

# Agenda



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Meeting: Transportation Policy Alternatives Committee (TPAC)  
Date: Friday, June 2, 2023  
Time: 9:00 a.m. to 12:00 p.m.  
Place: Virtual meeting held via Zoom  
[Connect with Zoom](#)  
Passcode: 665293  
Phone: 877-853-5257 (Toll Free)

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<b>9:00 a.m.</b>	<b>Call meeting to order, declaration of quorum and introductions</b>	Vice Chair Leybold
<b>9:10 a.m.</b>	<b>Comments from the Chair and Committee Members</b> <ul style="list-style-type: none"><li>• Updates from committee members around the Region (all)</li><li>• Monthly MTIP Amendments Update (Ken Lobeck)</li><li>• Fatal crashes update (Lake McTighe)</li><li>• Cascadia Corridor Ultra-High-Speed Transportation program update (Ally Holmqvist)</li></ul>	
<b>9:17 a.m.</b>	<b>Public communications on agenda items</b>	
<b>9:18 a.m.</b>	<b>Consideration of TPAC minutes, May 5, 2023 (<u>action item</u>)</b>	Vice Chair Leybold
<b>9:20 a.m.</b>	<b>Metropolitan Transportation Improvement Program (MTIP) Formal Amendment 23-5345 (<u>action item, Recommendation to JPACT</u>)</b> Purpose: For the purpose of adding three new projects and cancelling one project to the 2021-24 MTIP enabling required Federal approval actions to move forward.	Ken Lobeck, Metro
<b>9:30 a.m.</b>	<b>2023 Regional Transportation Plan (RTP): Finalizing draft RTP and list of project and program priorities for public review (<u>action item, Recommendation to JPACT</u>)</b> Purpose: Request TPAC recommendation to JPACT to support release of the draft 2023 RTP and draft HCT Strategy for public review.	Kim Ellis, Metro
<b>11:15 a.m.</b>	<b>2024-2027 Metro Transportation Improvement Program (MTIP) Adoption Draft and Public Comment Report</b> Purpose: To provide TPAC an overview of the adoption draft of the 2024-2027 MTIP and report back the public comment feedback.	Grace Cho, Metro
<b>11:55 a.m.</b>	<b>Committee comments on creating a safe space at TPAC</b>	Vice Chair Leybold
<b>12:00 p.m.</b>	<b>Adjournment</b>	Vice Chair Leybold

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## សេចក្តីជូនដំណឹងអំពីការមិនរើសអើងរបស់ Metro

ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានការបណ្តឹងរើសអើងសូមទូរសព្ទទូរសារកេហ្វធីរ [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights)។  
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឱ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

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Metro tributes cai. Rau cov lus qhia txog Metro txoj cai kev pab, los yog kom sau ib daim ntawv tsis txaus siab, mus saib [www.oregonmetro.gov/civilrights](http://www.oregonmetro.gov/civilrights). Yog hais tias koj xav tau lus kev pab, hu rau 503-797-1700 (8 teev sawv ntov txog 5 teev tsaus ntuj weekdays) 5 hnub ua hauj lwu ua ntej ntawm lub rooj sib tham.



## 2023 TPAC Work Program

**As of 5/25/2023**

**NOTE:** Items in *italics* are tentative; **bold** denotes required items

**All meetings are scheduled from 9am - noon**

<p><b><u>TPAC meeting, June 2, 2023</u></b></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> <li>• Cascadia Corridor Ultra High-Speed Ground Transportation program update (Ally Holmqvist)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-5345</b> <i>Recommendation to JPACT</i> (Lobeck, 10 min)</li> <li>• <b>2023 RTP: Finalizing draft RTP and list of project and program priorities for public review</b> <i>Recommendation to JPACT</i> (Kim Ellis, 1 hr. 45 min)</li> <li>• 2024-2027 MTIP – Adoption Draft and Public Comment Report (Cho, 40 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	<p><b><u>MTAC/TPAC joint workshop, June 21, 2023</u></b></p> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• Climate Smart Strategy Discussion (Kim Ellis/ Eliot Rose, Metro, 60 min.)</li> <li>• 2024 Urban Growth Management Decision: housing market filtering and displacement trends (Ted Reid, Metro, 60 min.)</li> <li>• Construction Career Pathways Overview and Update (Sebrina Owens-Wilson &amp; Andre Bealer, Metro, 45 min.)</li> </ul>
<p><b><u>TPAC meeting, July 7, 2023</u></b></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> <li>• 2023 RTP: Public Review Draft RTP (Kim Ellis)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-XXXX</b> <i>Recommendation to JPACT</i> (Lobeck, 10 min)</li> <li>• <b>2024-2027 MTIP – Adoption Draft</b> <i>Recommendation to JPACT</i> (Cho, 45 min)</li> <li>• 2027-30 STIP Revenue Forecast and Allocation to ODOT funding programs (Chris Ford/ODOT staff, 30 min)</li> <li>• 2023 RTP: Draft Chapter 8 (Implementation) (Kim Ellis, John Mermin, 45 min)</li> <li>• 82<sup>nd</sup> Avenue Transit Project Update (Elizabeth Mros-O'Hara/ TriMet TBD; 45 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	<p><b><u>TPAC workshop, July 12, 2023</u></b></p> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• Freight Commodity Study: Draft Finding (Tim Collins, Metro, 30 min)</li> <li>• Regional Mobility Policy incorporation into the 2023 RTP (Kim Ellis, Metro, 60 minutes)</li> <li>• Draft Transportation System Management &amp; Operations (TSMO) Key Corridors (Caleb Winter, 45 minutes)</li> <li>• 2027-30 STIP overview – development and funding allocation (Chris Ford, ODOT; 30 min)</li> </ul>

<p><b><u>TPAC meeting, August 4, 2023</u></b>  <b><i>Confirmation on meeting TBD – May be cancelled.</i></b>  Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	<p><b><u>MTAC/TPAC joint workshop, August 16, 2023</u></b></p> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• 2023 RTP: Begin discussion of public comments on Public Review Draft RTP, Project List and Appendices (Kim Ellis, 60 min)</li> <li>• 2023 RTP: Draft Ordinance and Outline of Adoption Package (Kim Ellis, 45 min)</li> <li>• TV Highway Transit and Development Project Update (Jessica Zdeb, 45 min)</li> </ul>
<p><b><u>TPAC meeting, September 1, 2023</u></b>  Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-XXXX</b>  <u>Recommendation to JPACT</u> (Lobeck, 10 min)</li> <li>• <i>Great Streets Program updates: Final project list</i> (Chris Ford, ODOT; 30 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	<p><b><u>TPAC workshop, September 13, 2023</u></b></p> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• 2023 RTP: Draft Public Comment Report and Recommended Changes in Response to Public Comment (Kim Ellis, 90 min)</li> </ul>
<p><b><u>TPAC meeting, October 6, 2023</u></b>  Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-XXXX</b>  <u>Recommendation to JPACT</u> (Lobeck, 10 min)</li> <li>• Ordinance 23-XXXX 2023 RTP: Adoption Package, Draft Public Comment Report and Recommended Changes in Response to Public Comment (Kim Ellis, 90 min)</li> <li>• Freight Delay Study Report Update (Tim Collins; 45 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	

<p><b><u>TPAC meeting, November 3, 2023</u></b></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-XXXX</b> <u>Recommendation to JPACT</u> (Lobeck, 10 min)</li> <li>• <b>Ordinance 23-XXXX on 2023 RTP, Projects and Appendices</b> <u>Recommendation to JPACT</u> (Kim Ellis, 90 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	<p><b><u>TPAC workshop, November 8, 2023</u></b></p> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• Regional Transportation Safety Performance Report (Lake McTighe, 30 min)</li> <li>• 2027-30 STIP – options being discussed at OTC (Chris Ford, ODOT; 30 min)</li> </ul>
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<p><b><u>TPAC meeting, December 1, 2023</u></b></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> <li>• Committee member updates around the Region (Chair Kloster &amp; all)</li> <li>• Monthly MTIP Amendments Update (Ken Lobeck)</li> <li>• Fatal crashes update (Lake McTighe)</li> </ul> <p><b>Agenda Items:</b></p> <ul style="list-style-type: none"> <li>• <b>MTIP Formal Amendment 23-XXXX</b> <u>Recommendation to JPACT</u> (Lobeck, 10 min)</li> <li>• Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)</li> </ul>	
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**Parking Lot: Future Topics/Periodic Updates**

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| <ul style="list-style-type: none"> <li>• Columbia Connects Project</li> <li>• 82<sup>nd</sup> Avenue Transit Project update (Elizabeth Mros-O'Hara &amp; TBD, City of Portland)</li> <li>• Best Practices and Data to Support Natural Resources Protection</li> <li>• TV Highway Corridor plan updates</li> <li>• High Speed Rails updates (Ally Holmqvist)</li> </ul> | <ul style="list-style-type: none"> <li>• MTIP Formal Amendment I-5 Rose Quarter discussion (Ken Lobeck)</li> <li>• I-5 Rose Quarter Project Briefing (Megan Channell, ODOT)</li> <li>• I-5 Interstate Bridge Replacement program update</li> <li>• Ride Connection Program Report (Julie Wilcke)</li> <li>• Get There Oregon Program Update (Marne Duke)</li> <li>• RTO Updates (Dan Kaempff)</li> </ul> |
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Agenda and schedule information E-mail: [marie.miller@oregonmetro.gov](mailto:marie.miller@oregonmetro.gov) or call 503-797-1766.

To check on closure or cancellations during inclement weather please call 503-797-1700.

# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: May 24, 2023  
To: TPAC and Interested Parties  
From: Ken Lobeck, Funding Programs Lead  
Subject: TPAC Metropolitan Transportation Improvement Program (MTIP) Monthly Submitted Amendments (May 1, 2023 through late May 2023)

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## **BACKGROUND**

### **Formal Amendments Approval Process:**

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

### **Administrative Modifications Approval Process:**

Projects requiring only small administrative changes as approved by FHWA and FTA are completed via Administrative Modification bundles. Metro normally accomplishes one "Admin Mod" bundle per month. The approval process is far less complicated for Admin Mods. The list of allowable administrative changes is already approved by FHWA/FTA and are cited in the Approved Amendment Matrix. As long as the administrative changes fall within the approved categories and parameters, Metro has approval authority to make the change and provide the updated project in the MTIP immediately. Approval for inclusion into the STIP requires approval from the ODOT. Final approval into the STIP usually takes between 2-3 weeks to occur depending on the number of submitted admin mods in the approval queue.



**MTIP Formal Amendments**

May FFY 2023 Formal Transition Amendment Bundle Contents

Amendment Type: Formal/Full

Amendment #: MY23-09-MAY

Total Number of Projects: 6

Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action
(#1) ODOT Key # <b>23428</b> MTIP ID TBD (New Project)	ODOT	<b>I-84: (Multi-Use Path) Jordan Rd Tunnel - Sandy River Delta</b>	Design and construct multi-use path parallel to Jordan Road from the pedestrian tunnel to Sandy River Delta increasing pedestrian safety and bike access (CAA23, DEMO ID OR211)	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations Act of 2023, Congressional Directed Spending project, DEMO ID OR211, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.
(#2) ODOT Key # <b>22647</b> MTIP ID TBD (New Project)	ODOT	<b>OR141 (SW Hall Blvd): SW Spruce St - SW Hemlock St</b>	The project will provide two enhanced pedestrian crossings along Hall to improve the visibility of pedestrians crossing the street and encouraging people to use these crossings to walk to parks and schools in the immediate area (CAA23, DEMO ID OR216)	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations Act of 2023, Congressional Directed Spending project, DEMO ID OR216, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.
(#3) ODOT Key # <b>TBD</b> MTIP ID TBD (New Project)	TriMet	<b>TriMet Merlo Bus Garage Zero Emission Retrofit</b>	This project includes sitework, garage and utility upgrades and installation of charging stations for articulated buses at Merlo Garage (ID# 2023-CMPJ-094 Earmark)	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations Act of 2023, Congressional Directed Spending project, ID# 2023-CMPJ-094, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.
(#4) ODOT Key # <b>TBD</b> MTIP ID	TriMet	<b>TriMet 82nd Ave MAX Station Improvement Project</b>	The project includes design, permitting, and construction for refurbishment of the light rail platform,	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations

TBD (New Project)			existing shelters and lighting, and new safety upgrades at the 82nd Avenue MAX Station for added passenger safety (DEMO ID OR209, CAA2023)	Act of 2023, Congressional Directed Spending project, DEMO ID OR209, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.
(#5) ODOT Key # TBD MTIP ID TBD (New Project)	TriMet	<b>TriMet Oregon City Transit Center</b>	This project includes acquisition of property, design and planning, sitework, construction and renovation of facilities at the Oregon City Transit Center for improved transit operations (ID# 2023-CMPJ-095)	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations Act of 2023, Congressional Directed Spending project, ID# 2023-CMPJ-095, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.
(#6) ODOT Key # TBD MTIP ID TBD (New Project)	TriMet	<b>Willamette Shore Line Rail &amp; Trestle Repair</b>	The WSL improvements will upgrade the South Miles Street crossing, replace Jones trestle, conduct mitigation associated with geotech exploration and miscellaneous trestle & track improvements along with routine maintenance (ID# 2023-CMPJ-096)	<b><u>ADD NEW PROJECT:</u></b> The formal MTIP amendment adds the new approved Consolidated Appropriations Act of 2023, Congressional Directed Spending project, ID# 2023-CMPJ-096, to the 2021-24 MTIP enabling PE to be obligated and initiated before the end of FFY 2023.

## Notes:

Approval Status for the May FFY 2023 Formal MTIP Amendment, MY23-09-MAY:

- TPAC approval date: May 5, 2023
- JPACT approval date: May 18, 2023
- Metro Council approval request: Scheduled for Tuesday, May 30, 2023.

**Administrative Modifications****AM23-14-MAY1**

Key	Lead Agency	Name	Change
16986	Gresham	NW Division Complete St Phase I: Wallula Ave – Birdsdales Ave	<b>FUND PHASE SHIFT</b> Cancel UR phase and re-allocate the \$100k among PE, ROW, and the Construction phase.
22529	Multnomah County	Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave	<b>ADD &amp; SWAP FUNDS:</b> Add new Consolidated Appropriations Act 2023 earmark of \$2 million plus match to the PE phase.
23999	TriMet	TriMet Beaverton Transit Center Renovation (2022 5339b)	<b>ADJUST PHASE OBLIGATION YEARS</b> Re-set all phase programming years to be FFY 2023

**AM23-15-MAY2**

Key	Lead Agency	Name	Change
22311	Metro	Portland Metro Planning SFY24	<b>ADD APPROVED FUNDS</b> Update PL, 5303, STBG, State STBG, and local overmatch based on the approved SFY 2024 UPWP. Key 22311 represents the approved UPWP projects as part of the Master Agreement. \$53k of PL plus match is removed from Key 22311 through Modification #1.
22598	Metro	Corridor and Systems Planning (2021)	<b>TRANSFER FUNDS</b> Shift all STBG-U and matching funds to Key 22311 in support of the SFY 2024 UPWP
22154	Metro	Next Corridor Planning (FFY 2022)	<b>TRANSFER FUNDS</b> Shift \$112,008 of STBG-U and match to Key 22311 in support of the SFY 2024 UPWP
22312	Metro	Portland Metro Planning SFY25	<b>ADD FUNDS:</b> Add \$37k of PL plus match which are defined as UPWP set-aside funds to FFY 2024. Funds are approved as part of the SFY 2024 UPWP but can't be obligated until FFY 2024.

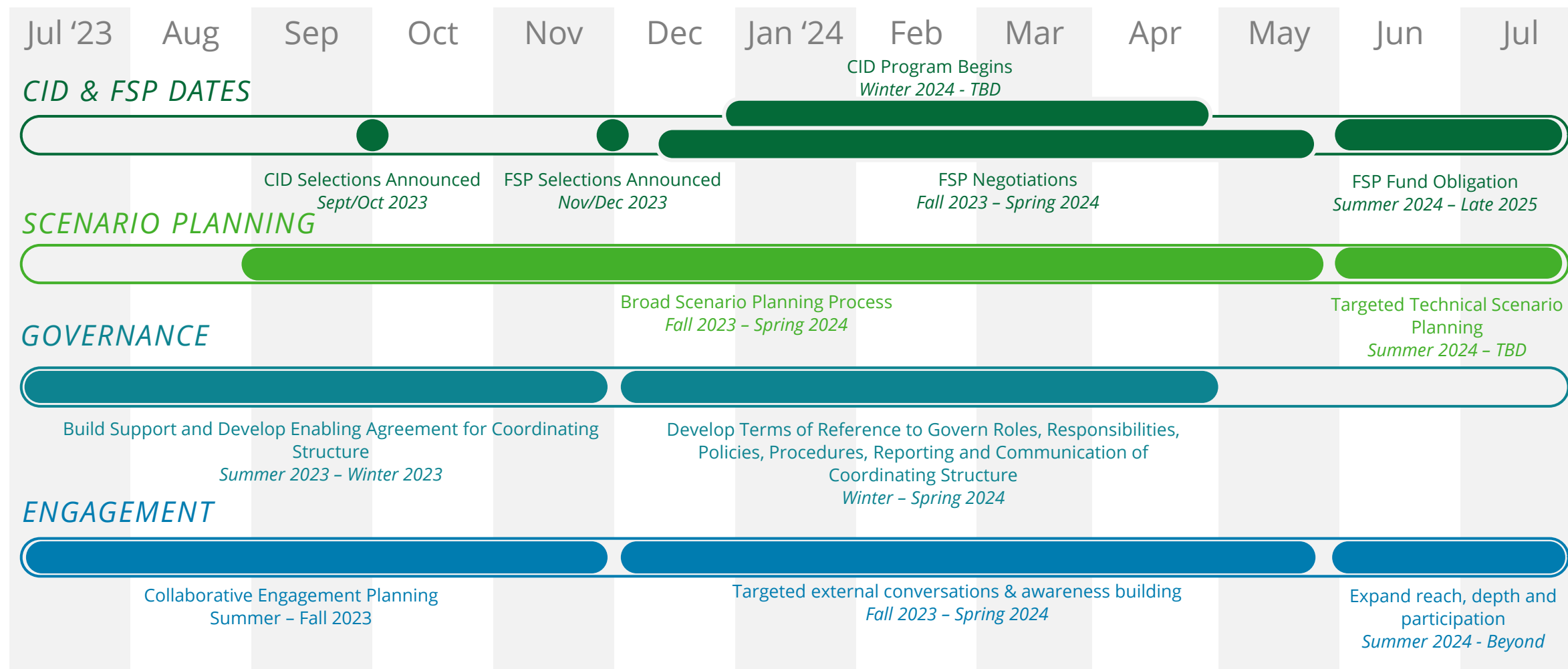
**AM23-16-MAY3**

Key	Lead Agency	Name	Change
22432	ODOT	US30BY Curb Ramps	<b>SPLIT PROJECT:</b> Split a total of \$11.4million from the construction phase to create a child project. Slip ROW and Cons to FFY 2024.
23458	ODOT	US30BY Curb Ramps, Phase 1	<b>CREATE CHILD PROJECT:</b> Using split funds from Key 22432, create a construction only phase child project supporting the ADA ramp enhancements

# Cascadia Ultra-High-Speed Ground Transportation: 1-Year Program Outlook



The below graphic illustrates the broad timeframes of activities and milestones anticipated between July 2023 and July 2024 (subject to change).





# Meeting minutes



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Meeting: **Transportation Policy Alternatives Committee (TPAC)**  
Date/time: Friday May 5, 2023 | 9:00 a.m. to 12:00 p.m.  
Place: Virtual online meeting via Web/Conference call (Zoom)

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## **Members Attending**

Tom Kloster, Chair  
Karen Buehrig  
Allison Boyd  
Dyami Valentine  
Lynda David  
Eric Hesse  
Jaimie Lorenzini  
Jay Higgins  
Mike McCarthy  
Chris Ford  
Gerik Kransky  
Laurie Lebowsky-Young  
Lewis Lem  
Bill Beamer  
Ellie Gluhosky  
Sarah Iannarone  
Danielle Maillard  
Jasia Mosley  
Indi Namkoong

## **Alternates Attending**

Jamie Stasny  
Sarah Paulus  
Gregg Snyder  
John Serra  
Neelam Dorman

## **Members Excused**

Tara O'Brien  
Jasmine Harris  
Katherine Kelly  
Shawn M. Donaghy  
Ned Conroy  
Rian Sallee

## **Affiliate**

Metro  
Clackamas County  
Multnomah County  
Washington County  
SW Washington Regional Transportation Council  
City of Portland  
City of Happy Valley and Cities of Clackamas County  
City of Gresham and Cities of Multnomah County  
City of Tualatin and Cities of Washington County  
Oregon Department of Transportation  
Oregon Department of Environmental Quality  
Washington State Department of Transportation  
Port of Portland  
Community member at large  
OPAL Environmental Justice Oregon  
The Steet Trust  
Oregon Walks  
Community member at large  
Verde

## **Affiliate**

Clackamas County  
Multnomah County  
City of Hillsboro and Cities of Washington County  
TriMet  
Oregon Department of Transportation

## **Affiliate**

TriMet  
Federal Highway Administration  
City of Vancouver  
C-Tran System  
Federal Transit Administration  
Washington Department of Ecology

### **Guests Attending**

A.J. O'Connor  
Brian Hurley  
Camilla Dartnell  
Chris Smith  
Cody Field  
Cody Meyer  
Jeff Owen  
Jonathan Maus  
Jonathan Slason  
Kate Freitag  
Kate Selin  
Phil Longenecker  
Rye Baerg  
Sara Wright  
Steve Gallup  
Steve Kelley  
Whitney Dorer

### **Affiliate**

TriMet  
Oregon Department of Transportation  
Kittelson & Associates  
  
City of Tualatin  
Department of Land Conservation and Development  
HRD  
Bike Portland  
RSG  
Oregon Department of Transportation  
Alta Planning & Design  
Alta Planning & Design  
Oregon Department of Transportation  
  
Clark County  
Washington County  
Oregon Department of Environmental Quality

### **Metro Staff Attending**

Ally Holmqvist, Caleb Winter, Cindy Pederson, Clint Chiavarini, Dan Kaempff, Daniel Audelo, Eliot Rose, Grace Cho, Grace Stainback, John Mermin, Ken Lobeck, Kim Ellis, Lake McTighe, Marie Miller, Matt Bihn, Matthew Hampton, Shannon Stock, Ted Leybold, Thaya Patton

### **Call to Order, Declaration of a Quorum and Introductions**

Chair Kloster called the meeting to order at 9:00 a.m. Introductions were made. A quorum of members present was declared. Reminders where Zoom features were found online was reviewed. A reminder was given to let us know if, as alternate member attending in place of a member to be placed as a panelist. Input was encouraged for providing safe space for everyone at the meeting via the link in chat. Comments would be shared at the end of the meeting.

