution 22-5273 will be submitted to Metro Council for approval on July 7, 2022.

## **What has changed since JPACT last considered this issue/item?**

- On June 3, 2022 TPAC recommended JPACT approval of Resolution 22-5273.

## **What packet material to you plan to include?**

- Resolution No. 22-5273
- Exhibit A: IBR Recommended Modified LPA
- Attachment 1: IBR Program Fact Sheet
- Attachment 2: IBR Modified LPA Fact Sheet
- IBR Briefing packet available here:  
[https://www.interstatebridge.org/media/vebbod4f/20220504\\_draft\\_ibr\\_lpa\\_briefing-book\\_remediated.pdf](https://www.interstatebridge.org/media/vebbod4f/20220504_draft_ibr_lpa_briefing-book_remediated.pdf)

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING THE	)	RESOLUTION NO. 22-5273
MODIFIED LOCALLY PREFERRED	)	
ALTERNATIVE FOR THE INTERSTATE	)	Introduced by Chief Operating Officer
BRIDGE REPLACEMENT PROGRAM	)	Marissa Madrigal in concurrence with
	)	Council President Lynn Peterson

WHEREAS, the Oregon and Washington sides of the metropolitan region are linked by critical transportation infrastructure vital to each community along the Columbia River; and

WHEREAS, the Interstate Bridge is part of a critical trade route for regional, national, and international commerce; and

WHEREAS, the Interstate Bridge carries more than 140,000 people each weekday by car, truck, bus, bicycle and on foot; and

WHEREAS, the existing structures were not designed to support the needs of today’s transportation system; and

WHEREAS, the segment of Interstate 5 in the vicinity of the Columbia River has extended peak-hour travel demand that exceeds capacity, includes bridge spans that are over 100 years old and do not meet current traffic safety or seismic standards; and

WHEREAS, congestion and bridge lifts slow auto, transit, and freight movement along Interstate 5; and

WHEREAS, the current bridge’s narrow shared-use paths, low railings, and lack of dedicated pathways impede safe travel for pedestrians and cyclists; and

WHEREAS, there are limited transit options across the bridge; and

WHEREAS, the current bridge could be significantly damaged in a major earthquake; and

WHEREAS, the Interstate Bridge Replacement Program (IBRP) is a collaboration between the Oregon and Washington Departments of Transportation, Metro, TriMet, C-TRAN, the Southwest Washington Regional Transportation Council, the Cities of Portland and Vancouver, the Ports of Portland and Vancouver, the Federal Highway Administration, and the Federal Transit Administration; and

WHEREAS, Metro is a Participating Agency in the federal environmental review process under the National Environmental Planning Act (NEPA); and

WHEREAS, Metro Council and staff participate in the IBRP Executive Steering Group, Equity Advisory Group, and staff level groups, and

WHEREAS, the Metro Council adopted the 2018 Regional Transportation Plan (RTP) with four primary priorities: Equity, Safety, Climate, and Congestion Relief; and

WHEREAS, the Metro Council strives for policies that promote climate resiliency, sustainability, economic prosperity, community engagement, and creating or preserving livable spaces; and

WHEREAS, the IBRP has recommended a Modified Locally Preferred Alternative (LPA) that revises the original LPA adopted by Metro Council in 2008 as part of the Columbia River Crossing project; and

WHEREAS, the Modified LPA supports Metro's policies and strategies in the RTP that promote safety, equity, climate, and mobility; and

WHEREAS, the Modified LPA has been endorsed by the Executive Steering Group for the IBRP; and

WHEREAS, Metro's Transportation Policy Alternatives Committee (TPAC) received an overview of the Modified LPA and recommended approval of Resolution 22-5273 to Metro's Joint Policy Advisory Committee on Transportation (JPACT) on June 3, 2022; and

WHEREAS, at its meeting on June 16, 2022, JPACT recommended approval of Resolution 22-5273 to the Metro Council; now therefore

BE IT RESOLVED that:

The Metro Council hereby endorses the Modified Locally Preferred Alternative for the Interstate Bridge Replacement Program, attached as Exhibit A to this resolution.

ADOPTED by the Metro Council this 7<sup>th</sup> day of July 2022.

---

Lynn Peterson, Council President

Approved as to Form:

---

Carrie MacLaren, Metro Attorney

## DRAFT MODIFIED LOCALLY PREFERRED ALTERNATIVE RECOMMENDATION

MAY 27, 2022

After regional support is reached on a Modified Locally Preferred Alternative for the Interstate Bridge Replacement (IBR) Program, the program commits to continuing work with the partner agencies and community to identify and refine program elements that have yet to be finalized. The **IBR Program** recommends the following components for the Modified LPA:

1. A replacement of the current I-5 Bridge with a seismically sound bridge.
2. A commitment to increase and implement attractive transit options across the Columbia River by supporting a variety of transit services that meet the needs of customers traveling between varied markets through:
  - i. Continuation of C-TRAN express bus service from markets north of the Bridge Influence Area (BIA) to the downtown Portland area utilizing new bus on shoulder facilities, where available, within the BIA.
  - ii. Continuation of C-TRAN's current and future Bus Rapid Transit lines as described in adopted regional plans and known as the Vine.
  - iii. New Light Rail Transit (LRT) service as the preferred mode for the dedicated High-Capacity Transit improvement within the BIA.
  - iv. An alignment of LRT that begins with a connection at the existing Expo Center LRT station in Portland, OR, extends north, with a new station at Hayden Island, continues across the Columbia River on a new I-5 bridge, and generally follows I-5 with an interim Minimum Operable Segment not extending north of E. Evergreen Boulevard, in Vancouver, WA. There will be multiple stations in the City of Vancouver to be decided by the Vancouver City Council in consultation with C-TRAN, the Port of Vancouver, and TriMet.
3. Active transportation and multimodal facilities that adhere to universal design principles to facilitate safety and comfort for all ages and abilities. Exceptional regional and bi-state multi-use trail facilities and transit connections will be created within the BIA. Opportunities will be identified to enhance active transportation facilities, with specific emphasis on local and cross-river connections between the region's Columbia River Renaissance Trail and the 40-mile Loop.
4. The construction of a seismically sound replacement crossing for the North Portland Harbor Bridge with three through lanes, northbound and southbound.
5. The construction of three through lanes northbound and southbound on I-5 throughout the BIA.

6. The inclusion of one auxiliary lane northbound and one southbound between Marine Drive in Portland and E. Mill Plain Boulevard in Vancouver to accommodate the safe movement of freight and other vehicles.
7. A partial interchange at Hayden Island, and a full interchange at Marine Drive, designed to minimize impacts on the Island's community; and improve freight, workforce traffic, and active transportation on Marine Drive.
8. A commitment to study improvements of other interchanges within the BIA.
9. Variable Rate Tolling will be used for funding, such as constructing the program, managing congestion, and improving multi-modal mobility within the BIA. The Program will study and recommend a low-income toll program, including exemptions and discounts, to the transportation commissions.
10. A commitment to establish a GHG reduction target relative to regional transportation impact, and to develop and evaluate design solutions that contribute to achieving program and state-wide climate goals.
11. A commitment to evaluate program design options according to their impact on equity priority areas with screening criteria such as air quality, land use, travel reliability, safety, and improved access to all transportation modes and active transportation facilities. The Program also commits to measurable and actionable equity outcomes and to the development of a robust set of programs and improvements that will be defined in Community Benefits Agreement.

## 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 north-south 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 bi-state 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 equity-priority 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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# IBR Recommended Modified LPA

The Interstate Bridge Replacement (IBR) program's Modified LPA identifies the foundational elements local agency partners agree should move forward for further evaluation through the environmental process in compliance with the National Environmental Policy Act (NEPA).

Other components expected to be included in the Modified LPA include additional corridor interchange improvements, replacement of the North Portland Harbor Bridge, active transportation improvements, variable rate tolling, and the continuation of the C-TRAN express bus service and current/future BRT lines.

The IBR program's Modified LPA recommendation is based on work completed since 2019 including climate and equity frameworks; screening results and modeling data; and input and feedback from partner agencies, program advisory groups, and the broader community. Targeted community engagement efforts to gather feedback on design options that helped inform the recommendation have included an online community survey with over **9,600 responses**, **300+ listening session participants** across multiple sessions, four Community Working Groups, over **two dozen** public meetings from the program's steering and advisory groups since fall of 2021, and a community opinion survey.

## IBR Recommendation: Modified LPA

- |   |  |
|---|--|
| Hayden Island:<br><b>Partial Interchange</b>        | River Crossing<br>Auxiliary Lanes:<br><b>1</b> |
| Transit:<br><b>Light Rail to Evergreen near I-5</b> | Variable Rate Tolling:<br><b>Yes</b>           |



*Visualization is intended as a high-level example for illustration purposes only and does not reflect property impacts or indicate that decisions on design options have been made.*

### Partial Interchange Summary

Hayden Island Drive local-only trips and Tomahawk Island Drive extension increase Hayden Island east-west connectivity

Smaller interchange leaves space for a comfortable pedestrian environment and opportunities for open space

Addresses safety and congestion by improving active transportation, adding shoulders, increasing lane widths and improving ramp merges

### Benefits of Expanding LRT from Expo to Evergreen

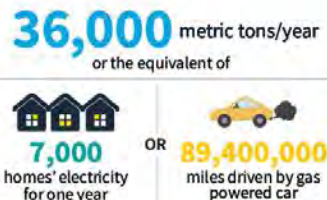


### Equity - Jobs Accessible via Transit (% Increase)\*



\*Increase in jobs accessible from the program area within a 45 minute midday transit ride. Percent increase determined by adding LRT Expo to Evergreen compared to 2045 No Build.

### Climate - GHG Reduction\*



\*GHG reduction is an estimate calculated from the displacement (or avoidance) in the shift from cars to transit.

### Strategies to Combat Climate Change

- Demand Management, including Variable Rate Tolling (tolling will consider price reductions for low-income users and low-carbon vehicles)
- Increase traffic operation efficiencies (ramp metering and auxiliary lanes)
- Mode shift from cars to active transportation and transit
- Low-carbon emission construction strategies



## Transit Recommendation:

Connect existing transit systems by extending light rail from Portland to Vancouver.

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. With a terminus near Evergreen Blvd. and adjacent to I-5, property impacts and disruptions to downtown Vancouver will be minimized.

### This recommendation offers:

- ▶ More competitive travel times
- ▶ A higher capacity of riders per trip
- ▶ Improved access to jobs and services
- ▶ More competitive and higher amounts of FTA discretionary funding for this project
- ▶ Strong community support
  - *Priorities expressed in community feedback included a desire for transit options that improve connectivity across the river, ease of access for a variety of users, and transit travel time/reliability*

## Hayden Island/Marine Drive Configuration Recommendation:

Partial interchange at Hayden Island and a full interchange at Marine Drive.

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.

### This recommendation offers:

- ▶ Access to Hayden Island through direct ramps at Jantzen Drive for I-5 traffic coming from the north
- ▶ Access to Hayden Island to/from the south with an upgraded interchange at Marine Drive and a local bridge connection between Marine Drive and Hayden Island
- ▶ The opportunity to reconnect local streets under I-5 improving east/west connectivity
- ▶ A smaller footprint over Hayden Island and separation of local traffic from freeway traffic
- ▶ A smaller footprint over the North Portland Harbor resulting in fewer property impacts
- ▶ Integration of community feedback prioritizing congestion relief on I-5 near Hayden Island, safe intersections and road improvements, and convenient access to services

## Auxiliary Lane Recommendation:

Include one auxiliary lane northbound and one auxiliary lane southbound between Marine Drive and Mill Plain Blvd.

An addition of auxiliary lanes can help optimize the existing 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.

Studying one auxiliary lane in each direction during the environmental process 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.

### This recommendation offers:

- ▶ Improved travel times
  - *Southbound morning traffic 5% faster (3 minutes) between I-5/I-205 split and I-405*
  - *Northbound evening traffic 30% faster (11 minutes) Broadway Ave and SR-500*
- ▶ Reduced congestion during off-peak travel periods and safer travel by improving visibility and decreasing collisions that occur when vehicles change lanes and enter/exit the freeway
- ▶ Strong community support
  - *Community engagement feedback has expressed support for the addition of auxiliary lanes, with both travel time and environmental impacts expressed as important considerations*

## Next Steps

- ▶ **Now - July 2022:** Review of IBR recommended Modified LPA by partner agency boards and councils, with a goal of receiving endorsement from partner agencies and Executive Steering Group by the end of July 2022
- ▶ **Fall 2022:** Begin preparing the environmental documentation, with the goal to submit by 2023

The program is committed to “right-sizing” the bridge replacement investment to best meet the needs of the region. The next phase of work will analyze benefits and impacts of the Modified LPA for public review and comment as part of the environmental process.

Final environmental documentation will be prepared to receive federal approval to reach construction after refinements are made in response to public, partner, and Tribal engagement, as well as additional design analysis. Construction is anticipated to begin as early as late 2025.

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## **6.1 Emerging Transportation Trends: Draft results and recommendations**

*Information/Discussion Items*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022

# JPACT Worksheet

**Agenda Item Title:** Emerging Transportation Trends Study: Draft Final Report

**Presenters:** Eliot Rose, Senior Transportation Planner, Metro and Margi Bradway, Deputy Director of Transportation Planning and Research, Metro

**Contact for this worksheet/presentation:** Eliot Rose, [eliot.rose@oregonmetro.gov](mailto:eliot.rose@oregonmetro.gov), 503.927.9685

**Purpose/Objective:** Staff seek questions and feedback from JPACT on the draft results of the Emerging Transportation Trends Study, and input on how the results of this Study should inform the 2023 Regional Transportation Plan (RTP) update process.

**Outcome:** JPACT provides feedback to the project team about the draft Study results and how these results should be addressed during the RTP update.

## **What has changed since JPACT last considered this issue/item?**

Metro staff signed a contract with the consultant team that is conducting the Emerging Transportation Trends Study in August 2021. The study is organized into three phases:

1. Researching potential trends and determining which ones to focus on
2. Analyzing the impacts of those trends on travel behavior and RTP goals
3. Conducting further research and analysis on how the RTP can address these trends

Metro staff and members of the consultant team presented on the first phase of the project and collected feedback from JPACT on which trends the Study should focus on in September 2021, and shared a draft analysis of the impacts of the selected trends on regional goals in February 2022.

Since then, the project team has been working to: Develop fact sheets that summarize the story, research and data, and impacts associated with each trend for decision-makers. These fact sheets address input and clarifying questions we received from JPACT, Metro Council and technical committees in February 2022. A draft of these fact sheets is attached.

In addition, the project team has completed three follow-up tasks that were identified based on the feedback received in February. Below we describe those tasks, including how they are grounded in feedback from Council and stakeholders and key findings to date. The attached technical memo describes the analysis and draft findings from these tasks in more detail.

**Scenario analysis:** The prior tasks in this project analyzed each trend on an individual basis, and estimated impacts based on the best research and data available. When we presented the results, stakeholders observed that different trends are inter-related (for example, higher levels of teleworking could lead to lower levels of transit service and ridership if the transit system continues to focus on serving commuters) and that each trend could potentially have a wide range of impacts depending on how lasting recent changes in travel behavior turn out to be. The analysis examines a range of scenarios that represent different assumptions about how the trends explored in this study will persist into the future – for example, one assumes that current levels of teleworking, online shopping, and other trends continue into the future, while another assumes that people return to their pre-pandemic habits. It then quantifies the impacts on vehicle miles traveled (VMT) per capita and transit ridership for each scenario in order to estimate how VMT per capita and transit ridership – which are important performance measures in the RTP – may vary

from the estimates in the RTP depending on how these trends unfold. This can help the region understand whether the RTP is likely to meet its performance targets in the face of uncertainty around what travel behavior will look like in the future.

**Arterial traffic analysis:** Throughout the Emerging Transportation Trends Study we have shared data about how highway traffic volumes and transit ridership have been changing. These data are consistently collected and reported by ODOT, TriMet, SMART and other agency partners. However, we have not had access to the same high quality of data on how arterial traffic volumes are changing. Metro's agency partners often conduct arterial counts at key points in the planning process, but rarely do so regularly and consistently in a way that would allow us to monitor how traffic is changing over time. Stakeholders have noted the absence of this arterial data and its importance in understanding how travel patterns are changing in the region. Arterial data can be more representative of how people in the region are traveling than highway data, because highways carry a higher proportion of people and goods that are passing through the region on route to other destinations. Arterials are also a key area of focus for the RTP since they are the streets where most transit runs, where most crashes occur, and where many jobs and other destinations are located. The project team collected data from 2019-21 for 20 different arterial locations in the region, and then compared changes in arterial traffic to changes in highway volumes and transit ridership along the same corridor to paint a more complete picture of how transportation has changed on these corridors.

**Draft RTP guidance:** Based on the draft findings from the Emerging Trends Study and their knowledge of how regional agencies are responding to these trends, the consultant team has identified seven opportunities to respond to these trends for Metro and its partners to pursue during the development of the RTP. For each opportunity, the team identified ways to implement the opportunity during the RTP process.

**What packet material do you plan to include?**

- Emerging Transportation Trends draft fact sheets
- Emerging Transportation Trends draft technical memo

# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: June 2<sup>nd</sup>, 2022  
To: Metro Joint Policy Advisory Committee on Transportation (JPACT)  
From: Eliot Rose, Senior Transportation Planner  
Subject: Emerging Transportation Trends draft final report: technical memo

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## **Introduction**

The COVID-19 pandemic and other recent disruptions significantly changed travel patterns in the Portland region. Metro’s Emerging Transportation Trends study seeks to understand how these changes could continue to impact transportation moving forward in order to ensure that the next update to the Regional Transportation Plan meets the shifting needs of people in the region.

Based on feedback from stakeholders during February 2020 presentations on the draft analysis of the impacts of emerging trends, the project team identified three follow-up tasks to complete the project:

1. A scenario analysis that estimates the range of impacts of the trends included in this study could have on vehicle travel and transit ridership.
2. An analysis of arterial traffic data that examines in more detail how travel behavior on some of the region’s key mobility corridors changed during the past several years.
3. Guidance how Metro and its agency partners can address emerging trends during the 2023 Regional Transportation Plan update.

Below we describe those tasks, including how they are grounded in the feedback we received and in prior results from this study. The findings and recommendations are in preliminary draft form and have not yet been presented to Metro technical committees.

## **Scenario analysis**

The prior tasks in the Emerging Trends Study analyzed each trend that was included in the study individually, and estimated impacts based on the best research and data available (see the Emerging Transportation Trends Study Fact Sheets, which are attached separately with the materials for this item). When we presented the results, stakeholders observed that different trends are inter-related (for example, higher levels of teleworking could lead to lower levels of transit service and ridership if the transit system continues to focus on serving commuters), and that each trend could potentially have a wide range of impacts depending on how lasting recent changes in travel behavior turn out to be.

This scenario analysis estimates how vehicle miles traveled (VMT) and transit ridership – which are two key indicators that we use to measure progress on climate, travel choices, safety and other regional goals – could vary depending upon how emerging trends unfold. It also estimates changes in morning peak congestion since congestion is a consideration for many transportation projects in the region, and research suggests that teleworking and other trends have impacts on peak travel.

## Defining scenarios

The analysis quantifies VMT and transit ridership under three different scenarios, each of which represents different assumptions about how the trends explored in this study will persist into the future. Metro staff and the project consultant team, Fehr and Peers, developed three different scenarios that represented a range of different possible futures. We used Fehr and Peers' TrendLab+ scenario planning tool – which applies national and regional research and data to estimate the impact of changing travel behaviors on outcomes including VMT, greenhouse gas emissions, transit ridership, and congestion – to quantify the impacts of each scenario. TrendLab+ uses inputs identified in the underlying research and data to define scenarios. Below we describe each scenario and which values we used when inputting the scenario into TrendLab+.

**Return to Pre-pandemic:** This scenario treats the pandemic as an anomaly and assumes that people will resume their pre-pandemic behavior as society reopens. Under this scenario, behaviors like teleworking and online shopping return to 2019 levels in the coming year, and continue to grow at pre-pandemic rates (i.e., the same growth as the region was seeing between 2015 and 2019) thereafter. Table 1 summarizes these assumptions.

*Table 1: Return to Pre-pandemic scenario assumptions*

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	9%	10%	11%	15%
	Percent of employees who leave the workforce <sup>1</sup>	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	12%	13%	18%	31%
Car Ownership	Percent of households with cars <sup>1</sup>	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	15%	7%	3%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90%	94%	105%	138%

<sup>1</sup> Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

**Transformative Trends:** This scenario treats the pandemic as a transformative event that will continue to alter people's behavior. It assumes that the trends observed during the



pandemic will continue into the future. Under this scenario, behaviors like teleworking and online shopping stabilize at current levels in the coming year and continue to grow at current rates (i.e., the rates of change observed between mid-2020 and mid-2022) thereafter. Table 2 summarizes these assumptions.

*Table 2: Transformative Trends scenario assumptions*

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	15%	19%	25%	31%
	Percent of employees who leave the workforce <sup>1</sup>	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	18%	32%	43%	58%
Car Ownership	Percent of households with cars <sup>1</sup>	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	20%	14%	7%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90.0%	112%	131%	151%

<sup>1</sup> Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

**New Status Quo:** This scenario treats the pandemic as an event that led to significant one-time changes in people's behavior, and assumes that we will not see the same kind of rapid evolution in travel patterns moving forward as we saw during the pandemic. Under this scenario, behaviors like teleworking and online shopping stabilize at current levels in the coming year and continue to grow at pre-pandemic rates thereafter.

Table 3: New Status Quo scenario assumptions

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	13%	13%	14%	19%
	Percent of employees who leave the workforce <sup>1</sup>	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	16%	25%	30%	45%
Car Ownership	Percent of households with cars <sup>1</sup>	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	15%	10%	5%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90%	112%	131%	151%

<sup>1</sup> Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

### Draft results

Figure 1, Figure 2, and Figure 3 below show TrendLab+ estimates of transit ridership and VMT per capita for each of the three scenarios described above. All of these metrics are indexed to pre-pandemic levels; i.e., we show the percent change in each metric compared to 2019 values. It is important to note that these estimates do not account for the many projects and policies under consideration in the region that could influence these outcomes, such as congestion pricing and planned capital projects. We will account for these impacts in more detail during the 2023 RTP update. The Emerging Transportation Trends Study focuses on understanding the impact of external forces so that Metro and its partners can assess whether these projects and policies adequate to meet regional goals during the RTP update.