### **Comments from the Chair and Committee Members**

- **Announcement of Lynda David (SW Washington Regional Transportation Council), TPAC member retirement** (Chair Kloster) Chair Kloster announced that Lynda David, TPAC member from SW Washington Regional Transportation Council, was retiring at the end of May. A tribute from photos and messages by members of TPAC and staff acknowledged the project work and regional efforts that were provided with best wishes for retirement. Ms. David thanked everyone for their comments.
- **Updates from committee members around the region** (Chair Kloster)  
(Eric Hesse) Recent federal grant awards have been provided to the City of Portland, among them \$14 million dollar award for the Hawthorne Bridge improvements and bike paths, and a grant through the SMART program with several partners.

(Allison Boyd) It was announced that Multnomah County was hiring for a new Transportation Planning and Development Manager. The link for this was shared in chat:

[https://multco.wd1.myworkdayjobs.com/en-US/Multco\\_Jobs/job/Transportation-Planning-and-Development-Manager\\_R-11173](https://multco.wd1.myworkdayjobs.com/en-US/Multco_Jobs/job/Transportation-Planning-and-Development-Manager_R-11173)

(Chris Ford) It was announced that the ODOT Region 1 Project Delivery Manager has been promoted to Assistant of Delivery Operations Division, responsible for statewide strategies and planning. It was noted letters to Metro from ODOT were included in the April 19 workshop packet with comments to address. It was suggested that with the RTP process now happening, JPACT and Metro Council have the opportunity to look at the 2040 Growth Concept with a refresh. Opportunities and solutions can be found from changes in land development in the region to support transportation modes and travel. As a reminder, May 12 is the deadline to comment on the Oregon Transportation Plan Update. The link for this was shared in chat: <https://www.oregon.gov/odot/planning/pages/oregon-transportation-plan-update.aspx>

- **Monthly MTIP Amendments Update** (Ken Lobeck) Chair Kloster referred to the memo in the packet on the monthly submitted MTIP formal amendments submitted from through April 2023. Questions on the memo can be directed to Mr. Lobeck.
- **Fatal crashes update** (Eliot Rose on behalf of Lake McTighe) The monthly fatal crash report for Clackamas, Multnomah and Washington Counties was provided. There have been eight fatalities reported in the last month, bringing the number of fatal crashes in the tri-county area to 42 since the start of the year.
- **2024-27 MTIP – Public Comment Report** (Grace Cho) A reminder was made on this being the last day to accept public comment on the 2024-27 MTIP. The link for this was shared in chat: <https://www.oregonmetro.gov/public-projects/2024-27-metropolitan-transportation-improvement-program> A preview of the adoption draft of this document will be shared with TPAC in June, and submitted for action at the July meeting.
- **Congressionally Directed Spending (earmarks)** (Ted Leybold) Mr. Leybold noted that if agencies intend to request Congressionally Directed Spending (earmarks), or if you intend to apply for federal discretionary funding for a project located with Metropolitan Planning Area, please coordinate with Metro staff as you are putting together your request or application to ensure the project is included in the current 2018 Regional Transportation Plan and the upcoming 2023 Regional Transportation Plan financially constrained system and can be identified as such.

Projects awards cannot be programmed in the Metropolitan Transportation Improvement Program (MTIP), and you will not be able to access the awarded funds, until MPO staff can confirm inclusion of the project in the RTPs financially constrained system. Many of the discretionary funding programs specifically request this information in the application materials and Metro staff will be happy to provide written confirmation of this if helpful.

#### **Public Communications on Agenda Items** – none received

#### **Consideration of TPAC Minutes from April 7, 2023**

Minutes from TPAC April 7, 2023 were approved by majority vote of the committee.  
Abstaining: Sarah Iannarone, Dyami Valentine and Lewis Lem.

#### **Metropolitan Transportation Improvement Program (MTIP) Formal Amendment 23-53XX** (Ken Lobeck, Metro) The May FFY 2023 Formal Metropolitan Transportation Improvement Program

(MTIP) Formal/Full Amendment bundle was presented. All six projects are Congressional Directed Spending projects, or otherwise referred to as Congressional Earmarks. Two are ODOT managed earmarks with the remaining four belonging to TriMet. They are being added now to the 2021-24 MTIP to enable Federal Highway Administration (FHWA) Financial Management Information System (FMIS) and Federal Transit Administration Transit Awards Management System (TrAMS) obligations to occur before the end of FFY 2023 (September 30, 2023). This will enable ODOT and TriMet to initiate Preliminary Engineering activities for their projects this federal fiscal year, and help accelerate overall project delivery.

**I-84: (Multi-Use Path) Jordan Rd Tunnel - Sandy River Delta**

Design and construct multi-use path parallel to Jordan Road from the pedestrian tunnel to Sandy River Delta increasing pedestrian safety and bike access.

**OR141 (SW Hall Blvd): SW Spruce St - SW Hemlock Street**

The project will provide two enhanced pedestrian crossings along Hall to improve the visibility of pedestrians crossing the street and encouraging people to use these crossings to walk to parks and schools in the immediate area.

**TriMet Merlo Bus Garage Zero Emission Retrofit**

This project includes sitework, garage and utility upgrades and installation of charging stations for articulated buses at Merlo Garage.

**TriMet 82nd Ave MAX Station Improvement Project**

The project includes design, permitting, and construction for refurbishment of the light rail platform, existing shelters and lighting, and new safety upgrades at the 82nd Avenue MAX Station for added passenger safety.

**TriMet Oregon City Transit Center**

This project includes acquisition of property, design and planning, sitework, construction and renovation of facilities at the Oregon City Transit Center for improved transit operations.

**Willamette Shore Line Rail & Trestle Repair**

The WSL improvements will upgrade the South Miles Street crossing, replace Jones trestle, conduct mitigation associated with geotech exploration and miscellaneous trestle and track improvements along with routine maintenance.

Comments from the committee:

- Lewis Lem asked about the process to add new projects listed as Congressionally Directed Spending (earmarks) into the MTIP and RTP. It was noted that if the project could not be linked to the constrained RTP list it could not be moved forward as an amendment. There are differing situations that have occurred in the past which will need further clarification.

**MOTION: To provide JPACT an approval recommendation of Resolution 23-53XX to add the six new projects to the 2021-24 MTIP.**

Moved: Chris Ford

Seconded: Eric Hesse

**ACTION: Motion passed with two abstentions: Sarah Iannarone and Ellie Gluhosky**



**Carbon Reduction Program – Funding Allocation** (Ted Leybold & Grace Cho, Metro) The presentation began with a background review of the program. The Carbon Reduction Program is a new funding program established by the BIL and administered through the Federal Highway Administration (FHWA). Oregon is to receive an estimated \$82.5 million total in Carbon Reduction Program funding. The Oregon Department of Transportation (ODOT) ODOT will administered approximately \$53.9 million, \$26.8 million of which will be targeted to smaller cities and rural areas and \$29.8 million of which will be allocated across the entire state, including the Metro area. Metro’s portion of the Carbon Reduction Program funding is approximately \$18.8 million total for the five federal fiscal years of BIL.

Due to requirements outlined in BIL, the allocation of Carbon Reduction Program funds must be completed and submitted to FHWA no later than November 2023. Due to this compressed timeline Metro will award all five years of funding in one allocation process. Metro staff developed several draft allocation packages of projects informed by the Climate Smart Strategy and initial TPAC, JPACT and Metro Council member input for consideration. TPAC and JPACT provided feedback on the draft package options, with TPAC recommending an additional package option. Input received for development of the package options and on the draft package options was summarized.

Based on the input received from TPAC and JPACT members regarding draft investment package options, Metro staff is proposing TPAC consider two package options: the Transit Corridors and Active Transportation option (Package C) and the Transit Corridors and System Management & Operations option (Package E) and make a recommendation to JPACT.

Comments from the committee:

- Jay Higgins noted the challenges with active transportation projects that can be small if they become federalized. It was asked if there are exchanges of funding identified for smaller projects. Mr. Leybold noted Metro has requested TriMet investigate the ability to do a fund exchange with the Federal requirements. Because of the structure requirements it is hard to do small projects. TriMet is checking on the possibilities and we expect to hear from them on this in two weeks. It was noted the project funding would not be available until 2025 if this happens.
- Danielle Maillard supported projects for active transportation and Safe Routes for Schools and was interested to know where the locations for these projects were in the region. There is concern about balancing building infrastructure that can increase traffic in areas in equity focus areas that would not reduce carbon (such as freight traffic around industrial areas).

Mr. Leybold noted during prioritization of the transit corridor projects all were selected considering the need for infrastructure and service location relative to equity focus areas and trying to address some of these major needs and reduction of carbon potential associated with them. The \$3 million investment in either System Management & Operations types of improvements, and active transportation improvements would identify locations of projects.

- Indi Namkoong asked how carbon reductions would be achieved from system management and operations tools and what types of projects related to reducing gas emissions. Mr. Leybold noted transit signals on the McLoughlin project as an example. Projects using

technology in how we operate the transportation system in ways that reduce carbon emissions are projects we are looking for. There could be investments in safety elements if they show they can reduce carbon. TransPort would investigate and come to TPAC with recommendations on these investments.

- Karen Buehrig asked about the \$1.8 million climate smart strategies mentioned. EV fuels and infrastructure are not mentioned in local Metro areas. Is additional planning work or EV infrastructure planned to come from this funding, or would TPAC have additional input on this scope of work? Mr. Leybold noted in terms of who we are looking at coordinating state investments the state has taken the lead with EV fuel planning. Statewide strategy has ODOT in the lead role with less on transit and active transportation at the local and regional level.

We have not identified local areas around EV infrastructure planning work, but if there is interest we can consider putting it into that tool box. In terms of providing further direction, the programming will all come back when we are starting to lay out these elements as part of the Unified Planning Work Program. Ms. Buehrig noted Clackamas County is reviewing the funding via ODOT that focuses on rural cities, and while there is money in that bucket for EV infrastructure in rural cities, it's difficult to understand this in the Metro area.

- John Serra noted TriMet is supportive of making less impacts with transit service and easier in areas of equity focus areas. With the active transportation funding they would encourage we are not creating a really detailed time process evaluation for just the \$3 million allocation.
- Indi Namkoong noted I'd tend to agree—some sort of equity/existing burden overlay for active transportation project locations could be useful in generating co-benefits to carbon reductions (air pollutants, safety, etc.).
- Jaimie Lorenzini suggested including language in conditions of approval for the projects selected for the \$3 million funding bucket and that the selecting body will consider investing throughout the entire region and will contemplate areas at a higher climate risk. We need to consider communities adversely affected by climate and pollution and not leave parts of the region behind. There is not enough quantitative analysis on the impacts of pollution. An example to consider was provided in the chat: National Air Toxics Assessment Tab: <https://enviroatlas.epa.gov/enviroatlas/interactivemap/>
- Indi Namkoong added without deprioritizing carbon reductions, we should absolutely be looking to maximize co-benefits of shifting trips to transit/active transportation.
- Mr. Leybold agreed these were consistent with recent RFFA allocation to spend active transportation project funds across the region. Ms. Cho noted there is a lot of overlapping inconsistency with analysis in terms of reducing carbon and air pollutants. We are open to looking at co-benefits around the active transportation package. It was noted these funds are focused on carbon reduction with first consideration of this.
- Jaimie Lorenzini added she did not want to change the focus of this program but rephrase reducing carbon in places where there is a higher risk in certain population areas because of a higher concentration of emissions. How do we strategically reduce carbon in these communities that are more impacted than others? More written into investment plans across the region should be considered.
- Chris Ford noted in chat the call for carbon deduction projects in Small Urban and Rural

Areas, \$13M total, submissions due by May 31:

<https://www.oregon.gov/odot/climate/Pages/CarbonReductionProgram.aspx#:~:text=The%20Carbon%20Reduction%20Program%20is,greenhouse%20gas%20emissions%20from%20transportation.>

Projects identified in the statewide program have a Nov. deadline. Information on these will be provided to TPAC this year. It was noted that part of the legislative materials on this item was suggested to include a timeframe to meet program obligations for allocating funds. ODOT supports capital projects that include completing bike and ped systems.

- Eric Hesse noted the challenges and implications of small funding available that are federalized to meet many needs. Even more complex are small subsets leveraged with larger investments could be used strategically as part of this conversation. Efforts by TriMet were appreciated to investigate a process of fund exchanges that de-federalize funds to make smaller projects possible. It was asked what TransPort ideas were on how some of these funds can be invested in the region to benefit carbon reduction.

Caleb Winter, Transport Program Manager, noted his presentation later at this meeting would provide information on proposed projects planned around the region. We do not yet have a regionwide rollout that identifies project strategies and plans to achieve carbon reduction goals per project location. But coming closer to this, along with safety, bike/ped transit offerings and travel information in real time with data to assist in carbon reduction.

Mr. Hesse noted the state is working with communities on corridors designs to address the carbon reduction goals. A link was shared in chat on *Applications for First Round of \$2.5 Billion Program to Build EV Charging in Communities & Neighborhoods Nationwide*:

<https://highways.dot.gov/newsroom/biden-harris-administration-opens-applications-first-round-25-billion-program-build-ev> With the deadline to apply this round is May 30, it might be beneficial to identify priorities and be prepared to apply in the next round for funding. It was asked if there is a possibility of allocating these funds next year not necessarily tied to federal requirements, or combined/substituted for project funding with need to complete/move forward on projects.

Mr. Leybold noted we will put the investment package endorsed to JPACT and Metro Council and start the programming for that. If we do run into a situation where we need to stop a project and re-allocate to something else, we would do this in a normal TIP amendment. We can refer back to what our internal directions said in terms of what we would re-allocate it to, and ensure we were doing this in a timely way, carbon reduction based, and eligible for funds, then take it through the regular MPO process.

- Jaimie Lorenzini acknowledged the work from Mr. Leybold and Ms. Cho on capturing all the feedback from TPAC and creating these scenarios for consideration. It was asked if TPAC could make a recommendation contingent on different scenarios if the full financial outlook is not known at the time of this motion. Chair Kloster recommended a transmittal comment to JPACT attached to the recommendation that would highlights comments by TPAC for policymakers. A summary of these discussion points from the meeting was given by the Chair.
- Dyami Valentine noted Washington County generally supported packet E. There is concern

of the cost of delivery on transportation projects that do not go far meeting the needs. It was encouraged to have the TSMO package move forward with the considerations noted.

- Allison Boyd noted that Transport would do the project analysis needed. Does TransPort make the final recommendation on projects or come back to TPAC? Mr. Leybold noted TransPort selects the projects and informs the committees and Metro Council, with feedback encouraged. Eventual programming is required for enclosure in the TIP. This is the same process as RFFA funds. It was asked with package E with the small amount of funds, so no need to attempt to de-federalize these funds? Mr. Leybold noted TransPort will work through the federal process, and if deciding better to have these funds de-federalized for some purpose more discussion with TriMet can be made.

**MOTION:** To approve package E, as presented, and to direct staff to incorporate these considerations with the TPAC recommendation to JPACT:

- Establish a timeframe for determining whether the small starts projects are expected to proceed.
- Include funding consideration for places across the region that experience both climate and other air pollution impacts.
- Include funding consideration for projects that have transit co-benefits for safe access to transit and schools.

Moved: Dyami Valentine

Seconded: Karen Buehrig

**ACTION:** Motion passed with the following voting:

**Yes:** Karen Buehrig, Allison Boyd, Dyami Valentine, Lynda David, Jaimie Lorenzini, Mike McCarthy, John Serra, Chris Ford, Gerik Kransky, Laurie Lebowsky-Young, Bill Beamer (11)

**No:** Jay Higgins, Indigo Namkoong, Jasia Mosley, Ellie Gluhosky, Danielle Maillard (5)

**Abstain:** Eric Hesse, Sarah Iannarone, Lewis Lem (3)

**2023 Regional Transportation Plan (RTP): Initial system analysis results and policymaker/public input** (Kim Ellis & Eliot Rose, Metro) Because of the limited time for presentations, Ms. Ellis noted her

slides on the 2023 RTP update would be added to the packet. It was noted that the JPACT/Metro Council workshop May 11 agenda has been posted. Materials for this are being developed and will be available soon. May 24 is the deadline for letters of endorsement from governing bodies and project list refinements.

Eliot Rose presented draft results from the 2023 Regional Transportation Plan (RTP) system analysis. The analysis helps to understand and demonstrate the RTP's impact on meeting regional goals related to mobility, safety, equity, climate and economy. The system analysis focuses on how the RTP advances the region toward meeting its transportation goals.

Highlights noted from the presentation included:

- The region is forecasted to grow significantly between now and 2045
- The motor vehicle network is much more extensive than other networks
- The RTP does not meet the region's targets to triple transit, walking and bicycling mode share.
- Driving currently offers much better access to jobs than transit does, and the RTP does not change this.
- The region has historically prioritized completing pedestrian and bicycle facilities near transit, and the RTP upholds this priority



- The region is not on track to meet its target of reducing fatal and serious injury crashes to zero by 2035.
- The RTP achieves mixed results on equity – it invests equitably, but these investments do not lead to more equitable outcomes, nor do they undo longstanding transportation inequities in safety and access to jobs.

Information on draft climate results were noted. The RTP may or may not meet regional climate targets depending on what state-led pricing and transportation funding sources are assumed in the analysis. The State is working to identify new revenue sources to replace or supplement the gas tax. The ODOT Urban Mobility Office and ODOT Climate Office both provide relevant information. We have prepared scenarios to illustrate how these assumptions affect greenhouse gas emissions. Increased transit service, parking pricing and other Climate Smart strategies can also help meet targets.

Presented were Greenhouse Gas Emissions and Vehicle Miles per Traveled performance results for three scenarios that represent the range of potential GHG and VMT reductions achievable through the RTP and compared these results to regional climate targets. All other assumptions are consistent across all of these scenarios, including assumptions about transit service, teleworking, parking pricing, and other key drivers of GHG/VMT emissions, so that the results only reflect changes to how travel in the region is priced.

Comments from the committee:

- Chris Ford noted clearly, without the pricing, we as a region will not come close to our revenue targets. In the next RTP, what would be the consequences of this?
- Karen Buehrig noted the importance of the role of land use to achieve climate goals. Interest was given to more information on the impact on tolling performance; is this reflected in the travel model? Next discussion interest was given on how the pricing is currently impact the travel model and sharing this information.
- Mike McCarthy was interested in seeing comparisons in terms of pricing or funding mechanisms between functions specific, such as tolls (pricing this way) and regionwide pricing like the gas tax functions or vehicle mile fee. How they compare to climate goals and also our safety goals were asked for.
- Sarah Iannarone asked for better understanding ODOT's pricing projects and climate analysis assumptions with conversation levers across scenarios in modeling. Will these be decided legislatively or from OTC? It's critical for understanding where the assumptions play out in the RTP with more detail requested from the flow chart in the presentation *State-provided cost-of-driving assumptions in the RTP*.
- Gerik Kransky noted a question for follow up, Oregon DEQ would like to understand the anticipated future impacts, based on Metro's climate modeling, of our Employee Commute Options regulations requiring employers to provide alternatives to driving alone. This was discussed briefly during the recent RTP Consultation, and we'd love to dig in deeper on this element.
- Eric Hesse suggested further unpacking the STS pricing assumptions to understand what we should consider assuming + connected to system performance and confirming the climate goal we're talking about making or not is the same of the CFEC-based VMT/capita reduction that the RTP must meet. Ms. Ellis agreed this is correct.

**Recommended Projects for Implementing the 2021 Transportation System Management and Operations Plan (TSMO) Strategy** (Caleb Winter, Metro/ Kate Freitag, ODOT/ A.J. O'Connor, TriMet) Information shared with the committee by TransPort was the 2021 TSMO Strategy Solicitation project recommendations. The recommendations suballocate Regional Flexible Fund Allocation (RFFA) dollars for two funding cycles (2022-2024 and 2025-2027). Staff sent TransPort and Interested Parties the Reviewer Teams recommendation in advance. At the TransPort April 12 meeting, staff touched on the 2021 TSMO Strategy goals and the development of criteria to implement the actions called for in the strategy.

After some discussion of the Reviewer Recommendation, TransPort took action to unanimously approve project recommendations that include follow-up activities. The action is detailed in 2 parts:

- Part 1 – Approve recommendation of full funding for seven (7) project applications receiving the highest Reviewer Team scores.
- Part 2a - Investigate the calculation on PSU/TREC's PORTAL application and provide additional clarification on the Total Project cost and TSMO Program funding requested.
- Part 2b – Hold a meeting of applicants and TSMO staff, followed by coming back to TransPort with a recommendation on budgeting funds across three (3) project applications. These applications had similarities and nearly tied scores, but together would cost more than the remaining TSMO funds.

The recommended projects to implement the 2021 TSMO Strategy in cities, counties and region-wide were described. Further growing capabilities as a result of TSMO investments were described. In summary: Investments in Safety, Equity, Climate and Congestion Relief

- 300+ improved signalized intersections improving over 30 miles of arterials
- 5 years of data lake management, analysis and computer science
- 1 New Signal Data Network, 11 ITS Network Switches
- 2 TSMO regional planning-related projects

Comments from the committee:

- Jaimie Lorenzini noted the sidewalk data sounds really interesting! Will it include crosswalks? Mr. Winter confirmed this would be part of the project.
- Eric Hesse asked if the timing of this process would coordinate around the timing of the CFEC projects, with a recommendation to fully fund from Transport. Mr. Leybold noted we would need to have TransPort re-evaluate this through the lens of the carbon reduction intention and direction TPAC provided. If one of these projects is responsive and performs well, it could be an option. The criteria TransPort has for the RFFA evaluation is a bit different.

**Committee comments on creating a safe space at TPAC** (Chair Kloster) Comment was read to the committee: *Could we please start programming a 10-minute break in the meeting so that staff can take required breaks without missing content? I would be willing to meet 30 minutes earlier to accommodate, if needed. Thanks!* Following the meeting staff discussed options for this request. It was determined to have a break during TPAC and MTAC meetings at roughly halfway through the meeting for either 5 or 10 minutes, during the agenda at the discretion of the chair.

### **Adjournment**

There being no further business, meeting was adjourned by Chair Kloster at 12:01 p.m.

Respectfully submitted,  
Marie Miller, TPAC Recorder

Attachments to the Public Record, TPAC meeting, May 5, 2023

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	5/5/2023	5/5/2023 TPAC Agenda	050523T-01
2	2023 TPAC Work Program	4/21/2023	2023 TPAC Work Program as of 4/21/2023	050523T-02
3	Memo	4/27/2023	TO: TPAC and interested parties From: Ken Lobeck, Funding Programs Lead RE: TPAC Metropolitan Transportation Improvement Program (MTIP) Monthly Submitted Amendments (through April 2023)	050523T-03
4	Draft Minutes	4/7/2023	Draft minutes from April 7, 2023 TPAC meeting	050523T-04
5	RESOLUTION NO. 23-53XX	N/A	Resolution No. 23-53XX FOR THE PURPOSE OF ADDING SIX NEW CONGRESSIONAL DIRECTED SPENDING PROJECTS TO THE 2021-24 MTIP ALLOWING PRELIMINARY ENGINEERING ACTIVITIES TO BE INITIATED	050523T-05
6	Exhibit A to Resolution 23-53XX	N/A	Exhibit A to Resolution 23-53XX	050523T-06
7	Staff Report to Resolution 23-53XX	4/27/2023	TO: TPAC and interested parties From: Ken Lobeck, Funding Program Lead RE: May FFY 2023 MTIP Formal Amendment & Resolution 23-53XX Approval Request	050523T-07
8	Memo	4/27/2023	TO: TPAC and interested parties From: Grace Cho, Senior Transportation Planner - Metro Ted Leybold, Resource Development Manager – Metro RE: Carbon Reduction Program – TPAC Recommendation of Draft Allocation Package	050523T-08
9	Attachment 1	N/A	Draft RESOLUTION NO. 23-5337 Allocation Carbon Reductions Funds Program	050523T-09
10	Attachment 2	May 2023	Staff Report to Resolution No. 23-5337 FOR THE PURPOSE OF ALLOCATING \$18.8 MILLION OF CARBON REDUCTION PROGRAM TRANSPORTATION FUNDING, PENDING INCORPORATION INTO THE 2024-2027 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM	050523T-10
11	Exhibit B	N/A	Exhibit B to Staff Report of Resolution 23-5337 Policy and Program Factors to Inform Carbon Reduction Program Investment Proposals	050523T-11
12	Exhibit C	N/A	Exhibit C to Staff Report of Resolution 23-5337 Conditions of Approval to Allocation of Carbon Reduction Program Funds	050523T-12

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
13	Memo	4/28/2023	TO: TPAC and interested parties From: Kim Ellis, RTP Project Manager RE: 2023 RTP Update: Status Report and Next Steps	050523T-13
14	Attachment 1	4/28/2023	Project Timeline and Schedule of Engagement and Metro Council and Regional Advisory Committees' Discussions and Actions for 2023	050523T-14
15	Attachment 2	April 2023	2023 Regional Transportation Plan Draft project list overview	050523T-15
16	Attachment 2a	N/A	2023 Regional Transportation Plan Draft project list summaries by category	050523T-16
17	Attachment 2b	N/A	2023 Regional Transportation Plan Draft project list high level assessment	050523T-17
18	Memo	5/5/2023	TO: TPAC and interested parties From: Eliot Rose, Senior Transportation Planner RE: Draft 2023 Regional Transportation Plan system analysis results	050523T-18
19	Memo	4/28/2023	TO: TPAC and interested parties From: Kate Freitag, TransPort Chair, ODOT Region 1 Traffic Engineer A.J. O'Connor, TransPort Vice Chair, TriMet Intelligent Transportation Systems Director Caleb Winter, TSMO Program Manager, Metro Senior Transportation RE: 2021 TSMO Strategy Solicitation - Project Recommendations	050523T-19
20	Slide	5/05/2023	Monthly fatal traffic crash report for Clackamas, Multnomah and Washington counties	050523T-20
21	Presentation	5/05/2023	May 2023 Formal MTIP Amendment Resolution 23-53XX	050523T-21
22	Presentation	5/05/2023	Carbon Reduction Program – Recommended Allocation	050523T-22
23	Presentation	5/5/2023	2023 Regional Transportation Plan Update	050523T-23
24	Presentation	5/5/2023	2023 draft RTP system analysis results	050523T-24
25	Presentation	5/5/2023	Recommended Projects for Implementing the 2021 Transportation System Management and Operations Strategy	050523T-25



BEFORE THE METRO COUNCIL

**FOR THE PURPOSE OF ADDING THREE  
NEW PROJECTS AND CANCELING ONE  
PROJECT TO THE 2021-24 MTIP  
ENABLING REQUIRED FEDERAL  
APPROVAL ACTIONS TO MOVE  
FORWARD**

) RESOLUTION NO. 23-5345  
)  
) Introduced by: Chief Operating Officer  
) Marissa Madrigal in concurrence with  
) Council President Lynn Peterson  
)  
)

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

WHEREAS, the U.S. Department of Transportation requires federal funding for transportation projects located in a metropolitan area to be programmed in an MTIP; and

WHEREAS, in July 2020, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved Resolution No. 20-5110 to adopt the 2021-24 MTIP; and

WHEREAS, pursuant to the U.S. Department of Transportation's MTIP amendment submission rules, JPACT and the Metro Council must approve any subsequent amendments to the MTIP to add new projects or substantially modify existing projects; and

WHEREAS, the Oregon Department of Environmental Quality's (DEQ) mission of leading the state in restoring, maintaining, and enhancing the quality of Oregon's air, land, and water includes a Congestion Mitigation Air Quality (CMAQ) improvement funding call to improve air quality by reducing transportation emissions; and

WHEREAS, DEQ's CMAQ total available funding in FFY 2023 of \$3,771,134 resulted in two Metro area projects awarded CMAQ funding with one for the Beaverton School District and one for TriMet; and

WHEREAS, both projects involve the purchase and installation of electric vehicle charging stations and completed a pre-award review and evaluation by the State CMAQ Manager and the Oregon Federal Highways Administration office to verify project eligibility for the CMAQ funds; and

WHEREAS, the Beaverton School District's CMAQ award of \$169,107 project will support the purchase and installation of twenty-two electric charging stations to be added to the existing eight charging stations at its Transportation Service Center (TSC) in Beaverton; and

WHEREAS, TriMet's CMAQ award of \$2,840,000 will support the purchase and installation of DC level-3 charging equipment at TriMet's Powell Bus Garage, and two opportunity fast chargers in the layover area of Beaverton Transit Center to support and expand TriMet's deployment of zero emission battery electric buses (BEBs) for the provision of public transit service; and

WHEREAS, ODOT received a \$1 million dollar competitive discretionary grant from the Federal Highway Administration's Bridge Investment Program to complete a required study to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project in support of the Interstate 5 Interstate Bridge Replacement project; and

WHEREAS, ODOT and Clackamas County have determined that prior completed safety upgrades to South Redland Rd and the revised cost increase affecting the remaining High Friction Surface Treatment necessitates the project cancelation at this time resulting in the Highway Safety Improvement Program funds being returned to the ODOT All Roads Transportation Safety program;

WHEREAS, the programming requirements to the four projects in the June 2023 Formal MTIP Amendment to the 2021-24 MTIP are stated in Exhibit A to this resolution; and

WHEREAS, on June 2, 2023, Metro's Transportation Policy and Alternatives Committee recommended that JPACT approve this resolution; and

WHEREAS, on June 15, 2023, JPACT approved and recommended the Metro Council adopt this resolution; now therefore

BE IT RESOLVED that the Metro Council adopts this resolution to add the three new projects and cancel the South Redland Rd project included the June 2023 Formal MTIP Amendment to the 2021-24 Metropolitan Transportation Improvement Program.

ADOPTED by the Metro Council this \_\_\_\_ day of \_\_\_\_\_ 2023.

---

Lynn Peterson, Council President

Approved as to Form:

---

Carrie MacLaren, Metro Attorney



2021-2024 Metropolitan Transportation Improvement Program  
**Exhibit A to Resolution 23-5345**

June FFY 2023 Formal Transition Amendment Bundle Contents  
 Amendment Type: Formal/Full  
 Amendment #: JN23-10-JUN  
 Total Number of Projects: 4

Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action
(#1) ODOT Key # <b>23462</b> MTIP ID TBD New Project	Beaverton School District	<b>Beaverton School District EV Chargers</b>	Purchase and install electric wall mount chargers.	<b><u>ADD NEW PROJECT:</u></b> Add new Oregon Department of Environmental Quality (DEQ) CMAQ awarded project to install up to 22 new EV charging stations
(#2) ODOT Key # <b>23463</b> MTIP ID TBD New Project	TriMet	<b>TriMet Transit Center EV Chargers</b>	Purchase and install electric chargers at Powell bus garage and Beaverton Transit Center.	<b><u>ADD NEW PROJECT:</u></b> Purchase and install up to 12 - DC level 3 charging equipment at TriMet's Powell Bus Garage, and 2 opportunity fast chargers in the layover area of Beaverton Transit Center
(#3) ODOT Key # <b>23456</b> MTIP ID TBD New Project	ODOT (and WSDOT)	<b>IBR Hayden Island Ground Improvement Study</b>	Implement study to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project	<b><u>ADD NEW PROJECT:</u></b> Add new USDOT Bridge Improvement Program (BIP) discretionary awarded study to ODOT in support of the I-5 Interstate Bridge Replacement project
(#4) ODOT Key # <b>21621</b> MTIP ID 71175	Clackamas County	<b>S Redland Rd: OR213 - Springwater Rd (Clackamas County)</b>	Install high friction surface treatment (HFST), signs and edge line/fog line markings on curves to improve driver control in this area.	<b><u>CANCEL PROJECT:</u></b> Cancel and remove project from the 2021-24 MTIP

Proposed Amendment Review and Approval Steps:

- Tuesday, May 30, 2023: Post amendment & begin 30-day notification/comment period.
- Friday, June 2, 2023: TPAC meeting (Required Metro amendment notification)
- Thursday, June 15, 2023: JPACT meeting.
- Wednesday, June 28, 2023: End 30-day Public Comment period.
- Thursday, July 6, 2023: Final approval from Metro Council anticipated.
- Early to mid-August 2023: Estimated final USDOT amendment approvals.

2021-2024 MTIP Formal Amendment - Exhibit A

June 2023 Formal Amendment for FFY 2023 - Amendment Number JN23-10-JUN

Summary Reason for Change: Add new DEQ awarded CMAQ funded project to BSD to the MTIP to meet federal obligation requirements



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

**MTIP Formal Amendment**  
**ADD NEW PROJECT**  
Add new DEQ CMAQ awarded  
project for BSD

<b>Lead Agency:</b>	Beaverton School District		Project Type:	Other	<b>ODOT Key:</b>	23462
<b>Project Name:</b>	<b>Beaverton School District EV Chargers</b>  <b>Project Status: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.).</b>  <b>Short Description:</b> <b>Purchase and install electric wall mount chargers.</b>	1	Fiscal Constraint Cat:	Capital	<b>MTIP ID:</b>	TBD
			ODOT Type	Unique	<b>Status:</b>	1
			Performance Goal:	CMAQ	<b>Comp Date:</b>	12/31/2027
			Capacity Enhancing:	No	RTP ID:	N/A
			Conformity Exempt:	Yes	RTP Approval:	12/6/2018
			On CMP:	No	Trans Model:	N/A
			30 Day Notice Begin:	5/30/2023	TCM:	No
			30 Day Notice End:	6/28/2023	TSMO Award	No
			Funding Source	DEQ	TSMO Cycle	N/A
			Funding Type:	CMAQ	RFFA ID:	N/A
			State Highway Route	N/A	RFFA Cycle:	N/A
			Mile Post Begin:	N/A	UPWP:	No
			Mile Post End:	N/A	UPWP Cycle:	N/A
			Length:	N/A	Past Amend:	0
			Flex Transfer to FTA	No	Council Appr:	Yes
			FTA Conversion Code:	N/A	Council Date:	7/6/2023
			1st Year Program'd:	2023	OTC Approval:	No
	Years Active:	0	OTC Date	N/A		
			<b>STIP Amend #:</b>	21-24-3389	<b>MTIP Amnd #:</b>	JN23-10-JUN

**Detailed Description:**

In the Beaverton School District in Washington County, add 22 electric charging stations to the existing 8 charge stations at its Transportation Service Center (TSC) in Beaverton (DEQ CMAQ award, EMRED - VOC: 0.108, NOX: 2.585, CO: 1.114, CO2: 100,786, PM10: 0.107, PM2.5: 0.027)

**STIP Description:** Purchase and install electric wall mount chargers.

Last Amendment of Modification: None. Initial project programming

PROJECT FUNDING DETAILS								
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other	Total
<b>Federal Funds</b>								
CMAQDEQ	Y400	2023				\$ 70,312		\$ 70,312
CMAQDEQ	Y400	2023					\$ 98,795	\$ 98,795
								\$ -
							<b>Federal Totals:</b>	<b>\$ 169,107</b>
<b>State Funds</b>								
							\$	-
							\$	-
							<b>State Total:</b>	<b>\$ -</b>
<b>Local Funds</b>								
Other	OTH0	2023		\$ 62,791				\$ 62,791
Local (CMAQ)	Match	2024				\$ 8,048		\$ 8,048
Other	OTH0	2024				\$ 358,212		\$ 358,212
Local (CMAQ)	Match	2024					\$ 11,308	\$ 11,308
								\$ -
							<b>Local Total</b>	<b>\$ 440,359</b>
Phase Totals Before Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phase Totals After Amend:			\$ -	\$ 62,791	\$ -	\$ 436,572	\$ 110,103	\$ 609,466
Total Project Cost Estimate (all phases):							\$	609,466
Year of Expenditure Cost Amount:							\$	609,466

Programming Summary Details												
Why project is short programmed: N/A. The project is not short programmed												
Phase Change Amount:	\$	-	\$	62,791	\$	-	\$	436,572	\$	110,103	\$	609,466
Phase Change Percent:		0%		100%		0%		100%		100%		100%
Revised Match Federal:		N/A		N/A		N/A	\$	8,048	\$	11,308	\$	19,356
Revised Match Percent:		N/A		N/A		N/A		10.27%		10.27%		10.27%

Phase Obligations and Expenditures Summary						
Item	Planning	PE	ROW	Construction	Other	
Total Funds Obligated:						Federal Aid ID
Federal Funds Obligated:						
Initial Obligation Date:						Other Notes DEQ CMAQ awarded project
EA Number:						
EA Start Date:						
EA End Date:						
Known Expenditures:						
MTIP Programming Consistency Check Details and Glossary						
General Areas						
1	Phase funding fields: Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.					
2	Amendment Purpose: The purpose of an MTIP amendment is normally to add a new project due to required federal review actions involving the MTIP and STIP, or complete required changes to the project (name description, or funding) to meet the project's next federal approval delivery step.					
3	This amendment to the MTIP completes what action: The amendment adds the new Beaverton School District Charging Station project with DEQ awarded CMAQ to the MTIP. Programming is required to meet FHWA obligation requirements through FMIS.					
4	MTIP Programming Submitted Supporting Documentation: STIP Summary Report, STIP Impacts Worksheet, Beaverton School District DEQ CMAQ application and project support information.					
Public Notification and Comment Process:						
5A	Was a 30 Public Notification/Opportunity to Comment Period Required? Yes					
5B	What were the 30 day Public Notification/Opportunity to Comment Start and end dates? May 30, 2023 to June 28, 2023					
5C	Was the Public Notification/Opportunity to Comment period completed consistent with the Metro Public Participation Plan? Yes					
5D	Was the Public Notification/Opportunity to Comment period included on the Metro website allowing email submissions as comments? Yes					
5E	Were there a significant amount of comments received requiring a comments log summary provided to Metro Communications Staff? Any and all submitted are logged in and reviewed for the content. If required a formal reply is provided back to the sender.					
6	Added clarifying notes: CMAQ funds directly support air quality improvements. These CMAQ funds are allocated from ODOT to the Oregon DEQ. DEQ has determined the eligibility criteria which in this case is not directly tied to the RTP. The DEQ CMAQ support air quality improvements which is a key goal in the RTP. However, the funds are not required to be tied directly with a project in the constrained RTP. Programming in the MTIP and STIP is required in support of FHWA fund obligation requirements which will occur through FMIS. Therefore the RTP consistency check does not include the RTP constrained project verification requirement as normally needed when transportation system improvement projects are added to the MTIP					

Fiscal Constraint Consistency Check Areas	
1	Will Performance Measurements Apply? Yes. CMAQ
2A	Does the amendment include fiscal updates? Yes. New CMAQ federal funds allocated to the Oregon Department of Environmental Quality
2B	What is the funding source for the project? CMAQ funds appropriated to ODOT with a portion allocated to DEQ
2C	Was the Proof-of Funding requirement satisfied and how? Yes. Verification of the CMAQ award occurred through the State CMAQ Manager
2D	Was overall fiscal constraint demonstrated? Yes.

RTP Consistency Check Areas	
1A	RTP ID and Name: ID# Not Applicable.
1B	RTP Project Description: Not applicable
2A	Is the project exempt per 40 CFR 93.126, Table 2 or 40 CFR 92.127, Table 3? Yes, per 40 CFR 93.126, Table 2 - Other
2B	What is the exception category per the regulation: Table 2 - Other - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.
3A	Is the project considered capacity enhancing? No. The project is a non capacity air quality improvement project
3B	If capacity enhancing, did the project complete required transportation demand modeling through the RTP Update or via an RTP amendment? N/A
3C	Is Air Quality analysis required? No.
3D	Is an Air Quality analysis approval date required? No. If the project is capacity enhancing, then transportation modeling analysis was completed as part of the RTP update. The RTP approval date 12/6/2018 can be considered the date for the completion of any required transportation demand modeling requirements for projects if they are capacity enhancing.
4	What RTP Goal(s) does the project support? Goal #7 - Healthy People under two objectives: - Objective 7.2 Pollution Impacts – Minimize noise and other transportation related pollution health impacts. - Objective 7.3 Clean Air – Reduce transportation-related air pollutants, including and air toxics emissions.
5	Does the project require a special performance assessment evaluation as part of the amendment? (applies to capacity enhancing projects, \$100 million or greater, and regionally significant). No. The project is not capacity enhancing nor does it exceed \$100 million dollars in cost. However, as a CMAQ funded project, the project required completion of a satisfactory air quality emission reduction analysis, pre-reviews and formal approvals from the State CMAQ Manager, plus FHWA before DEQ could officially award the CMAQ to the project.

UPWP Consistency Check Areas	
1A	Does the MTIP action also require an UPWP amendment: No.
1B	Can the MTIP amendment proceed ahead of the UPWP amendment? Yes.

2	What UPWP category does the project fit under (e.g. Master Agreement, Metro Funded Regionally Significant, or Non-Metro Funded Regionally Significant)? N/A
---	--

Other Review Areas	
1	Is the project location identified on the National Highway System (NHS), and what is its designation? No - Not applicable
2A	Is the project location identified as part of one or more of Metro Modeling Networks, and which one(s)? No - Not applicable
2B	What is the Metro modeling designation? Not applicable
3	Is the project designated as a Transportation Control Measure (TCM)? No
4	Is the project location identified on a Congestion Management Plan route? No

Fund Type Codes References	
Local	General Local funds committed by the lead agency that normally cover the minimum match requirement to the federal funds
CMAQ	Congestion Mitigation Air Quality (CMAQ) funds. CMAQ funds are a federal funding source (FHWA based) that provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). The funds are normally apportioned to the eligible states and then potentially sub-allocated to MPOs or other eligible agencies based on a formula allocation.
Other	Additional Local funds beyond the required minimum match to the federal funds that are committed to the project. Also referred to "over-match" to the project.

**Key Number:**               **23462**

**2021-2024 STIP**

**Project Name:**           **Beaverton School District EV chargers**

**(DRAFT AMENDMENT**

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	OTH0	OTHER THAN STATE OR		100.00%	62,791.00	0.00%	0.00	0.00%	0.00	100.00%	62,791.00
	PE Totals			100.00%	62,791.00		0.00		0.00		62,791.00
CN	OTH0	OTHER THAN STATE OR		82.05%	358,212.95	0.00%	0.00	0.00%	0.00	100.00%	358,212.95
	Y400	CMAQ congestion mitigation air quality IJJA		17.95%	78,359.05	89.73%	70,311.58	0.00%	0.00	10.27%	8,047.47
	CN Totals			100.00%	436,572.00		70,311.58		0.00		366,260.42
OT	Y400	CMAQ congestion mitigation air quality IJJA		100.00%	110,103.00	89.73%	98,795.42	0.00%	0.00	10.27%	11,307.58
	OT Totals			100.00%	110,103.00		98,795.42		0.00		11,307.58
	Grand Totals				609,466.00		169,107.00		0.00		440,359.00



The tables below illustrate reductions on a metric basis. Based on a 190-day operational year and the 20-year life cycle of ESBs, students will avoid exposure by nearly 10 metric tons of NOx and over 4 metric tons of Carbon Monoxide.

Pollutant	Kg/Day	Kg/Yr[2]	Lifetime Metric Tons
Carbon Monoxide (CO)	1.114	211.66	4.23
Nitrogen Oxide (NOx)	2.585	491.15	9.82
Particulate Matter <2.5 µm (PM <sub>2.5</sub> )	0.027	5.13	0.10
Particulate Matter <10 µm (PM <sub>10</sub> )	0.107	20.33	0.41
Volatile Organic Compounds (VOC)	0.108	20.52	0.41

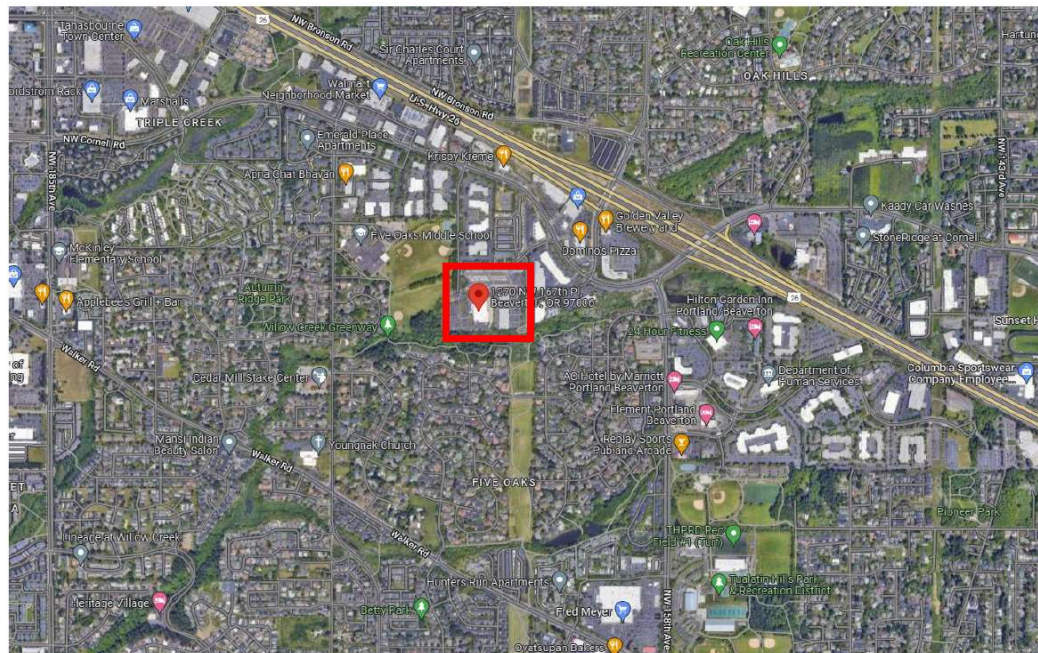
Carbon Dioxide Emissions (CO2) (30 buses) [3]	Diesel Bus	Electric Bus
Annual Energy Consumption	1,885,008 gal	16,022,568 kWh
Emissions Factor (lbs CO2/unit)	22.4	0.5
Annual Emissions (lbs CO2)	42,224,179	8,075,374
Lifetime Emissions (lbs CO2)	1,266,725,376	242,261,228
<b>Savings Emissions Savings (lbs CO2)</b>		<b>1,024,464,148</b>

2 FHWA/CMAQ Emissions Calculator, 190-day year

3 PGE Lifetime Savings Estimator

Use the following boxes to show estimated reduction amount (kg/day).