Figure 1: Forecasted change in transit ridership by scenario

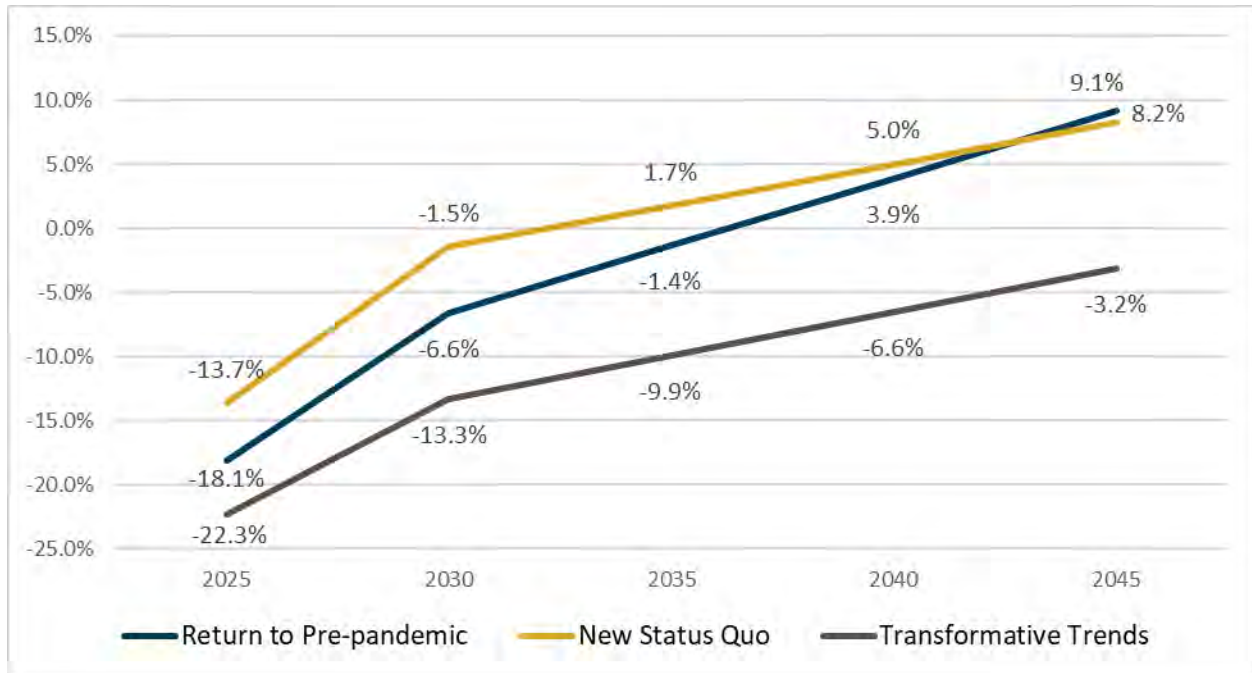


Figure 2: Forecasted change in VMT per capita by scenario

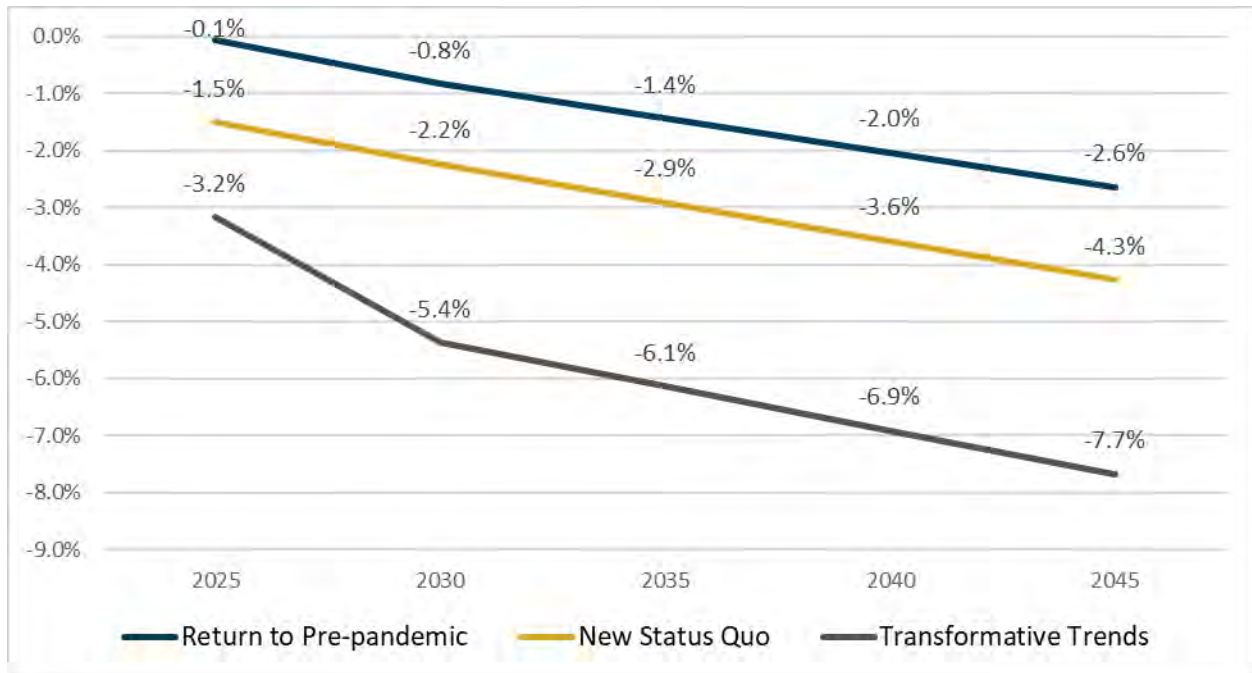
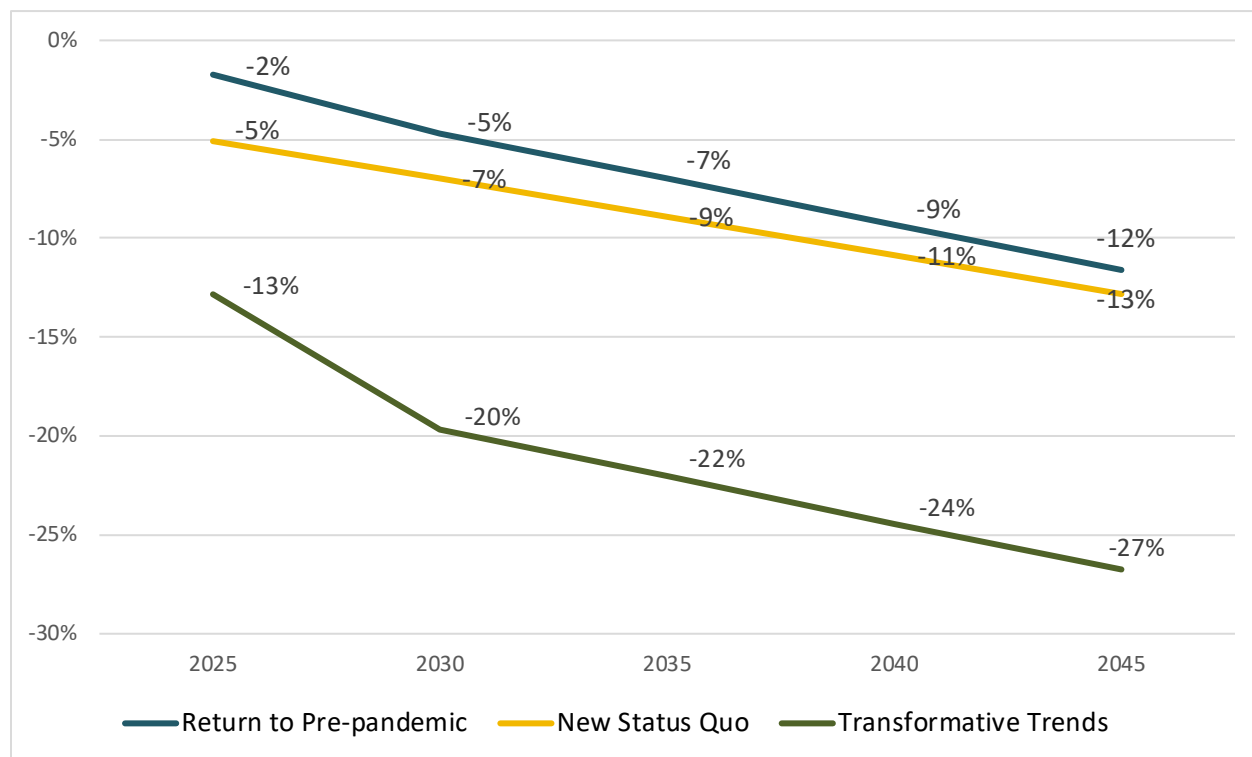


Figure 3: Forecasted change in morning peak congestion by scenario



**Emerging trends help to reduce VMT per capita.** Forecasted VMT per capita decreases under all scenarios, by between 2.6% (Return to Pre-pandemic) and 7.7% (Transformative Trends) in 2045. This represents partial progress toward the region’s target to reduce VMT per capita to 35 percent by 2045.<sup>1</sup> The more that current trends – particularly teleworking (see below) – persist, the lower VMT per capita is likely to be.

**Emerging trends could reduce or increase transit ridership compared to pre-pandemic levels.** Transit ridership is and service is currently below pre-pandemic levels due to challenges hiring drivers and the ongoing impact of the pandemic. As of February 2022, TriMet ridership was at roughly half of pre-pandemic levels.<sup>2</sup> All scenarios project that transit ridership will increase significantly above current levels. Over the short term, all scenarios forecast that ridership will return to between 14 and 22% below pre-pandemic levels between now and 2025 as TriMet restructures service and hires more drivers, and over the long-term all scenarios forecast that transit ridership will continue to increase. However, these increases are not necessarily enough to restore pre-pandemic ridership levels, both because transit service and ridership declined so steeply during the pandemic and because our analysis assumes that some former riders will not return to transit due to health concerns and/or shifting travel needs. Comparing results to 2019 levels, we see transit ridership increasing under some scenarios and decreasing under others, ranging from a 3.2% decrease (Transformative Trends) to a 9.1% increase (Return

<sup>1</sup> VMT targets can be found at Oregon Department of Land Conservation and Development, Climate-Friendly and Equitable Communities Rulemaking Advisory Committee, RAC 11 item 10: Proposed Amendments to Division 44, January 11, 2022, p. 7. [https://www.oregon.gov/lcd/LAR/Documents/2022-01\\_Div44.pdf](https://www.oregon.gov/lcd/LAR/Documents/2022-01_Div44.pdf). In addition to the 2045 target, the Metro region has a target to reduce VMT per capita by 20 percent by 2035.

<sup>2</sup> <http://www.trimet.org/about/performance.htm>

to Pre-pandemic) in 2045. The more that current trends persist, the lower transit ridership is likely to be.

**Congestion during the morning peak period declines under all scenarios**, by between 12% (New Status Quo) and 27% (Transformative Trends). This is due to teleworkers replacing peak period commute trips with errands throughout the day, and declining VMT; small increase in VMT can significantly reduce congestion when roads are operating at or near peak capacity, as was the case many areas of the region prior to the pandemic. As the data in the next section illustrates, travel has declined more during the weekday AM peak period than any other time period.

**Teleworking has a significant influence on outcomes.** Teleworking reduces VMT, because teleworkers typically replace long commute trips with shorter trips throughout the day, but it leads to even bigger reductions in transit ridership, because currently people are roughly 50% more likely to use transit for commuting than for other trips. Our forecasts assume that the transit system continues to focus on serving commutes; reconfiguring the network to focus on other trips could help maximize both teleworking and transit ridership, as well as the resulting VMT reductions.

Table 4 below summarizes the range of impacts associated with each of the four metrics discussed above. These ranges represent the uncertainty that emerging trends create for these outcomes, which are critical to measuring progress toward regional goals. During the system-level performance analysis of the RTP we can use these factors to identify the range of uncertainty associated with different performance measure and assess how likely the region is to meet its performance targets given the different ways in which emerging trends could continue to unfold.

*Table 4: Uncertainty ranges for key transportation metrics*

<b>Metric</b>	<b>Range</b>
VMT per capita	-2.6% to -7.7%
Transit ridership	-3.2% to +9.1%
AM peak period congestion	-12% to -27%

### **Arterial traffic analysis**

Throughout the Emerging Transportation Trends Study we have shared data about how highway traffic volumes and transit ridership have been changing. These data are consistently collected and reported by ODOT, TriMet, SMART and other agency partners. However, we have not had access to the same high quality of data on how arterial traffic volumes are changing. Metro's agency partners often conduct arterial counts at key points in the planning process, but rarely do so regularly and consistently in a way that would allow us to monitor how traffic is changing over time. Stakeholders have noted the absence of this arterial data and its importance in understanding how travel patterns are changing in the region. Arterial data can be more representative of how people in the region are traveling than highway data, because highways carry a higher proportion of people and goods that are passing through the region on route to other destinations. Arterials are also a key area of focus for the RTP since they are the streets where most transit runs, where most crashes occur, and where many jobs and other destinations are located.

### Arterial locations and data source

The project team purchased data from Streetlight, which estimates traffic volumes based on data from cell phones and other sources, for this analysis. The project budget allowed us to purchase data for 20 arterial count locations. Three factors drove the selection of these locations:

**Aligning with ODOT automated traffic recorders:** we selected arterial locations that paralleled stretches of highways where ODOT has installed automated traffic recorders (ATRs) that continuously monitor traffic counts; these ATRs have supplied the data on highway volumes that we have previously shared in the Emerging Trends study. Aligning arterial count locations with a subset of ATR locations allows us to validate Streetlight data against the ATR data<sup>3</sup> and ensure the two sources are comparable, and also to compare counts between arterials and highways located along the same corridor.

**Representing regional mobility corridors:** Metro has defined a set of mobility corridors throughout the region that connect different regional centers, and commonly uses these corridors in transportation analysis. Most of the locations we selected are on a geographically representative set of mobility corridors throughout the region. This enables us to compare highway, arterial, and transit data and paint a more complete picture of how travel is changing along these corridors. For longer arterials that pass through the region, like Powell Boulevard and TV Highway, we selected several count locations along their length in order to examine how traffic changes as they pass through different communities.

**Capturing freight routes:** One of the trends under study is the increase in online shopping, and some of the data we have reviewed in previous tasks suggests that goods kept moving through the region during the pandemic, even as people took fewer trips. We included several count locations along freight routes so that we could monitor how travel to and from some of the region's growing transportation, warehousing and industrial areas is changing. In particular, we included several freight routes along freight-heavy arterials that do not have parallel ATRs; these are locations where changes in total traffic volume are more likely to be driven by changes in freight trips.

Table 5 summarizes the count locations used in this analysis.

*Table 5: Summary of arterial count locations*

Count location	Mobility corridor	Parallel ATR	Freight route?
NE Martin Luther King Blvd. @ NE Ainsworth St.	1: Portland to Vancouver	I-5 @ N Ainsworth St.	N
N. Interstate @ N Ainsworth St.	1: Portland to Vancouver	I-5 @ N Ainsworth St.	Y
SW Barbur Blvd. @ SW Capitol Hwy.	2: Portland to Tigard	I-5 @ Capitol Hwy.	N

<sup>3</sup> In addition to collecting Streetlight data from arterial count locations, we also collected Streetlight data for the same highway count locations captured by the ATRs in the Portland region. We found that the average error between the Streetlight and ATR data was 0% for 2019 and -1% for 2020. Except for 3 outliers, the Streetlight values were within +/- 15% of the ATR values for the 40 observations included in the validation dataset. We repeated this exercise with volume data from INRIX, another private transportation data source that ODOT makes available to transportation agencies in Oregon, and found that INRIX consistently overestimated traffic volumes during 2020, by an average of 15%. This led us to opt to use Streetlight instead.

Count location	Mobility corridor	Parallel ATR	Freight route?
NE Halsey Blvd. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
NE Sandy Blvd. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
SE Stark St. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
NW Marine Dr. @ NW Frontage Rd.	6: Gateway to Troutdale	N/A	Y
NE 82nd Ave. @ NE Halsey St.	7: Gateway to Clark County	I-205 @ SE Washington St.	N
SE 82nd Avenue @ SE Foster Rd	8: Gateway to Oregon City	I-205 @ SE Steele St.	N
SE 122nd Avenue @ SE Foster Rd	8: Gateway to Oregon City	I-205 @ SE Steele St.	N
99W @ SW 124th Ave.	11: Tigard to Sherwood	I-5 @ SW Wilsonville Rd.	Y
NW Cornell Rd. @ 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	N
SW TV Hwy. @ SW 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	Y
SW Farmington Rd. @ SW 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	Y
SW TV Hwy. @ SE Brookwood Ave.	14: Beaverton to Hillsboro	N/A	Y
N Columbia Blvd. @ N Portland Rd.	17: Rivergate to I-5	N/A	Y
SE Powell Blvd. @ E end of Ross Island Br.	19: Portland to Lents	I-405 @ Marquam Br.	Y
W Powell Blvd. @ NE Hogan Dr.	20: Lents to Gresham	N/A	Y
OR 212 @ SE 98th	23: Clackamas to Damascus	OR-224 @ SE Mather Rd.	Y
OR 212 @ SE 172nd	23: Clackamas to Damascus	N/A	Y

For each of the locations listed above, we collected data for October 2019, 2020 and 2021. We focused on the month of October because it was during fall/spring instead of during summer/winter, when vacations influence travel patterns, and because October 2021 was one of the most recent months for which data was available at the time when we made the purchase. However, there are reasons why October may not be representative of normal travel conditions; new COVID-19 cases were high but declining from the peak of the Delta variant in October 2021, and the Labor Day wildfires of 2020 continued to impact travel into October of that year.<sup>4</sup>

## Results

Comparing changes during different time periods

We examined how traffic volumes on the arterials studied changed by time of day (AM/PM peak, midday) and by day of week (weekday vs. weekend). Table 6 below summarizes how volumes changed between October 2019 and 2021 for the various time periods studied, by arterial. All values in the table are indexed to October 2019; i.e., they show the percentage change in traffic volumes between October '19 and '21.

<sup>4</sup>Though it was useful to have 2020 data for performing validation, we focus on comparing 2019 and 2021 data in our analysis, so the impact of the 2020 wildfires does not influence the results shown in this memo.

*Table 6: Percent change in study arterial volumes by time period*

Segment	Weekday All day 2019 to 2021 Change	Weekday 2019 to 2021 Change			Weekend 2019 to 2021 Change		
		AM Period	Midday Period	PM Period	AM Period	Midday Period	PM Period
NE Martin Luther King Blvd. @ NE Ainsworth St.	-14%	-17%	-7%	-16%	1%	-4%	-7%
N. Interstate @ N Ainsworth St.	-14%	-28%	-18%	14%	-30%	-13%	-20%
SW Barbur Blvd. @ SW Capitol Hwy.	-23%	-36%	-9%	-27%	22%	4%	14%
NE Halsey Blvd. @ NE 148th Ave.	-16%	-30%	-11%	-12%	-21%	-7%	2%
NE Sandy Blvd. @ NE 148th Ave.	-14%	-26%	-6%	-17%	-14%	4%	-9%
SE Stark St. @ NE 148th Ave.	-14%	-23%	-16%	-12%	27%	0%	8%
NW Marine Dr. @ NW Frontage Rd.	-6%	-16%	-2%	-9%	22%	12%	16%
NE 82nd Ave. @ NE Halsey St.	-17%	-25%	-12%	-18%	-17%	-6%	-6%
SE 82nd Avenue @ SE Foster Rd	-13%	-25%	-13%	-3%	-18%	-5%	-6%
SE 122nd Avenue @ SE Foster Rd	-9%	-21%	-8%	-5%	-30%	-19%	-1%
99W @ SW 124th Ave.	-12%	-26%	-4%	-12%	-8%	-1%	3%
NW Cornell Rd. @ 185th Ave.	-18%	-34%	-11%	-13%	1%	-5%	-3%
SW TV Hwy. @ SW 185th Ave.	-10%	-8%	-9%	-10%	-11%	6%	-4%
SW Farmington Rd. @ SW 185th Ave.	-13%	-22%	-6%	-9%	-21%	-7%	2%
SW TV Hwy. @ SE Brookwood Ave.	-14%	-22%	-12%	-16%	-11%	-3%	-1%
N Columbia Blvd. @ N Portland Rd.	-16%	-32%	-6%	-20%	-19%	-15%	-3%
SE Powell Blvd. @ E end of Ross Island Br.	-18%	-28%	-13%	-19%	1%	-4%	-1%
W Powell Blvd. @ NE Hogan Dr.	-9%	-14%	-4%	-5%	-6%	-11%	-2%
OR 212 @ SE 98th	-9%	-12%	-14%	-10%	-4%	-3%	3%
OR 212 @ SE 172nd	-6%	-11%	9%	-13%	-18%	-7%	-2%
<b>Average</b>	<b>-13%</b>	<b>-23%</b>	<b>-9%</b>	<b>-12%</b>	<b>-8%</b>	<b>-4%</b>	<b>-1%</b>

As of October 2021, **weekday arterial volumes were below pre-pandemic levels throughout the day at almost every location studied.** Weekend results were more scattered; traffic increased on some arterials and fell on others.

**Arterial traffic decreased most significantly (by an average of 23%) during the weekday morning peak, followed by the weekday evening peak (by an average of 12%).** This observation is consistent with research finding that teleworkers are more likely to run errands in the afternoon than in the morning. It is significant since many transportation projects and policies in the region focus on managing high levels of travel demand – and the congestion, safety risks, and emissions that come from that demand.

The locations where peak demand fell the least are freight corridors in suburban areas of the region (e.g., Farmington Rd., OR 212, outer Marine Drive and outer Powell). There are several potential explanations for this, including:



- Goods kept moving during the pandemic, so freight traffic may have remained high on these routes.
- Traffic volumes have rebounded more in other parts of Oregon than in the Portland region, and trips through / into / out of the region could be driving up volumes in locations at the edge of the region.
- These corridors serve communities where incomes are lower, and people with low incomes are more likely to have in-person jobs.
- There are fewer travel options in these areas, which makes residents more likely to rely on cars.

Comparing changes in arterial highway, arterial, and transit use

Many of the arterial locations that we studied carry transit and/or are aligned with traffic counters on parallel highways. We combined transit and highway data at these locations to get a more complete picture of how travel is changing along our study corridors. Though we do not have a large enough dataset to examine in detail how regional travel patterns are changing, having consistent data for this set of locations allows us to make an “apples-to-apples” comparison of regional trends in highway, arterial and transit use. Table 7 summarizes arterial, highway, and transit volume changes by corridor, and Figure 3 displays this data on a map.

Table 7: Percent change in weekday highway, arterial, and transit use, 2019-21, by corridor/location

Highway	Parallel Arterial	Highway <sup>1</sup>	Parallel Arterial <sup>2</sup>		Transit Ridership <sup>3</sup>	
		Percent Change	Percent Change	Average of Parallel Routes	Percent Change in Stop Ridership	Average of Parallel Routes
<i>Locations with highway, arterial, and transit data</i>						
OR-224 @ SE Mather Rd.	OR 212 @ SE 98th Ave.	0%	-9%	-9%	-43%	-43%
I-5 @ SW Capitol Hwy.	SW Barbur Blvd. @ SW Capitol Hwy.	-10%	-23%	-23%	-70%	-70%
I-205 @ SE Steele St.	SE 82nd Ave. @ SE Foster Road	-1%	-13%	-11%	-42%	-45%
	SE 122 Ave. @ SE Foster Road		-9%		-48%	
I-84 @ NE 148th Ave.	NE Sandy Blvd. @ NE 148th Ave.	-1%	-14%	-15%	-35%	-41%
	NE Halsey Blvd. @ NE 148th Ave.		-16%		-46%	
	SE Stark St. @ NE 148th Ave.		-14%		-43%	
I-5 @ Hayden Island <sup>4</sup>	NE Martin Luther King Blvd. @ NE Ainsworth St.	-3%	-14%	-14%	N/A <sup>5</sup>	-34%
	N Interstate @ N Ainsworth St.		-14%		-34%	
I-5 @ SW Wilsonville Rd.	99W East of SW 124th Ave.	-7%	-12%	-12%	-21%	-21%
US-26 @ NW 170th Ave.	NW Cornell Rd. @ SW 185th Ave.	-10%	-18%	-14%	-32%	-37%
	SW TV Hwy @ SW 185th Ave.		-10%		-48%	
	SW Farmington Rd. @ SW 185th Ave.		-13%		-32%	
<b>Average</b>		<b>-5%</b>	<b>-14%</b>		<b>-41%</b>	
<i>Locations with arterial and transit data only</i>						
N/A	NE 82nd Ave. @ NE Halsey St.	N/A	-17%	-17%	-40%	-40%
	N Columbia Blvd. @ N Portland Rd.		-16%	-16%	N/A <sup>5</sup>	N/A
	NW Marine Dr. @ NW Frontage Rd.		6%	6%	N/A <sup>5</sup>	N/A
	OR 212 @ SE 172nd Ave.		-6%	-6%	N/A <sup>5</sup>	N/A
	SE Powell Blvd. @ E end of Ross Island Bridge.		-18%	-18%	-84%	-84%
	W Powell Blvd. @ NE Hogan Dr.		-9%	-9%	-17%	-17%

<sup>1</sup> Highway data comes from ODOT's Automatic Traffic Recorders (ATR) and is a comparison of October 2019 and October 2021 volumes.