VOC	0.108	PM2.5	0.027	PM10	0.107
NOx	2.585	CO	1.114	CO2	100,786
Duration of PM10 & CO Benefit				Years	20



[External sender]RE: DEQ CMAQ Award Letters



DERRICKSON Hope <Hope.DERRICKSON@odot.oregon.gov>

To: ● Ken Lobeck; ○ ANTELO Adriana

Cc: ○ KRANSKY Gerik \* DEQ

 You replied to this message on 5/22/2023 1:37 PM.

Hi Ken,

Please see the revised project summaries Adriana sent regarding both of these projects. My apologies for providing her incorrect information.

Listed below are the three entities DEQ "awarded" CMAQ funding to for a total of \$3,771,134, this includes the revised amounts for TriMet and Beaverton School District. We will be amending the DEQ/ODOT IGA to reflect a new total of \$3,864,043.

1. TriMet - Powell Garage and Beaverton Transit Center EV Chargers: **revised # - \$2,840,000**
2. Beaverton School District - EV Chargers : **revised # - \$169,107**
3. Salem Area Mass Transit District - \$762,027

If you have any other questions just let me know.

Thank you!

**Hope Derrickson, OPMA**

*Funding Programs Senior Analyst*

*Program Manager - HB2017, CMAQ, Western Federal Lands/FLAP & Fund Exchange*

*ODOT | Program and Funding Services Unit*

*355 Capitol St. NE, Salem, OR 97301*

 Reply  Reply All  Forward  

Mon 5/22/2023 12:44 PM

# 2021-2024 MTIP Formal Amendment - Exhibit A

June 2023 Formal Amendment for FFY 2023 - Amendment Number JN23-10-JUN

Summary Reason for Change: Add new DEQ awarded CMAQ funded project to TriMet for EV Chargers at two of their transit centers to the MTIP to meet federal obligation requirements



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

**MTIP Formal Amendment  
ADD NEW PROJECT**  
Add new DEQ CMAQ awarded  
project for TriMet

<b>Lead Agency:</b> TriMet		Project Type:	Other	<b>ODOT Key:</b>	<b>23463</b>
<b>Project Name:</b> TriMet Transit Center EV Chargers	<b>2</b>	Fiscal Constraint Cat:	Capital	<b>MTIP ID:</b>	<b>TBD</b>
		ODOT Type	Unique	<b>Status:</b>	<b>1</b>
		Performance Goal:	CMAQ	<b>Comp Date:</b>	<b>12/31/2027</b>
		Capacity Enhancing:	No	RTP ID:	12081
		Conformity Exempt:	Yes	RTP Approval:	12/6/2018
		On CMP:	No	Trans Model:	N/A
		30 Day Notice Begin:	5/30/2023	TCM:	No
		30 Day Notice End:	6/28/2023	TSMO Award	No
		Funding Source	DEQ	TSMO Cycle	N/A
		Funding Type:	CMAQ	RFFA ID:	N/A
		State Highway Route	N/A	RFFA Cycle:	N/A
		Mile Post Begin:	N/A	UPWP:	No
		Mile Post End:	N/A	UPWP Cycle:	N/A
		Length:	N/A	Past Amend:	0
		Flex Transfer to FTA	Yes	Council Appr:	Yes
		FTA Conversion Code:	5307	Council Date:	7/6/2023
		1st Year Program'd:	2024	OTC Approval:	No
	Years Active:	0	OTC Date	N/A	
		<b>STIP Amend #: 21-24-3390</b>		<b>MTIP Amnd #: JN23-10-JUN</b>	

**Detailed Description:** Procure and install twelve - DC level 3 charging equipment at TriMet's Powell Bus Garage, and two opportunity fast chargers in the layover area of Beaverton Transit Center to support and expand TriMet's deployment of zero emission battery electric buses (BEBs) for the provision of public transit service. (DEQ CMAQ award, EMRED - VOC: 0.8439, NOX: 25.9111, CO: 5.9796, PM10: 0.1408, PM2.5: 0.1324)

**STIP Description:** Purchase and install electric chargers at Powell bus garage and Beaverton Transit Center.

Last Amendment of Modification: None. Initial project programming

PROJECT FUNDING DETAILS								
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other	Total
Federal Funds								
CMAQDEQ	Y400	2024	\$ 110,319					\$ 110,319
CMAQDEQ	Y400	2024		\$ 220,640				\$ 220,640
CMAQDEQ	Y400	2024				\$ 2,509,041		\$ 2,509,041
							Federal Totals:	\$ 2,840,000
State Funds								
							\$ -	
							State Total:	\$ -
Local Funds								
Local (CMAQ)	Match	2024	\$ 12,627					\$ 12,627
Other	OTH0	2024	\$ 65,581					\$ 65,581
Local (CMAQ)	Match	2024		\$ 25,253				\$ 25,253
Other	OTH0	2024		\$ 131,162				\$ 131,162
Local (CMAQ)	Match	2024				\$ 287,171		\$ 287,171
Other	Other	2024				\$ 978,206		\$ 978,206
							Local Total	\$ 1,500,000
Phase Totals Before Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phase Totals After Amend:			\$ 188,527	\$ 377,055	\$ -	\$ 3,774,418	\$ -	\$ 4,340,000
Total Project Cost Estimate (all phases):								\$ 4,340,000
Year of Expenditure Cost Amount:								\$ 4,340,000

Programming Summary Details							
Why project is short programmed: N/A. The project is not short programmed							
Phase Change Amount:	\$	188,527	\$	377,055	\$	-	\$ 4,340,000
Phase Change Percent:		0%		100%		0%	100%
Revised Match Federal:	\$	12,627	\$	25,253		N/A	\$ 325,051
Revised Match Percent:		10.27%		10.27%		N/A	10.27%

Phase Obligations and Expenditures Summary						
Item	Planning	PE	ROW	Construction	Other	
Total Funds Obligated:						Federal Aid ID
Federal Funds Obligated:						
Initial Obligation Date:						Other Notes CMAQ will be flex transferred to FTA
EA Number:						
EA Start Date:						
EA End Date:						
Known Expenditures:						
MTIP Programming Consistency Check Details and Glossary						
General Areas						
1	Phase funding fields: Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.					
2	Amendment Purpose: The purpose of an MTIP amendment is normally to add a new project due to required federal review actions involving the MTIP and STIP, or complete required changes to the project (name description, or funding) to meet the project's next federal approval delivery step.					
3	This amendment to the MTIP completes what action: The amendment adds the new TriMet Charging Station project with DEQ awarded CMAQ to the MTIP. TriMet is expected to flex transfer the CMAQ to FTA.					
4	MTIP Programming Submitted Supporting Documentation: STIP Summary Report, STIP Impacts Worksheet, TriMet DEQ CMAQ application and project support information.					
Public Notification and Comment Process:						
5A	Was a 30 Public Notification/Opportunity to Comment Period Required? Yes					
5B	What were the 30 day Public Notification/Opportunity to Comment Start and end dates? May 30, 2023 to June 28, 2023					
5C	Was the Public Notification/Opportunity to Comment period completed consistent with the Metro Public Participation Plan? Yes					
5D	Was the Public Notification/Opportunity to Comment period included on the Metro website allowing email submissions as comments? Yes					
5E	Were there a significant amount of comments received requiring a comments log summary provided to Metro Communications Staff? Any and all submitted are logged in and reviewed for the content. If required a formal reply is provided back to the sender.					
6	Added clarifying notes: CMAQ funds directly support air quality improvements. These CMAQ funds are allocated from ODOT to the Oregon DEQ. DEQ has determined the eligibility criteria which ODOT and FHWA have verified. TriMet will complete the obligation process through the FTA TrAMS process which will require the CMAQ funds to be flex transferred to FTA.					

Fiscal Constraint Consistency Check Areas	
1	Will Performance Measurements Apply? Yes. CMAQ
2A	Does the amendment include fiscal updates? Yes. New CMAQ federal funds allocated to the Oregon Department of Environmental Quality
2B	What is the funding source for the project? CMAQ funds appropriated to ODOT with a portion allocated to DEQ
2C	Was the Proof-of Funding requirement satisfied and how? Yes.
2D	Was overall fiscal constraint demonstrated? Yes.

RTP Consistency Check Areas	
1A	RTP ID and Name: ID# 12081 - Bus: Electrification of Bus Fleet: Phase 1
1B	RTP Project Description: Electrifying the bus fleet.
2A	Is the project exempt per 40 CFR 93.126, Table 2 or 40 CFR 92.127, Table 3? Yes, per 40 CFR 93.126, Table 2 - Mass Transit
2B	What is the exception category per the regulation: Table 2 - Mass Transit - Construction or renovation of power, signal, and communications systems.
3A	Is the project considered capacity enhancing? No. The project is a non capacity air quality improvement project
3B	If capacity enhancing, did the project complete required transportation demand modeling through the RTP Update or via an RTP amendment? N/A
3C	Is Air Quality analysis required? No.
3D	Is an Air Quality analysis approval date required? No. If the project is capacity enhancing, then transportation modeling analysis was completed as part of the RTP update. The RTP approval date 12/6/2018 can be considered the date for the completion of any required transportation demand modeling requirements for projects if they are capacity enhancing.
4	What RTP Goal(s) does the project support? Goal #7 - Healthy People under two objectives: - Objective 7.2 Pollution Impacts – Minimize noise and other transportation related pollution health impacts. - Objective 7.3 Clean Air – Reduce transportation-related air pollutants, including and air toxics emissions.
5	Does the project require a special performance assessment evaluation as part of the amendment? (applies to capacity enhancing projects, \$100 million or greater, and regionally significant). No. The project is not capacity enhancing nor does it exceed \$100 million dollars in cost. However, as a CMAQ funded project, the project required completion of a satisfactory air quality emission reduction analysis, pre-reviews and formal approvals from the State CMAQ Manager, plus FHWA before DEQ could officially award the CMAQ to the project.

UPWP Consistency Check Areas	
1A	Does the MTIP action also require an UPWP amendment: No.
1B	Can the MTIP amendment proceed ahead of the UPWP amendment? Yes.



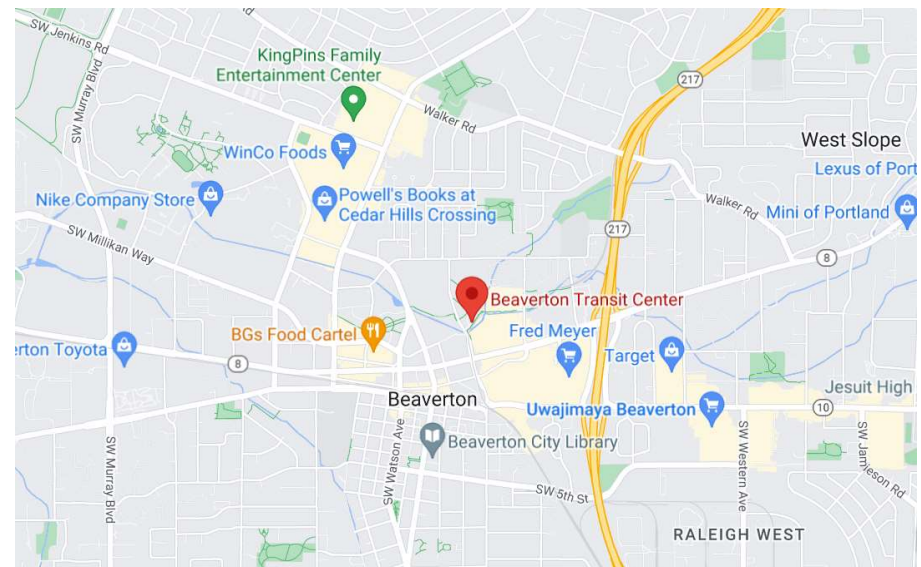
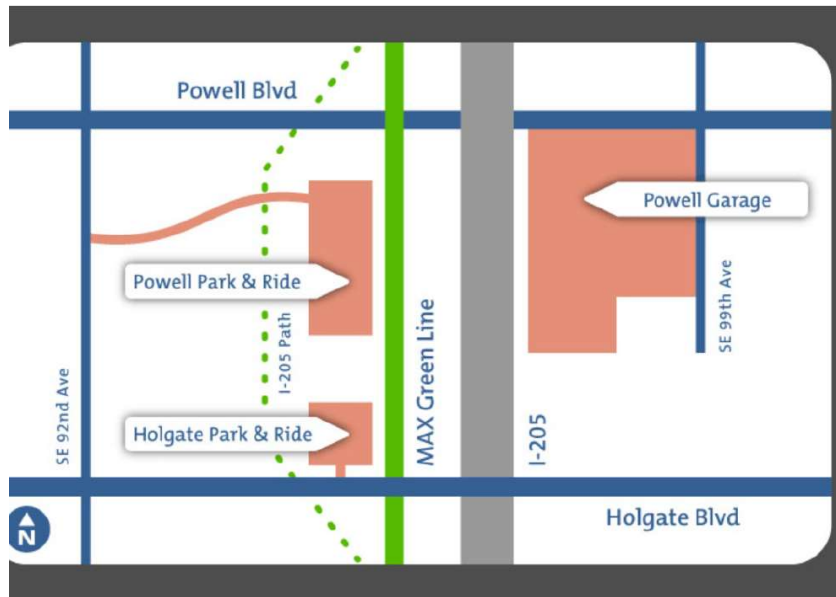
2	What UPWP category does the project fit under (e.g. Master Agreement, Metro Funded Regionally Significant, or Non-Metro Funded Regionally Significant)? N/A
---	--

Other Review Areas	
1	Is the project location identified on the National Highway System (NHS), and what is its designation? No - Not applicable
2A	Is the project location identified as part of one or more of Metro Modeling Networks, and which one(s)? No - Not applicable
2B	What is the Metro modeling designation? Not applicable
3	Is the project designated as a Transportation Control Measure (TCM)? No
4	Is the project location identified on a Congestion Management Plan route? No

Fund Type Codes References	
Local	General Local funds committed by the lead agency that normally cover the minimum match requirement to the federal funds
CMAQ	Congestion Mitigation Air Quality (CMAQ) funds. CMAQ funds are a federal funding source (FHWA based) that provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). The funds are normally apportioned to the eligible states and then potentially sub-allocated to MPOs or other eligible agencies based on a formula allocation.
Other	Additional Local funds beyond the required minimum match to the federal funds that are committed to the project. Also referred to "over-match" to the project.

EMISSIONS REDUCTIONS					
This project is requesting \$2.84 million in CMAQ funding to procure and install twelve - DC level 3 charging equipment at TriMet's Powell Bus Garage, and two opportunity fast chargers in the layover area of Beaverton Transit Center. These chargers will support and expand TriMet's deployment of zero emission battery electric buses (BEBs) for the provision of Public Transit. These are all CMAQ eligible project expenses.					
<i>Use the following boxes to show estimated reduction amount (kg/day).</i>					
VOC	.8439	PM2.5	.1324	PM10	.1408
NOx	25.9111	CO	5.9796	CO2	
Duration of PM10 & CO Benefit				Years	10





[External sender]RE: DEQ CMAQ Award Letters








DERRICKSON Hope <Hope.DERRICKSON@odot.oregon.gov>

To ● Ken Lobeck; ○ ANTELO Adriana

Cc ○ KRANSKY Gerik \* DEQ

 You replied to this message on 5/22/2023 1:37 PM.

Hi Ken,

 Reply  Reply All  Forward  

Mon 5/22/2023 12:44 PM

Please see the revised project summaries Adriana sent regarding both of these projects. My apologies for providing her incorrect information.

Listed below are the three entities DEQ "awarded" CMAQ funding to for a total of \$3,771,134, this includes the revised amounts for TriMet and Beaverton School District. We will be amending the DEQ/ODOT IGA to reflect a new total of \$3,864,043.

1. TriMet - Powell Garage and Beaverton Transit Center EV Chargers: **revised # - \$2,840,000**
2. Beaverton School District - EV Chargers : **revised # - \$169,107**
3. Salem Area Mass Transit District - \$762,027

If you have any other questions just let me know.

Thank you!

**Hope Derrickson, OPMA**

*Funding Programs Senior Analyst*

*Program Manager - HB2017, CMAQ, Western Federal Lands/FLAP & Fund Exchange*

*ODOT | Program and Funding Services Unit*

*355 Capitol St. NE, Salem, OR 97301*

# 2021-2024 MTIP Formal Amendment - Exhibit A

June 2023 Formal Amendment for FFY 2023 - Amendment Number JN23-10-JUN

Summary Reason for Change: Add the new FY 2022 BIP award for the I-5 IBR study



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

**MTIP Formal Amendment  
ADD NEW PROJECT**

Add the approved BIP award ed  
study supporting the I-5 IBR

<b>Lead Agency:</b> ODOT		Project Type:	Highway	<b>ODOT Key:</b>	<b>23456</b>
<b>Project Name:</b> <b>IBR Hayden Island Ground Improvement Study</b>	<b>3</b>	Fiscal Constraint Cat:	Planning	<b>MTIP ID:</b>	<b>TBD</b>
		ODOT Type	Planning	<b>Status:</b>	<b>D</b>
		Performance Goal:	N/A	<b>Comp Date:</b>	<b>12/31/2026</b>
<b>Project Status:</b> D = Project implementation in progress (New BIP funded study in support of the ongoing Interstate Bridge Replacement project which has initiated PE in Key 21570)		Capacity Enhancing:	No	RTP ID:	10893
		Conformity Exempt:	Yes	RTP Approval:	12/6/2018
		On CMP:	Yes	Trans Model:	12/6/2018
		30 Day Notice Begin:	5/30/2023	TCM:	No
		30 Day Notice End:	6/28/2023	TSMO Award	No
		Funding Source	BIP	TSMO Cycle	N/A
		Funding Type:	BIP	RFFA ID:	50397
		State Highway Route	I-5	RFFA Cycle:	2022-24
		Mile Post Begin:	307.60	UPWP:	No
		Mile Post End:	308.30	UPWP Cycle:	N/A
		Length:	0.70	Past Amend:	0
		Flex Transfer to FTA	No	Council Appr:	Yes
		FTA Conversion Code:	N/A	Council Date:	7/6/2023
		1st Year Program'd:	<b>2023</b>	OTC Approval:	No
		Years Active:	0	OTC Date	N/A
		<b>STIP Amend #: 21-24-3389</b>		<b>MTIP Amnd #: JN23-10-JUN</b>	

### Detailed Description:

On I-5 across the Columbia River between MP 307.6 and MP 308.3 at Hayden Island, initiate and complete study activities to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project

**STIP Description:** Study to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project

Last Amendment of Modification: None. Initial project programming

#### PROJECT FUNDING DETAILS

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other	Total
<b>Federal Funds</b>								
AC-BIP	ACPO	2023	\$ 500,000					\$ 500,000
								\$ -
							<b>Federal Totals:</b>	<b>\$ 500,000</b>
<b>State Funds</b>								
State	Match	2023	\$ 500,000					\$ 500,000
								\$ -
							<b>State Total:</b>	<b>\$ 500,000</b>
<b>Local Funds</b>								
Other	OTH0	2023	\$ 1,000,000					\$ 1,000,000
								\$ -
							<b>Local Total</b>	<b>\$ 1,000,000</b>
Phase Totals Before Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Phase Totals After Amend:			\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000
Total Project Cost Estimate (all phases):								\$ 2,000,000
Year of Expenditure Cost Amount:								\$ 2,000,000

#### Programming Summary Details

Why project is short programmed: The project is not short programmed. The "Other" funds represent WSDOT's contribution to the project

Phase Change Amount:	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000
Phase Change Percent:	100%	0%	0%	0%	0%	100%
Revised Match Federal:	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
Revised Match Percent:	75.00%	N/A	N/A	N/A	N/A	75.00%

Phase Obligations and Expenditures Summary																																																																																						
Item	Planning	PE	ROW	UR	Other																																																																																	
Total Funds Obligated:						Federal Aid ID																																																																																
Federal Funds Obligated:																																																																																						
Initial Obligation Date:						Other Notes The project is a bi-state effort between ODOT and WASHDOT																																																																																
EA Number:																																																																																						
EA Start Date:																																																																																						
EA End Date:																																																																																						
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3	This amendment to the MTIP completes what action: The amendment adds the new FY 2022 Bridge Investment Program planning grant to the MTIP in support of the Oregon/Washington DOT efforts to plan and implement the I-5 interstate bridge replacement across the Columbia River. The project is a complimentary activity to the PE actions occurring in Key 21570.																																																																																					
3A	<table><tr><th colspan="2">LEAD AGENCY</th><td colspan="5">ODOT</td></tr><tr><th colspan="2">PROJECT NAME</th><td colspan="5">I-5: Columbia River (Interstate) Bridge</td></tr><tr><th colspan="2">Project IDs</th><th colspan="4">Project Description</th><th>Project Type</th></tr><tr><td>ODOT KEY</td><td>21570</td><td colspan="4" rowspan="3">Planning and design activities for the replacement of the I-5 Interstate Bridge between Oregon and Washington. Replacing the bridge is anticipated to improve traffic and mobility for freight and the public traveling across the river.</td><td rowspan="3">Roadway and bridge</td></tr><tr><td>MTIP ID</td><td>71083</td></tr><tr><td>RTP ID</td><td>10893</td></tr><tr><th colspan="2">Phase</th><th>Year</th><th>Fund Type</th><th>Federal Amount</th><th>Minimum Local Match</th><th>Other Amount</th><th>Total Amount</th></tr><tr><td colspan="2">Preliminary engineering</td><td>2022</td><td>NHPP (Z001)</td><td>\$41,671,700</td><td>\$4,769,513</td><td>\$2,058,787</td><td>\$48,500,000</td></tr><tr><td colspan="2">Preliminary engineering</td><td>2022</td><td>OTHER - LOCAL</td><td>\$0</td><td>\$0</td><td>\$32,500,000</td><td>\$32,500,000</td></tr><tr><td colspan="4">FY 21-24 Totals</td><td>\$41,671,700</td><td>\$4,769,513</td><td>\$34,558,787</td><td>\$81,000,000</td></tr><tr><td colspan="4">Prior and Future Years' Totals</td><td>\$7,200,000</td><td>\$824,072</td><td>\$975,928</td><td>\$9,000,000</td></tr><tr><td colspan="4">Estimated Project Cost (YOE\$)</td><td>\$48,871,700</td><td>\$5,593,585</td><td>\$35,534,715</td><td>\$90,000,000</td></tr></table>						LEAD AGENCY		ODOT					PROJECT NAME		I-5: Columbia River (Interstate) Bridge					Project IDs		Project Description				Project Type	ODOT KEY	21570	Planning and design activities for the replacement of the I-5 Interstate Bridge between Oregon and Washington. Replacing the bridge is anticipated to improve traffic and mobility for freight and the public traveling across the river.				Roadway and bridge	MTIP ID	71083	RTP ID	10893	Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount	Preliminary engineering		2022	NHPP (Z001)	\$41,671,700	\$4,769,513	\$2,058,787	\$48,500,000	Preliminary engineering		2022	OTHER - LOCAL	\$0	\$0	\$32,500,000	\$32,500,000	FY 21-24 Totals				\$41,671,700	\$4,769,513	\$34,558,787	\$81,000,000	Prior and Future Years' Totals				\$7,200,000	\$824,072	\$975,928	\$9,000,000	Estimated Project Cost (YOE\$)				\$48,871,700	\$5,593,585	\$35,534,715	\$90,000,000
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4	MTIP Programming Submitted Supporting Documentation: STIP Summary Report, STIP Impacts Worksheet, SFY 2023 UPWP I-5 IBR Study project overview, project location map, and FFY 2022 BIP funding award fact sheet notification																																																																																					

Public Notification and Comment Process:	
5A	Was a 30 Public Notification/Opportunity to Comment Period Required? Yes
5B	What were the 30 day Public Notification/Opportunity to Comment Start and end dates? 5/30/2023 to 6/28/2023
5C	Was the Public Notification/Opportunity to Comment period completed consistent with the Metro Public Participation Plan? Yes
5D	Was the Public Notification/Opportunity to Comment period included on the Metro website allowing email submissions as comments? Yes
5E	Were there a significant amount of comments received requiring a comments log summary provided to Metro Communications Staff? No. However, any significant comments received are sent on to Metro's Communication staff for review plus evaluation, and response as needed.
6	Added clarifying notes: The study is a bi-state effort between ODOT and WASHDOT

Fiscal Constraint Consistency Check Areas	
1	Will Performance Measurements Apply? No. This is a planning activity. Performance measurements do not apply to planning activities.
2A	Does the amendment include fiscal updates? Yes. The amendment adds new federal BIP awarded funds to the MTIP.
2B	What is the funding source for the project? Federal Bridge Investment Act funds.
2C	Was the Proof-of Funding requirement satisfied and how? Copy provide of the FFY 202 BIP Planning Awards notification fact sheet for the project
2D	Was overall fiscal constraint demonstrated? Yes.

RTP Consistency Check Areas	
1A	RTP ID and Name: ID# 10893 - I-5 Columbia River Bridge
1B	RTP Project Description: Replace I-5/Columbia River bridges and improve interchanges on I-5. Project adds protected/buffered bikeways, cycletracks and a new trail/multiuse path or extension.
2A	Is the project exempt per 40 CFR 93.126, Table 2 or 40 CFR 92.127, Table 3? Yes, per 40 CFR 93.126, Table 2
2B	What is the exception category per the regulation: Table 2 - Other - Planning and technical studies.
3A	Is the project considered capacity enhancing? No. The project is a planning project. It is not capacity enhancing.
3B	If capacity enhancing, did the project complete required transportation demand modeling through the RTP Update or via an RTP amendment? No.
3C	Is Air Quality analysis required? No. The Metro MPA has obtained conformity attainment. Special air quality analysis requirements do not apply
3D	Is an Air Quality analysis approval date required? No. If the project is capacity enhancing, then transportation modeling analysis was completed as part of the RTP update. The RTP approval date 12/6/2018 can be considered the date for the completion of any required transportation demand modeling requirements for projects if they are capacity enhancing.
4	What RTP Goal(s) does the project support? Goal #11 - Transparency and Accountability. Objective 11.2 Performance-Based Planning – Make transportation investment decisions using a performance-based planning approach that is aligned with the RTP goals and supported by meaningful public engagement, multimodal data and analysis.
5	Does the project require a special performance assessment evaluation as part of the amendment? (applies to capacity enhancing projects, \$100 million or greater, and regionally significant). No. The project is not capacity enhancing nor does it exceed \$100 million dollars in cost.

### UPWP Consistency Check Areas

1A	Does the MTIP action also require an UPWP amendment: Maybe. MTIP programming can continue. It is unclear if the BIP award acts as a continuation of the SFY 23 UPWP I-5 IBR project entry, or should be considered a new project as part of the SFY 24 UPWP.
1B	Can the MTIP amendment proceed ahead of the UPWP amendment? Yes. The MTIP amendment can proceed even if an UPWP amendment is required.
2	What UPWP category does the project fit under (e.g. Master Agreement, Metro Funded Regionally Significant, or Non-Metro Funded Regionally Significant)? Non-Metro Funded Regionally Significant project

### Other Review Areas

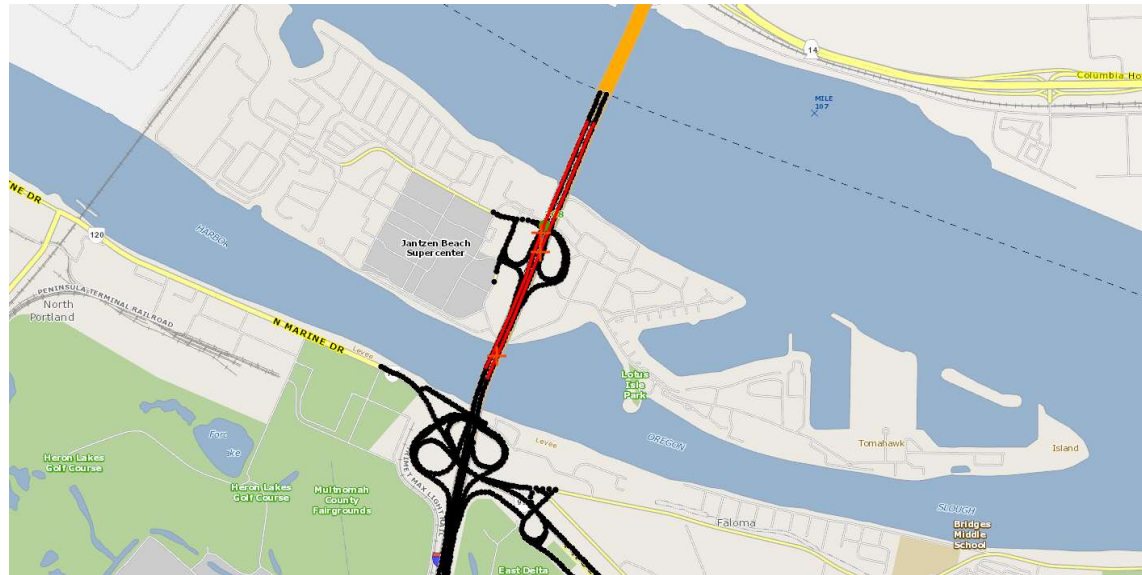
1	Is the project location identified on the National Highway System (NHS), and what is its designation? No - Not applicable
2A	Is the project location identified as part of one or more of Metro Modeling Networks, and which one(s)? No - Not applicable
2B	What is the Metro modeling designation? Not applicable
3	Is the project designated as a Transportation Control Measure (TCM)? No
4	Is the project location identified on a Congestion Management Plan route? No

### Fund Type Codes References

Local	General Local funds committed by the lead agency that normally cover the minimum match requirement to the federal funds
Advance Construction ADVCON (AC funds)	A funding placeholder tool. This fund management tool allows agencies to incur costs on a project and submit the full or partial amount later for Federal reimbursement if the project is approved for funding. Advance construction can be used to fund emergency relief efforts and for any project listed in the STIP, including surface transportation, interstate, bridge, and safety projects. The use of Advance Construction is normally only by the State DOT to help leverage their funding resources and keep projects on their respective delivery schedules.
AC-BIP	Federal Advance Construction funds with an estimated conversion code of federal Bridge Improvement Program (BIP) funds
Other	Additional local funds committed to the project by the lead agency which are beyond the minimum federal match requirement

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
PL	ACPO	ADVANCE CONSTRUCT PR		50.00%	1,000,000.00	50.00%	500,000.00	50.00%	500,000.00	0.00%	0.00
	OTH0	OTHER THAN STATE OR		50.00%	1,000,000.00	0.00%	0.00	0.00%	0.00	100.00%	1,000,000.00
	PL Totals			100.00%	2,000,000.00		500,000.00		500,000.00		1,000,000.00
	Grand Totals				2,000,000.00		500,000.00		500,000.00		1,000,000.00





## BIP Planning Grant Awards 2022



## **BIP Planning, Urban**

### **IBR Hayden Island Ground Improvement Study**

Oregon DOT, Oregon

**Grant Funding: \$1,000,000**

**Estimated Total Planning Project Costs: \$2,000,000**

#### **Project Description**

Ground improvement study for seismic analysis to support future project preliminary engineering work for the replacement of the I-5 bridge over the Columbia River.

#### **Project Benefits**

The existing I-5 bridge is at risk of facing closure in a major seismic event. The application describes how a closure of the bridge would threaten the transportation network's efficiency and the ability to move goods and people in the Portland metropolitan region. The Interstate Bridge Replacement (IBR) Hayden Island Ground Improvement Study will help mitigate existing seismic risks from liquefiable soils to the proposed infrastructure in the IBR program area. The Ground Improvement Study will establish construction techniques to protect the replacement structure's long-term utility through a resilient construction approach. The bridge replacement project would address congestion and safety; this bridge has been ranked the worst bottleneck in Oregon and Washington, according to the applicant. Additionally, the bridge's facilities are inadequate for pedestrians, cyclists, and individuals using mobility devices.



Photo Source: Oregon DOT, Oregon

# 2021-2024 MTIP Formal Amendment - Exhibit A

June 2023 Formal Amendment for FFY 2023 - Amendment Number JN23-10-JUN

Summary Reason for Change: Cancel the project from the MTIP due to revised scope and funding requirements



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

**MTIP Formal Amendment  
CANCEL PROJECT**  
Remove Key 21621 from the MTIP

<b>Lead Agency:</b> Clackamas County				Project Type: Local		<b>ODOT Key:</b> 21621	
<b>Project Name:</b> S Redland Rd: OR213 - Springwater Rd (Clackamas County)		4	Fiscal Constraint Cat: SM&O		<b>MTIP ID:</b> 71175		
			ODOT Type: Safety		<b>Status:</b> 2		
			Performance Goal: N/A		<b>Comp Date:</b> 12/31/2025		
<b>Project Status:</b> 2 = Pre-design/project development activities (pre-NEPA) (ITS = ConOps.)  <div>*** Canceled Project ***</div>			Capacity Enhancing: No		RTP ID: 12095		
			Conformity Exempt: Yes		RTP Approval: 12/6/2018		
			On CMP: No		Trans Model: 12/6/2018		
			30 Day Notice Begin: 5/30/2023		TCM: No		
			30 Day Notice End: 6/28/2023		TSMO Award: No		
			Funding Source: ODOT		TSMO Cycle: N/A		
			Funding Type: HSIP		RFFA ID: N/A		
			State Highway Route: N/A		RFFA Cycle: N/A		
			Mile Post Begin: N/A		UPWP: No		
			Mile Post End: N/A		UPWP Cycle: N/A		
Length: N/A			Past Amend: 0				
Flex Transfer to FTA: No			Council Appr: Yes				
FTA Conversion Code: N/A			Council Date: 7/6/2023				
1st Year Program'd: 2022			OTC Approval: No				
Years Active: 2		OTC Date: N/A					
		STIP Amend #: 21-24-3374		MTIP Amnd #: JN23-10-JUN			
<b>Detailed Description:</b> Install high friction surface treatment (HFST), signs and edge line/fog line markings on curves to improve driver control in this area.							

**STIP Description:** Install high friction surface treatment (HFST), signs and edge line/fog line markings on curves to improve driver control in this area.

Last Amendment of Modification: Administrative - January 2023 - AM23-07-JAN1 - Slip PE phase to FFY 2024 with HSIP funds. Total PE = \$38,080. Slip Cons phase to FFY 2024 with HSIP funds. Total Cons = \$296,278

PROJECT FUNDING DETAILS								
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other	Total
<b>Federal Funds</b>								
HSIP	ZS30	2024		<del>\$ 35,117</del>		-		\$ -
HSIP	ZS30	2024				<del>\$ 273,228</del>		\$ -
								\$ -
							<b>Federal Totals:</b>	<b>\$ -</b>
<b>State Funds</b>								
								\$ -
								\$ -
							<b>State Total:</b>	<b>\$ -</b>
<b>Local Funds</b>								
Local	Match	2024		\$ 2,963				\$ -
Local	Match	2024				\$ 23,050		\$ -
								\$ -
							<b>Local Total</b>	<b>\$ -</b>
Phase Totals Before Amend:			\$ -	<del>\$ 38,080</del>	\$ -	<del>\$ 296,278</del>	\$ -	<del>\$ 334,358</del>
Phase Totals After Amend:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Cost Estimate (all phases):								\$ -
Year of Expenditure Cost Amount:								\$ -

### Programming Summary Details

Why project is short programmed:

Phase Change Amount:	\$ -	\$ (38,080)	\$ -	\$ (296,278)	\$ -	\$ (334,358)
Phase Change Percent:	0%	-100%	0%	-100%	0%	-100%
Revised Match Federal:	N/A	\$ -	N/A	\$ -	N/A	\$ -
Revised Match Percent:	N/A	0%	N/A	0%	N/A	0.00%

### Phase Obligations and Expenditures Summary

Item	Planning	PE	ROW	Construction	Other	
Total Funds Obligated:						Federal Aid ID
Federal Funds Obligated:						
Initial Obligation Date:						Other Notes Project is canceled from the 2021-24 MTIP
EA Number:						
EA Start Date:						
EA End Date:						
Known Expenditures:						

### MTIP Programming Consistency Check Details and Glossary

#### General Areas

1	Phase funding fields: Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.
2	Amendment Purpose: The purpose of an MTIP amendment is normally to add a new project due to required federal review actions involving the MTIP and STIP, or complete required changes to the project (name description, or funding) to meet the project's next federal approval delivery step.
3	This amendment to the MTIP completes what action: The amendment cancels the project from the 2021-24 MTIP per ODOT's request. Note: Clackamas County provided concurrence for the cancellation. Prior safety related improvements have occurred in the area which overlapped with this project. ODOT's review determined that the existing funding was not sufficient to cover the high friction surface treatment requirements. The ODOT Region 1 Traffic proposed the project cancellation with Clackamas County provided their concurrence during April 2023. The funding is proposed to be returned to the ODOT All Roads Transportation Safety (ARTS) program.
4	MTIP Programming Submitted Supporting Documentation: STIP Summary Report, STIP Impacts Worksheet, plus a project location map

#### Public Notification and Comment Process:

5A	Was a 30 Public Notification/Opportunity to Comment Period Required? Yes
5B	What were the 30 day Public Notification/Opportunity to Comment Start and end dates? May 30, 2023 to June 28, 2023
5C	Was the Public Notification/Opportunity to Comment period completed consistent with the Metro Public Participation Plan? Yes
5D	Was the Public Notification/Opportunity to Comment period included on the Metro website allowing email submissions as comments? Yes

5E	Were there a significant amount of comments received requiring a comments log summary provided to Metro Communications Staff? No. However, any significant comments received are sent on to Metro's Communication staff for review plus evaluation, and response as needed.
6	Added clarifying notes: Clackamas County reviewed ODOT cancelation request and provided their concurrence.

Fiscal Constraint Consistency Check Areas	
1	Will Performance Measurements Apply? N/A
2A	Does the amendment include fiscal updates? Yes. The cancelation will result in the HSIP programming returning to the ODOT ARTS program.
2B	What is the funding source for the project? ODOT HSIP
2C	Was the Proof-of Funding requirement satisfied and how? N/A
2D	Was overall fiscal constraint demonstrated? N/A

RTP Consistency Check Areas	
1A	RTP ID and Name: ID# 12095 - Safety & Operations Projects
1B	RTP Project 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.
2A	Is the project exempt per 40 CFR 93.126, Table 2 or 40 CFR 92.127, Table 3? Yes, per 40 CFR 93.126, Table 2
2B	What is the exception category per the regulation: Table 2 - Safety - Highway Safety Improvement Program implementation.
3A	Is the project considered capacity enhancing? No.
3B	If capacity enhancing, did the project complete required transportation demand modeling through the RTP Update or via an RTP amendment? No.
3C	Is Air Quality analysis required? No. The Metro MPA has obtained conformity attainment. Special air quality analysis requirements do not apply
3D	Is an Air Quality analysis approval date required? No. If the project is capacity enhancing, then transportation modeling analysis was completed as part of the RTP update. The RTP approval date 12/6/2018 can be considered the date for the completion of any required transportation demand modeling requirements for projects if they are capacity enhancing.
4	What RTP Goal(s) does the project support? N/A now as the project is being canceled from the MTIP.
5	Does the project require a special performance assessment evaluation as part of the amendment? (applies to capacity enhancing projects, \$100 million or greater, and regionally significant). No. The project was not capacity enhancing nor does it exceed \$100 million dollars in cost.

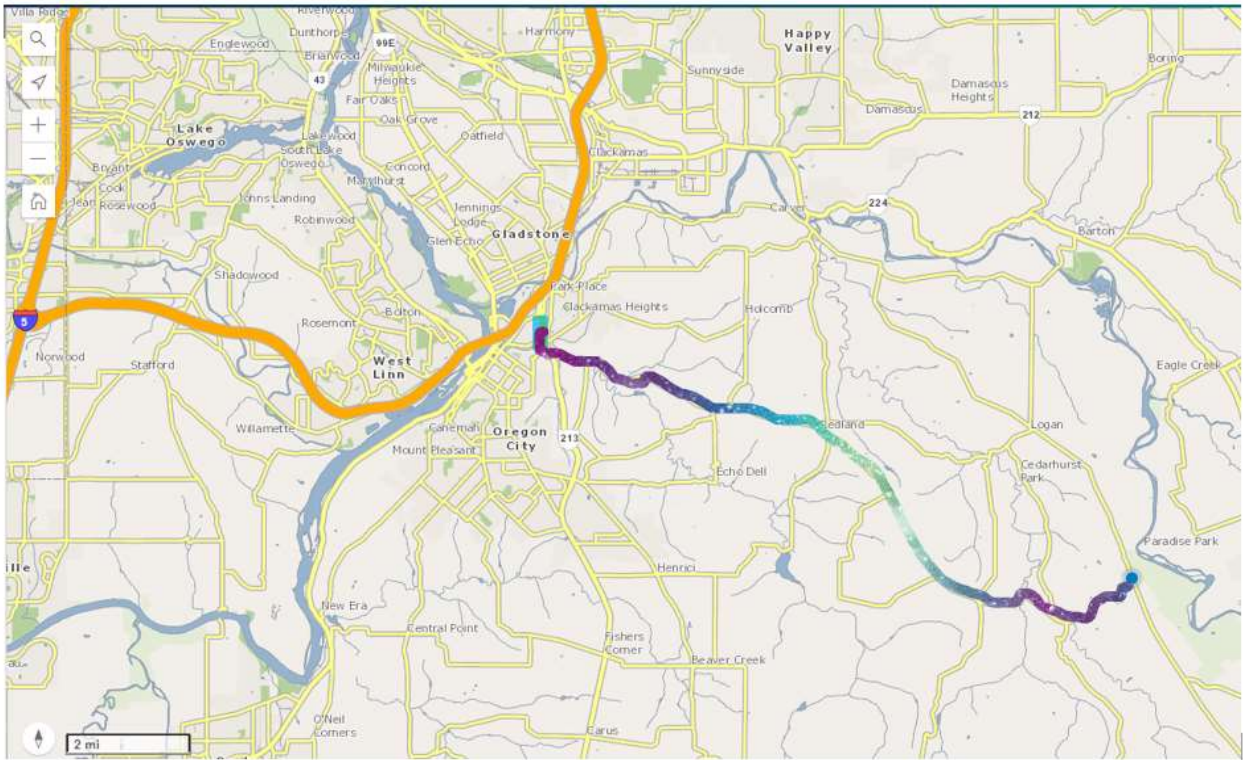
UPWP Consistency Check Areas	
1A	Does the MTIP action also require an UPWP amendment: No
1B	Can the MTIP amendment proceed ahead of the UPWP amendment? Yes.



2	What UPWP category does the project fit under (e.g. Master Agreement, Metro Funded Regionally Significant, or Non-Metro Funded Regionally Significant)? N/A
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Other Review Areas	
1	Is the project location identified on the National Highway System (NHS), and what is its designation? No - Not applicable
2A	Is the project location identified as part of one or more of Metro Modeling Networks, and which one(s)? No - Not applicable
2B	What is the Metro modeling designation? Not applicable
3	Is the project designated as a Transportation Control Measure (TCM)? No
4	Is the project location identified on a Congestion Management Plan route? No

Fund Type Codes References	
Local	General Local funds committed by the lead agency that normally cover the minimum match requirement to the federal funds
HSIP	A federal funding source (FHWA based) appropriated to the State DOT. The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.





# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: May 24, 2023  
To: TPAC and Interested Parties  
From: Ken Lobeck, Funding Programs Lead  
Subject: June FFY 2023 MTIP Formal Amendment & Resolution 23-5345 Approval Request

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## **FORMAL MTIP AMENDMENT STAFF REPORT**

### **Amendment Purpose Statement**

**FOR THE PURPOSE OF ADDING THREE NEW PROJECTS AND CANCELING ONE PROJECT TO THE 2021-24 MTIP ENABLING REQUIRED FEDERAL APPROVAL ACTIONS TO MOVE FORWARD**

### **BACKGROUND**

#### **What This Is - Amendment Summary:**

The June FFY 2023 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment bundle contain four projects. Three are new projects being added to the MTIP. Two of the new projects originate from the Oregon Department of Environmental Quality's (DEQ) Congestion Mitigation Air Quality (CMAQ) funding call. One new project originates from a discretionary grant award from FHWA's Bridge Investment Program (BIP). Adding the three projects now will enable them to initiate various required project delivery actions.

The fourth project is being canceled and removed from the MTIP and STIP. The project is a Clackamas County ODOT funded Highway Safety Improvement Program (HSIP) project which proposed various safety upgrades along Redland Rd. However, other related project have completed several of the safety improvements in the project area. The remaining High Friction Surface Treatment (HFST) cost review determined additional costs would be required to complete the scope of work. Upon review by ODOT and Clackamas County, both provided concurrence to cancel the project. The HSIP funds will be returned to ODOT's All Roads Transportation Safety (ARTS) program.

#### **What is the requested action?**

**Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 23-5345 to add the three new projects and cancel the Clackamas County HSIP funded Redland Rd project to the 2021-24 MTIP.**

A summary of the project and amendment actions are shown on the next pages.