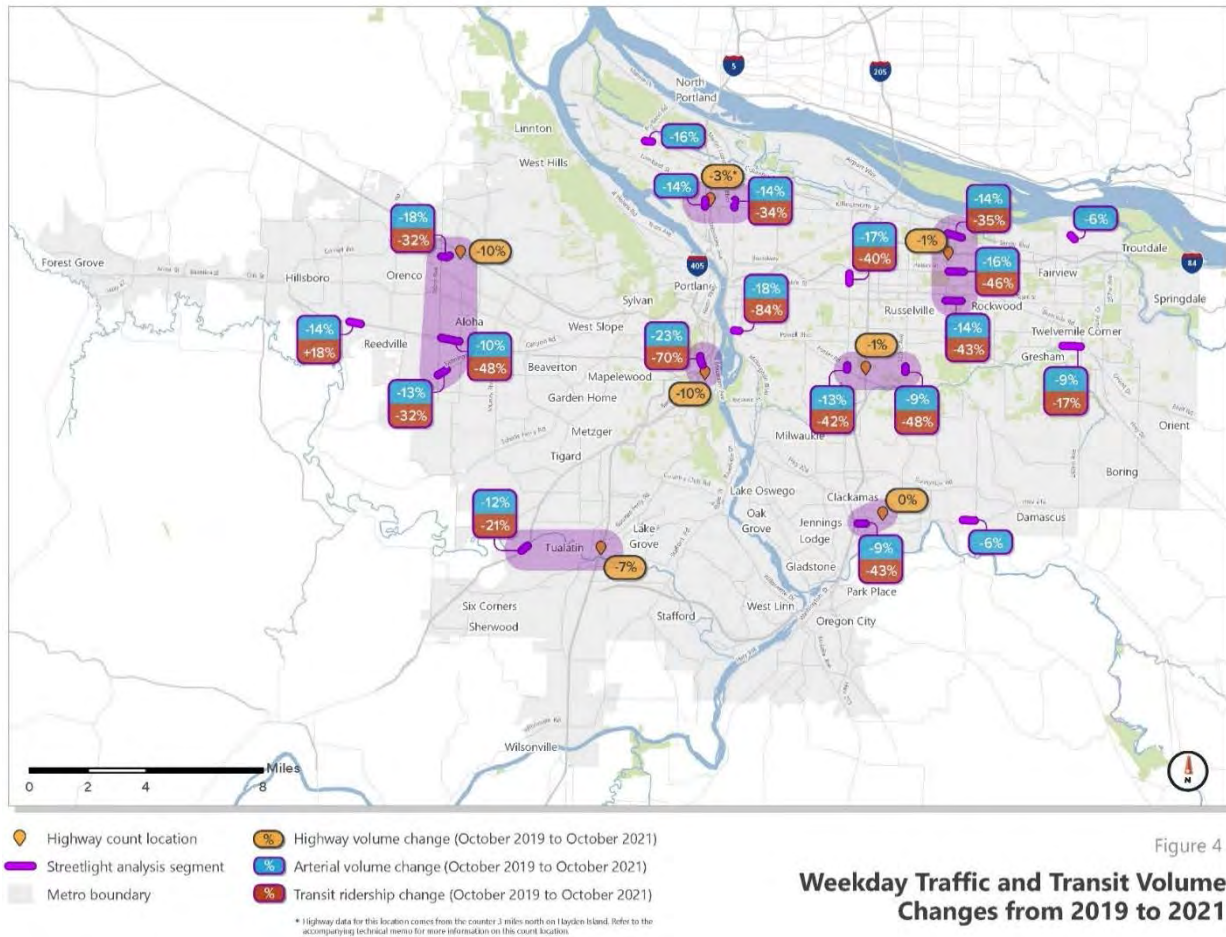
<sup>2</sup> Arterial data comes from Streetlight, Inc. and is a comparison of October 2019 and October 2021 volumes.

<sup>3</sup> Transit ridership data comes from TriMet quarterly Automatic Passenger Counters (APC) and is a three month average of weekday boardings/alightings from Fall 2019 and Fall 2021.

<sup>4</sup> I-5 @ N Ainsworth St. was one of 3 ATR locations used in this analysis that did not have complete data for October 2019, 2020, and 2021; we were able to use these locations in validation but not in the results. (The other two locations were I-205 @ SE Washington St. and I-405 @ Marquam Br.) Since I-5 from Portland to Vancouver is a high-volume corridor with several future projects planned and we had two parallel arterial count locations we prioritized collecting ATR data for this location. After comparing data from the I-5 @ N Ainsworth ATR with data from the Hayden Island ATR, roughly 3 miles to the north, we determined that the Hayden Island ATR was a valid proxy for the I-5 @ N Ainsworth ATR.

<sup>5</sup> N/A (not applicable) indicates that no transit routes serve the arterial count location in question.

Figure 4: Percent change in highway, arterial, and transit use (average all-day travel volumes), 2019-21, by location



On average, across the study corridors:

- **Daily highway trips decreased by five percent.**
- **Daily arterial trips decreased by 14 percent.**
- **Daily transit ridership decreased by 41 percent.**

In almost every location studied, **arterial volumes have decreased more significantly from pre-pandemic levels than highway volumes have.** Potential explanations for this include:

- Highways carry more freight trips (which have held steady during the pandemic) and trips through the region (which have fallen less than trips within the region).<sup>5</sup>
- Traffic is flowing more freely on highways due to below-normal volumes, which means that fewer drivers divert off of the freeway onto arterials to avoid traffic.

**Transit volumes are further below pre-pandemic levels in locations closer to the center of the region.** Potential explanations for this include:

<sup>5</sup> According to ODOT's COVID-19 traffic reports, highway volumes in other areas of Oregon have returned to, and in some cases exceeded, pre-pandemic levels, while they are still slightly below normal in the Portland region.

- Transit ridership and service levels are generally lower in suburban areas of the region, and a higher proportion of riders in these areas could be transit-dependent riders who continued to rely on transit throughout the pandemic.
- Commutes fell throughout the region, and some data suggests that trips to Downtown Portland fell more precipitously than in other regional downtowns. The two study locations where transit ridership declined the most – at SW Barbur and Capitol Highway and SE Powell at the Ross Island Bridge – involve transit routes that carry people into downtown.
- Incomes are generally higher toward the center of the region, and workers with higher incomes are more likely to be able to telework, so teleworking may be competing more with transit in communities at the center of the region.

### **Draft RTP guidance**

Based on the draft findings from the Emerging Trends Study and their knowledge of how regional agencies are responding to these trends, the consultant team has identified seven opportunities to respond to these trends for Metro and its partners to pursue during the development of the RTP. For each of these opportunities, the team has identified *why* the opportunity is important to consider (based on findings from this study) and *how* the region might address the opportunity, both during the short term (through the process of developing the RTP in 2022-23) and the long term (when implementing the RTP in 2024 and beyond). Table 8 below summarizes this draft guidance.

*Table 8: Summary of draft RTP guidance*

Opportunity	Why	How
Prioritize transit ridership recovery	<ul style="list-style-type: none"> <li>Increasing transit service is critical to meeting the region’s climate and equity goals.</li> <li>Transit service and ridership fell dramatically during the pandemic.</li> <li>Lingering health concerns and changing patterns of behavior (e.g., teleworking replacing transit commutes) make some former riders unlikely to return to transit.</li> </ul>	<p>In the short term:</p> <ul style="list-style-type: none"> <li>Reconfigure the transit network to serve changing travel patterns (more midday errands, fewer peak commute trips, continued demand on routes that serve people of color and people with low incomes).</li> <li>Explore new service options to expand coverage in selected areas.</li> <li>Communicate with the public about measures that are underway to keep people safe and healthy when riding transit.</li> <li>If arterial traffic volumes remain low, consider redesigning certain streets to prioritize transit.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>Seek funding to expand the transportation system.</li> <li>Expand the availability and depth of discounts for low income riders.</li> </ul>
Confirm that previously planned high-priority/high cost auto and transit projects meet changing travel demand patterns	<ul style="list-style-type: none"> <li>Many major projects in the region aim to address peak levels of demand. As of the latest data, peak-period trips on the region’s highway, arterial and transit networks are all still below pre-pandemic levels.</li> <li>Teleworking seems likely to remain popular, and teleworkers make fewer trips, particularly during the morning peak.</li> <li>Transportation projects often seek to address peak-period conditions, which is when demand and congestion are the highest.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>Continue to monitor traffic volumes in the region until conditions stabilize.</li> <li>Identify major capital projects in the RTP that are intended to address peak period demand and/or congestion, and review assumptions to ensure that they are consistent with how peak period traffic levels are changing.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>Consider more frequent updates to transportation data sources and Metro’s travel model to keep pace with changing behavior.</li> <li>Increase the focus on managing demand – including accounting for new opportunities like congestion pricing and teleworking – before investing in system expansions.</li> </ul>
Provide more diverse travel options to support changing travel patterns	<ul style="list-style-type: none"> <li>As teleworking increases, travel patterns are less driven by long-distance commutes and more by short-distance errands, school drop-offs and other trips.</li> <li>E-bikes are gaining popularity, and workplace shuttles, and bike/scooter-share are thriving in some parts of the region.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>Develop consistent, comparable information on the benefits and cost-effectiveness of fixed-route transit, shuttles/vanpools, bike/scooter share, and other emerging modes to help identify the best type of service for different communities.</li> <li>Prioritize closing gaps in bike/ped access to transit stations.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>Seek stable funding for shuttles/vanpools, shared mobility, and other emerging travel options.</li> </ul>
Maximize potential VMT reductions from teleworking	<ul style="list-style-type: none"> <li>Teleworkers are more likely to run errands by car throughout the day, potentially offsetting reductions in commute VMT.</li> <li>Employers’ teleworking policies and employees’ reaction to office reopenings both vary widely.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>Consider the potential for mode shifts to teleworking when developing pricing and demand management programs.</li> <li>Consider reallocating transit service to better serve short trips to commercial centers and corridors.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>Coordinate with employers in job centers to balance day-to-day travel using hybrid work schedules.</li> <li>Support innovations that enable more teleworking at employers with a high number of in-person jobs.</li> </ul>

Opportunity	Why	How
Prioritize safe access to transit	<ul style="list-style-type: none"> <li>• Personal safety is a growing concern for many travelers.</li> <li>• Safety is a particular concern for people of color, who are less likely to feel safe while using a variety of modes, including walking and transit.</li> <li>• People feel especially vulnerable when walking to / waiting for transit. Most transit riders report feeling safe when on the bus or train.</li> </ul>	<ul style="list-style-type: none"> <li>• Support equitable and innovative approaches to transportation safety, such as creating response teams trained in mental health and de-escalation.</li> <li>• Identify opportunities for travel options programs to fund lighting and other safety measures.</li> <li>• Improve transit reliability, frequency, and coordination to minimize the time riders spend waiting for transit.</li> </ul>
Plan for the changing role of freight	<ul style="list-style-type: none"> <li>• Freight played an increased role in shaping travel demand during the pandemic; goods continued to move even as people traveled less.</li> <li>• Increased online shopping is changing how goods move through our region.</li> <li>• Delivery trips have been concentrated in central cities. Some cities have used curb and parking management to manage conflicts between delivery vehicles and other modes.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>• Increase data collection on freight, goods movement, and delivery activity.</li> <li>• Improve freight models and analysis tools.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>• Expand the use of parking management in regional centers.</li> </ul>
Accelerate the adoption of electric bicycles, scooters, and shared vehicles.	<ul style="list-style-type: none"> <li>• Electric bicycles and scooters are becoming more popular, more affordable, and more efficient for longer trips.</li> <li>• Shared e-bike and scooter systems can be effective in providing affordable access to these modes</li> <li>• Oregon’s current transportation electrification programs focus overwhelmingly on electric cars and trucks. EV buyers are eligible for State rebates; e-bike buyers are not.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>• Explore whether recent changes to federal funding sources enable regional programs to subsidize shared EV, bike, and scooter systems.</li> <li>• Advocate for the expansion of state and federal electric vehicle rebate programs to also provide rebates for electric bicycles.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>• Explore the potential to fund larger-scale deployment of shared EVs, bikes, and scooters through discretionary grants.</li> <li>• Coordinate investments in shared mobility with affordable housing investments.</li> <li>• Support transportation system plan updates in addressing shared and electric transportation.</li> <li>• Fund completion of the regional bicycle network.</li> </ul>
Consider digital approaches to providing equitable access to opportunities.	<ul style="list-style-type: none"> <li>• The pandemic both highlighted and elevated the importance of technology in connecting people to jobs, school, and goods.</li> <li>• Low-income people are significantly less likely to be able to telework or shop online.</li> <li>• Low-income people are more likely to face barriers to accessing technology, such as lack of affordable internet access and lack of bank accounts.</li> <li>• It seems likely that teleworking will continue to increase in the future, and that people who are able to telework will be able to apply for more job openings in a broader variety of locations.</li> </ul>	<p>Over the short term:</p> <ul style="list-style-type: none"> <li>• Explore opportunities to fund digital access (e.g., laptops and internet hotspots) or education programs that can help people shop, work, book transportation services, and meet other needs online.</li> </ul> <p>Over the long term:</p> <ul style="list-style-type: none"> <li>• Support investments in publicly-owned broadband networks or public-private partnerships that create low- or no-cost plans for low-income households.</li> </ul>





# Draft Executive Summary



The Emerging Transportation Trends Study identifies major changes in transportation that we expect the region to face during the coming decade following the COVID-19 pandemic and other recent disruptions.

## Planning during a time of change

We are living through a time of rapid change, marked by a global pandemic that affected nearly every aspect of life. These changes have challenged the conventional wisdom around how we work, live and travel. Many more people are now teleworking and shopping online than seemed possible a few years ago. Formerly bustling downtowns were empty through most of 2020. Some streets closed to cars and filled up with bicycles, pedestrians, and restaurant seating. Some of these changes are

already rolling back as society recovers from the pandemic. Others appear likely to last. The Emerging Transportation Trends Study examines how eight of these trends could continue to impact the greater Portland region. This study forecasts how long each trend will last, how it will affect people's travel behavior and how it will impact progress toward the region's climate, safety, and equity goals.

The goal of this study is to help Metro and its partners account

for these trends during the 2023 update to the Regional Transportation Plan (RTP). The study focuses on understanding the impact of external forces and does not account for the impact of actions that agencies are taking to address these trends. Metro and its partners can assess whether current policies and programs are adequate to meet regional goals as travel changes. These fact sheets summarize key trends and their impacts on regional goals.

## Measuring how trends impact regional goals and performance measures

### EQUITY

The pandemic widened disparities in health, employment and education for people of color and people who earn low incomes. People of color and people who earn low incomes were also less likely to be able to work from home and shop online than white and affluent people. This study qualitatively examines impacts of the trends on equity. The analysis considers whether trends have disproportionate negative impacts on people of color and people who earn low incomes and whether the benefits of these trends are accessible to all.

### VEHICLE MILES TRAVELED (VMT) & TRANSIT RIDERSHIP

Vehicle Miles Traveled (VMT) per capita measures how much people drive. It is an important indicator of

congestion, safety and greenhouse gas (GHG) emissions. Increasing transit ridership is critical to reducing VMT, congestion and emissions equitably and effectively. People traveled less overall during the pandemic, but transit use fell more sharply than driving. This study forecasts VMT and transit ridership based on national and regional data to assess impacts on climate and congestion.

### SAFETY

Fatal crashes increased during the pandemic. People grew concerned about being exposed to COVID. People also grew concerned about encountering racism and threatening behavior from other people when traveling. This study qualitatively examines how these changes are likely to impact crash risks and personal safety over the next decade.



LEGEND: Arrows indicate how the trend impacts equity, safety, VMT and transit

↔ Potential increase/decrease   ⊖ No impact   ● Impact is positive   ● Impact is negative

# Trends, outlooks and impacts

Trend	Short Term Outlook (5-10 Years)	Long Term Outlook (20 Years)	Equity	Safety	VMT	Transit
<b>Declining transit service &amp; ridership</b>	Transit service is still down 2-4% from pre-pandemic levels. Agencies restructure service to focus on people who are still riding transit. 10-30% of people who stopped using transit during the pandemic don't return.	Transit service increases as envisioned in regional plans. Ridership increases too, but it lags behind service because some people who stopped using transit during the pandemic don't return due to behavior change or health concerns.	↔	⬇	⬆	10-30% ⬇
<b>Increasing remote work/ work from home</b>	14% of workers telework regularly, compared to 8% before the pandemic.	Up to a third of the workforce teleworks, but only 10% of low-income workers do so.	↔	↔	0-6% ●	⬇
<b>Increasing online shopping</b>	People replace 16-36% of their shopping trips with delivery. This has mixed impacts on VMT. Delivery trips are shorter than in-person shopping trips, but ordering online tends to generate more trips because of frequent returns, rush deliveries, and other factors.	People replace 25-50% of their in-person shopping trips with deliveries. Only 20% of people with low-incomes shop online.	↔	↔	1-2% ●	⬇
<b>More affordable and efficient electric vehicles</b>	More people will own electric vehicles (EVs), but Oregon is not on track to meet its 2030 EV adoption targets. Electric bicycles are increasingly popular and useful for longer trips.	EVs technology is cheaper, more efficient, and more ubiquitous. EVs make up the majority of the vehicle fleet, can drive farther on a charge, and charge more quickly.	●	⊖	⬆	⬇
<b>Increasing concerns about personal safety</b>	People are increasingly concerned about health, policing, and other travelers' unsafe or threatening behavior when they are using the transportation system.	<i>We do not have sufficient information to create a long-term forecast for this trend.</i>	⬇	⬇	⬆	⬇
<b>Increasingly unsafe streets</b>	Fatal crashes in the Portland region increased during the pandemic, while crashes resulting in serious injuries fell. Streets will likely become safer as more people start using them again, but fatal crash rates may remain higher than average.	<i>We do not have sufficient information to create a long-term forecast for this trend.</i>	↔	⬇	⬆	⊖
<b>Increasing recreational cycling</b>	The number of recreational cyclists will increase slightly, particularly in communities that had lower levels of cycling before the pandemic.	<i>We do not have sufficient information to create a long-term forecast for this trend.</i>	●	⊖	●	⊖



TRANSIT RECOVERY

# Transit ridership will recover slowly.

Transit service will likely not recover to pre-pandemic levels during the next five years, and some people who stopped using transit during the pandemic may never come back. However, increasing transit ridership is critical to meeting regional goals. Agencies need to refocus the transit system around how people now travel while continuing to increase and improve transit service.



BEFORE THE PANDEMIC

## Transit ridership was in a slight decline.

Nationally, transit ridership declined by 4% between 2010 and 2019 (8% per capita). TriMet, the region's largest transit agency, also saw its ridership decrease 4% over this time period, even as service increased.



DURING THE PANDEMIC

## Ridership fell and agencies reduced service.

Between February and April 2020, regional transit ridership dropped by 69%. TriMet responded by reducing service by 20%. By fall 2021, service returned to 90% of pre-pandemic levels, but ridership was still down by about 50%.



FOLLOWING THE PANDEMIC

## Car ownership and driving could increase.

People who started working from home will no longer commute on transit, and others may avoid transit due to public health concerns. This could lead people to buy cars or replace trips they would have taken on transit with driving.

## Key assumptions and findings

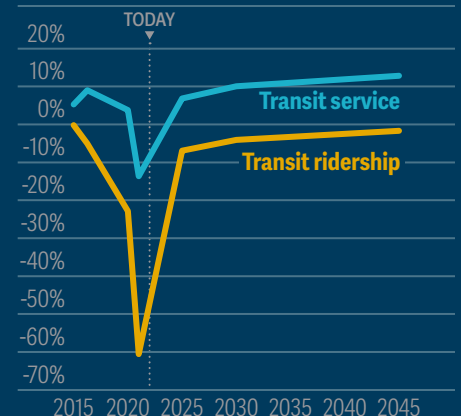
ASSUMPTIONS

- There will not be resources to increase transit service beyond pre-pandemic levels until 2027. After that, service will increase at the pace envisioned in the 2018 Regional Transportation Plan.
- In 2025, 10-30% of prior transit riders will not have returned, and transit service will still be **2-4%** below pre-pandemic levels.
- Transit fares will increase by **\$0.10** every other year.
- Restructuring will make transit service **5-10%** more efficient.

EFFECTS ON TRAVEL

- Reduced service will decrease transit trips by **2-6%**. Some of these trips will shift to personal vehicles—increasing regional VMT per capita by **0-1%** until service levels reach pre-pandemic conditions.
- People will slowly return to transit over the next 20 years, which will increase VMT by **0-2%** and decrease transit ridership by **10-30%** compared to what is expected under the Regional Transportation Plan.

SERVICE AND RIDERSHIP CHANGE





Source: TriMet



WHAT IT MEANS FOR TRAVEL

## Agencies need to continue to refocus service on those who still rely on transit while also increasing transit service.

During the pandemic, ridership held steadier on routes that have more people of color and people with low incomes and routes that serve arterials with a mix of jobs, housing, shops and other destinations. If people continue to work from home, we expect to see fewer commute


trips during peak hours and more errands throughout the day.

TriMet prioritized serving those who were still riding during the pandemic, and plans to continue to do so as it updates its service plan. But recovering from the


pandemic-era ridership slump and meeting the region's transit ridership goals will require broader action, potentially including rethinking how transit serves the region's centers, finding resources to increase service, and redesigning streets to keep buses moving.

### Effects on RTP priorities


#### CLIMATE & MOBILITY

 Lower-than-expected levels of transit service and higher-than-expected vehicle use will likely increase congestion and greenhouse gas emissions.

#### SAFETY

 Transit is one of the safest ways to travel on a per-mile basis. People driving cars are much more likely to die, be injured or harm others while traveling than transit riders. Our streets will likely become less safe if more people shift from taking transit to driving.

#### EQUITY

 Agencies have made efforts to focus service on riders who most rely on transit, but long-term reductions in transit service and ridership could have disproportionate impacts on people of color and people with low incomes, who are more likely to depend upon transit.



REMOTE WORK

# Remote work is here to stay.

The pandemic caused a massive surge in working from home and this trend is likely to continue. It may change when and where we travel, but not necessarily how much we travel.



BEFORE THE PANDEMIC

## Remote workers were a sliver of the workforce.

Before the pandemic, remote workers accounted for 8% of the workforce in the Portland region and just over 7% statewide.



DURING THE PANDEMIC

## Working from home skyrocketed.

By May 2020, over 35% of workers in Oregon were working remotely due to COVID-19. This decreased to 18% of workers by the end of the year, down from the peak but still over double pre-pandemic levels.



FOLLOWING THE PANDEMIC

## Work from home will remain common.

Remote work is likely to continue to decline as offices reopen, but will remain much more prevalent than it was before the pandemic, and will continue to increase over time. This could create long-term changes in travel patterns.

## Key assumptions and findings

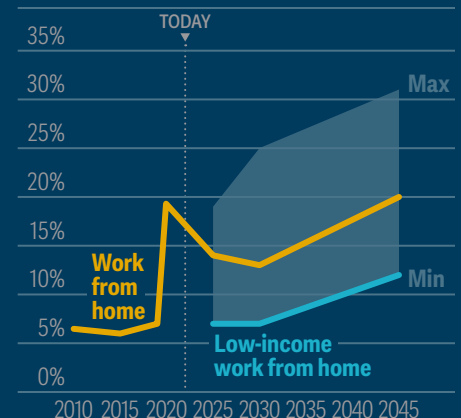
ASSUMPTIONS

- The share of the Oregon workforce that will permanently work from home in 2025 is predicted to be **14%**, up from **8%** before the pandemic
- Remote work is likely to decline from the 2020 peak over the next five years as offices reopen, but will increase over the 20-year horizon as employers allow for more flexibility.

EFFECTS ON TRAVEL

- The increase in remote work will decrease the share of work trips in the peak hours on transit and in personal vehicles, decreasing 2025 VMT and transit ridership by **0-6%**.

OREGON REMOTE WORK LEVELS







Source: Microsoft



WHAT IT MEANS FOR TRAVEL

# More teleworking could mean fewer trips during rush hour and more throughout the day.

People who work from home do not commute, but they run errands and make other trips throughout the workday. Even if the share of people working from home doubles, VMT per capita will likely only decline by less than 6%. Fewer commute

trips could allow transportation agencies to redistribute some of the resources that they had planned to spend on keeping the region moving during rush hour, potentially making more funding available for other projects.

Not all workers are able to telework. Low-income workers are much more likely to do their jobs in person. As agencies plan for more teleworking, they need to maintain access to jobs for those who need it.