June FFY 2023 Formal Transition Amendment Bundle Contents Amendment Type: Formal/Full Amendment #: JN23-10-JUN Total Number of Projects: 4				
Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action
(#1) ODOT Key # <b>23462</b> MTIP ID TBD <i>(New Project)</i>	Beaverton School District	<b>Beaverton School District EV Chargers</b>	Purchase and install electric wall mount chargers.	<b><u>ADD NEW PROJECT:</u></b> Add new Oregon Department of Environmental Quality (DEQ) CMAQ awarded project to install up to 22 new EV charging stations
(#2) ODOT Key # <b>23463</b> MTIP ID TBD <i>(New Project)</i>	TriMet	<b>TriMet Transit Center EV Chargers</b>	Purchase and install electric chargers at Powell bus garage and Beaverton Transit Center.	<b><u>ADD NEW PROJECT:</u></b> Purchase and install up to 12 - DC level 3 charging equipment at TriMet's Powell Bus Garage, and 2 opportunity fast chargers in the layover area of Beaverton Transit Center
(#3) ODOT Key # <b>23456</b> MTIP ID TBD <i>(New Project)</i>	ODOT (and WSDOT)	<b>IBR Hayden Island Ground Improvement Study</b>	Implement study to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project	<b><u>ADD NEW PROJECT:</u></b> Add new USDOT Bridge Improvement Program (BIP) discretionary awarded study to ODOT in support of the I-5 Interstate Bridge Replacement project
(#4) ODOT Key # <b>21621</b> MTIP ID 71175	Clackamas County	<b>S Redland Rd: OR213 - Springwater Rd (Clackamas County)</b>	Install high friction surface treatment (HFST), signs and edge line/fog line markings on curves to improve driver control in this area.	<b><u>CANCEL PROJECT:</u></b> Cancel and remove project from the 2021-24 MTIP

**AMENDMENT SUMMARY**

<b>Project #1</b> <b>Key</b> <b>23462</b>	<b>Beaverton School District EV Chargers</b> <b>(Add new project)</b> <b>Lead Agency: Beaverton School District</b>
<p><b><u>Project Description:</u></b></p> <p>In the Beaverton School District in Washington County, add 22 electric charging stations to the existing 8 charge stations at its Transportation Service Center (TSC) in Beaverton</p> <p><b>Identifications/Key Consistency Check Areas:</b></p> <ul style="list-style-type: none"> <li>• Lead Agency: Beaverton School District</li> <li>• ODOT Key Number: <b>23462</b></li> <li>• MTIP ID#: TBD (new entry not yet assigned in the MTIP)</li> <li>• RTP ID: Not applicable. The project is funded with Congestion Mitigation Air Quality (CMAQ) funds which have a priority emphasis to provide air quality benefits. The improvements related back to the RTP's air quality improvement goals, but do not correspond to a specific project in the Constrained RTP.</li> <li>• Proof-of Funding/Fiscal Constraint Demonstrated: Yes. The ODOT State CMAQ manage provided confirmation of the Oregon Department of Environmental Quality's CMAQ award to the Beaverton School District.</li> <li>• Conformity Status: The project is exempt from air quality analysis and is considered a non- capacity enhancing project per 40 CFR 93.126, Table 2 – Other - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.</li> <li>• OTC approval No.</li> <li>• Performance Measurements applicable: Yes. CMAQ.</li> <li>• Special Amendment Performance Assessment Required: No</li> <li>• Were overall RTP Consistency checks achieved and satisfactory: Yes.</li> <li>• Can the required changes be made without issues: Yes.</li> <li>• Additional information: The CMAQ award is \$169,107.</li> </ul>	
<p><b><u>Description of Changes</u></b></p> <p>The formal amendment adds the new DEQ CMAQ award to the Beaverton School District to the 2021-24 MTIP. The project will add 22 electric charging stations to the existing 8 charge stations at its Transportation Service Center (TSC) in Beaverton. The CMAQ award is \$169,107 and requires a 10.27% minimum match against the federal funds. The Beaverton School District has provided the matching funds and \$358,212 of local overmatching funds to the project. The estimated total project cost is \$609,466.</p> <p>Beaverton School District (BSD) is expanding its alternative fuel fleet by replacing 30 diesel school buses with electric-powered school buses (ESBs) by</p>	



Fall 2025 and adding 22 electric charging stations to the existing 8 charge stations at its Transportation Service Center (TSC) located at 1270 NW 167th Pl Beaverton OR 97006. The CMAQ funding will support the procurement and installation for 21 Level 2 Clipper Creek 100-amp wall mount chargers.

The overall benefits of replacing 30 diesel buses with electric-powered units include elimination of harmful airborne particulate matter, noxious gases, and other pollutants which students, employees, and the public would otherwise ingest; significant reduction in vehicle maintenance and fuel expense for the district; increased lifecycle of mechanical parts on ESB's; interior vehicle noise reduction (which has a significant positive effect on special needs students having sensory input issues); and eventually returning electrical power back to the grid via V2G technology from stored battery energy once PGE has achieved this ability.

### Support Item(s):

#### Air Quality Emission Reduction Analysis Findings

The tables below illustrate reductions on a metric basis. Based on a 190-day operational year and the 20-year life cycle of ESBs, students will avoid exposure by nearly 10 metric tons of NOx and over 4 metric tons of Carbon Monoxide.

Pollutant	Kg/Day	Kg/Yr[2]	Lifetime Metric Tons
Carbon Monoxide (CO)	1.114	211.66	4.23
Nitrogen Oxide (NOx)	2.585	491.15	9.82
Particulate Matter <2.5 µm (PM <sub>2.5</sub> )	0.027	5.13	0.10
Particulate Matter <10 µm (PM <sub>10</sub> )	0.107	20.33	0.41
Volatile Organic Compounds (VOC)	0.108	20.52	0.41

Carbon Dioxide Emissions (CO2) (30 buses) [3]	Diesel Bus	Electric Bus
Annual Energy Consumption	1,885,008 gal	16,022,568 kWh
Emissions Factor (lbs CO2/unit)	22.4	0.5
Annual Emissions (lbs CO2)	42,224,179	8,075,374
Lifetime Emissions (lbs CO2)	1,266,725,376	242,261,228
<b>Savings Emissions Savings (lbs CO2)</b>		<b>1,024,464,148</b>

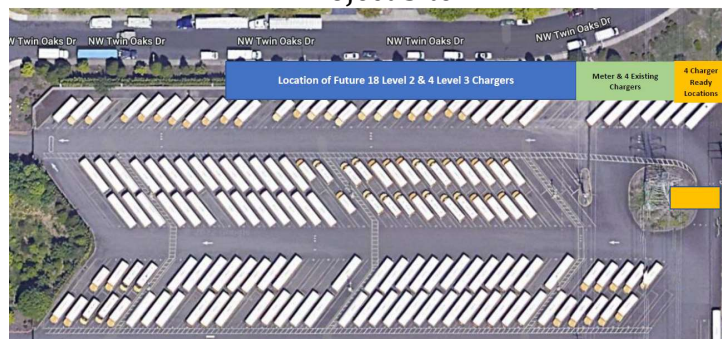
2 FHWA/CMAQ Emissions Calculator, 190-day year

3 PGE Lifetime Savings Estimator

Use the following boxes to show estimated reduction amount (kg/day).

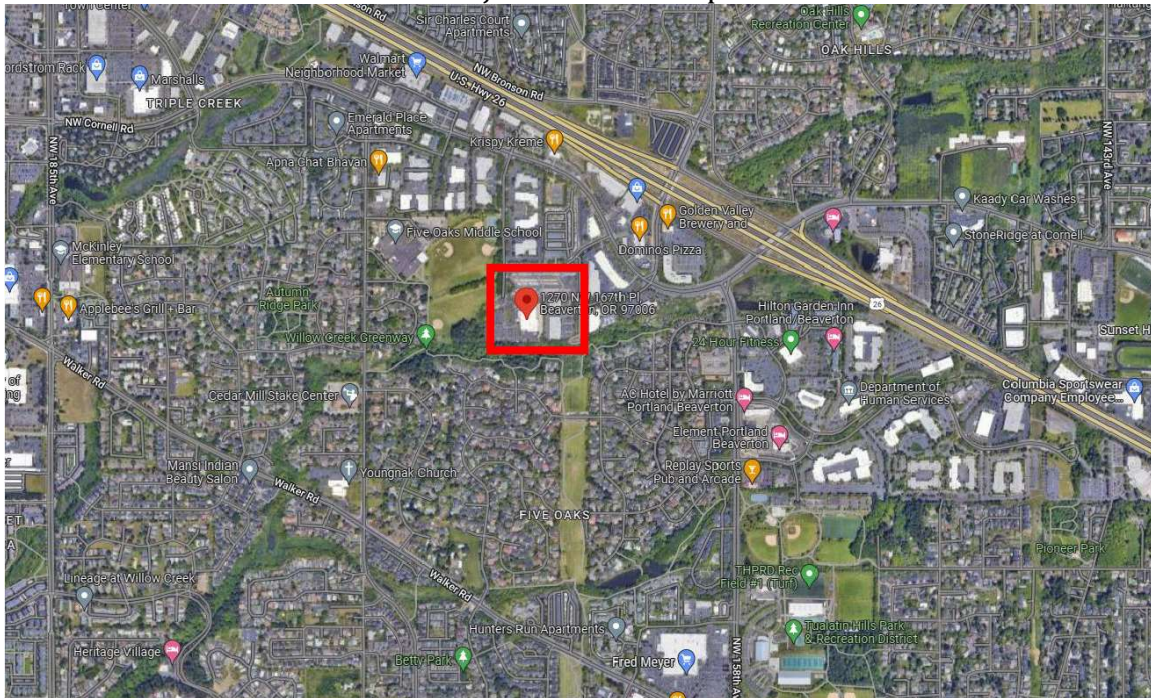
VOC	0.108	PM2.5	0.027	PM10	0.107
NOx	2.585	CO	1.114	CO2	100,786
Duration of PM10 & CO Benefit			Years	20	

#### Project Site





### Project Location Map



### About CMAQ Funds

Federal CMAQ funds are not directly transportation funds. CMAQ funds are air quality improvement funds that support eligible transportation related projects. CMAQ funds provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

Many types of projects are eligible under the CMAQ program including electric vehicles and **charging stations**, diesel engine replacements and retrofits, transit improvements, bicycle and pedestrian facilities, shared micro-mobility projects including shared scooter systems, and more. In addition to improving air quality and reducing congestion, CMAQ projects can improve equitable access to transportation services, improve safety, and promote application of new and emerging technologies.

The Infrastructure Investment and Jobs Act / Bipartisan Infrastructure Law (IIJA/BIL) continues all prior CMAQ eligibilities. Each CMAQ project must meet three basic criteria:

1. The project must be a transportation related project.
2. The project must be located in or benefit a nonattainment or maintenance area
3. The project must generate an emissions reduction.

Note: Many CMAQ projects also provide congestion reduction benefits and reduce greenhouse gas emissions. Since its beginning in 1992, the CMAQ program has provided more than \$42 billion for over 45,000 transportation-related emission reduction projects

by State transportation departments (DOTs), metropolitan planning organizations (MPOs), and other sponsors across the country.

Examples of CMAQ Eligible projects include the following:

- Alternative fuels and vehicles.
- Bicycle and pedestrian facilities/programs.
- Diesel engine replacement or retrofit.
- Electric vehicles and **charging**.
- Idle reduction.
- Intermodal freight facilities and port improvements.
- Improvements to locks and dams and marine highways.
- Operating assistance.
- Transit improvements.
- Transportation control measures (TCMs).
- Transportation management associations.
- Travel demand management.
- Shared micro-mobility.

Under the IIJA/BIL legislation, the CMAQ program adds four new eligibilities:

- Shared micro-mobility: bikeshare and shared scooters.
- Purchase of medium or heavy duty zero emission vehicles and related charging stations.
- Modernization or rehabilitation of a lock and dam or a marine highway corridor under certain circumstances.
- No time limitation on operating assistance to include transit systems in small urban and rural areas.

<b>Project #2</b> <b>Key</b> <b>23463</b>	<b>TriMet Transit Center EV Chargers</b> <b>(Add new project)</b> <b>Lead Agency: TriMet</b>
<p><b><u>Project Description:</u></b>  The project will purchase and install electric chargers at Powell bus garage and Beaverton Transit Center.</p>	
<p>Identifications/Key Consistency Check Areas:</p> <ul style="list-style-type: none"> <li>• Lead Agency: TriMet</li> <li>• ODOT Key Number: <b>23643</b></li> <li>• MTIP ID#: TBD (new entry not yet assigned in the MTIP)</li> <li>• RTP ID: 12081 – Bus Electrification of Bus Fleet: Phase 1</li> <li>• Proof-of Funding/Fiscal Constraint Demonstrated: Yes. The ODOT State CMAQ manage provided confirmation of the Oregon Department of Environmental Quality's CMAQ award to TriMet</li> <li>• Conformity Status: The project is exempt from air quality analysis and is considered a non- capacity enhancing project per 40 CFR 93.126, Table 2 – Mass Transit - Construction or renovation of power, signal, and communications systems.</li> </ul>	

- OTC approval No.
- Performance Measurements applicable: Yes. CMAQ
- Special Amendment Performance Assessment Required: No
- Were overall RTP Consistency checks achieved and satisfactory: Yes.
- Can the required changes be made without issues: Yes.
- Additional information: The DEQ CMAQ award is for \$2,840,000. The CMAQ funds are expected to be flex transferred to FTA.

### **Description of Changes**

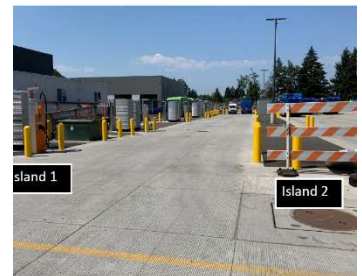
The formal amendment adds the new DEQ CMAQ award for TriMet to the 2021-24 MTIP. TriMet will procure and install twelve - DC level 3 charging equipment at TriMet's Powell Bus Garage, and two opportunity fast chargers in the layover area of Beaverton Transit Center. These chargers will support and expand TriMet's deployment of zero emission battery electric buses (BEBs) for the provision of public transit service.

The CMAQ award is \$2,840,000 and requires a 10.27% minimum match against the federal funds. TriMet has provided the matching funds and \$1,174,949 of local overmatching funds to the project. The estimated total project cost is \$4,340,000.

Construction at Powell Garage is nearing completion to reconfigure the site to support a mixed fleet including larger, articulated buses, and TriMet's growing fleet of zero emission battery electric buses. TriMet has committed to transition its entire bus fleet to zero emissions by 2040, and has just placed an order for 24 BEBs to be housed at Powell Garage, arriving in FY24. The CMAQ funding will fund the purchase and expansion of 12 additional Buy America compliant at Island Charging Station 2. Medium voltage power electronics and gear are in place to support expansion seamlessly without disrupting bus operations.

Additionally, the project will add charging infrastructure to allow TriMet to extend the operation of zero emissions buses, dispatched from Merlo Garage, and laying over at Beaverton Transit Center, to routes and scheduling blocks that require ranges of more than 150 miles. In the course of adding this infrastructure, improvements will also be made to accommodate higher capacity, sixty-foot, articulated, long-range battery electric buses.

Powell Garage



Beaverton Transit Center  
Overhead Pantograph Fast  
Chargers



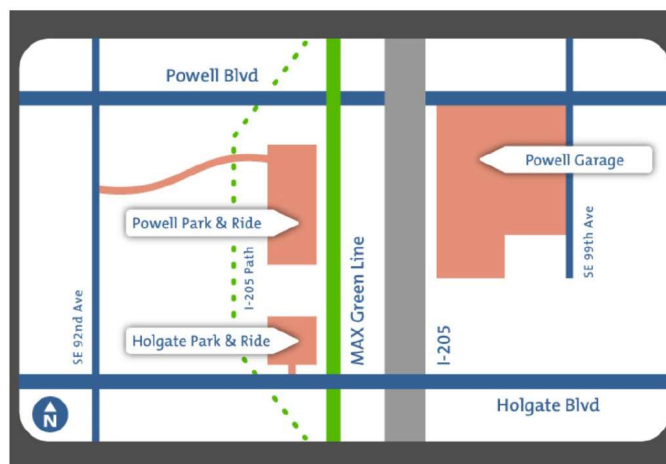


**Support Item(s):****Air Quality Emission Reduction Analysis Findings**

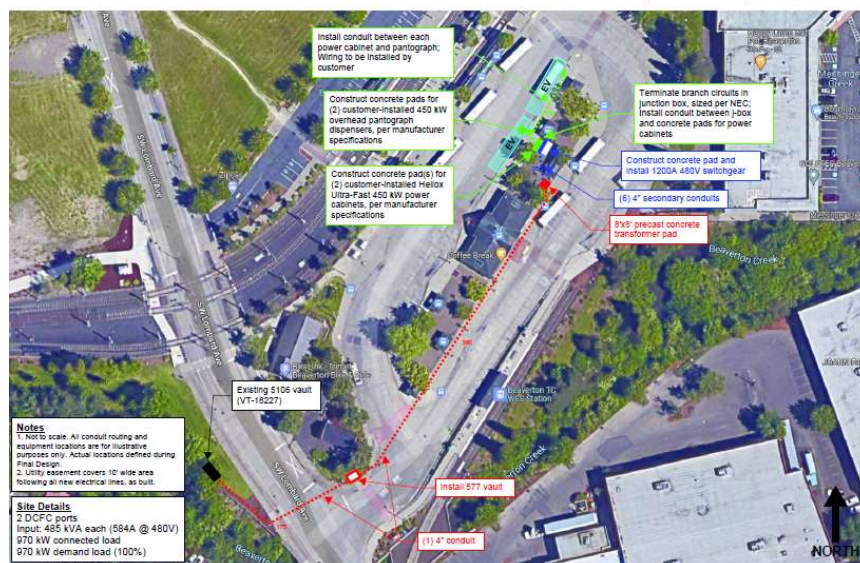
This project is requesting \$2.84 million in CMAQ funding to procure and install twelve - DC level 3 charging equipment at TriMet's Powell Bus Garage, and two opportunity fast chargers in the layover area of Beaverton Transit Center. These chargers will support and expand TriMet's deployment of zero emission battery electric buses (BEBs) for the provision of Public Transit. These are all CMAQ eligible project expenses.

Use the following boxes to show estimated reduction amount (kg/day).

VOC	.8439	PM2.5	.1324	PM10	.1408
NOx	25.9111	CO	5.9796	CO2	
Duration of PM10 & CO Benefit				Years	10

**Project Location – Powell Garage****Project Location – Beaverton Transit Center****Preliminary Site Design**

TriMet – Beaverton Transit Center (3864 SW Lombard Ave, Beaverton)



<b>Project #3</b> <b>Key</b> <b>23456</b>	<b>IBR Hayden Island Ground Improvement Study</b> <b>(Add new project)</b> <b>Lead Agency: ODOT</b>
<p><b><u>Project Description:</u></b></p> <p>The study is intended to help mitigate seismic risks by assessing soil stabilization techniques including solid mixing, compaction grouting, jet grouting and the use of stone columns to minimize soil liquefaction during the preliminary engineering stage of the project</p>	
<p><b>Identifications/Key Consistency Check Areas:</b></p> <ul style="list-style-type: none"> <li>• Lead Agency: ODOT (and WSDOT)</li> <li>• Project Administrator:</li> <li>• ODOT Key Number: <b>23456</b></li> <li>• MTIP ID#: TBD (new entry not yet assigned in the MTIP)</li> <li>• RTP ID: 10893 - I-5 Columbia River Bridge</li> <li>• Proof-of Funding/Fiscal Constraint Demonstrated: Yes. The funding award was verified through the FHWA FY 2022 BIP Planning Awards fact sheets</li> <li>• Conformity Status: The project is exempt from air quality analysis and is considered a non- capacity enhancing project per 40 CFR 93.126, Table 2 – Air Quality – Planing and Other Technical Studies</li> <li>• OTC approval No.</li> <li>• Performance Measurements applicable: No – Not Applicable.</li> <li>• Special Amendment Performance Assessment Required: No</li> <li>• Were overall RTP Consistency checks achieved and satisfactory: Yes.</li> <li>• Can the required changes be made without issues: Yes.</li> <li>• Additional information: The BIP Planning grant award is \$1,000,000. The estimated total project cost is \$2 million dollars.</li> </ul>	
<p><b><u>Description of Changes</u></b></p> <p>The formal amendment adds the new FY 2022 Bridge Investment Program planning grant to the MTIP in support of the Oregon/Washington DOT efforts to plan and implement the I-5 interstate bridge replacement across the Columbia River. The project is a complimentary activity to the PE actions occurring in Key 21570.</p> <p>The Interstate Bridge Replacement (IBR) Hayden Island Ground Improvement Study will help mitigate existing seismic risks from liquefiable soils to the proposed infrastructure in the IBR program area. The Ground Improvement Study will establish construction techniques to protect the replacement structure's long-term utility through a resilient construction approach. The bridge replacement project would address congestion and safety; this bridge has been</p>	



Photo Source: Oregon DOT, Oregon

ranked the worst bottleneck in Oregon and Washington, according to the applicant. Additionally, the bridge's facilities are inadequate for pedestrians, cyclists, and individuals using mobility devices.

LEAD AGENCY		ODOT				
PROJECT NAME		I-5: Columbia River (Interstate) Bridge				
Project IDs		Project Description				Project Type
ODOT KEY	21570	Planning and design activities for the replacement of the I-5 Interstate Bridge between Oregon and Washington. Replacing the bridge is anticipated to improve traffic and mobility for freight and the public traveling across the river.				Roadway and bridge
MTIP ID	71083					
RTP ID	10893					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2022	NHPP (2001)	\$41,671,700	\$4,769,513	\$2,058,787	\$48,500,000
Preliminary engineering	2022	OTHER - LOCAL	\$0	\$0	\$32,500,000	\$32,500,000
FY 21-24 Totals			\$41,671,700	\$4,769,513	\$34,558,787	\$81,000,000
Prior and Future Years' Totals			\$7,200,000	\$824,072	\$975,928	\$9,000,000
Estimated Project Cost (YOE\$)			\$48,871,700	\$5,593,585	\$35,534,715	\$90,000,000

### Proof-of-Funding Verification/Fiscal Constraint Demonstration



### BIP Planning Grant Awards 2022



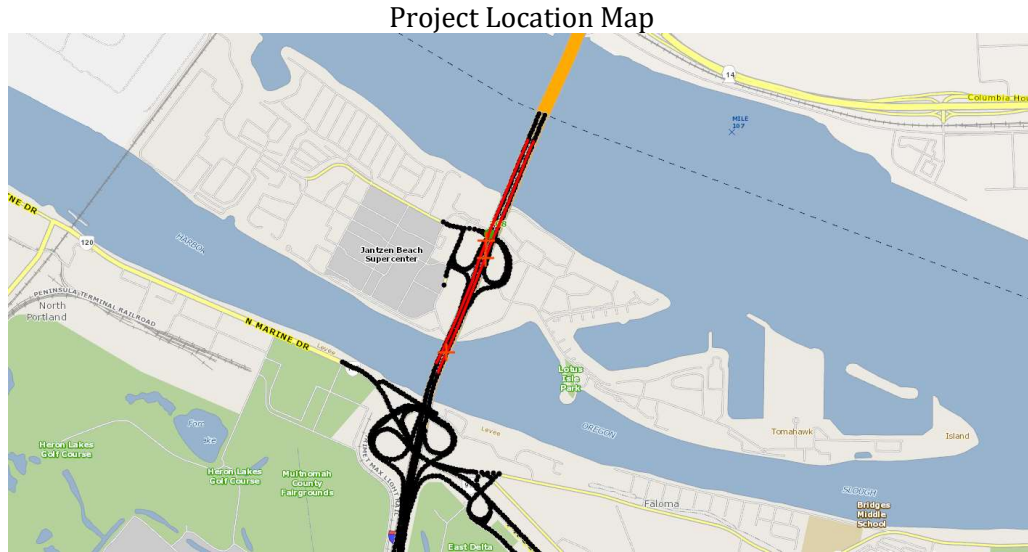
#### BIP Planning, Urban

#### IBR Hayden Island Ground Improvement Study

Oregon DOT, Oregon

**Grant Funding: \$1,000,000**

**Estimated Total Planning Project Costs: \$2,000,000**

**Support Item(s):**

**Project #4**  
**Key**  
**21625**

**S Redland Rd: OR213 - Springwater Rd (Clackamas County)**  
**(Cancel Project)**  
**Lead Agency: Clackamas County**

**Project Description:**

Install high friction surface treatment (HFST), signs and edge line/fog line markings on curves to improve driver control in this area.