## Effects on RTP priorities

### CLIMATE & MOBILITY



As working from home increases, vehicle trips decrease - particularly during rush hour, when vehicles typically emit more pollution because they are stuck in traffic. This means fewer greenhouse gas emissions and less congestion during peak hours. It also raises the question of how transit might best serve riders who are taking more midday trips and commuting less.

### SAFETY



With prolonged working from home, travel may occur at different times of the day. The overall amount of traffic is not likely to change, but if local and arterial streets see more traffic from teleworkers running errands, it could create additional conflicts between vehicles and pedestrians, bicyclists, and transit riders.

### EQUITY



Only some people have the option to work remotely. Almost twice as many workers with high incomes say they are able to work from home compared to those with low incomes. Providing access to internet and other services that support teleworking could help workers with low incomes connect to career opportunities in this new environment.



## E-COMMERCE

# E-commerce means more deliveries.

During the pandemic, people started buying more goods online to avoid the health risk of going to the store. The increase in online shopping is reshaping how goods move through the region.



### BEFORE THE PANDEMIC

## Online retail sales were climbing.

Between 2015 and 2019, the share of retail goods bought online increased from 7% to 11%, an increase of roughly 1% per year.



### DURING THE PANDEMIC

## Online sales spiked.

The share of goods bought online peaked at 15% in 2020, and has since declined a few percentage points as stores reopened and health risks receded.



### FOLLOWING THE PANDEMIC

## New types of businesses are moving online.

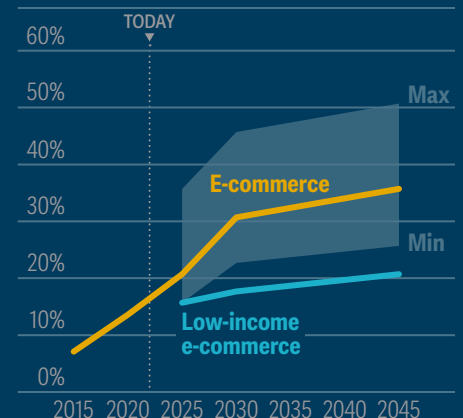
The current dip in online sales is likely temporary. People are now used to shopping online, and more companies are focusing on online sales. This study forecasts that online sales will increase to 20% market share by 2025 and continue to grow thereafter.

## Key assumptions and findings

### EFFECTS ON TRAVEL

- In-person shopping trips represent less than **10%** of total VMT in the Metro region, and some shopping trips will be replaced by delivery trips.
- An online delivery generates up to 12x fewer VMT than a trip to the store. VMT reductions from delivery are more modest in communities where people can walk, bike, take transit or only drive a short distance to the store.
- Compared to **9%** of in-store purchases, **15%-30%** of online goods are returned.
- Same-day shipping increases VMT, and not all online purchases replace a trip to the store. This offsets some of the VMT reductions from consolidated delivery trips.
- By 2025, online shopping is projected to reduce VMT by up to **1%** and transit ridership by up to **2%**.

### E-COMMERCE AS A PERCENT OF NATIONAL RETAIL SALES





Source: Fehr & Peers



#### WHAT THIS MEANS FOR TRAVEL

## Delivery trips will replace some personal shopping trips, and these new trips have different demands on our roads.


The increase in online shopping has mixed effects on vehicle travel, and it can be hard to distinguish these impacts from the general increase in shopping-related trips due to more consumer spending. On one hand, delivery trips are typically shorter

than people's trips to the store, because companies make multiple deliveries in a single trip. On the other hand, people are more likely to return goods that they buy online and make rush orders that require companies to split a single order

into multiple deliveries, creating more trips per item purchased. Growth in delivery trips is also altering the ways that retailers, restaurants, and grocery stores use space and resources for parking, pickup, delivery, and stock storage.

### Effects on RTP priorities


#### CLIMATE & MOBILITY

 Online delivery trips are usually consolidated and occur outside of peak hours, reducing congestion. Delivery trips are shorter than in-person shopping trips, but many consumers are drawn to online shopping by same-day delivery, easy returns, and the convenience of shopping from home - all of which lead to more trips. Because of these conflicting factors, online shopping produces a modest reduction in VMT and emissions.

#### SAFETY

 Aggressive schedules may encourage delivery drivers to prioritize speed over safety. Deliveries may also bring more large vans and medium-size delivery trucks onto neighborhood streets. Delivery drivers who are independent contractors and not commercially trained may also be less experienced than licensed commercial drivers.

#### EQUITY

 People with higher incomes are more likely to shop online than people with low incomes. Improving access to goods and services can benefit everyone, but people typically pay a premium for the convenience of shopping online. People with low incomes and people of color are also more likely to face technological, financial and cultural barriers to shopping online.



## VEHICLE ELECTRIFICATION

# Get ready to plug in.

Oregon has set ambitious targets to increase the number of electric vehicles (EVs) on the road. Whether or not the state meets these targets, we are likely to see many more EVs in the years to come.



### BEFORE THE PANDEMIC

## EV use was growing exponentially.

Between 2010 and 2020, the number of EVs on Oregon's roads grew from 670 to 33,600. E-bikes and e-scooters also became more popular and widely available, both for purchase and through bike- and scooter-share systems like those in Portland.



### DURING THE PANDEMIC

## EVs remained popular, and e-bikes boomed.

Between 2019 and 2021, EV sales grew by 3.6%, outperforming sales of gas-powered vehicles. E-bike sales skyrocketed, growing by 240% - almost four times more than regular bike sales grew.



### FOLLOWING THE PANDEMIC

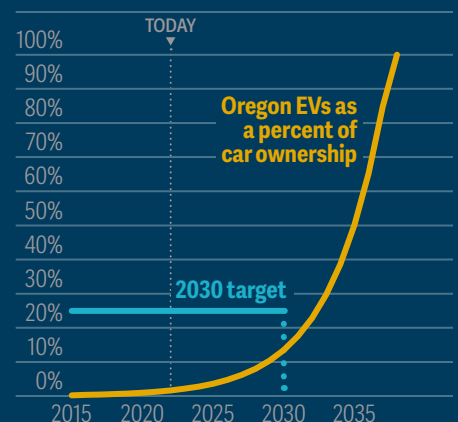
## EV use will keep growing.

The batteries that power EVs and e-bikes are likely to become more efficient and cheaper to manufacture. EV and e-bike sales will continue to increase as these vehicles become more affordable and efficient.

## Key assumptions and findings

- Our forecast is based on historical growth in EV sales and on anticipated changes to EV cost and range. It does not account for the many clean vehicle and fuel policies that support Oregon's EV targets.
- By **2030**, the State of Oregon aims to have **50%** of new vehicles sold and **25%** of all vehicles be EVs.
- EV/ZEV registrations in Oregon have grown by around **30%** each year since 2015.
- After declining at the beginning of the pandemic, shared e-bike and e-scooter use in the City of Portland rebounded to more than **double** pre-pandemic usage.
- Cities with shared e-bike fleets reported that e-bikes were used **twice** as frequently as regular bicycles.

### OREGON EVS AS A PERCENT OF CAR OWNERSHIP







Source: Fehr & Peers



#### WHAT THIS MEANS FOR TRAVEL

## EV adoption is accelerating, but a broader approach to electrification could help meet State goals.


Over the long term, EVs are forecast to become the default choice for many car buyers, but currently their additional cost and limited range restricts their appeal. Cheaper, more efficient batteries should remove these barriers. However, these

changes are expected to take 10 to 20 years, and Oregon is aiming for 25% EV adoption by 2030. The State has adopted several clean vehicle and fuel policies in order to meet this target. In the Portland region, expanding charging - particularly in


multifamily buildings - will be critical to providing equitable access to EVs. High levels of bicycle use and successful bike- and scooter-share systems create an opportunity to further electrify transportation using e-bikes and e-scooters.

### Effects on Metro's RTP priorities


#### CLIMATE & MOBILITY

 EVs will gain appeal as technology improves, but not enough to meet state targets - and meeting these targets is critical to meeting our regional GHG goals. The region should follow along as the state tracks EV deployment in Oregon so that we can identify whether agency partners need to take additional action to meet our GHG targets.

#### SAFETY

 This trend is not likely to affect safety outcomes.

#### EQUITY

 The higher costs of EVs and lack of charging options in multi-unit dwellings pose additional barriers for people with low incomes. Oregon offers significant rebates for people with low incomes who purchase a new or used EV. The region should monitor whether these rebates are leading to equitable EV adoption.



## PERSONAL SAFETY IN PUBLIC

# Personal safety is a growing concern.

People of color are increasingly likely to be concerned for their safety when traveling due to fear of harassment and discrimination, and concerns about health and unsafe behavior are on the rise for many travelers.



### BEFORE THE PANDEMIC

## Safety was a concern for people of color.

People of color were more likely to be concerned for their personal safety when walking and taking transit.



### DURING THE PANDEMIC

## Many people felt unsafe, especially people of color.

Black people grew more mistrustful of police in the wake of George Floyd's killing, Asian immigrants experienced more racism in public, and people who continued to rely on transit - who are more likely to be people of color - dealt with new health concerns.



### FOLLOWING THE PANDEMIC

## Increased safety concerns seem likely to linger.

Recent polling suggests that Oregonians continue to be highly concerned about public safety. Even though much of society is now reopening following the pandemic, people also continue to be concerned about health risks when riding transit.

## Key assumptions and findings

We analyzed this trend qualitatively by reviewing existing research. Here are some of the important findings from that research:

- TriMet surveyed riders about safety in 2020. Overall more riders reported feeling safe riding transit than feeling unsafe - but people of color were much more likely than white riders to say they feel unsafe.
- Riders' top safety concerns were other riders' unsafe behavior and a lack of staff presence.
- 
- During the pandemic, the biggest factors in determining whether or not someone would choose to ride transit are: occupation, pre-pandemic mode choice, walking time to the nearest station, and health concerns.
- Race, gender and age play major roles in perceptions of safety when traveling.
- Numerous surveys and focus groups from the Portland region have found that people of color are more concerned for their safety than other travelers when walking, bicycling or taking transit.
- Crashes are disproportionately located in communities of color and communities with lower incomes. In 2020, **60%** of the region's fatal crashes and **66%** of severe injury crashes occurred in the communities with the highest concentrations of people of color and people earning low incomes.
- Focus groups conducted by the City of Portland found that inadequate street lighting was the #1 safety concern for Black pedestrians.



Source: TriMet



#### WHAT THIS MEANS FOR TRAVEL

## We may need to invest more in helping travelers feel safe in order for our investments in climate and equity to pay off.


People are feeling less safe when traveling for reasons including increased crashes, concern about catching COVID, and the behavior of other travelers. These concerns are particularly high among people of color, who are more likely to live in a

neighborhood with unsafe streets, work in an in-person job through the pandemic, or to be harassed while traveling. It is hard to estimate how these feelings impact travel due to a lack of research. However, many of our planned investments in climate


and equity - like more frequent bus service and better access to transit in communities of color - rely on people feeling safe enough to use them. We may need to invest more in safety for these projects to deliver their intended benefits.

### Effects on Metro's RTP priorities


#### CLIMATE & MOBILITY

 Increasing transit ridership is critical to meeting the region's GHG reduction goals. Safety is an important concern for people who already ride transit, but it doesn't seem to be as big of a factor in whether or not people choose to ride. Investing in safety alone may not have a big impact on transit ridership - but improved transit service will likely draw more riders and reduce more emissions if people feel safe.

#### SAFETY

 Transportation agencies in the region have been working to prioritize safety for people of color travelers, and transit agencies have invested extensively in public health measures to keep riders safe during the COVID-19 pandemic. In spite of these measures, safety is a pressing concern for many travelers.

#### EQUITY

 People of color are significantly more likely to be concerned for their safety when walking, bicycling, or taking public transportation. Transportation investments in communities of color may not benefit residents if these safety concerns are not addressed.



## SEVERE AND FATAL CRASHES

# Fatal crashes are going up.

More people died in crashes during the pandemic, even though people were driving less.



### BEFORE THE PANDEMIC

## Traffic deaths and injuries were on the rise.

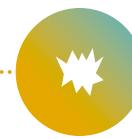
The number of fatal crashes in the region increased by 76% between 2011 and 2019, and severe injury crashes increased by 13%. In 2018, the region set a goal to eliminate all traffic fatalities and severe injuries by 2035.



### DURING THE PANDEMIC

## Traffic deaths increased even as people drove less.

Between 2020 and 2021, fatal crashes in the region increased by 20%, even as people were driving less and severe injury crashes fell by 26%. Empty streets and impaired driving contributed to the rise in deadly crashes.



### FOLLOWING THE PANDEMIC

## There is reason for both hope and concern.

Vehicles are already speeding less as the streets fill up again, but some of the other trends discussed here - especially lower-than-anticipated transit ridership - could lead to more driving and more crashes in the long term.

## Key assumptions and findings

We analyzed this trend qualitatively by reviewing existing research. Here are some of the important findings from that research.

- During the first half of 2021, U.S. crash-related fatalities increased **18%**, from 1.06 per 100 million vehicle miles traveled (VMT) to 1.25 per 100 million VMT.
- As of November 2021, fatal crash rates in Oregon were **1.64 fatalities per 100 million VMT**, higher than national rates.
- Crashes are disproportionately located in BIPOC and low-income communities. In 2020, **60%** of the region's fatal crashes and **66%** of severe injury crashes occurred in the communities with the highest concentrations of people of color and people earning low incomes.
- Nationally, traffic fatalities reached a **16-year high** in 2021. The percent of fatal crashes that involved alcohol increased by **22%** between 2019 and 2021, and average speeds increased on almost every type of road.
- Between 2019 and 2021, fatal crashes in U.S. urban areas increased by over **4x** as much as in rural areas. Urban local and collector streets saw the biggest increase in fatal crashes, followed by urban interstates and urban arterials.





Source: Portland Police Department



#### WHAT THIS MEANS FOR TRAVEL

## More work will be needed to reduce fatal crashes.

Traffic on the region's roads is still below pre-pandemic levels, but not by much. Unless the region takes more comprehensive action to reduce crashes, we could continue to see high levels of fatal and serious crashes.

During the pandemic, many agencies in the region took steps to make streets safer, such as reducing speed limits, calming traffic and dedicating certain streets for pedestrians and bicyclists. These design changes are important, but

they need to be combined with speed management strategies, advanced vehicle and alcohol detection technologies, and other approaches to address the many factors contributing to high levels of fatal and injury crashes.

### Effects on RTP priorities

#### CLIMATE & MOBILITY



Crashes contribute to congestion and GHG emissions. Estimates suggest that eliminating roadway crashes could translate into 21.4 billion hours in traffic time saved nationally and a 2% reduction in emissions by 2035. High crash rates may also deter people from walking and bicycling, since pedestrians and cyclists are more vulnerable to crashes.

#### SAFETY



Traffic fatality rates in Oregon have been consistently high over the last 13 months; higher than national averages - in spite of the growing adoption of Vision Zero policies throughout the state and region.

#### EQUITY



People walking and biking in communities of color and/or lower-income communities face greater risk of injury and death. In the Metro region, risk of dying in a motor-vehicle involved crash is higher for people of color, people over 65 or people with low-incomes. A majority of pedestrian deaths and high-injury corridors are in communities with higher densities of people of color, people with low incomes and people with limited English proficiency.



## RECREATIONAL BICYCLING

# Bicycling is booming.

More people turned to recreational bicycling and other types of outdoor exercise when gyms and sports clubs closed down during the pandemic.



### BEFORE THE PANDEMIC

## The Portland region was known for bicycling.

In 2015, more people commuted by bicycle in the Portland region than in any other US metro area, which also made bicycling a popular form of recreation.



### IN THE PANDEMIC

## Recreational biking grew in popularity.

Many of the region's trails saw increased usage during the early days of the pandemic, and across the US bike sales boomed. Some agencies dedicated streets to bicycling and walking to meet the new demand for outdoor recreation.



### FOLLOWING THE PANDEMIC

## Recreational biking continues to increase.

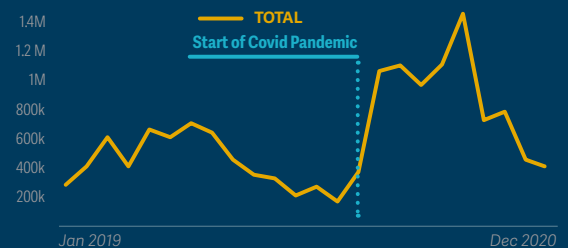
According to data collected by Strava, an exercise tracking app, total bicycle miles traveled in the Metro region have increased by 51% since before the pandemic, most of those leisure trips.

## Key assumptions and findings

- Nationally, bicycles make up a \$5.3 billion industry. Between 2019 and 2021, bicycle sales grew by **67%**, and e-bike sales grew by **240%**.
- Users of Strava, an app commonly used to track recreational bike rides, logged close to twice as many trips during summer 2020 as during summer 2019 (see chart).
- In 2020, approximately **10%** of people tried bicycling for the first time or tried riding in a new way, such as using a bike for transportation.
- The City of Portland's Slow Streets program has provided greater opportunity for people to travel safely on low-traffic streets, thus potentially promoting more recreational biking.
- 86%** of cities that have implemented slow street programs intend to make them permanent fixtures of future bike networks.

### CHANGE IN STRAVA BIKE TRIPS, 2019-2020

METRO REGION STRAVA TRIPS



Source: CityLab



Source: Fehr & Peers



#### WHAT THIS MEANS FOR TRAVEL

## More people on bikes instead of in cars can translate to reduced driving and greenhouse gas emissions.

The growth in recreational biking during the pandemic is expected to continue, which can lead to improvements in mobility, climate, and public health. If more people decide to start biking or continue the riding habits

that they picked up during the pandemic, there will potentially be more demand for better and safer biking infrastructure. Many jurisdictions across the US, including the Metro region, have already dedicated streets

for active transportation. These changes may become permanent fixtures of the transportation system—further incentivizing greener modes of travel.

### Effects on RTP priorities

#### CLIMATE & MOBILITY



People who bicycle for fun and exercise are more likely to try riding to work or for errands, which reduces congestion and emissions. They are also more likely to advocate for improvements to bicycle infrastructure, which can help other travelers feel comfortable bicycling.

#### SAFETY



The pandemic-era bicycling boom has already led to safety improvements to the region's streets. Portland is installing permanent infrastructure and keeping speeds low on some of the Slow Streets that it created during the pandemic. Research suggests that seeing more cyclists helps non-cyclists feel safe trying bicycling.

#### EQUITY



Bikes are much cheaper to buy and maintain than cars or trucks. However, gaps in bicycling infrastructure - which often occur in communities where people of color and people with low incomes live - create barriers to bicycling for many people. Safe, comfortable bikeways are benefits that should be shared by everyone.

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## **6.2 Freight Commodity Study**

*Information/Discussion Items*

Joint Policy Advisory Committee on Transportation  
Thursday, June 16, 2022

# JPACT Worksheet

**Agenda Item Title:** Regional Freight Delay and Commodities Movement Study

**Presenters:** Tim Collins, Metro; and Garth Appanaitis, DKS Associates

**Contact for this worksheet/presentation:** Tim Collins, Metro

## Purpose/Objective

The purpose of the study is to evaluate the level and value of commodity movement on the regional freight network. The study will incorporate the economic impacts of COVID-19 on freight truck travel, e-commerce and delivery services. This study will also lead to the creation of a policy framework for commodity movement in the region.

The main objectives of the study are to:

- Identify which mobility corridors are carrying the highest volumes and highest values of commodities;
- Explore how increases in e-commerce are impacting the transportation system and regional economy;
- Examine how congestion and unreliability on the regional transportation system impacts commodity movement;
- Make recommendations for future regional policy and planning efforts to improve commodity movement; while addressing equity, safety and climate when applicable

## Stakeholder Advisory Committee Membership

The Stakeholder Advisory Committee represents a variety of different interests:

Business Interest Members on the Stakeholder Advisory Committee (SAC):

- Jonathan Sabin (FedEx)
- Kristine Kennedy (Highway Specialized Transport)
- Carly Riter (Intel)
- Andrew Geisler (Vice President, Strategy - Columbia Distributing)
- Phillip Ross, (Director of Sales & Marketing at B-Line)
- Jason Jordan (General Manager, Portland Metro, Republic Services)

Freight Interest Members on the Stakeholder Advisory Committee (SAC):

- Randy Fischer (Port of Portland – Marine Operations)
- Corky Collier (Columbia Corridor Association)
- Ron Arp (Identity Clark County)
- Jana Jarvis (Oregon Trucking Association)
- Peter Finley Fry (Central Eastside Industrial Council)
- William Burgel (Burgel Rail Group)
- Jennifer Dill (Research professor at PSU and TREC director)
- Bret Marchant (Greater Portland Inc.)

Environmental Interests and Bicycle/Pedestrian Interests Members on the SAC:

- Sara Wright (Oregon Environmental Council)
- Cory Ann Wind (Oregon Dept. of Environmental Quality – DEQ)
- André Lightsey-Walker (The Street Trust)

Transit and Economic Development Members for SAC:

- Kate Lyman (TriMet)
- Kevin Johnson (Prosper Portland)
- Gail Greenman (Westside Economic Alliance, Executive Director)
- Nellie deVries (Clackamas County Business Alliance)

### **Timeline for the study**

The study started in October of 2021 and will conclude in July/August of 2023 with a final report and technical presentations.

### **Summary of Policy Framework**

Importance of developing a freight policy framework

1. Needs to be consistent with other regional policies
2. To address economic benefits and impacts of commodity movement
3. To address the growth impacts of goods delivery and e-commerce.

Policy questions that the study will address:

- What are emerging trends in the freight sector that have certain types of impacts on the transportation system?
- When and how should the public sector play a role in addressing the growth impacts that e-commerce and goods delivery is having?
- Are there new ways to address goods movement performance and what is relevant to know about freight and goods movement?
- What are ways in which the freight sector can reduce greenhouse gas emissions?

### **Summary of work done to date**

- In December 2021, the Project Management Team reviewed regional freight policies, development of the study's freight policy framework, and development of relevant freight policy questions.
- In January of 2022 the Stakeholder Advisory Committee reviewed regional freight policies, development of the study's freight policy framework, and development of relevant freight policy questions.
- In March of 2022 staff presented a draft report on the status and general impacts of COVID-19 on e-commerce and delivery services, and a presentation on how does freight movement in the region intersects with the RTP priorities of climate, safety, and congestion

relief. A third PMT meeting in May, addressed how freight employment areas intersect with the RTP priority of equity.

- The Stakeholder Advisory Committee, also in March of 2022, addressed how the rise of online shopping and the COVID-19 pandemic has affected how goods move through the region. Staff presented on freight movement in the region and its intersection with the RTP priorities of climate and safety.
- The following work on the study has also been completed:
  - Selected the number of regional freight network roadways and locations that the study will use for evaluating existing data and commodities (modeled).
  - Collected data (truck volumes, speeds, and travel times) in 19 regional mobility corridors and mapped the results.
  - For 2020 modeling results, determined which freight facilities are carrying the highest volume, and the highest amount of value for commodities on the regional freight network.

### **Outcome**

Staff is bringing this study to JPACT for the first time this month the give JPACT members a high level overview of the study. Staff will be able to answer questions about the process and planned policy framework outcomes, and will also take feedback from members.

### **Next Steps**

Next steps in the project include:

- Updates to PMT, SAC, MTAC, TPAC and JPACT throughout the 22 – 23 month long study
- Prepare future year regional freight modeling outputs for the study
- Prepare mapping for more of the data (truck volumes, speeds, travel times) in 19 regional mobility corridors

Staff will bring this topic back to JPACT for regular updates.

### **What has changed since JPACT last considered this issue/item?**

This is the first time JPACT will be presented information about the study.

### **What packet material do you plan to include?**

There will be a PowerPoint presentation that will be provided to JPACT.

Materials following this page were distributed at the meeting.