**Identifications/Key Consistency Check Areas:**

- Lead Agency: Clackamas County
- Project Administrator: ODOT
- ODOT Key Number: **21625**
- MTIP ID#: 71175
- RTP ID: 12095 - Safety & Operations Projects
- Proof-of Funding/Fiscal Constraint Demonstrated: N/A. The HSIP funds will be returned to the ODOT All Roads Transportation Safety program.
- Conformity Status: The project is exempt from air quality analysis and is considered a non- capacity enhancing project per 40 CFR 93.126, Table 2 – Safety – Highway Safety Improvement Program Implementation
- OTC approval No.
- Performance Measurements applicable: No – Not Applicable
- Special Amendment Performance Assessment Required: No
- Were overall RTP Consistency checks achieved and satisfactory: Not Applicable
- Can the required changes be made without issues: Yes.
- Additional information: Clackamas County provided concurrence to cancel the project as well.



**Description of Changes**

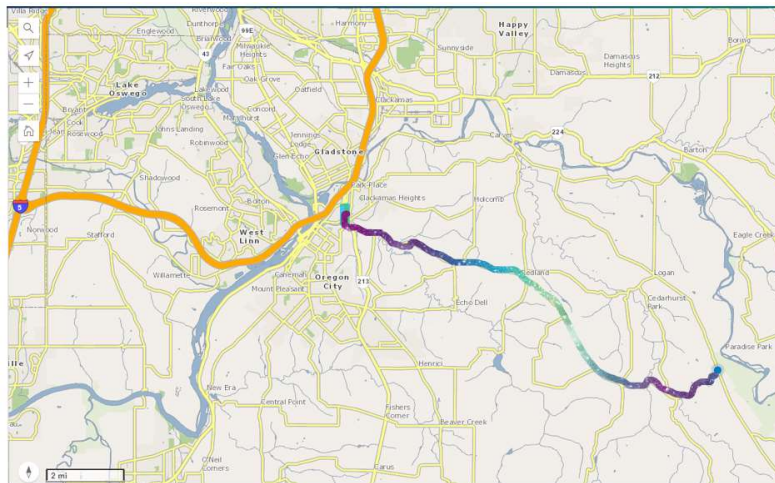
The formal amendment cancels the project and removes it from the MTIP and STIP.

Two of the planned safety countermeasures (sign enhancements and edge line striping) have been completed through another project and only one remaining safety countermeasure, High Friction Surface Treatment (HFST), remained to be completed. However, ODOT's review determined that the HFST would not be cost effective and as initially proposed. Additional special materials along with special contractors plus equipment would be required to complete the HFST.

The review determined the existing project was not sufficient to cover the design and construction of the HFST scope element. Since Clackamas County has replaced the sogns and completed the edge-line/fog markings through another project, ODOT's Region 1 Traffic Unit proposed canceling the project. The existing Highway Safety Improvement Program (HSIP) funding will be returned to the ODOT ARTS program and will help fund other ARTS projects. Clackamas County evaluated the cancelation request and provided their concurrence on April 17, 2023.

**Support Item(s):**

Project Location Map

**METRO REQUIRED PROJECT AMENDMENT REVIEWS**

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

- Complete eligibility verification to be programmed in the MTIP.
- Pass proof of funding and fiscal constraint verification.

- Pass the RTP consistency review which requires a confirmation that the project(s) are identified in the current approved constrained RTP either as a stand- alone project or in an approved project grouping bucket.
- Are consistent with RTP project costs when compared with programming amounts in the MTIP.
- If a capacity enhancing project, the project is identified in the approved Metro modeling network and has completed required air conformity analysis and transportation demand modeling.
- Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
- If not directly identified in the RTP's constrained project list, the project is verified to be part of the MPO's annual Unified Planning Work Program (UPWP) if federally funded and a regionally significant planning study that addresses RTP goals and strategies and/or will contribute or impact RTP performance measure targets.
- Determined the project is eligible to be added to the MTIP, or can be legally amended as required without violating provisions of 23 CFR450.300-338 either as a formal Amendment or administrative modification:
- Does not violate supplemental directive guidance from FHWA/FTA's approved Amendment Matrix.
- Reviewed and determined that Performance Measurements will or will not apply.
- Completion of the required 30-day Public Notification/Opportunity to Comment period.
- Meets MPO responsibility actions including project monitoring, fund obligations, and expenditure of allocated funds in a timely fashion.

## APPROVAL STEPS AND TIMING

Metro's approval process for formal amendment includes multiple steps. The required approvals for the June FFY 2023 Formal MTIP amendment (JN23-10-JUN) will include the following:

<u>Action</u>	<u>Target Date</u>
• TPAC Agenda mail-out.....	May 26, 2023
• Initiate the required 30-day public notification process.....	May 30, 2023
• <b>TPAC notification and approval recommendation.....</b>	<b>June 2, 2023</b>
• JPACT approval and recommendation to Council.....	June 15, 2023
• Completion of public notification process.....	June 28, 2023
• Metro Council approval.....	July 6, 2023

### Notes:

\* The above dates are estimates. JPACT and Council meeting dates could change.

\*\* If any notable comments are received during the public comment period requiring follow-on discussions, they will be addressed by JPACT.

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

<u>Action</u>	<u>Target Date</u>
• Final amendment package submission to ODOT & USDOT.....	July 12 ,2023
• USDOT clarification and final amendment approval.....	Early/mid-August 2023

## 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. None of the included project amendments impact the Metro current annual budget.

## RECOMMENDED ACTION:

**Staff is providing TPAC their official notification and requests they provide JPACT an approval recommendation of Resolution 23-5345 to add the three new projects and cancel the Clackamas County HSIP funded Redland Rd project to the 2021-24 MTIP.**

No Attachments.



# Memo



Metro

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: May 26, 2023  
To: Transportation Policy Alternatives Committee (TPAC) and interested parties  
From: Kim Ellis, RTP Project Manager  
Subject: Resolution No. 23-5343: Release of the Draft 2023 Regional Transportation Plan (RTP) and Draft 2023 High Capacity Transit Strategy for Public Review and Policy Discussion – **RECOMMENDATION TO JPACT REQUESTED**

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## PURPOSE

This memo provides an overview of materials provided to TPAC for discussion and action on the draft of the 2023 Regional Transportation Plan, draft project list and the draft 2023 High Capacity Transit Strategy at the June 2 TPAC meeting.

## ACTION REQUESTED

Metro requests members of TPAC to recommend that the Joint Policy Advisory Committee on Transportation (JPACT) approve Resolution No. 23-5343 for the purpose of releasing the Draft 2023 Regional Transportation Plan (RTP) and project list, and Draft 2023 High Capacity Transit Strategy for public review and policy discussion.

## BACKGROUND

A major update to the Regional Transportation Plan (RTP) is underway. The RTP is the State- and Federally-required long-range transportation plan for the Portland metropolitan area. The RTP is the blueprint for transportation in our region and a key tool for implementing the region's [2040 Growth Concept](#) and [Climate Smart Strategy](#). Together, these plans will help ensure that greater Portland thrives by connecting people to their jobs, families, schools and other important destinations and by allowing business and industry to create jobs and move goods to market.

The update of the 2023 RTP has been informed by extensive community, stakeholder and policymaker input, research and technical analysis, and Federal and State regulations, as described in the attached staff report.

## MATERIALS FOR CONSIDERATION

The following materials are provided in the June 2 TPAC packet, or will be provided in the June 15 JPACT packet, or will be included in the Public Review Draft of the 2023 RTP to be released in July 2023.

1. Draft Resolution No. 23-5343 “For The Purpose Of Releasing The Draft 2023 Regional Transportation Plan (RTP) And Project List For Public Review And Policy Discussion” **(Attached)**
2. Staff Report to Draft Resolution No. 23-5343, including Attachment 1 to the Staff Report (DRAFT 2023 RTP Public Engagement Report Phase 4) **(Attached)**

3. Exhibit A to Resolution No. 23-5343: Working draft of the 2023 Regional Transportation Plan (RTP). This draft is subject to copy edits, technical corrections and minor updates as it finalized for public review.
  - Draft 2023 RTP Chapter 1: Introduction ***(To be provided in JPACT packet)***
  - Draft 2023 RTP Chapter 2: Our Shared Vision and Goals for Transportation ***(Attached)***
  - Draft 2023 RTP Chapter 3: System Policies to Achieve Our Vision ***(Attached)***
  - Draft 2023 RTP Chapter 4: Our Growing and Changing Region ***(Attached)***
  - Draft 2023 RTP Chapter 5: Our Transportation Funding Outlook ***(To be provided in JPACT packet)***
  - Draft 2023 RTP Chapter 6: Regional Projects and Programs to Achieve Our Vision ***(To be released in July)***
  - Draft 2023 RTP Chapter 7: Measuring Outcomes ***(Attached)***
  - Draft 2023 RTP Chapter 8: Moving Forward Together ***(To be provided in JPACT packet)***
  - DRAFT 2023 RTP Glossary of Terms ***(Attached)***
  - DRAFT 2023 RTP Appendices A-V ***(To be released in July)***
4. Exhibit B to Resolution No. 23-5343: DRAFT 2023 RTP Project List ***(Attached)***
5. Exhibit C to Resolution No. 23-5343: DRAFT 2023 High Capacity Transit Strategy ***(Attached)***

#### NEXT STEPS

June 2	TPAC recommendation to JPACT on release of the Draft 2023 RTP public review draft and project list for public review and policy discussion (Resolution No. 23-5343)
June 13	Metro Council discussion on the 2023 RTP public review draft
June 15	JPACT considers action on TPAC recommendation on release of the 2023 RTP public review draft, and project list for public review (Resolution No. 23-5343)
June 29	Metro Council considers action on JPACT recommendation on release of the 2023 RTP public review draft and project list for public review (Resolution No. 23-5343)
July 10 to Aug. 25	45-day public comment period on the public review draft RTP  TPAC and MTAC continue to develop and discuss Chapter 8 of the 2023 RTP, the results of the regional mobility policy system analysis and testing, and potential updates to Climate Smart Strategy
Sept.-Nov. 2023	Metro staff document public comments received and work with TPAC and MTAC to develop recommendations for discussion and consideration by MPAC, JPACT and Metro Council
November 2023	JPACT and Metro Council consider adoption of the 2023 RTP (and updated project and program priorities)

Refer to Attachment 2 for the full 2023 RTP schedule. For more information about the RTP update, visit [oregonmetro.gov/rtp](https://oregonmetro.gov/rtp).

/Attachments

1. Resolution 23-5343
2. Staff Report to Resolution 23-5343
3. Summaries of public engagement and agency consultation – Spring 2023
4. Exhibit A to Resolution 23-5343
5. Exhibit B to Resolution 23-5343
6. Exhibit C to Resolution 23-5343
7. ODOT Comment Letter on Draft Pricing policies
8. ODOT Comment Letter on Draft Auxiliary Lane policies

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF RELEASING THE	)	RESOLUTION NO. 23-5343
DRAFT 2023 REGIONAL TRANSPORTATION	)	
PLAN (RTP) AND PROJECT LIST FOR PUBLIC	)	Introduced by Chief Operating Officer
REVIEW AND POLICY DISCUSSION	)	Marissa Madrigal in concurrence with
	)	Council President Lynn Peterson

WHEREAS, Metro is the regional government responsible for regional land use and transportation planning under state law and the federally-designated metropolitan planning organization (MPO) for the Portland metropolitan area; and

WHEREAS, the Regional Transportation Plan (RTP) is the federally recognized transportation policy for the Portland metropolitan region, and must be updated every five years; and

WHEREAS, the RTP fulfills statewide planning requirements to implement Goal 12 Transportation, as implemented through the Transportation Planning Rule (Oregon Administrative Rules Chapter 660 Division 12), and must be updated every five to seven years; and

WHEREAS, the RTP is a central tool for implementing the Region 2040 Growth Concept, and constitutes a policy component of the Regional Framework Plan; and

WHEREAS, the most recent update to the RTP was completed in December 2018, and approved and acknowledged by the Land Conservation and Development Commission (LCDC); and

WHEREAS, the next update must be completed by November 30, 2023 to allow time for review and approval prior to the plan's expiration on December 6, 2023, and to ensure continued compliance with federal planning regulations and funding eligibility of projects and programs using federal transportation funds; and

WHEREAS, the 2023 RTP update will serve as a major vehicle for implementing and updating the region's Climate Smart Strategy, first adopted in December 2014, approved by the LCDC in 2015 and incorporated in the RTP in 2018, in response to House Bill 2001 and Oregon Administrative Rules Chapter 660 Division 44, to help meet statewide goals to reduce greenhouse gas emissions to levels at least 75 percent below 1990 levels by the year 2050; and

WHEREAS, the 2023 RTP update and 2023 Climate Smart Strategy will seek to help meet revised statewide goals identified in the Governor's Executive Order 20-04 that require accelerated reductions in greenhouse gas emissions to levels at least 45 percent below 1990 emissions levels by 2035 and at least 80 percent below 1990 levels by the year 2050; and

WHEREAS, from October 2021 to April 2022, Metro engaged local, regional, state, business and community partners as to what priorities and challenges should be addressed as part of the update and the process for how the region should work together to address them; and

WHEREAS, the scoping phase concluded with approval of Resolution No. 22-5255 by the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council, approving the work plan and engagement plan to guide the update; and

WHEREAS, from May 2022 to May 2023, the Metro Council, the Joint Policy Advisory Committee on Transportation (JPACT), the Metro Policy Advisory Committee (MPAC), Metro's Committee on Racial Equity (CORE), the Metro Technical Advisory Committee (MTAC), the Transportation Policy Alternatives Committee (TPAC), the TransPort Subcommittee of TPAC, the Southwest Washington Regional Transportation Council (SWRTC) staff, county-level coordinating committees and elected officials, city and county staff, representatives from federally recognized tribes, representatives from state, federal and resource agencies, port and transit districts, business, environmental, social equity, and transportation organizations, and community members from the Portland-Vancouver metropolitan area provided input that identified regional transportation needs and challenges and shaped the draft 2023 RTP vision, goals, policies and investment priorities for the region's transportation system; and

WHEREAS, as part of the process, Metro issued a Call for projects through which jurisdictional partners and transportation agencies were asked to identify projects that addressed regional needs and challenges, reflected public priorities and made progress toward the draft 2023 RTP vision and goals for the future transportation system, within a regionally-coordinated financially constrained revenue forecast; and

WHEREAS, the draft Regional High Capacity Transit Strategy is a component of the RTP and 2018 Regional Transit Strategy; and

WHEREAS, in 2022 Metro and TriMet, as a Project Management Team, created a High Capacity Transit Working Group consisting of transit providers and city, county and state representatives and agency partners, which was tasked with providing technical input to the team regarding development of a new coordinated vision and strategy for high capacity transit in the greater Portland region; and

WHEREAS, the Regional High Capacity Transit Working Group met more than six times from 2022 through 2023, through scheduled meetings, review sessions, and office hours, and provided input to Metro staff regarding the development of a new Regional High Capacity Transit Strategy (HCT) to be adopted concurrently with the 2023 Regional Transportation Plan (RTP); and

WHEREAS, the 2023 RTP and 2023 HCT Strategy include a regional high capacity transit vision to make transit more frequent, convenient, accessible and affordable for everyone, and new and updated high capacity transit-related policies aimed at providing a stronger backbone for the regional transit system in the greater Portland region; and

WHEREAS, the 2023 RTP and 2023 HCT strategy includes updates to the Regional Transit Network map to include the updated 2023 high capacity transit lines, adjusted routes proposed in TriMet's Forward Together service concept, and new existing and planned County shuttles, along with enhanced Better Bus transit corridors, streetcar and future transit service identified by TriMet's Service Enhancement Plans and Wilsonville's South Metro Area Regional Transit (SMART) Master Plan; and

WHEREAS, the 2023 HCT Strategy updates existing transit-related policies, performance measures and actions that are described in the 2018 Regional Transit Strategy and are reflected in the draft 2023 RTP; and

WHEREAS, Metro staff have conducted planning activities that were informed by extensive inclusive public engagement to support a regional policy discussion on the future of the region's transportation system and the role that investment can play in providing safe, reliable and affordable mobility options to access to jobs, education, healthcare and other services and opportunities and building healthy, climate-friendly and equitable communities and a strong economy; and

WHEREAS, development of the 2023 RTP and 2023 HCT Strategy aimed to increase regional collaboration and coordination through a combination of partnerships, focused policy discussions, sound technical work, and inclusive public engagement to update the vision, goals, policies and investment priorities for the region's transportation system to support ongoing efforts to link land use and transportation planning to implement the 2040 Growth Concept and community visions within fiscal constraints while addressing urgent global and regional challenges facing the region – including rising inequities, climate change and safety, housing affordability, homelessness, public health and economic disparities that were intensified by the global pandemic; and

WHEREAS, the inclusive public engagement that informed development of the 2023 RTP and 2023 HCT Strategy aimed to strengthen existing partnerships, and build new partnerships with local, regional, Tribal, state and federal governments, small and large businesses and economic development interests, business and community leaders, and underrepresented communities, including Black, Indigenous and people of color (BIPOC) communities, federally recognized tribes, people with low income, people who speak limited English, people experiencing a disability, youth and older adults, build public trust in government, build support for and momentum to adopt the 2023 RTP and 2023 HCT Strategy, and make the case for funding and investment in the region's transportation system; and

WHEREAS, the system analysis of the draft project list is not yet complete and will be added to the Chapter 7 of the draft 2023 RTP, identified in Exhibit A, along with design and copy edits, technical corrections and minor updates as the plan is finalized for public review; and

WHEREAS, Chapter 8 of the 2023 RTP, which establishes the ongoing work plan for regional planning activities, will evolve throughout the remainder of this RTP update - it will continue to be revised by Metro staff prior to release of the public review draft 2023 RTP and additional revisions are also anticipated in response to public comment and policy discussion as part of final adoption of the plan; and

WHEREAS, on June 15, JPACT approved and recommended Metro Council approval to release the Draft 2023 RTP, identified in Exhibit A; the Draft 2023 RTP Project List, identified in Exhibit B; and the Draft 2023 High Capacity Transit Strategy, identified in Exhibit C, for public review and policy discussion, and supported staff making necessary design and copy edits, technical additions and corrections and minor updates when preparing the documents for release; now therefore

BE IT RESOLVED that the Metro Council approves releasing the Draft 2023 RTP, identified in Exhibit A; the Draft 2023 RTP Project List, identified in Exhibit B; and the Draft 2023 High Capacity Transit Strategy, identified in Exhibit C, for public review and policy discussion, and supports staff making necessary design and copy edits, technical additions and corrections and minor updates when preparing the documents for release.

ADOPTED by the Metro Council this \_\_\_\_ day of June 2023.

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Lynn Peterson, Council President

Approved as to Form:

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Carrie MacLaren, Metro Attorney

DRAFT



## STAFF REPORT

### IN CONSIDERATION OF RESOLUTION NO. 23-5343, FOR THE PURPOSE OF RELEASING THE DRAFT 2023 REGIONAL TRANSPORTATION PLAN (RTP) AND PROJECT LIST FOR PUBLIC REVIEW AND POLICY DISCUSSION

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Date: May 26, 2023

Department: Planning, Development &  
Research

Prepared by:

Kim Ellis, RTP Project Manager

[Kim.ellis@oregonmetro.gov](mailto:Kim.ellis@oregonmetro.gov)

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## ISSUE STATEMENT

A major update to the [Regional Transportation Plan](#) (RTP) is underway and must be completed by Dec. 6, 2023 when the current plan expires.

The RTP is the state- and federally-required long-range transportation plan for the Portland metropolitan area. The RTP is the blueprint for transportation in our region and a key tool for implementing the region's [2040 Growth Concept](#) and [Climate Smart Strategy](#). Together, these plans will help ensure that greater Portland thrives by connecting people to their jobs, families, schools and other important destinations and by allowing business and industry to create jobs and move goods to market.

We are at pivotal moment. The greater Portland region continues to grow and change. The most recent census data shows our region continues to grow more diverse. By 2045 more than 2 million people are expected to be living within the metropolitan planning boundary for the RTP – about one-half million more people than today.

The greater Portland region is facing urgent global and regional challenges, and the future is uncertain. The impacts of climate change, generations of systemic racism, economic inequities and the pandemic have made clear the need for action. Systemic inequities mean that communities have not equally benefited from public policy and investments, and our changing climate and the pandemic has exacerbated many disparities that Black, Indigenous and people of color (BIPOC) communities, people with low income, women and other marginalized populations already experience. Safety, housing affordability, homelessness, and public health and economic disparities have been intensified by the global pandemic.



**Draft 2023 RTP Goals developed by  
JPACT and Metro Council with input from  
MPAC and CORE**

## **ACTION REQUESTED**

Approve Resolution No. 23-5343.

## **POLICY OPTIONS FOR CONSIDERATION**

1. Recommend JPACT approval of Resolution No. 23-5343 as recommended by TPAC.
2. Recommend JPACT approval of Resolution No. 23-5343 with changes.
3. Do not recommend approval of Resolution No. 23-5343, and refer back to TPAC.

## **RECOMMENDED ACTION**

Approve No. 23-5343 as recommended by TPAC.

## **ANTICIPATED EFFECTS**

In June, JPACT will be requested to make a recommendation to the Metro Council to support releasing the draft 2023 RTP and project list, and the draft 2023 High Capacity Transit Strategy for a 45-day public comment period. On June 29, Metro Council will be requested to take action on JPACT's recommendation on release of the draft plan and project list for public review. The comment period is planned for July 10 to August 25.

The 45-day public comment period provides an opportunity for local, regional, state and federal agencies and special districts, federally recognized tribes, business and community leaders, the public and policymakers to provide additional feedback on before the draft 2023 RTP and project list, and the draft 2023 High Capacity Transit Strategy are finalized for consideration by MPAC, JPACT and Metro Council. The comment period will include a public hearing and consultation with tribes and federal and state agencies.

In early fall, following the public comment period, staff will compile public comments received and work with the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC) to make recommendations for revisions to the draft plan in early fall as part of the final adoption process for the 2023 RTP. TPAC and MTAC will be asked to identify remaining policy issues to be discussed by MPAC, JPACT and the Metro Council prior to adoption of the 2023 RTP and HCT Strategy. The 2023 RTP will be adopted by Ordinance as a land use action to meet federal and state requirements. The HCT Strategy will be adopted by Resolution.

MTAC and TPAC will be requested to make final recommendations to MPAC and JPACT, in October and November, respectively. MPAC and JPACT will be requested to make final recommendations to the Metro Council in October and November, respectively. The Council is anticipated to consider final action on 2023 RTP and the HCT Strategy on November 30, 2023.