## May traffic deaths report for Clackamas, Multnomah and Washington counties \*

*\*ODOT preliminary fatal crash report as of 5/25/22, police and news reports*

Unidentified person, driving, NE102nd Ave just south of NE Prescott St., Portland, Multnomah 5/31

Unidentified woman, driving, NW Yeon Ave, Portland, Multnomah 5/27

Bianca Ceperich, 16, driving, New Era Rd, Clackamas, 5/20

Gwendolyn E. Brake, 83, walking, Molalla Ave & Warner Milne Rd, Clackamas, 5/6

Unidentified person, motorcycling, US 26 Mt Hood Hwy, Multnomah 5/14

Unidentified person, 52, walking, I5-Ramp to Morrison Bridge, Portland, Multnomah, 5/8

Shane Johnson, 43, motorcycling (e-dirt bike), SE Powell/SE 50th, Portland, Multnomah 5/4

Tufa Shuka, 41, driving, Gaffney Ln & Berta Dr, Oregon City, Clackamas 5/4

David Carl Paulsen, 36, motorcycling, SE 208th Ave & SE Stark St, Portland, Multnomah 5/3



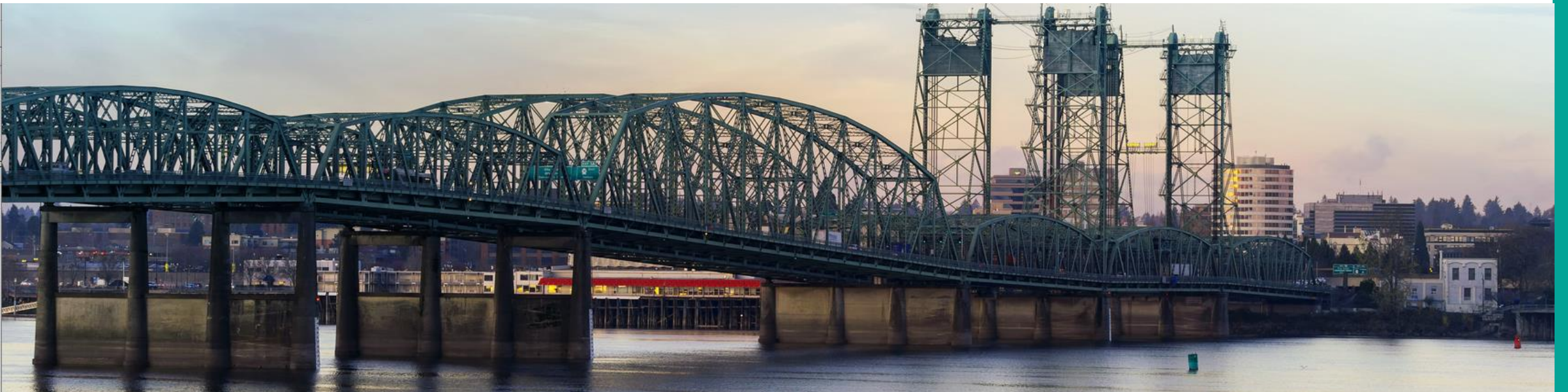


# IBR Modified LPA Process & Resolution

Joint Policy Advisory Committee on Transportation  
Metro  
June 16, 2022

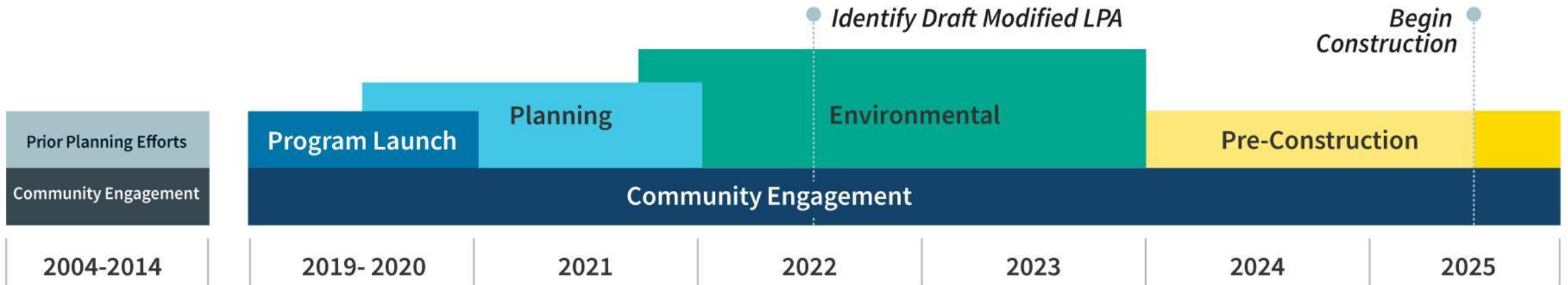
# Agenda

- ▶ Program Timeline & IBR Locally Preferred Alternative (LPA) Process
- ▶ Metro Council LPA Sequence
- ▶ Calendar
- ▶ LPA Description Recap
- ▶ Resolution Discussion





# Program Timeline



- ▶ **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

# IBR Modified LPA Process

- ▶ IBR LPA modified from 2008 CRC LPA
- ▶ Developed with input of project staff groups informed by public engagement and feedback from community groups
  - Community Advisory Group
  - Equity Advisory Group
  - Executive Steering Group
- ▶ 8 partners asked to present Modified LPA to their commission/boards



OPENING OF INTER STATE BRIDGE VANCOUVER WASH. (WACCEBER) P. 194

# Metro Council Modified LPA Resolution Sequence

- ▶ TPAC Endorsed Modified LPA: June 3, 2022
- ▶ JPACT review/consideration: June 16, 2022
- ▶ Metro Council consideration: July 14, 2022



# Partner Endorsement Schedule\*

- ▶ June 22: TriMet Board of Directors
- ▶ July 11: Vancouver City Council
- ▶ July 12: CTRAN Board of Directors
- ▶ July 12: Port of Vancouver Board of Commissioners
- ▶ July 13: Portland City Council
- ▶ July 13: Port of Portland Board of Commissioners
- ▶ July 14: RTC Board of Directors
- ▶ July 14: Metro Council



## Following Partner Endorsement Meetings:

- ▶ July 21: Executive Steering Group to consider consensus recommendation to move the Modified LPA into the SEIS process for further evaluation
- ▶ July 21: Bi-state legislative committee responds to ESG recommendation

\* *Dates as currently scheduled, subject to change*



# IBR Recommendation: Modified LPA

Hayden Island: River Crossing  
**Partial Interchange**  
 Auxiliary Lanes: **1**

Transit: Variable Rate  
**Light Rail to Evergreen near I-5**  
 Tolling: **Yes**



## Partial Interchange Summary

Hayden Island Drive local-only trips and Tomahawk Island Drive extension increase Hayden Island east-west connectivity

Smaller interchange leaves space for a comfortable pedestrian environment and opportunities for open space

Addresses safety and congestion by improving active transportation, adding shoulders, increasing lane widths and improving ramp merges

## Benefits of Expanding LRT from Expo to Evergreen

**4** Stations\*

**3,000+** Residents are within a half mile walk

**26%** BIPOC **41%** Low-income

\*Includes the existing Expo station and 3 new stations.

## Equity - Jobs Accessible via Transit (% increase)\*

**68%** General **73%** BIPOC

**59%** Low-income **71%** People w/ disabilities

\*Increase in jobs accessible from the program area within a 45 minute midday transit ride. Percent increase determined by adding LRT Expo to Evergreen compared to 2045 No Build.

## Climate - GHG Reduction\*

**36,000** metric tons/year  
or the equivalent of

**7,000** homes' electricity for one year **OR** **89,400,000** miles driven by gas powered car

\*GHG reduction is an estimate calculated from the displacement (or avoidance) in the shift from cars to transit.

## Strategies to Combat Climate Change

- Demand Management, including Variable Rate Tolling (tolling will consider price reductions for low-income users and low-carbon vehicles)
- Increase traffic operation efficiencies (ramp metering and auxiliary lanes)
- Mode shift from cars to active transportation and transit
- Low-carbon emission construction strategies





Interstate  
**BRIDGE**  
*Replacement Program*



# Thanks!

Matt Bihn

[matt.bihn@oregonmetro.gov](mailto:matt.bihn@oregonmetro.gov)

EXTRA SLIDES IN BACK

# IBR Modified LPA Components

- ▶ Replacement of I-5 Bridge
  - 3 I-5 through lanes through BIA
  - 1 aux lane b/w Marine Drive and E Mill Plain Blvd
- ▶ Replacement of N Harbor Bridge
- ▶ Partial Interchange at Hayden Island, full interchange at Marine Drive
- ▶ Variable Rate Tolling
  - Funds construction
  - Manages congestion
  - Improves multi-modal mobility within BIA

# IBR Modified LPA Components

## ▶ Transit Improvements

- Light Rail extension from Expo
  - *Generally adjacent to I-5*
  - *Station at Hayden Island*
  - *Interim MOS terminus at Evergreen*
  - *Additional station(s) in Vancouver decided by Vancouver City Council in consultation with C-TRAN, Port of Vancouver, and TriMet*
- Continuation of C-TRAN current and future Vine BRT
- Continuation of C-TRAN express bus service between markets north of the Bridge Influence Area and Downtown Portland, using bus on should facilities where available

## ▶ Active Transportation Improvements

- Multi-Use Path included on new bridge
- Connections to transit, Columbia River Renaissance Trail, 40-Mile Loop

# IBR Modified LPA Components

## ▶ Additional Commitments

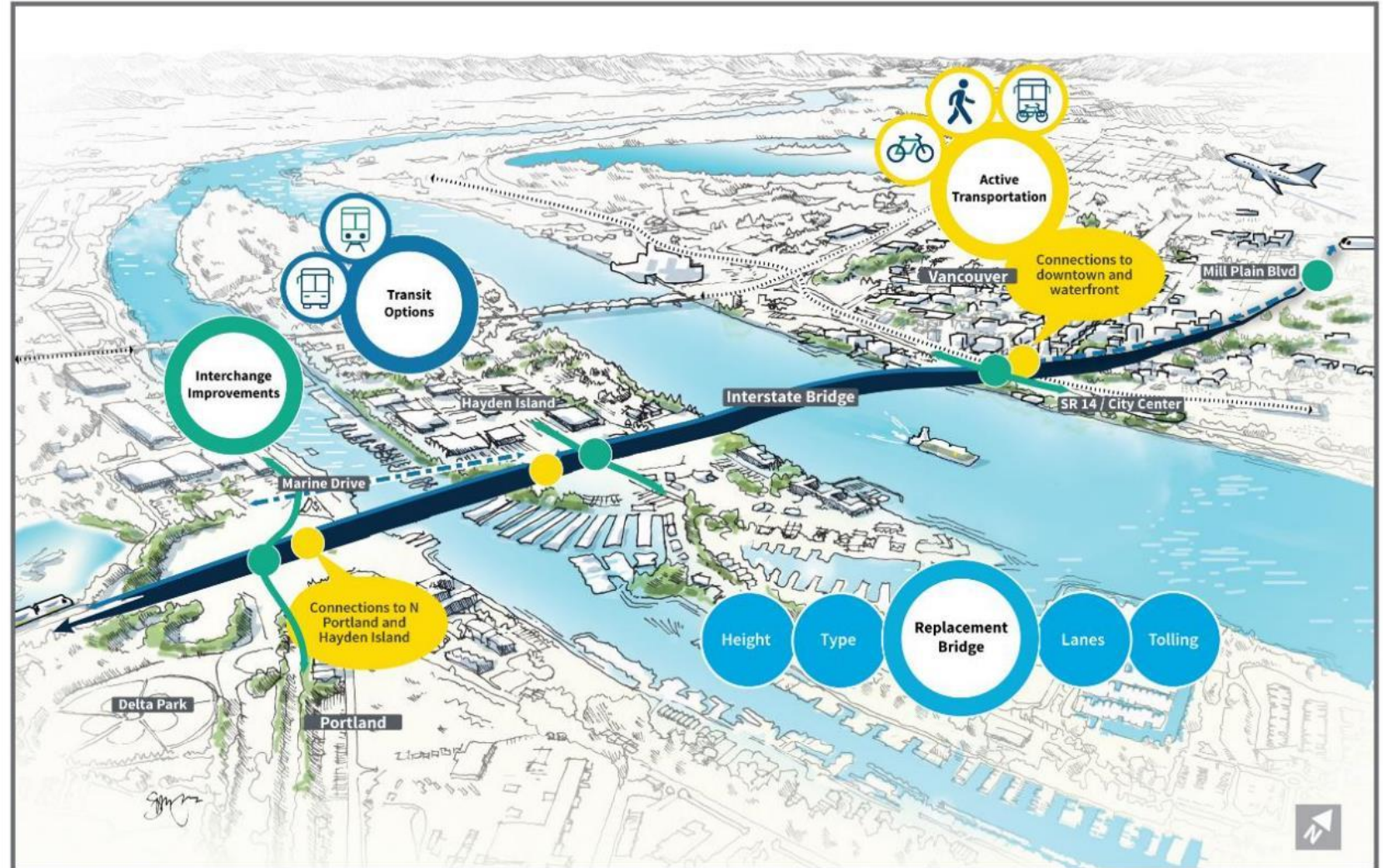
- Study improvements to additional interchanges within BIA
- Establish a GHG reduction target and develop and evaluate design solutions that contribute to achieving program and statewide climate goals
- Evaluate design options' impact on equity priority areas addressing air quality, land use, travel reliability, safety, and improved access to all transportation modes and facilities
- Development of programs and improvements to be defined in a Community Benefits Agreement



# Modified Locally Preferred Alternative (LPA)

Key components of the Modified LPA:

- ▶ Transit Investment
- ▶ Number of Auxiliary Lanes
- ▶ Tolling
- ▶ Hayden Island/Marine Drive Interchange
- ▶ Bike/Ped Facility





# 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



# Modified LPA – Auxiliary Lanes

- ▶ Aux lanes are ramp-to-ramp connections that facilitate acceleration and deceleration, weaving, merging and diverging between intersections

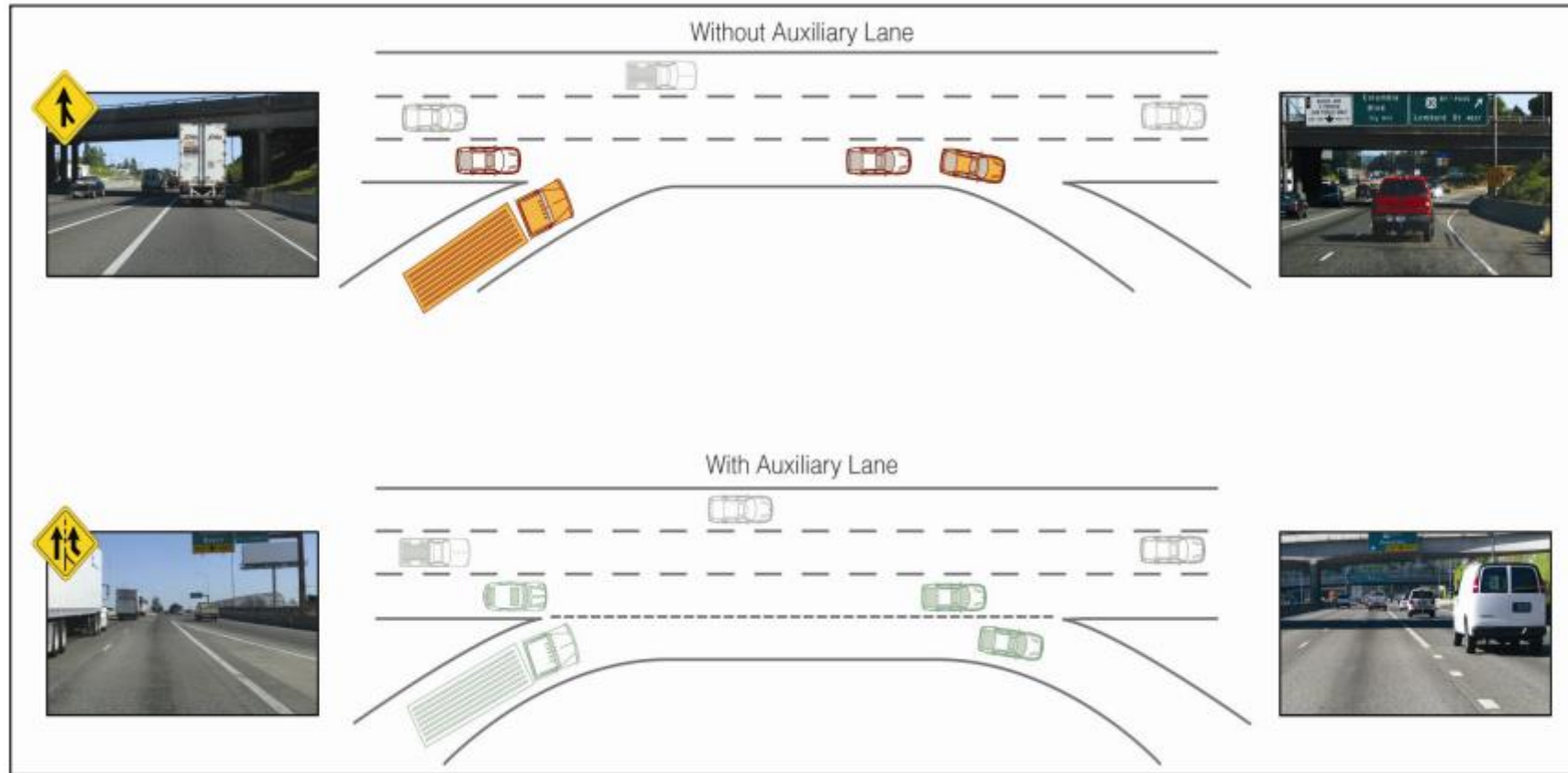
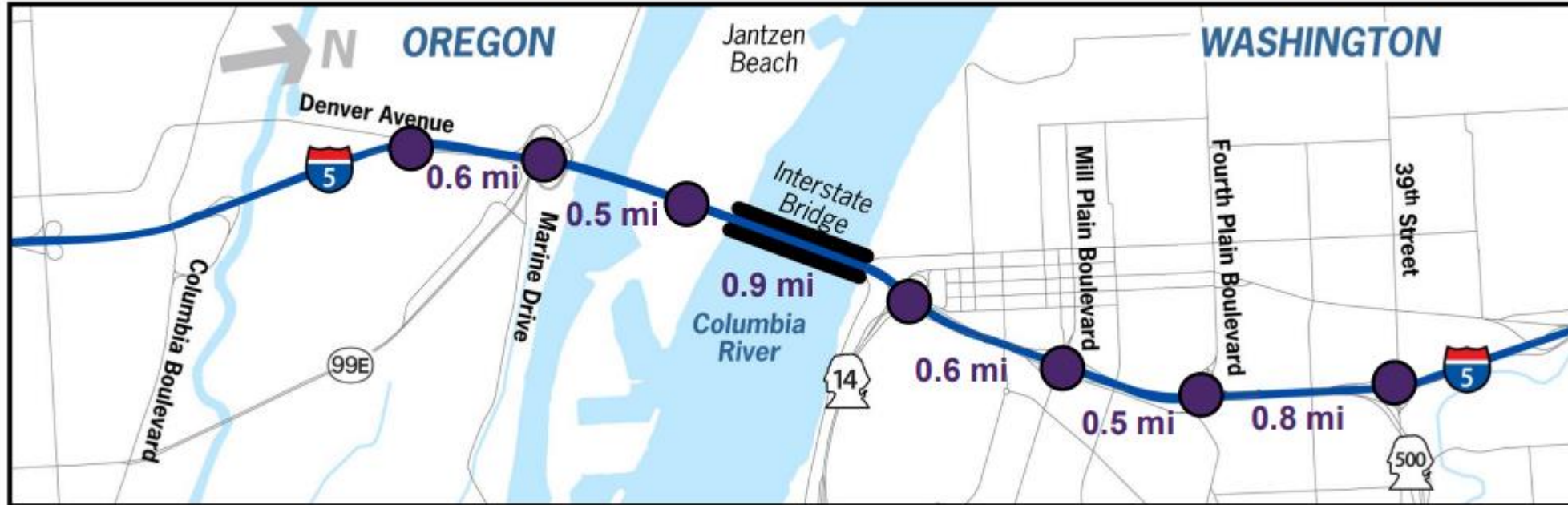


Figure shows typical highway Merge and Diverge conditions, without (top) and with (bottom) Aux Lane



# 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 – Hayden Island/Marine Drive Interchange

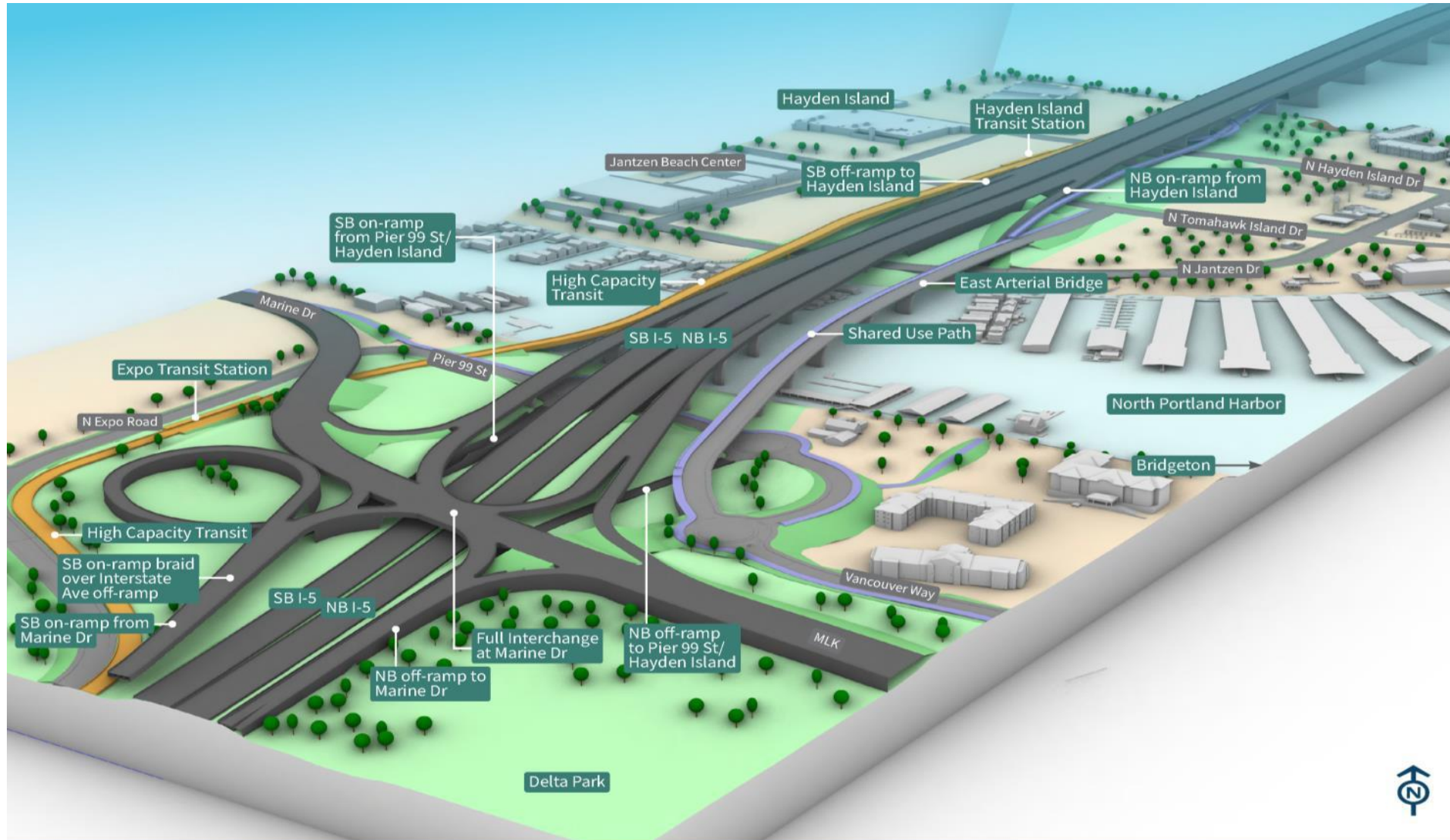
## Design Assumptions

- ▶ 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





# Half Interchange Option





Metro

# **Emerging transportation trends: draft final results**

Joint Policy Advisory Committee  
on Transportation

June 16, 2022

# Study purpose

**Scope:** Major transportation trends due to the pandemic and other recent disruptions

**Time frame:** Aug '21 - June '22

## **Goals:**

- Develop common understanding of changes that we've all been experiencing individually
- Understand potential risks of “business as usual”
- Identify potential changes to policy and analysis to consider during the 2023 RTP update
- Will be followed by other Emerging Trends work

# Study timeline

## Emerging trends

Research / select trends  
Aug-Oct '21

Analyze trends individually  
Oct '21-Feb '22

Analyze scenarios and add'l data /  
RTP guidance  
Mar '22 – Jun '22

(we are here)

## 2023 Regional Transportation Plan (RTP) update

Scoping  
Oct '21 – Mar '22

Data and policy analysis  
May – Aug '22

Data and policy analysis  
May – Aug '22

# Study focus

Based on feedback from technical and policy committees, we focus on the following trends:

- **Declining transit service and ridership**
- **Increasing remote work / work from home**
- **Increasing online shopping**
- More affordable and efficient electric vehicles
- Increasing concerns about personal safety
- Increasingly unsafe streets
- Increasing recreational cycling

For trends shown in **bold**, there is enough data and research to forecast their impacts on travel and on our regional goals.



# Final draft work products

- **Scenario analysis** of how emerging trends impact future vehicle travel and transit ridership
- **Corridor analysis** of changes in arterial traffic versus changes in highway traffic and transit ridership
- **Regional transportation plan** guidance on potential RTP responses to trends and their impacts
- **Fact sheets** summarizing the background, current understanding, and impacts of each trend

# Scenario analysis: overview

**Goal:** understand how trends collectively impact driving and transit ridership.

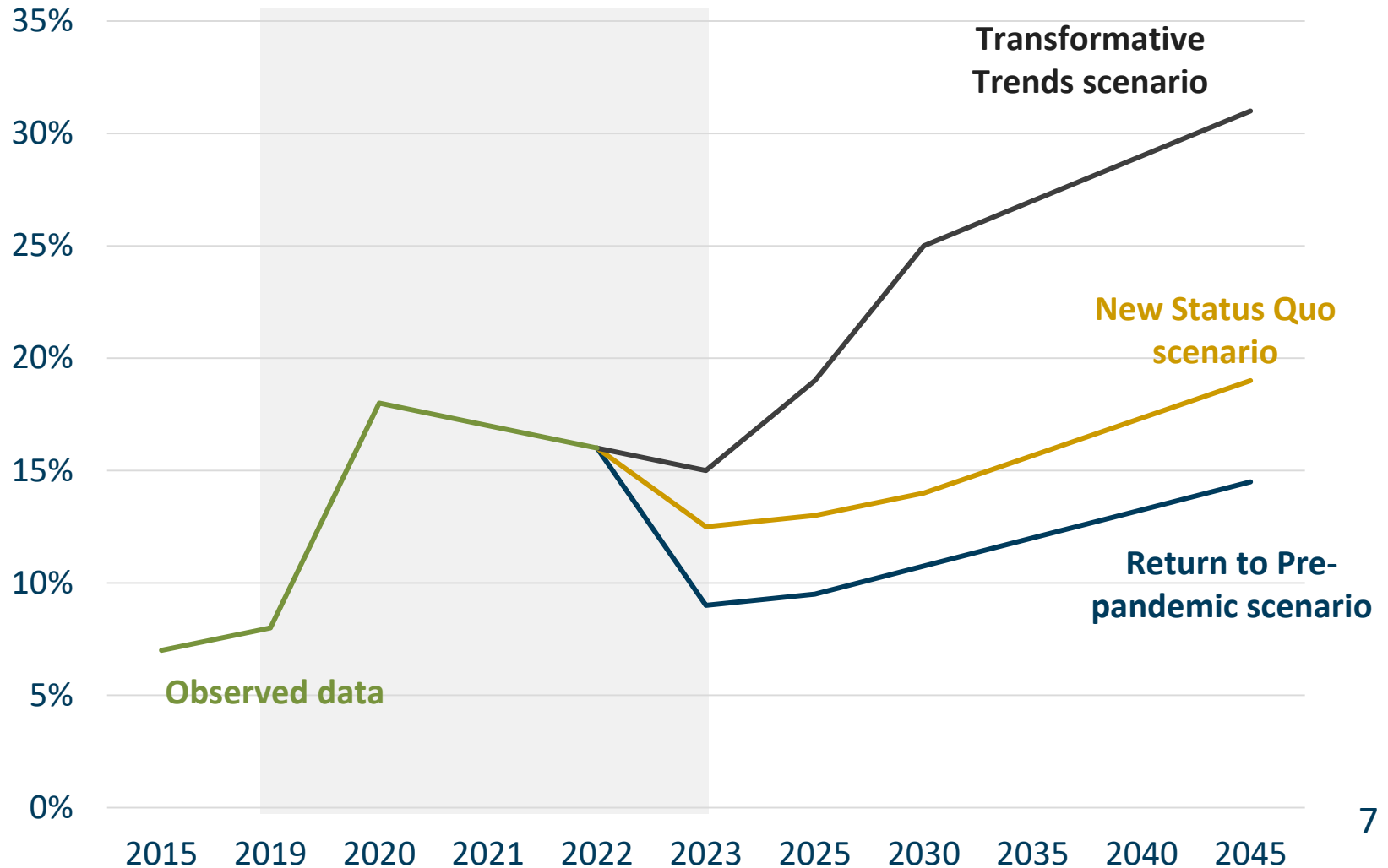
**What we did:** forecasted vehicle miles traveled and transit ridership under three different scenarios.

**Why we did it:**

- To capture the interrelationships between different trends
- To better understand the uncertainty that trends create around future travel in the region

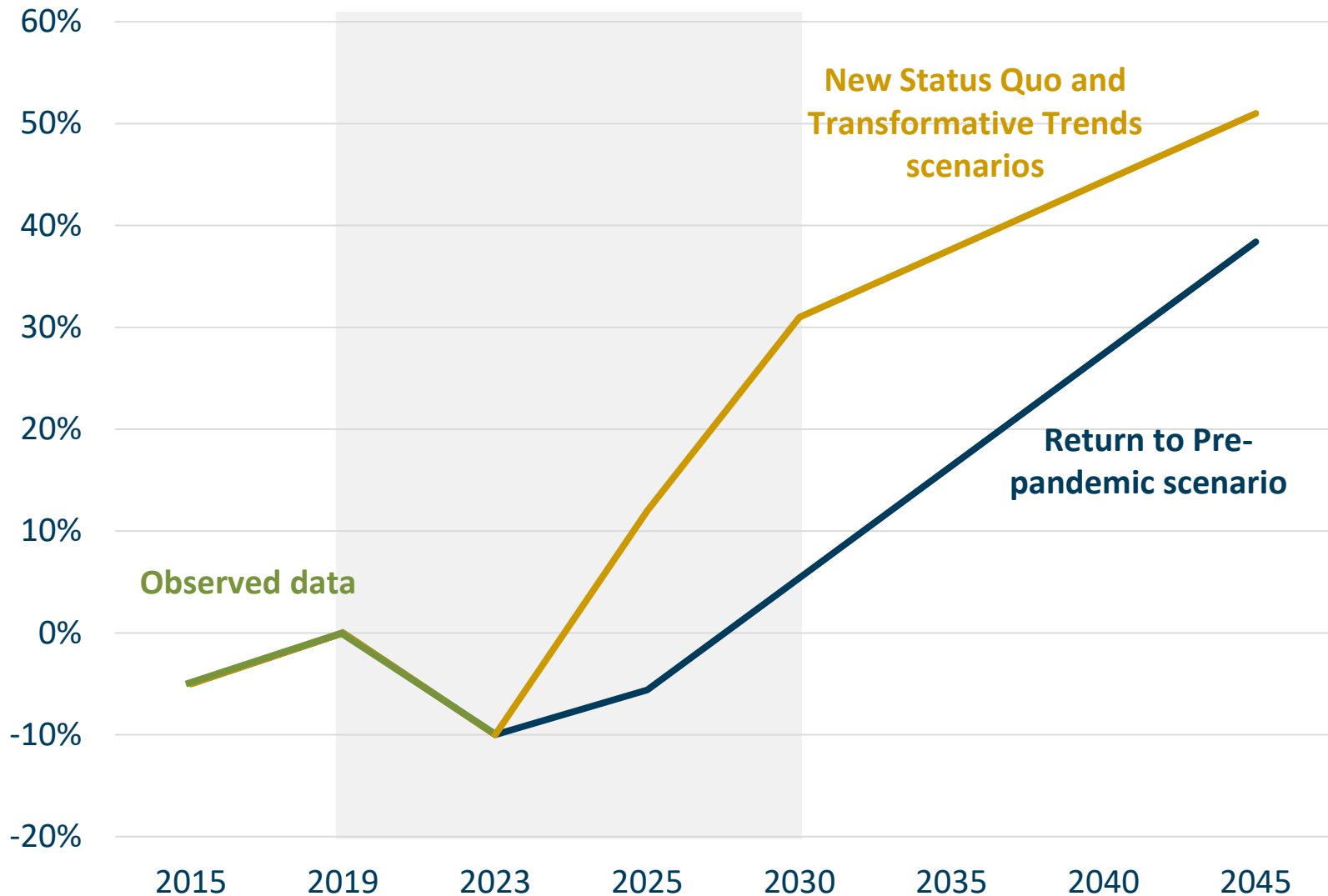
# Defining scenarios

Assumptions about current and future teleworking rates, by scenario



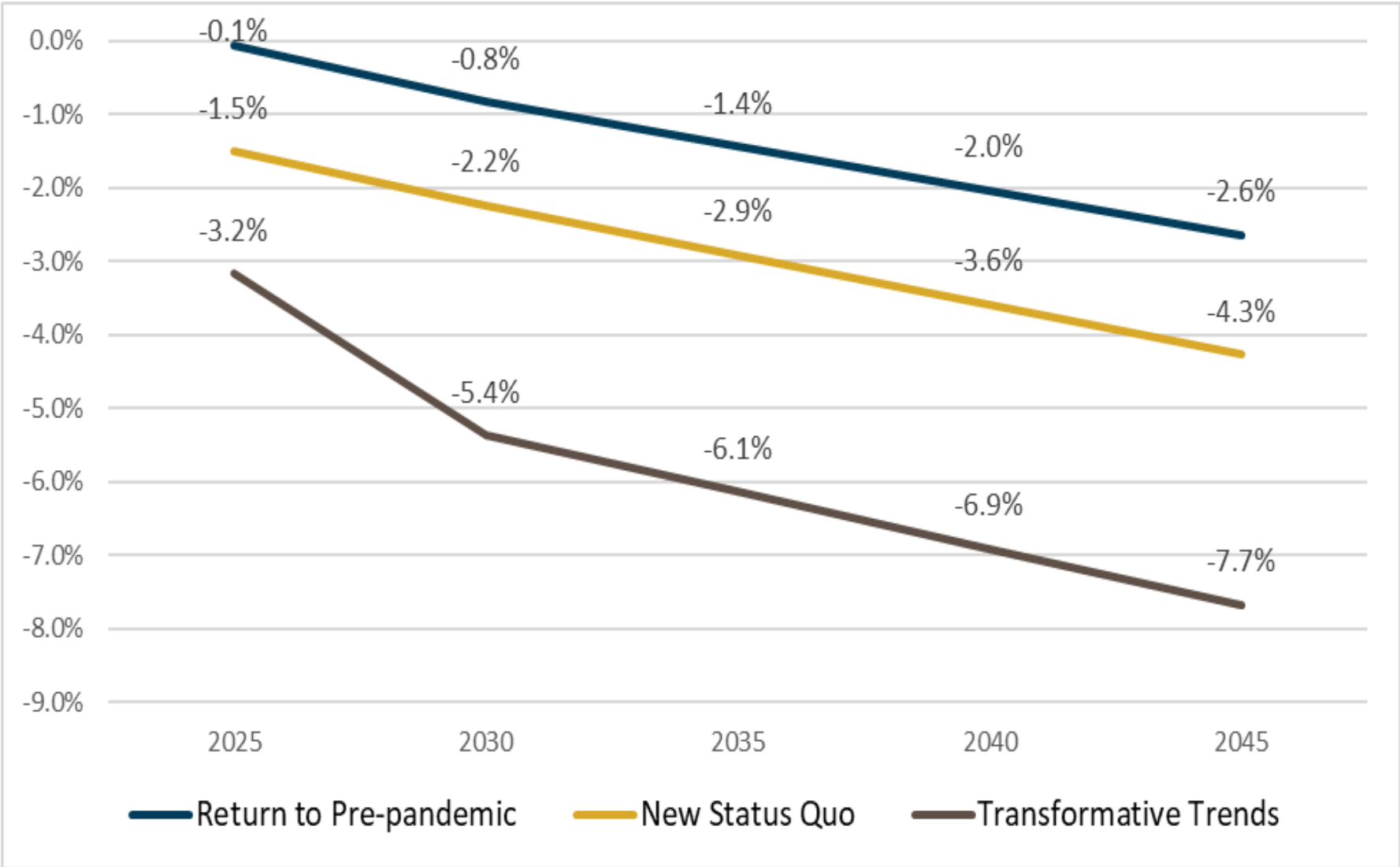
# Defining scenarios: transit service

Assumptions about current and future transit service, by scenario



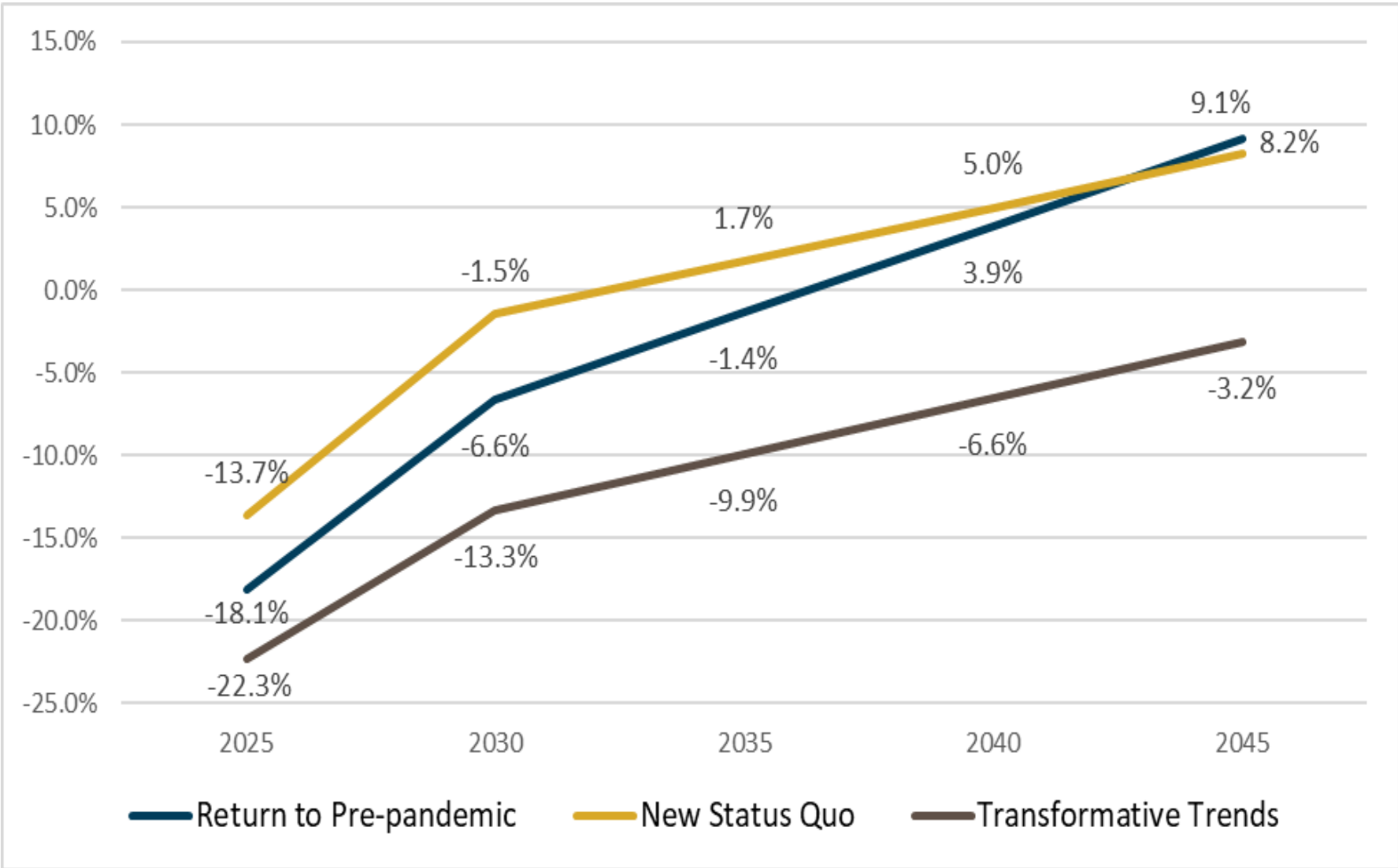
# Vehicle miles traveled results

Forecasted change in vehicle miles traveled per capita, by scenario



# Transit ridership results

Forecasted change in transit ridership, by scenario





# Scenario analysis: findings

Emerging trends help to **reduce VMT per capita** by between 2.6% and 7.7% below current levels.

Emerging trends could **reduce or increase transit ridership** by between a 3.2% decrease and a 9.1% increase from current levels.

**Teleworking has a big influence** on these outcomes, and on congestion during the morning peak.

Even if we return to pre-pandemic conditions, we can still expect to see a **significant long-term increase in teleworking and online shopping.**

# Corridor analysis: overview

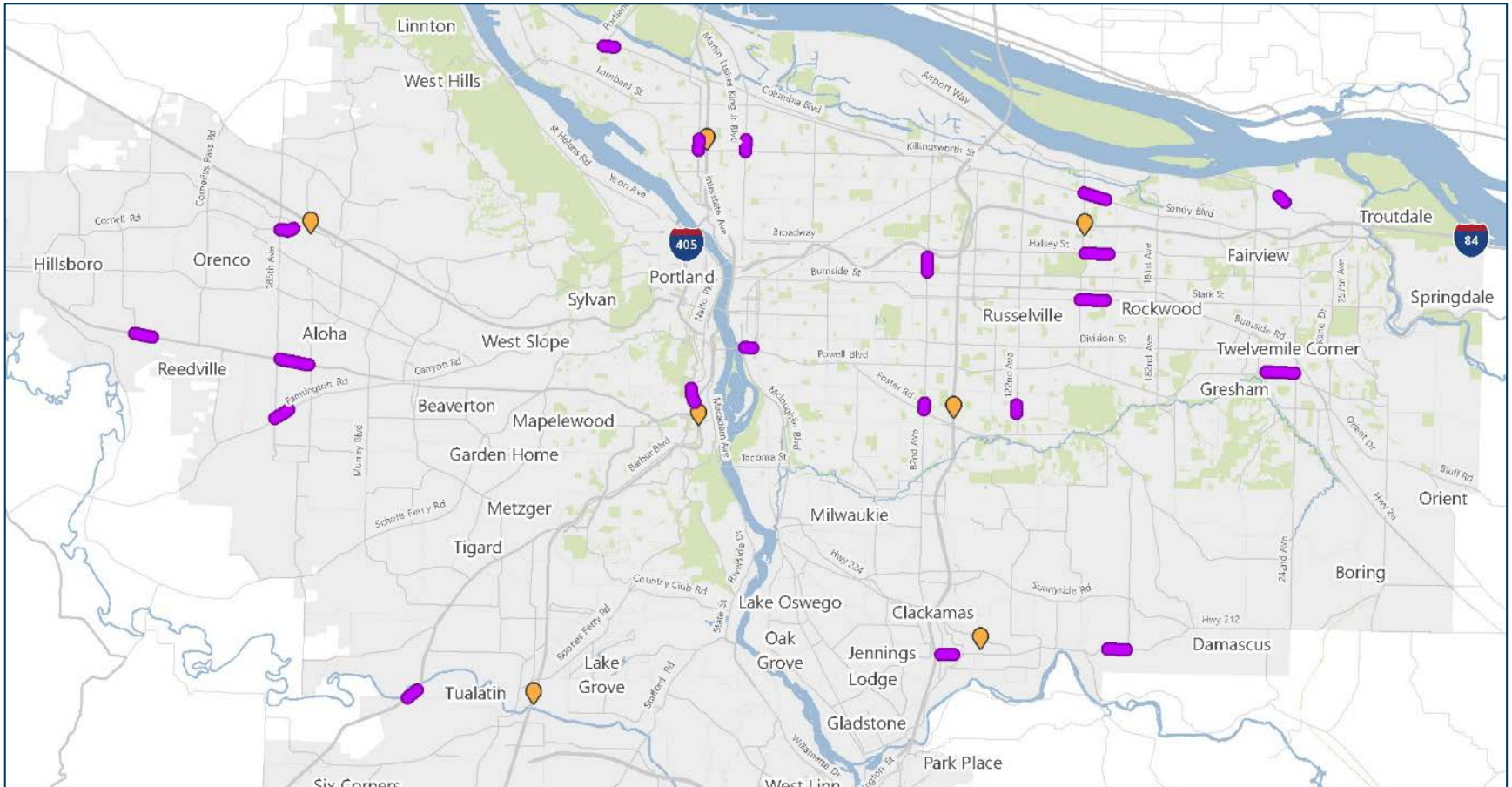
**Goal:** understand how travel patterns have changed on the region's mobility corridors, particularly on arterial streets.

**What we did:** collected data for selected locations, analyzed changes in traffic volumes and speeds, and compared arterial, highway, and transit results

**Why we did it:**

- Arterials are the streets where transit runs, where crashes occur, and destinations are located.
- Metro's agency partners collect high-quality data on highways and transit, but not on arterials.

# Corridor analysis: about the data



We collected data on **arterial locations** throughout the region, aiming to capture corridors throughout the region, freight routes, and alignment with **highway traffic count locations**.

# Volumes were down and speeds were up at most locations & times studied

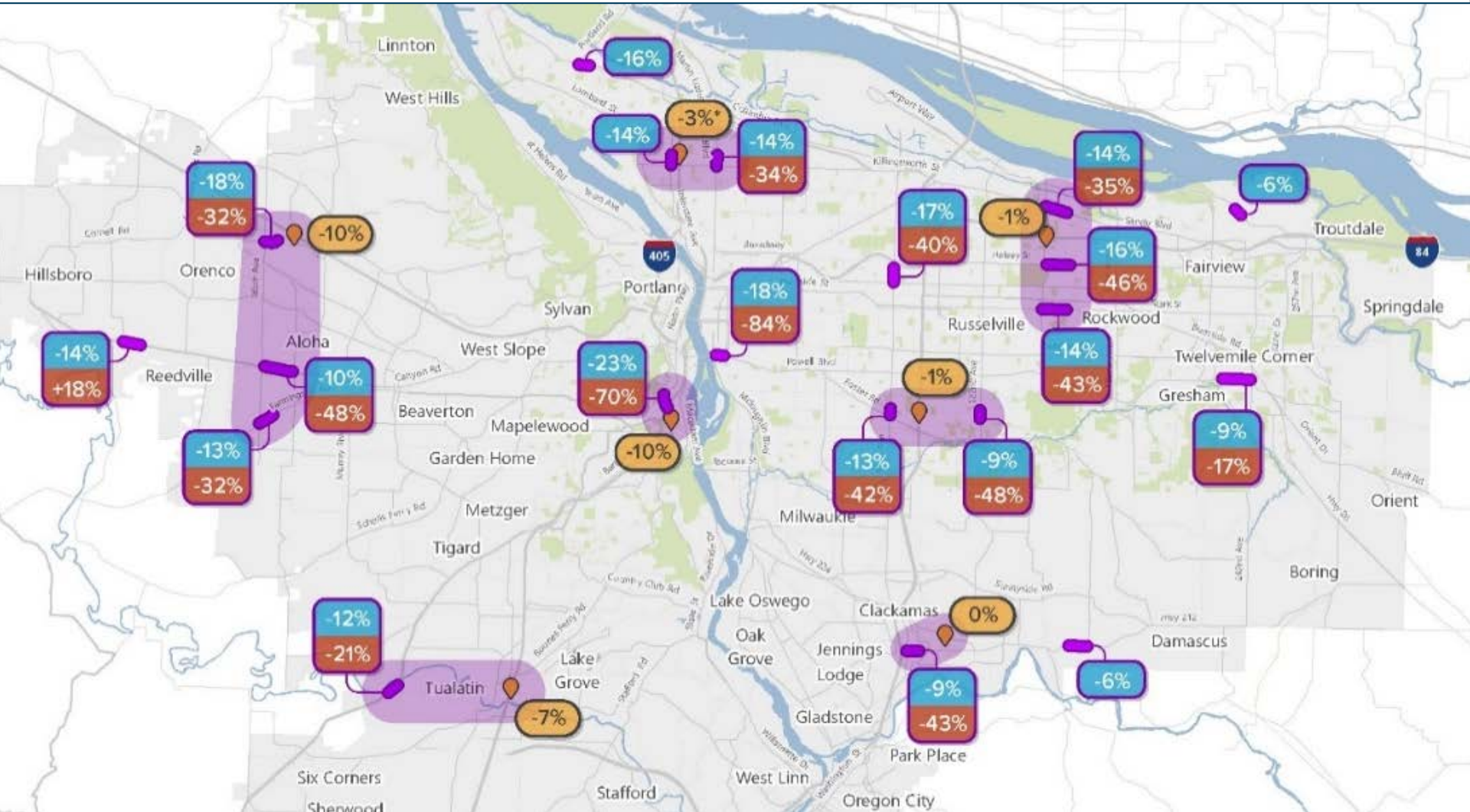
Time period	% change in arterial volumes	% change in arterial speeds
<b>Weekdays</b>		
Morning peak	<b>-23%</b>	+9%
Midday	-9%	+6%
Evening peak	<b>-12%</b>	+11%
All day	-13%	+10%
<b>Weekends</b>		
Morning peak	-8%	+7%
Midday	-4%	+6%
Evening peak	-1%	+6%

# Arterial trips are down more than highway trips, but less than transit trips

Location	% change in highway trips	% change in arterial trips	% change in transit rides
I-5 @ NE Ainsworth	-3%	-14%	-37%
I-5 @ SW Capitol	-10%	-23%	-70%
I-5 @ SW Wilsonville	-7%	-12%	-21%
I-205 @ SE Steele	-1%	-11%	-45%
I-84 @ NE 148 <sup>th</sup>	-1%	-15%	-41%
OR-224 @ SE Mather	0%	-9%	-43%
US-26 @ NW 170 <sup>th</sup>	-10%	-14%	-37%
<b>Average</b>	<b>-5%</b>	<b>-14%</b>	<b>-41%</b>



# Changes by location



- Highway count location
- Streetlight analysis segment
- Metro boundary
- Highway volume change (October 2019 to October 2021)
- Arterial volume change (October 2019 to October 2021)
- Transit ridership change (October 2019 to October 2021)

# Corridor analysis: findings

As of October 2021, travel in many parts of our region was not “back to normal.”

Arterial traffic fell farther and remains lower than highway traffic.

Arterial volumes fell significantly in many locations where transit ridership also fell.



# Corridor analysis: findings (con't.)

Arterial traffic and transit use fell more in the center of the region, and less at the edges of the region.

Potential explanations for this include:

- Many locations where demand remained high are in low-income communities and/or near industrial centers where people continue to work in person.
- More people and goods enter and exit the region in these locations.

# RTP guidance: summary of draft recommendations

- Prioritize transit ridership recovery.
- Confirm that previously planned high-priority/cost projects meet changing travel demand patterns.
- Provide more diverse travel options to support diversifying travel patterns.
- Maximize opportunities to reduce VMT through teleworking.
- Prioritize safe access to transit.
- Plan for the changing role of freight.
- Accelerate the adoption of electric bicycles, scooters, and shared vehicles.
- Consider digital approaches to providing equitable access to opportunities.

# Discussion and feedback

- Do you have any questions or feedback about the draft findings and recommendations?
- How should the region respond to these trends as we update the Regional Transportation Plan?

You can also email me comments or edits to the draft deliverables at [eliot.rose@oregonmetro.gov](mailto:eliot.rose@oregonmetro.gov).

**eliot.rose@oregonmetro.gov**  
**oregonmetro.gov**





# Regional Freight Delay and Commodities Movement Study

Metro – Informational

JPACT informational, June 16, 2022

Tim Collins, Metro

# What is the reason for this study? (Why now?)

- Developed as part of the 2018 Regional Freight Strategy
- Regional Freight Strategy is part of the 2018 RTP
- Top priority in Regional Freight Strategy Action Plan
- New Regional Freight Model was developed in 2018 and updated this year with capability to look at Commodity Movement in our region.

# Study Purpose

- Purpose of the study is to evaluate the level and value of commodity movement on the regional freight network
- Includes a policy framework for commodity movement in the region; with a history of how COVID-19 economic impacts have effected freight truck travel, e-commerce and delivery services





# Main Study Objectives

- Identify which mobility corridors are carrying the highest volumes and highest values of commodities
- Explore how increases in e-commerce are impacting the transportation system and regional economy
- Examine how congestion and unreliability on the regional transportation system impacts commodity movement
- Make recommendations for future regional policy and planning efforts to improve commodity movement; while addressing equity, safety and climate when applicable

# What are the Early Tasks in the Scope of Work?

- **Task 1** Select a Project Management Team (PMT) and define their roles and responsibilities.
- PMT consists of representatives from ODOT, WSDOT, PBOT, the 3 counties, Port of Portland, SWRTC and Port of Vancouver.
- **Task 2** Select a Stakeholder Advisory Committee with representatives from trucking and rail industries, marine and air freight operations, electronics, manufacturing, e-commerce and delivery services, and community members that would represent environmental, equity and safety concerns.

# Stakeholder Advisory Committee Members– Business, Freight, Bike/Pedestrian, Environmental, Economic Interests

## Businesses

- Highway Specialized Transport
- Columbia Distributing
- Intel
- B-Line
- FedEx distribution
- Republic Services recycling

## Freight Interests

- Port of Portland
- Columbia Corridor Association
- Burgel Rail Group
- PSU - TREC director
- Greater Portland Inc.
- Oregon Trucking Assn.
- Central Eastside Industrial Council
- Identity Clark County

## Bike/Pedestrian, Environmental, and Economic Interests

- The Street Trust
- Oregon Environmental Council
- DEQ
- Westside Economic Alliance
- Clackamas County Business Alliance
- Prosper Portland

# Freight Policy Framework

- **Task 3** Policy Framework
- Will be consistent with other regional policies
- Will address economic benefits and impacts of commodity movement
- Will address the growth impacts of goods delivery and e-commerce.



# Freight Policy Questions

Policy questions that the study will address:

- What are emerging trends in the freight sector that have certain types of impacts on the transportation system?
- When and how should the public sector play a role in addressing the growth impacts that e-commerce and goods delivery is having?
- Are there new ways to address goods movement performance and what is relevant to know about freight and goods movement?
- What are ways in which the freight sector can reduce greenhouse gas emissions?

# What are the Main Tasks in the Scope of Work? (Big Picture)

- **Task 4** Regional Freight Modeling Work and Measures
- **Task 5** Growth Trends in E-commerce and Delivery Services (includes logistics solutions and Covid-19 impacts on e-commerce and delivery services)
- **Task 6** Policy Findings and Recommendations
- **Task 7** Final Report and Presentations

# Major milestones for the Commodities Movement Study

- March 29 to May 24, 2022 - PMT and SAC feedback on how freight movement in the region intersect with the RTP policy priorities of equity, climate, and safety.
- April 2022 - Report on general impacts of COVID-19 on e-commerce and delivery services.
- June 2022 – Mapping of 2019 travel data including: daily truck volumes, truck volumes as a % of traffic, average speed and travel times during midday and PM peak.



# Next Steps

- Updates to PMT, SAC, MTAC/TPAC, and JPACT throughout the 22 – 23 month long study
- Prepare future year regional freight modeling outputs for the study to use in Task 4
- Prepare mapping for more of the data (truck volumes, speeds, travel times) in 19 regional mobility corridors



# Regional Freight Delay and Commodities Movement Study

Questions?



JPACT Members,

Attached please find a letter from the Just Crossing Alliance outlining our position on an IBR LPA entering environmental review.

In summary, we think the current recommendation is NOT fit to enter environmental review because it lacks any financial accountability, because we are concerned about the grades on the "tall bridge" and because we see no practical way to phase the project. As a result we expect to face a very expensive and difficult financial decision in a year or two.

We ask that you delay endorsing a set of alternatives for environmental review until:

- The project provides an updated cost estimate and credible finance plan
- The project develops an additional alternative that is capable of being phased (i.e., doesn't require rebuilding the bridge and seven interchanges at once) that can go through environmental review alongside the current recommendation

Thank you.

Chris Smith



## JUST CROSSING ALLIANCE

Date: June 10, 2022

To: Bi-State Interstate Bridge Legislative Committee  
Metro Council  
SW Washington Regional Transportation Council  
Portland City Council  
Vancouver City Council  
TriMet Board of Directors  
C-TRAN Board of Directors  
Port of Portland Board of Commissioners  
Port of Vancouver Board of Commissioners

From: Julia DeGraw, Coalition Director, Oregon League of Conservation Voters  
Huy Ong, Executive Director, OPAL  
Dan Bilka, President, All Aboard Northwest  
Michael Andersen, Transportation Lead, Sightline Institute  
Paulo Nunes-Ueno, Transportation and Land Use Lead,  
Front and Centered  
Art Poole, President, AORTA  
Nick Caleb, Climate and Energy Attorney, Breach Collective  
Brett Morgan, Transportation and Metro Policy Manager,  
1000 Friends of Oregon  
Mary Peveto, Executive Director, Neighbors for Clean Air  
Ukiah Halloran-Steiner, Co-lead, Sunrise Rural Oregon  
Adah Crandall, Campaign Lead, Sunrise PDX  
Vivian Satterfield, Director of Strategic Partnerships, Verde  
Heidi Cody & Cathryn Chudy,  
Alliance for Community Engagement SW WA (ACE)  
Monica Zazueta, Sunrise SW WA  
Kiel Johnson, Chair, BikeLoud PDX

Sara Wright, Transportation Program Director,  
Oregon Environmental Council  
Claire Vlach, Plans and Projects Committee, Oregon Walks  
Michelle DuBarry, Families for Safe Streets  
Dan Frye, Steering Committee, Metro Climate Action Team  
Sarah Iannarone, Executive Director, The Street Trust  
Abby Griffith, Disability Mobility Initiative  
Bob Sallinger, Conservation Director, Portland Audubon  
Joe Cortright, Director, City Observatory  
Debra Higbee-Sudyka, Conservation Committee Chair,  
Oregon Chapter Sierra Club  
Aaron Brown, Co-founder, No More Freeways  
Stephanie Noll, Coalition Director, Oregon Trails Coalition  
Doug Allen, PDX Forward

Re: Significant adjustment of Interstate Bridge Replacement Project is necessary before Environmental Review

The Just Crossing Alliance is committed to ensuring that the IBR project outcomes are centered in Environmental Justice, Social Justice, Climate Justice and Environmental Health. Our assessment is that if the current Modified Locally Preferred Alternative is advanced into Environmental Review as the sole option other than a No Build, we are unlikely to get acceptable outcomes and may well find ourselves with another failed project.

Our significant concerns include:

- We don't have an accurate picture of the costs or funding of this project. This mega-project has the potential to soak up funding that could be used for many other critical transportation and seismic needs.
- The "High Bridge" (i.e., going over the shipping channel) approach is fundamentally monolithic and means the project cannot be broken up into phases.
- At 116 feet over the shipping channel (and the Coast Guard could require an even greater height), the grades on this project will likely make the

bridge crossing inaccessible for active transportation users of all ages and abilities. and may also create challenging conditions for freight at some ramps.

- The visual impact of the structure, particularly on Hayden Island and the Vancouver Waterfront, has not been sufficiently explored. The project has been careful to show bird's eye views. We need to see "from the ground up" renderings of what this structure will look like.
- Hayden Island and Vancouver will incur displacement of homes and businesses.
- Relying on screening choices made 15 years ago is insufficient. We deserve a public debate on options for both cost and performance from this project.

We also note that in the National Environmental Policy Act (NEPA) process, which is intended to ensure agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making, a "locally preferred alternative" (LPA) is not selected until *after* a range of alternatives have been advanced and thoroughly vetted. Choosing an LPA before doing the analysis is logically backwards, likely violates NEPA and deprives the region of fully informed choices about its future. Given the scale of this project--\$5 billion, and likely more--we deserve a thorough analysis before selecting an alternative. Therefore we are calling on the local partner governments to vote against moving this project to environmental review until the following things happen:

- The project prepares updated cost estimates for the high bridge alternative and a credible and complete finance plan for how those costs will be funded.
- That finance plan should include an Investment Grade Analysis of toll revenue for three purposes:
  - To understand how the countervailing impacts of tolls (suppressing demand) and additional lane capacity (inducing demand) will resolve, so that we understand how this project will affect overall amounts of driving, and the climate and air quality impacts from that driving.
  - To help the public better understand the cost of tolls as part of the equity analysis of the environmental review.



- To understand how much tolling can realistically contribute to the funding of the project.
- The project must create a “phaseable” alternative (e.g., a lower bridge with a lift span, or a tunnel), with sequencing priority addressing seismic resilience and transit connectivity, to advance into environmental review alongside the high bridge alternative.

Unless this is done, we believe there is significant risk that we will emerge from the environmental review process with another unfundable project, with no “Plan B” to prevent a repeat of the Columbia River Crossing failure. We are relying on you to make sure this does not happen.







All Aboard  
**NORTHWEST**



**FRONT**  
— **AND** —  
**CENTERED**



## **ODOT's Reign of Error:**

### **Chronic highway cost overruns**

By Joe Cortright, City Observatory

<https://cityobservatory.org/odots-reign-of-error-chronic-highway-cost-overruns/>

June 15, 2022

*Nearly every major project undertaken by the Oregon Department of Transportation has ended up costing at least double its initial estimate*

*As ODOT proposes a multi-billion dollar series of highway expansions, its estimates pose huge financial risks for the state. ODOT refuses to acknowledge its long record of cost-overruns, and has no management strategy to address this chronic problem*

*Costs are escalating rapidly for more recent and larger projects, indicating this problem is getting worse*

The Oregon Department of Transportation is proposing to move forward with a multi-billion dollar series of highway expansion projects in the Portland metropolitan area, including the \$5 billion Interstate Bridge Replacement project, the \$1.45 billion Rose Quarter freeway widening project, the likely \$1 billion I-205/Abernethy Bridge/I-205 widening project and an as yet un-priced Boone Bridge project. Collectively, these projects would be by far the most expensive infrastructure investment in department's history. But the quoted prices for each project are just the tip of a looming financial iceberg.

A quick look at the agency's history shows that it has invariably grossly underestimated the actual cost of the major projects it has undertaken in the past two decades. Using data from ODOT's own records and other public reports, we've compiled data on the initial project costs estimates (those quoted *before* construction commenced) and compared them with the latest estimates (either the actual final amount of spending in the case of completed projects, or the latest cost estimates for projects that have not yet been finished). In every case, the ultimate price of a project was more than double the initial cost estimate.

This is important because ODOT is asking for permission to undertake a series of highway expansion projects, which, once started, will create a huge financial liability for the state of Oregon. For three projects (the I-5 Bridge Replacement, the Rose Quarter and the Abernethy Bridge I-205 widening), ODOT is planning to sell toll-backed bonds to pay for part of project costs. But if toll revenues are insufficient to pay bonds, or if costs escalate beyond current estimates, the state is fully liable to repay all these costs, and debt service on bonds, and these payments will take precedence over all other expenditures from state and federal transportation funds. The failure to accurately forecast project costs for Portland freeway expansions, coupled with an unavoidable obligation to repay bondholders means that all other state transportation priorities, including even routine maintenance, would be in jeopardy.

Here is a closer look at seven major ODOT construction projects undertaken in the past twenty years. Every one has experienced enormous cost overruns.

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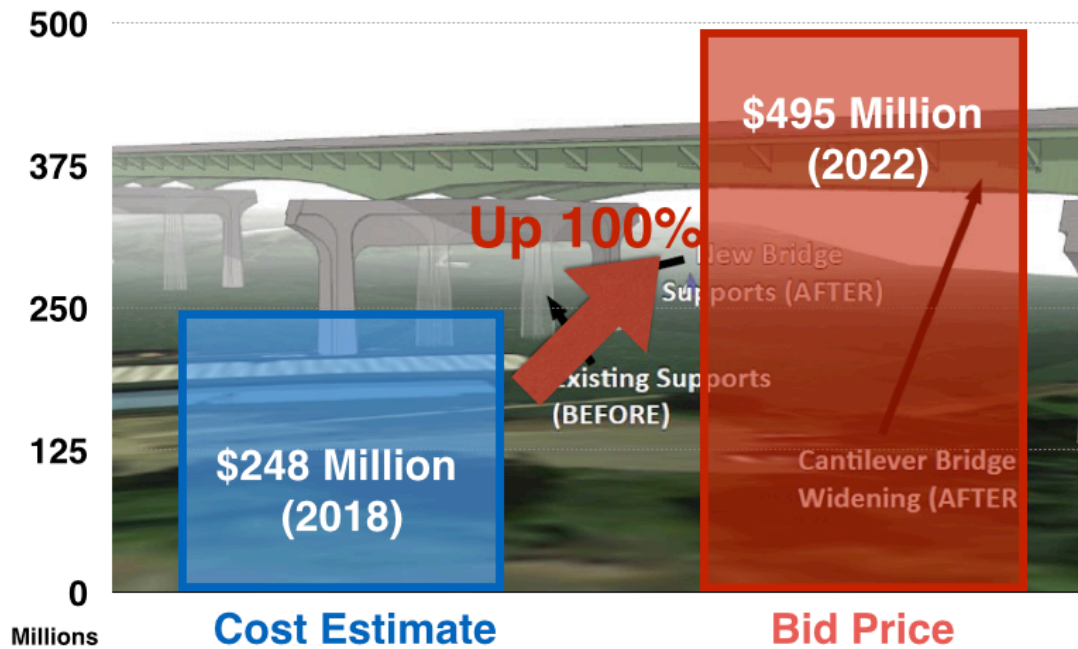
# I-5 Rose Quarter



CityObservatory

The Interstate 5 Rose Quarter Freeway project would widen a 1.5 mile stretch of freeway in Portland and was originally represented to the 2017 Oregon Legislature as costing \$450 million. The latest estimates from the Oregon Department of Transportation are that the project could cost as much as \$1.45 billion.

# I-205 Abernethy Bridge



CityObservatory

The Legislature directed ODOT to prepare a “cost to complete” report for the I-205 Abernethy Bridge project. The bridge connects Oregon City and West Linn, and would be widened and seismically strengthened. ODOT’s 2018 report said the bridge would cost \$248 million. When the agency put the project out to bid in 2022, the actual cost came in at \$495 million—essentially double ODOT’s estimate.

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## Hwy 20: Pioneer Mtn. Eddyville



CityObservatory

ODOT estimated the 5 mile long Highway 20 Pioneer Mountain-Eddyville project would cost \$110 million when the project completed its environmental reviews in 2003 (Federal Highway Administration and Oregon Department of Transportation. (2003). Pioneer Mountain to Eddyville US 20, Lincoln County, Oregon, *Draft Environmental Impact Statement, Executive Summary*). After years of delay, and including a design-build contractor withdrawing from the project, and ODOT having to demolish bridge structures and redesign significant parts of the project, its total cost was \$360 million.



# Newberg Dundee Bypass



CityObservatory

The Newberg-Dundee Bypass has been under consideration for almost two decades; a portion of the project was completed five years ago. The initial estimate of the project's total cost was \$222 million (Oregon Department of Transportation. (2005). *Newberg-Dundee Transportation Improvement Project Location (Tier 1) Final Environmental Impact Statement* (News Release 06-132-R2). The latest estimate of the cost of completing that full bypass project is now \$752 million (Federal Highway Administration and Oregon Department of Transportation. (2010). *Newberg Dundee Bypass, Tier 2 Draft Environmental Impact Statement* (FHWA-OR-EIS-10-0-1D). Salem: Oregon Department of Transportation.



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# Grand Avenue Viaduct (99E)



CityObservatory

In 2002, the Oregon Department of Transportation told the City of Portland that rebuilding the Grand Avenue Viaduct (Highway 99E) in Southeast Portland would cost about \$31.2 million (Leeson, Fred, “Council Backs Long Bridge in Viaduct’s Spot” *Portland Oregonian*, July 19, 2002) . The project was completed seven years at a total cost almost three times higher: \$91.8 million (ODOT, ARRA Project Data for ODOTas of 8/31/2010) .

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# South Medford Interchange



CityObservatory

When proposed in 1999, it was estimated that the I-5 South Medford Interchange would cost about \$30 million (Rogue Valley Area Commission on Transportation meeting notes, September 13, 2005). In 2013, after the project was completed the agency said the cost was \$96 million.

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## I-5 Woodburn Interchange



CityObservatory

The original cost estimate for the I-5 Woodburn interchange project was \$25 million in 2006 (FHWA & ODOT, Woodburn Interchange Project, Revised Environmental Assessment, November 2006). The completed price was \$68 million.

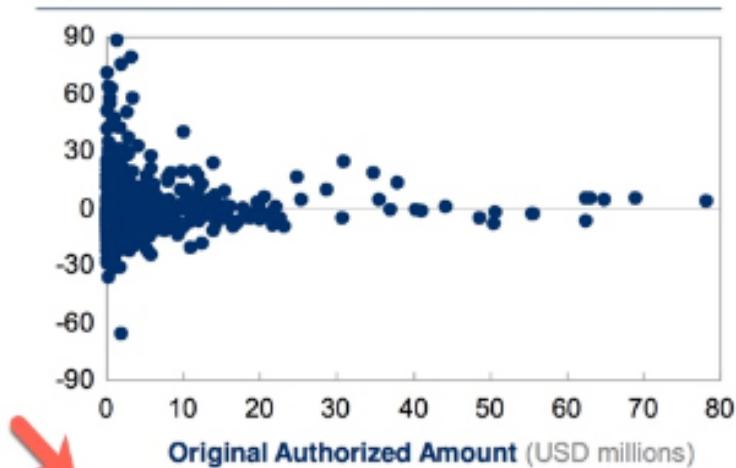
It's always possible to make excuses for cost-overruns on any single project. And if cost-overruns had happened only once, or maybe twice, it might make sense to dismiss them as aberrations. But as the record of these seven projects makes abundantly clear, major ODOT highway projects almost invariably ending up costing twice as much as the original price quoted at the time the project is approved. Cost overruns are a systematic and predictable feature of ODOT's approach to highway building, not an aberrant bug.

## **No Accountability for Cost Overruns**

In an attempt to quell concerns about the ODOT's managerial competence, in 2015, Governor Kate Brown directed that the agency hire an outside auditor to examine its performance. ODOT did nothing for the first five months of 2016, and said the project would cost as much as half a million dollars. Initially, ODOT awarded a \$350,000 oversight contract to an insider, who as it turns out, was angling for then-ODOT director Matt Garrett's job. After this conflict-of-interest was exposed, the department rescinded the contract in instead gave a million dollar contract to McKinsey & Co, (so without irony, ODOT had at least a 100 percent cost overrun on the contract to perform their audit.)

McKinsey's work consisted mostly of interviews with agency-identified "stakeholders" and a superficial analysis of ODOT data. Its report focused on largely meaningless or trivial indicators such as "average time needed to process purchase orders." One part of the report purportedly addressed the agency's ability to bring projects on time and under budget. McKinsey presented this graphic, showing the variation between initial and finished costs for a series of mostly small projects.

Variation from original authorization amount to overall performed amount for ODOT projects 2010-2016, Percent<sup>1</sup>



McKinsey  
& Company

<sup>1</sup> This excludes US20 Pioneer Mtn-Eddyville project (Overall performed 27% higher than \$140M original authorized amount)

There's a striking omission, as revealed in the fine-print footnote: McKinsey excluded data for the Highway 20 Pioneer Mountain Eddyville project. This project, the single most expensive project that ODOT had undertaken, had a 300 percent cost-overrun, which the McKinsey report both failed to report correctly and which it described as "performed 27 percent higher."

The Oregon Department of Transportation doesn't accurately forecast the cost of its projects, and refuses to be held accountable for a consistent pattern of errors. Relying on ODOT's cost estimates exposes the state to enormous financial risk, something that is likely to be magnified as the department moves ahead relentlessly with plans for billions of dollars of freeway expansion projects in the Portland area.

# Ten unanswered questions about the IBR Freeway widening project

Joe Cortright, City Observatory  
June 2022

<https://cityobservatory.org/ten-unanswered-questions-about-the-ibr-boondoggle/>

The Oregon and Washington Legislatures are being asked to accede to the “modified locally preferred alternative” for the I-5 Bridge Replacement (IBR) Project, an intentionally misnamed, \$5 billion, 5 mile long, 12-lane wide freeway widening project between Portland and Vancouver, Washington.

There’s a decided rush to judgment, with almost many of the most basic facts about the project being obscured, concealed, or ignored by the Oregon and Washington Departments of Transportation. As with the failed Columbia River Crossing, they’re trying to pressure leaders into making a decision with incomplete information. Here are ten questions that the IBR project has simply failed to answer. We’ve offered our own insights on the real answers, but before the state leaders take another step, they should satisfy themselves that they know the real answers to each of these questions.

## **1. How much will it cost?**

Conspicuously absent from IBR presentations is any clear statement of what the project is likely to cost. It has been more than 18 months since the project released a warmed over version of the cost estimates from the Columbia River Crossing indicating the project could cost \$4.8 billion. But this estimate is based on an update of old CRC estimates, rather than a new, bottom-up cost estimate of the current project. Already, the IBR team has decided to rebuild the North Portland Harbor bridge which will add an estimated \$200 million to the project. Moreover construction inflation has accelerated in recent months; bids for the Abernethy Bridge project in Portland came in almost 40 percent higher than forecast. Similar cost overruns on the IBR would add more than \$2 billion to the price tag.

*Real Answer: The IBR is likely to be a \$5-7 billion project*

## **2. Who will pay for it?**

Also missing from the IBR presentation is a definitive statement of the sources of funds to pay for the project. For starters—and just for starters—the project says Oregon and Washington will each be expected to contribute \$1 billion. There’s a considerable amount of vague hand-waving about federal support, but most federal money in the Infrastructure bill is allocated by formula, and comes to the two states



whether they build this project or not; and so spending this money on the IBR, rather than fixing the multi-billion dollar backlog of other bridge repairs, comes at a real cost to the states. What is clear is that a third or more of the IBR's costs will have to be recouped by charging tolls to bridge users, and that the two states, and no one else, will be on the hook for any cost overruns and any revenue shortfalls. And cost overruns are hardly conjecture: The I-5 Rose Quarter Freeway widening project, estimated to cost \$450 million five years ago, is now likely to cost as much as \$1.45 billion according to ODOT.

*Real answer: Oregon and Washington have **unlimited liability** for project costs including cost overruns and toll revenue shortfalls.*

### 3. How high will tolls be?

IBR staff have said next to nothing about what level of tolls will be charged for bridge users. Studies prepared for the Columbia River Crossing showed that tolls would have to be a minimum of \$2.60 for off peak users and \$3.25 for peak travel, plus surcharges for those who don't buy transponders, which would push peak period car tolls over \$5.00 each way. Trucks would pay 5 times as much as cars, with peak period tolls topping \$18.

## IRB Truck Toll: \$16-18 each way



Table 6-2 Assumed Account Based Toll Rate Schedule (with transponder)

Fiscal Year	Weekday									Weekend	
	5-6AM	6-7AM	7-9AM	9-10AM	10AM-3PM	3-6PM	6-7PM	7-8PM	8PM-5AM	5AM-8PM	8PM-5AM
6-Axle											
2022-60	\$13.00	\$14.65	\$16.25	\$14.65	\$13.00	\$16.25	\$14.65	\$13.00	\$13.00	\$13.00	\$13.00

Table 6-3 Assumed Non-Account Based Toll Rate Schedule (no transponder)

Fiscal Year	Weekday									Weekend	
	5-6AM	6-7AM	7-9AM	9-10AM	10AM-3PM	3-6PM	6-7PM	7-8PM	8PM-5AM	5AM-8PM	8PM-5AM
6-Axle											
2022-60	\$14.77	\$16.42	\$18.02	\$16.42	\$14.77	\$18.02	\$16.42	\$14.77	\$14.77	\$14.77	\$14.77

Knowing what the toll levels will be is essential to understanding the economic impacts of the bridge, as well as accurately forecasting future traffic levels. Experience in other states has shown that even an \$1 or \$2 toll could permanently reduce traffic to half of its current levels, eliminating the need to add any capacity to



the I-5 crossing. Before they move ahead with the project, shouldn't the public and its leaders know how much will be charged in tolls?

*Real answer: Tolls will be \$2-3 each way, and highest at peak hours, costing regular commuters more than \$1,000 per year.*

#### 4 Will other bridges and highways be tolled to avoid gridlock?

If just the I-5 bridges are tolled, ODOT and WSDOT's own consultants predict that this will produce gridlock on I-205. IBR staff have made vague statements claiming to have looked at tolling other roadways at the same time. But unless parallel routes like the I-205 are also tolled, the traffic claims made for the IBR are simply invalid. If the region is serious about tolling and avoiding gridlock, it needs to adopt a comprehensive tolling strategy before it commits to a multi-billion dollar freeway widening project.

Technical work done for the CRC project, reported on page one of the Oregonian in 2014, indicated that tolling I-5 would produce gridlock on I-5.

## CRC to push gridlock east

A new, tolled I-5 bridge will lead to a big jump in traffic on the I-205 span, a report says

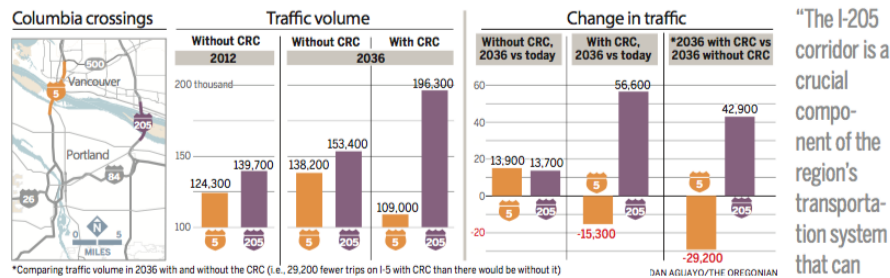


ASSOCIATED PRESS/2005



JAMIE FRANCIS/THE OREGONIAN/2012

A report says that if the Interstate 5 bridge (left) is replaced by a tolled Columbia River Crossing, daily traffic on the Interstate 205 bridge (right) is projected at 196,300 — 42,900 vehicles more than if the CRC were not built. That level of traffic would push the I-205 span to its capacity.

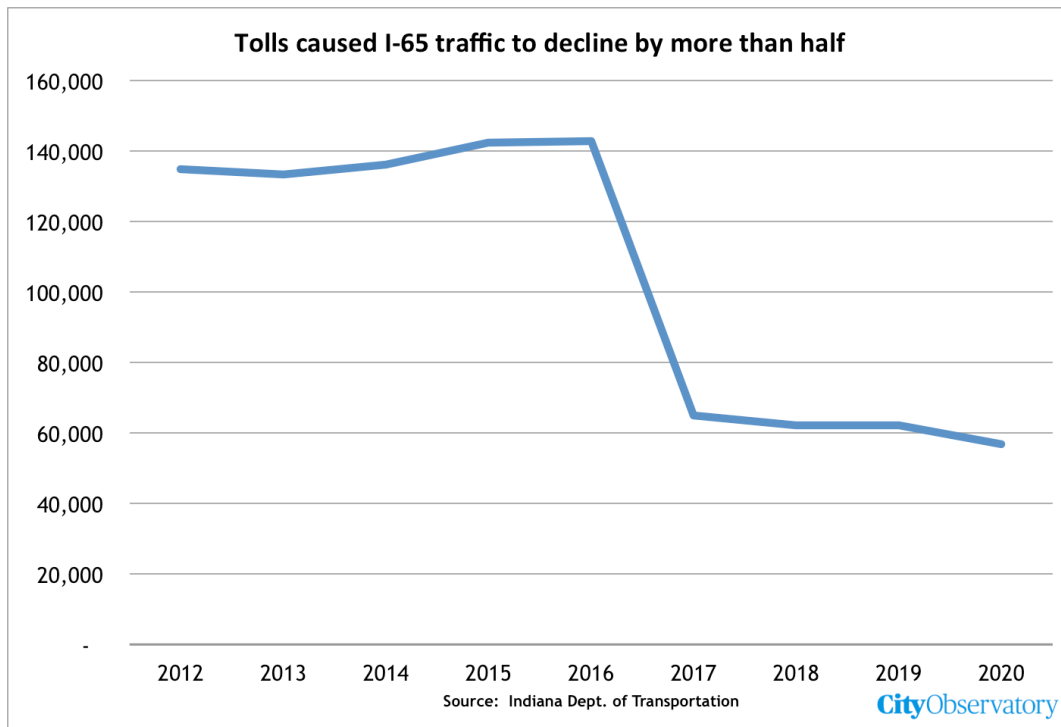


"The I-205 corridor is a crucial component of the region's transportation system that can

*The Oregonian*, Page 1, January 11, 2014, reporting on ODOT's own analysis

Tolling will dramatically affect the traffic levels on I-5 and I-205. The best evidence is that tolling the region's freeways would virtually eliminate the need for additional capacity expansion. ODOT's own congestion pricing consultants showed that a comprehensive system of road pricing would eliminate most metro area traffic

congestion, without the need to spend billions on added capacity. We know from experience in other cities that tolling after adding capacity simply leads to wasting billions of dollars on roadways that aren't used because travelers don't value them. In Louisville, Kentucky, two state DOTs doubled the size of the I-65 bridge—from six to 12 lanes—over the Ohio River that carried almost the same traffic as the I-5 Columbia River Bridges. After construction they started charging a \$1-\$2 toll per crossing, and traffic fell by half. The same thing would likely happen here.



*Real Answer: Unless we toll the I-205 bridge as well, the I-5 bridge will be under-utilized, and I-205 will have gridlock. The two states and the Portland region need to decide on a toll system before its squanders billions on un-need highway capacity, and goes deeply into debt to repay bonds for capacity that isn't used.*

## 5. What will it look like?

Despite spending more than two and a half years and tens of millions of dollars on designing the project, the IBR has yet to produce any renderings showing what the project would look like to human beings standing on the ground in Vancouver or on Hayden Island. The bridge will be 150 feet tall as it crosses the Columbia River and will have lengthy approach ramps, and extensive elevated freeway sections over Vancouver and Hayden Island, with substantial visual and noise impacts. But you would never know it from the project's presentations, which if they show the bridge and freeway expansion at all, show it from an aerial view that could be seen only from flights over Portland International Airport. The project's presentation to a

joint legislative committee in April contains no illustrations of what is to be built at all.

City Observatory has obtained, via public records request, the 3D models created by IBR to show the size and location of the proposed I-5 Bridge. The following image shows what the proposed I-5 bridge would look like, compared to the existing bridge. It would be dramatically taller and wider, and would loom over downtown Vancouver. It's relatively easy to produce images showing how the replacement bridge would affect Vancouver. Why hasn't the IBR with its extensive budget produced any such images?



*Real Answer: The I-5 replacement bridge and approaches will tower over downtown Vancouver and Hayden Island.*

## **6. How long will the trains take?**

A key part of the project is a plan to add light rail service between Portland's Expo Center and downtown Vancouver. The IBR project asserts that there will be huge demand for travel on light rail. But light rail is relatively slow. Unless light rail is faster than car travel or express buses, it's unlikely to attract many riders. Currently, Tri-Met's Yellow line takes 29 minutes to get from the Expo Center to downtown Portland. The CRC FEIS projected that it would take light rail trains about 6 minutes to get from Mill Plain Boulevard across a new I-5 bridge to the Expo Center; together this means it will take at least 35 minutes via light rail to reach downtown Portland from Vancouver. That's more than 10 minutes longer than it takes current C-Tran express buses, traveling in morning, peak hour traffic, to travel between 15th and Broadway in Vancouver to SW 5th and Alder in Portland—a 7:56

AM bus leaving Vancouver reaches downtown Portland at 8:20. Also: with added capacity on I-5 and tolling of I-5, future express buses would travel even faster than they do today, so light rail would likely be at an even greater time disadvantage than it is now. The information provided by the IBR contains no explanation of how a slower train is going to attract more riders than a faster bus or why BRT would perform worse than LRT in this corridor.

*Real Answer: The LRT extension to Vancouver will be considerably slower than today's buses.*

### **7. How can traffic models predict more no-build traffic on a bridge that is already at capacity?**

The I-5 bridges reached capacity almost two decades ago, and can't handle additional traffic, but ODOT's model apparently predicts that traffic will continue to grow across the bridge even though there's no capacity. This is a classic example of a broken model that in the words of national modeling expert Norm Marshall "forecasts the impossible." ODOT's own consultants, CDM Smith, said in 2013 that the I-5 bridge could handle no more peak traffic due to capacity constraints:

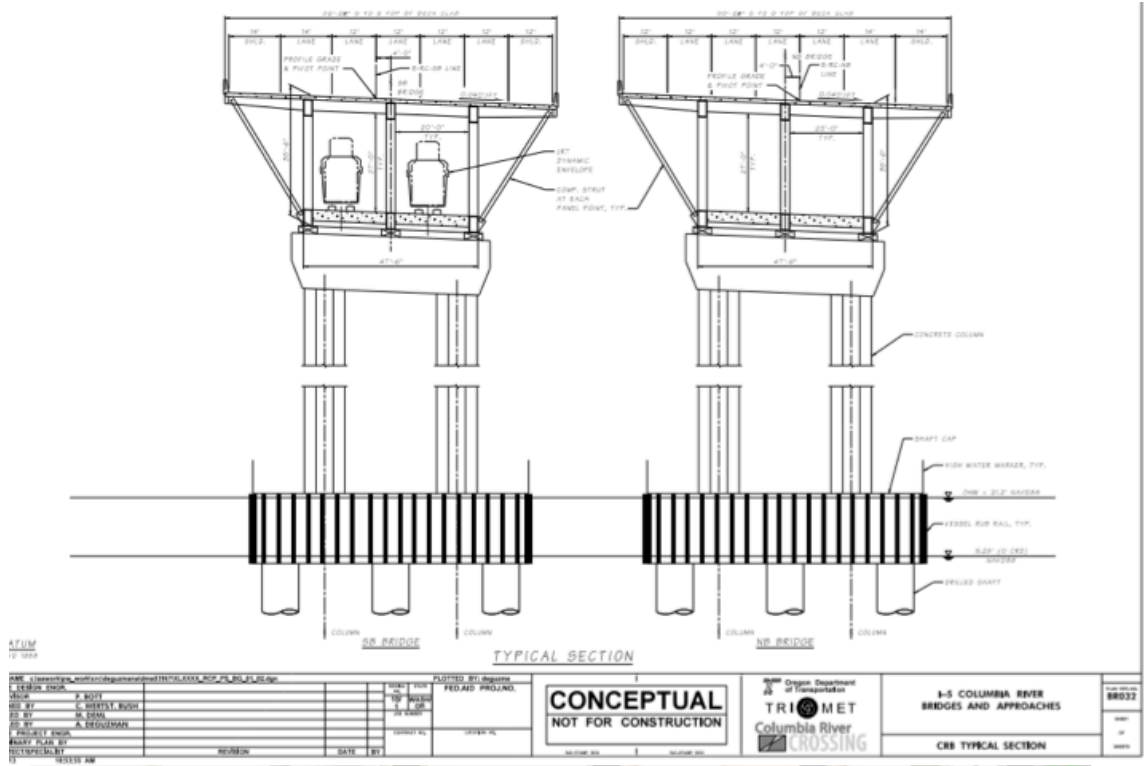
Traffic under the existing toll-free operating condition on the I-5 bridge reached nominal capacity several years ago, especially considering the substandard widths of lanes and shoulders on the facility. The I-5 bridge has little or no room for additional growth in most peak periods, and capacity constraints have limited growth over the last decade.

The IBR's own modelers admitted that traffic growth on I-5 has been limited due to the bridge being at capacity and congested. Yet they've created a fictitious "no build" scenario in which traffic continues to increase, essentially because it has no meaningful feedback loops to adjust travel demand to reflect how humans actually respond in the face of congestion.

*Real Answer: ODOT is using flawed models that overstate no-build traffic and pollution, and conceal the true environmental impact of freeway expansion*

### **8. How wide will the bridges be?**

The IBR team describes the I-5 Bridges adding either two or four so-called "auxiliary lanes" to the existing six freeway lanes on I-5 through the project area. But the project hasn't revealed how wide the structures are that its actually building. In the project's last iteration, the "Columbia River Crossing", the project said they reduced the size of the bridge from twelve lanes to ten in response to objections to its width from local leaders, but in fact, public records requests showed that they didn't reduce the physical size of the bridges (or other structures) at all. The supposed "ten lane" bridge was 180 feet wide, just as was the proposed "twelve lane" bridge.



The cryptic information provided by the IBR says that its so-called 10-lane bridge would be just as wide as the CRC (180 feet), and the so-called 8 lane bridge (“one auxiliary lane”) would be just 16 feet narrower (“2013 LPA Minus 16 Feet”), which works out to 164 feet wide. With standard-width 12 foot wide freeway lanes, this 164 foot wide bridge would accommodate ten traffic lanes (120 feet), with 11 foot shoulders on either side of the travel lanes, or as many as twelve travel lanes (144 feet) with five foot shoulders on either side of the twelve travel lanes). (Alternatively, the 164 foot width would allow construction of 12 travel lanes with 2 foot wide left shoulders and 8 foot wide right shoulders, which would be common, if not generous for an urban bridge).

When it comes to bridges or freeway capacity, ignore how many “lanes” ODOT and WSDOT claim they’re building, and look at how wide the structures are. They’ve repeatedly used this deceptive tactic to intentionally conceal the true width and environmental impact of their projects.

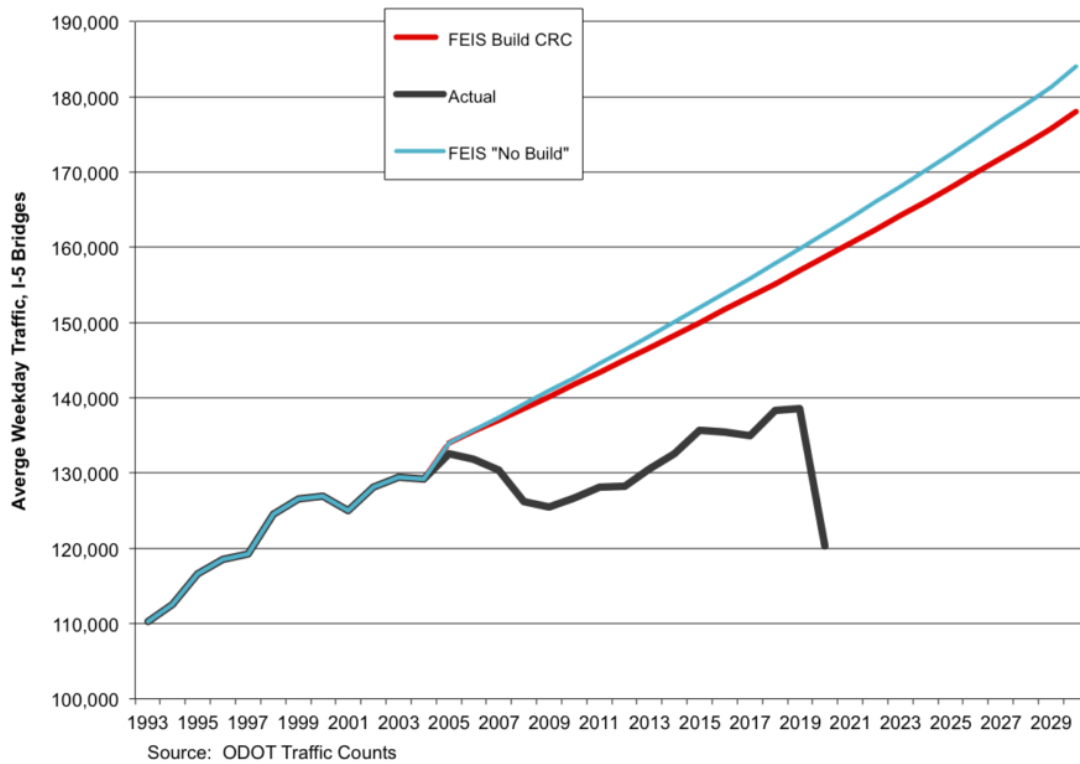
*Real Answer: Regardless of how many lanes IBR claims it is building, its actual plans provide capacity for more, in this case a 10 or 12 lane bridge.*

**9. How many cars will use the bridge?**

The primary argument for the IBR is that it is needed to carry a growing number of vehicles crossing the Columbia River. But completely absent from any of the

project's materials is any specification the volume of traffic the bridge will carry. The project makes claims about travel times and traffic delay, but can't possibly have come up with those estimates without coming up with estimates of the number of cars that will use the bridge. It specifically suppressed this information to undercut the public's ability to understand—and ask questions about and criticize the modeling. And we know that the project's earlier modeling done for the Columbia River Crossing was simply wrong. It predicted that traffic would grow by 1.7 percent per year on I-5 between 2005 and 2030; in fact, through 2019, traffic grew by only 0.3 percent per year. This chart shows the average daily traffic on I-5 as predicted by the CRC (blue: no-build, red build) and actual, from ODOT's own traffic records (black). We can't see how IBR's new modeling compares to these figures, because they've simply refused to publish any average daily traffic totals.

**ODOT's I-5 traffic forecast was monumentally wrong**



The models used by IBR systematically over-estimate travel in the No-build scenario and underestimate, if not completely ignore, the additional traffic induced by adding more lanes. It's impossible to assess the project's claims about traffic performance, environmental impacts, or financial viability with out transparent and accurate estimates of the number of vehicles that will use the bridge.

*Real Answer: IBR uses flawed models which overstate the need for freeway capacity to justify un-needed and expensive freeway widening.*



### 10. How will a wider freeway reduce carbon emissions?

The IBR material makes the specious claim that it will result in lower emissions, based on the false claim that decreasing traffic congestion will reduce vehicle idling in traffic, and that the bridge will have a higher share of transit passengers (something which it cannot explain—see #6 above). The RMI Shift induced travel calculator estimates that adding lanes to the I-5 bridge could increase greenhouse gas emissions hundreds of thousands of tons per year.

## 103 to 155 million additional VMT/year

(Vehicle Miles Travelled)

**Portland-Vancouver-Hillsboro, OR-WA** currently has **715 lane miles** of Interstate highway on which **~4.6 billion** vehicle miles are travelled per year.

A project adding **20 lane miles** would induce an additional **103 to 155 million** vehicle miles travelled per year. Under today's conditions, the annual emissions from this are the same as **~14,100** passenger cars and light trucks or **~7 million** gallons of gas.

Cumulative emissions projections range from **0.5** MMT CO<sub>2</sub>e to **1.6** MMT CO<sub>2</sub>e and are shown in the following table:

### Cumulative Emissions Added Through 2050

	NDC-Aligned Scenario	BAU Scenario
Direct Emissions	~0.5 MMT CO <sub>2</sub> e	~1.1 MMT CO <sub>2</sub> e
Lifecycle Emissions	~0.9 MMT CO <sub>2</sub> e	~1.6 MMT CO <sub>2</sub> e

This calculation is using an elasticity of **1.0**.

*Real Answer: Expanded freeway capacity leads to more driving and more greenhouse gas emissions.*