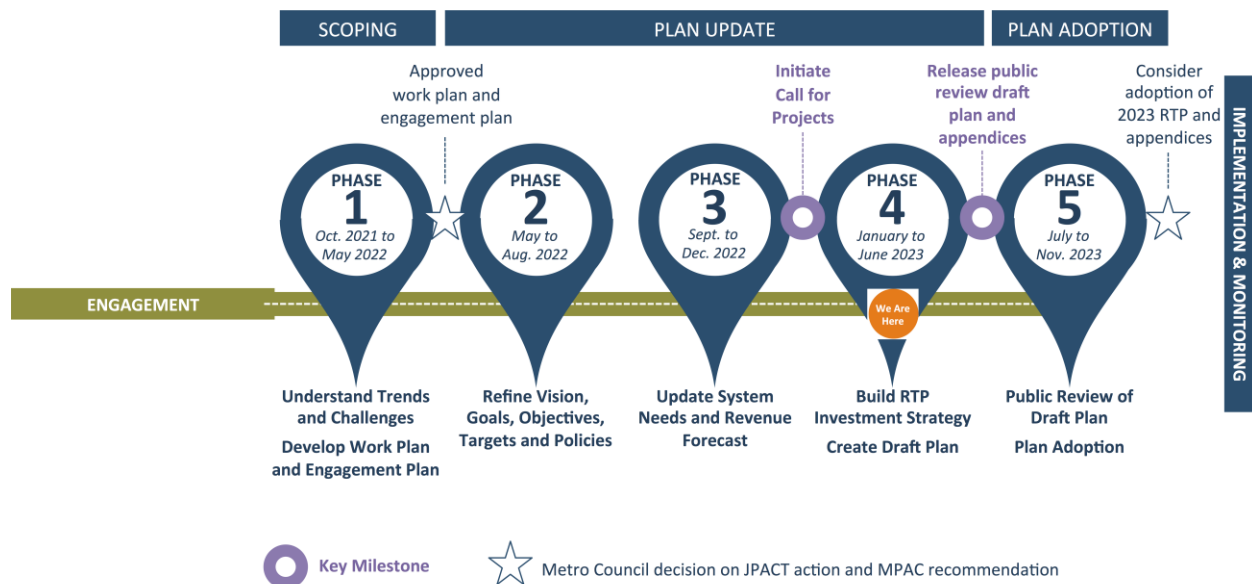
## **STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION**

Metro is the regional government responsible for regional land use and transportation planning under state law and the federally designated metropolitan planning organization (MPO) for the Portland metropolitan area. As the federally designated MPO, Metro is responsible for leading and coordinating updates to the Regional Transportation Plan (RTP) every five years. Metro is also responsible for developing a regional transportation system plan (TSP), consistent with the Regional Framework Plan, statewide planning goals,

the Oregon Transportation Planning Rule (TPR), the Metropolitan Greenhouse Gas Reduction Targets Rule, the Oregon Transportation Plan (OTP), and by extension state modal plans. As a result, the RTP serves as both the Federal metropolitan transportation plan and the regional TSP for the region.

The timeline for the RTP update is shown in **Figure 1**.

**Figure 1. Timeline for the 2023 RTP Update**



During the past year, Metro has extensively engaged with policymakers, jurisdictional staff, federally recognized tribes, transportation agencies, community-based organizations and business groups, businesses, and members of the public to update the region's vision, goals and policies for the transportation system and understand the region's transportation trends<sup>1</sup>, needs<sup>2</sup> and <sup>3</sup>, and priorities for investment.

This engagement also shaped the Call for Projects held from January 6 to February 17, 2023 and subsequent engagement of the public and a technical analysis of the projects submitted by jurisdictional partners, development of the 2023 HCT Strategy, and identification of future regional planning activities recommended following adoption of the 2023 RTP.

Public engagement and outreach activities completed from March through May 2023 are documented in **Attachment 1**, and include:

<sup>1</sup> The emerging transportation trends research summary is available at:

[https://www.oregonmetro.gov/sites/default/files/2022/10/12/Metro-Emerging-Trends-summary-final\\_1.pdf](https://www.oregonmetro.gov/sites/default/files/2022/10/12/Metro-Emerging-Trends-summary-final_1.pdf)

<sup>2</sup> Factsheets summarizing the regional transportation needs assessment are available at:

<https://www.oregonmetro.gov/sites/default/files/2022/11/29/2023-RTP-Needs-Assessment-fact-sheets.pdf>

<sup>3</sup> Research about trends and needs of the region's urban arterials is available at:

<https://www.oregonmetro.gov/sites/default/files/2022/10/24/Safe%20and%20healthy%20urban%20arterials%20policy%20brief.pdf>

- **Community partnerships (through November 2023).** Metro partnered with seven community-based organizations: Centro Cultural, Community Cycling Center, Next Up, OPAL, The Street Trust, Unite Oregon and Verde. These community partners engaged people of color, youth and other marginalized communities in Clackamas, Multnomah and Washington counties, with a focus on engaging people at the intersection of multiple communities who have been underrepresented in decision-making processes. Organizations primarily engaged community members in the draft project list and the High Capacity Transit Strategy.
- **In-language community forums:** Metro worked with community engagement liaisons to hold four in-person culturally specific forums in Chinese, Vietnamese, Spanish and Russian languages that included participants from all three counties. These are communities who are typically underrepresented in online survey feedback. The forums focused on receiving feedback on similar questions to those in the online survey including near-term investment priorities. The forums also provided opportunities to hear community members experiences traveling around the region and their ideas for improving the system.
- **Online interactive public survey (April 3 – May 1, 2023).** A third interactive public survey for the 2023 RTP provided an opportunity for the public at-large to provide feedback on the RTP goal areas and the draft project list. The survey was promoted through Metro’s email lists, website, social media and project partners. More than 800 people responded to the survey.
- **Community Leaders Forum (April 13, 2023).** Metro convened community leaders forum in early April will focus on the draft RTP project list and outcomes of the high level assessment of the draft project list Results of the forum will be reported to decision-makers at their meetings leading up to the release of the draft plan and project list for public review in July.
- **Consultation meetings with Tribes and Federal, State and regional agencies (multiple dates in April and May 2023).** Metro consulted with Tribes, in coordination with Metro’s Tribal Liaison, resource agencies, and with Federal, State regulatory agencies to share process information and review the draft RTP goals and policies, project list and the technical analysis completed to date, including methods and data sources. Metro also reviewed the updates made to the draft 2023 RTP responding to the feedback and information provided by Tribes and consulting agencies during the scoping phase in 2022.
- **Business Leaders Forum (May 25, 2023).** Metro partnered with the Portland Business Alliance to convene businesses and business organizations from across the region to discuss the draft RTP project list and findings from the technical evaluation and from the [Regional Freight Delay and Goods Movement Study](#). Feedback received at the forum will be reported to decision-makers at their meetings in June.

## ANALYSIS/INFORMATION

**Known Opposition.** None known. There is broad support for updating the RTP to better address urgent global and regional challenges and understand variations of disparities and needs across the region and gaps in investment and funding.

**Legal Antecedents.** Several federal, state and regional laws and actions relate to this action, including:

Federal laws and actions include:

- 23 U.S. Code 134: Metropolitan Transportation Planning.
- 23 U.S.C. 150: National goals and performance management measures.
- 23 CFR 450 and 771: USDOT rules that govern updates to RTPs.
- Clean Air Act [42 U.S.C. 7401 and 23 U.S.C. 109(j)], as amended.
- US EPA transportation conformity rules (40 CFR, parts 51 and 93).
- Moving Ahead for Progress in the 21st Century Act (MAP-21), signed into law in 2012.
- Fixing America's Surface Transportation Act (FAST Act), signed into law in 2015.
- Infrastructure Investment and Jobs Act (IIJA), signed into law in 2020.

State laws and actions include:

- Statewide planning goals
- Oregon Transportation Planning Rules (OAR Chapter 660, Division 12)
- Oregon Transportation Plan and implementing modal plans, including the Oregon Highway Plan
- Oregon Clean Air Act State Implementation Plan (SIP)
- Oregon Metropolitan Greenhouse Gas Reduction Targets Rules (OAR Chapter 660, Division 44)
- [Governor's Executive Order 20-04](#) on Climate Change, signed in March 2020.

Metro Council actions include:

- Ordinance No. 14-1346B (For the Purpose of Adopting the Climate Smart Communities Strategy and Amending the Regional Framework Plan to Comply with State Law), adopted by the Metro Council on December 18, 2014.
- Resolution No. 16-4708 (For the Purpose of Approving the Strategic Plan to Advance Racial Equity, Diversity and Inclusion), adopted by the Metro Council on June 23, 2016.
- Ordinance No. 18-1421 (For the Purpose of Amending the 2014 Regional Transportation Plan to Comply with Federal and State Law and Amending the Regional Framework Plan), adopted by the Metro Council on Dec. 6, 2018.
- Ordinance No. 21-1457 (For the Purpose of Adopting the Distribution of the Population and Employment Growth to Year 2045 to Local Governments in the Region Consistent with the Forecast Adopted by Ordinance No. 18-1427 in Fulfillment of Metro's Population Coordination Responsibility under ORS 195.036), adopted by the Metro Council in February 2021.

- Resolution No. 22-5255 (For the Purpose of Adopting the Work Plan and Engagement Plan for the 2023 Regional Transportation Plan Update), adopted by the Metro Council on May 5, 2022.

**ATTACHMENTS**

1. Phase 4 Public Engagement Report



## 2023 Regional Transportation Plan

# Summaries of public engagement and agency consultation – Spring 2023

*The following reports and summaries include input on the draft 2023 Regional Transportation Plan (RTP) received by Metro in Spring 2023. This input includes consultations with agencies and input from the public. The feedback will inform Metro and agency partners as the draft RTP is refined this summer in preparation for an adoption draft plan this fall.*

The following summaries are enclosed:

- 1. Preliminary summary of community input on investment priorities**
- 2. Community based organization engagement summaries**
- 3. Language specific forums draft summary**
- 4. 2023 RTP online survey #3 draft summary**
  - Note: Results of project priorities collected through the survey map are listed on page 28 of the survey summary
  - Note: Comments on individual projects sorted by sponsoring agency are included in *Table 18: Project List Comments*, starting on page 106 of the survey summary.
- 5. Summaries of consultation meetings with federal, state, regional and resource agencies**





## 2023 Regional Transportation Plan

# Community input on investment priorities – Preliminary summary

*In early 2023, agencies submitted draft lists of priority investments for the 2023 Regional Transportation Plan (RTP). Metro asked the public to weigh in on how the draft investment list aligns with regional priorities and community needs. This document includes themes from this input as of May 4. **This is a preliminary summary that will continue to be updated as more input is received.***

## Overview

Through in-person and virtual events and online surveys in March and April 2023, community members shared their experiences traveling around the greater Portland and their priorities for investments in the region's transportation system. This input can help inform the refinement of the draft 2023 RTP project list. This engagement is also building awareness about the importance of regional transportation planning and ongoing opportunities to be involved in transportation decisions.

Community members were asked to consider the long-term future of greater Portland, and to provide feedback on priorities the region should focus on in the near term (next five to 10 years). This summary is organized by input on outcomes and investment categories.

### Key takeaways:

- Safety is the top priority across community input.
- Equitable transportation and climate are also important outcomes to focus on in the near-term.
- Maintaining the transportation system is the most important near term investment.
- Investments in roads and bridges, biking and walking and transit are also important.

**In early spring 2023, 1,175 people from across the region weighed in on transportation investment priorities.**

**Online public survey (April 3 – May 1, 2023):** 861 respondents.

**Community Leaders' Forum (April 13):** Representatives from 11 community based, environmental and transportation related organizations participated.

**Cultural and language specific forums (April 15):** In-person sessions co-hosted by Metro and community engagement liaisons involved 50 community members from across the region in Spanish, Chinese, Russian and Vietnamese.

**Community Based Organization engagement (ongoing):** Centro Cultural, Community Cycling Center, Next Up, OPAL, The Street Trust, Unite Oregon and Verde have engaged people of color, youth and people with disabilities across greater Portland. This summary includes input from engagement hosted by Centro Cultural, OPAL, Verde and Unite Oregon that reached about 250 people. Input specific to High Capacity Transit (HCT) been informing the HCT strategy. CBO's will continue to engage community through the summer.

## Outcomes: Focus on safety.

Safety is the top priority for community participants. Safety concerns were the prominent theme that emerged from community members' discussions about transportation priorities. In the survey and at several community events, community participants ranked the draft 2023 RTP goals to indicate which are most important for the next 5 to 10 years (see Table 1).

Concerns about safety included both personal safety and traffic safety. These concerns overlap for transit riders and people walking and biking, where there is not good lighting, sidewalks or places to wait for transit. Participants cited harassments, unpredictable, unsafe and sometimes violent behavior on transit and at transit stops.

**“There are places where there are no sidewalks and sometimes bikes are in the actual car lanes which makes me fear for their safety.” –Unite Oregon participant**

Community Leaders' Forum participants voiced concern that emphasis on large projects in the RTP assessment and in conversations could take away from a focus on the smaller-scale safety infrastructure projects that are deeply needed in many of the that the communities that the CBO's serve.

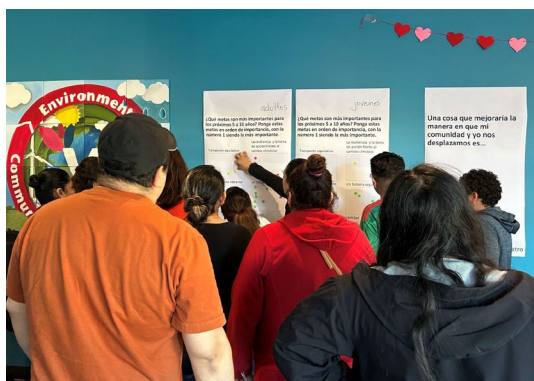


Photo: Verde forum participants

**Table 1: Ranking of most important near-term goals (1= most important, 5= least important)**

RTP Goals	In-language forums	Verde forum	Online survey
Safe system	1	1	1
Thriving Economy	2	--	5
Equitable Transportation	3	3	4
Climate Action and Resilience	5	2	2
Mobility Options	4	--	3

**“My 13-year-old use to take TriMet to school. I don't feel safe with him riding the bus anymore so I changed my works schedule so I can drive him.” – Verde participant.**

Unite Oregon interview participants expressed the need for more security/safety employees (not police officers) on TriMet facilities.

**“Being a woman and a visible Muslim makes it hard and unsafe. I have been harassed several times. We cannot control other people. I appreciate there are security officers on MAX, though.” –Unite Oregon participant.**

**“I would feel safer with increased frequency of [transit] line service so that I spend less time exposed on the streets, better light at bus stops. Street [design] and finding ways to increase ridership would make me feel safer.” – OPAL participant**

## Outcomes: Equitable transportation and climate are also priorities.

Climate and equity are also priority goals for community members. Online survey respondents and participants at community based organization events indicated that these goals are important near term priorities. However, climate action and resilience were ranked lower across all the in-language focus groups.

Climate was a focus at the Community Leaders' Forum. Participants commented that the investment categories and the project list assessment need to be more nuanced. Specifically, roadway repair needs to be considered differently than roadway expansion and climate action and resilience should be assessed separately. Investments in reducing climate pollution can be very different from investments in emergency routes that support resilience.

Community member conversations at Centro Cultural identified the importance of affordable and accessible transit as well as safe places to bike, walk and carpooling in meeting climate goals and protecting the environment.

**"Include carpooling services, HOV lanes and affordable public transportation."** – *Centro Cultural participant*

## Investments: maintenance.

Across communities, people prioritize investment in maintenance. Comments about maintenance spanned transit, roadways and sidewalks. Although people prioritized taking care the existing system, it was not a focus of conversation.

**Table 2: Ranking of top 3 near-term priority investment categories**

Investment category	In-language forums	Verde forum	Online survey
Maintenance	1	2	1
Biking and walking	3		3
Roads and bridges	2	3	
Transit capital			2
Transit service and operations		1	
Throughways			
Freight access			

**Potholes in different places along the roadway and uneven sidewalks were the two most highlighted concerns.** – *Unite Oregon interview summary*

**"A short term focus should include fixing potholes and pavement surfaces, as well as fixing sidewalks and making sure that bus/light rail vehicles receive the maintenance needed and are replaced when they are no longer in good condition."** – *Centro Cultural participant*

## Investments: roads and bridges, biking and walking and transit are also priorities.

### Roads and bridges

Community members included HOV lanes, improved sidewalks and crosswalks, seismic investments and generally improved roads as investments they would like to see in roads and bridged.

**Improve roads that are close to schools; for example Hillsboro High School needs to urgently improve access.” – Centro Cultural participant**

Community participants also cited concerns about congestion and the time it takes to get where they want to go.

## **Transit**

Community members identified a need for both investment in transit capital and operations. Improvements in frequency and reliability were reoccurring themes.

Frequency of bus service was the top priority for transit improvements among OPAL participants (64 participants), followed by cost of service and accessibility.

**“Waiting time for bus on weekend takes too long. Can frequency be as good as weekday? People work on weekends too. They have to wake up so early to make time to take transit.”**  
– Vietnamese in-language forum participant.

Community members investments in transit stops, such as lighting, shelters and bathrooms, as priority investments. Barriers along sidewalks for people with disabilities who need to access transit were also cited.

## **Biking and walking**

Sidewalks and lighting were the most frequently mentioned types of investment related to biking and walking. Community members also discussed not feeling safe on bike facilities where they were close to vehicle traffic.

**“Where there are no sidewalks, people are forced to drive.”** - Russian in-language forum participant.

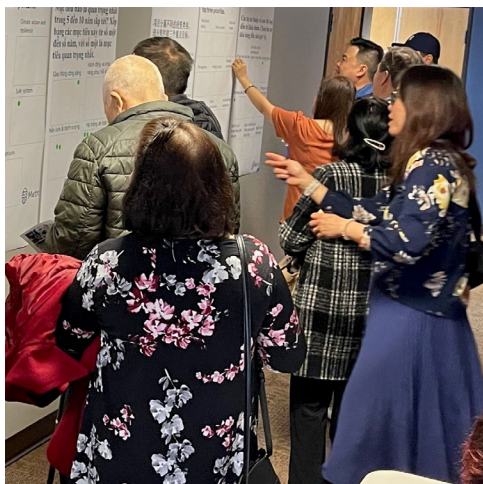


Photo: In-language forum participants

## **Next steps**

As Metro continues to receive community feedback provided by community based organizations, a deeper analysis of the online public survey and other engagements, staff will continue sharing this input with partnering agencies and decision makers.



## 2023 Regional Transportation Plan Community based organization engagement reports

*Metro partnered with seven community-based organizations: Centro Cultural, Community Cycling Center, Next Up, OPAL, The Street Trust, Unite Oregon and Verde. These community partners have focused on engaging people across the region who hold identities at the intersection of multiple underrepresented communities.*

Through partnerships community based organizations Metro aims to elevate the voices of underrepresented communities in the 2023 Regional Transportation plan process while also more broadly increasing the capacity of communities to engage in transportation planning and policy decisions. Some of the community conversations have been focused on the High Capacity Transit Strategy. The input received through these conversations has been considered and incorporated, as feasible, into the draft [High Capacity Strategy](#). Other conversations have focused on community needs and investment priorities and can help to inform the refinement of the draft 2023 Regional Transportation Plan.

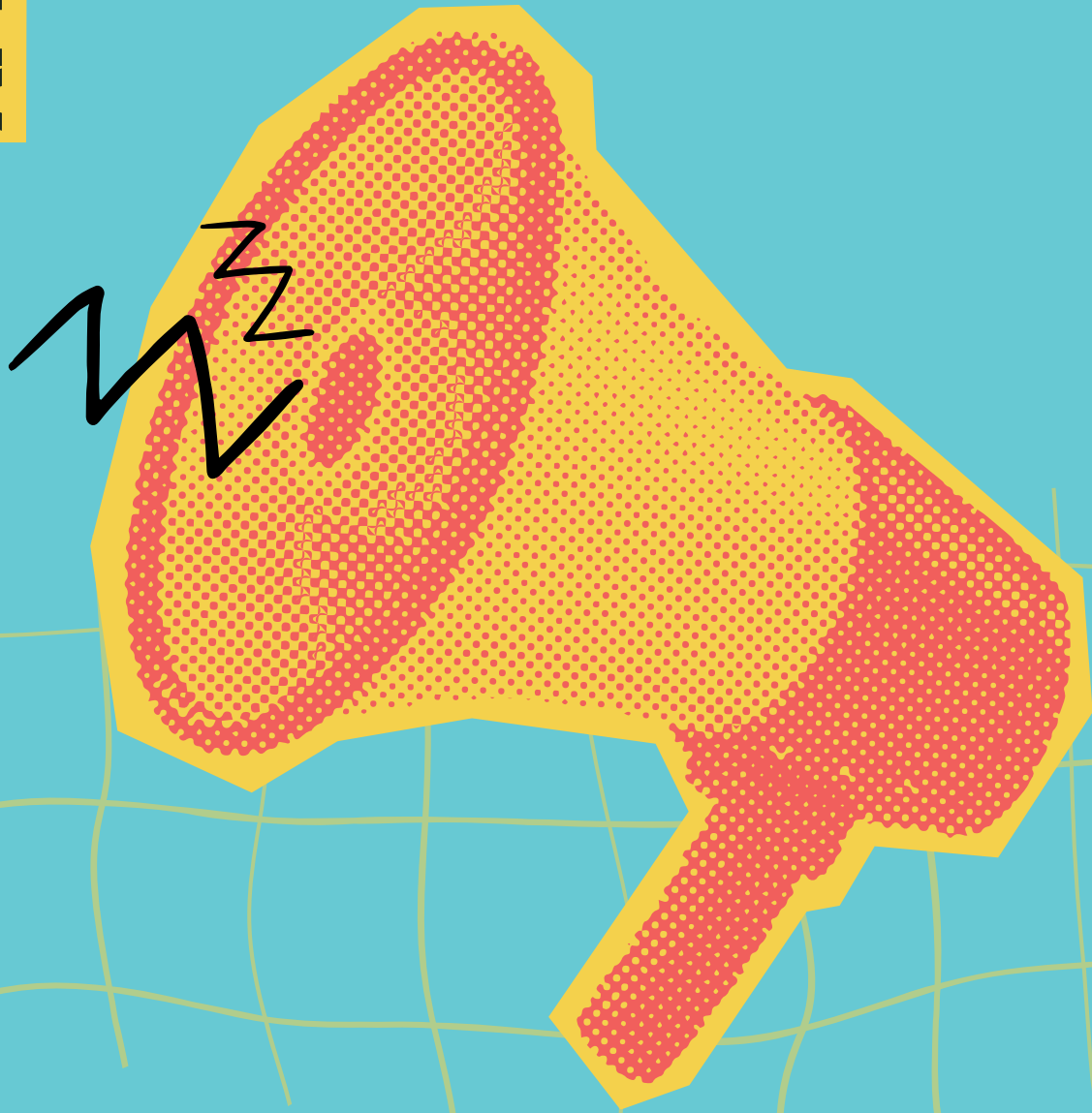
Some organizations will continue to engage community members through the 2023 Regional Transportation Plan public comment period. Enclosed are the summaries of the community based organization-led engagement that has been completed to date. This includes:

- Next Up listening sessions (2): 39 participants
- OPAL: online survey and listening sessions (2): 141 participants
- Unite Oregon listening session: 21 participants
- Verde focus groups (2): 29 participants



**APR 2023**

**NEXT  
UP** 



**REGIONAL  
TRANSPORTATION  
PLAN**

**LISTENING SESSIONS REPORT**



# NEXT UP



## Our mission

Next Up amplifies the **voice and leadership of diverse young people** to achieve a more just and equitable Oregon.

## The impact of our work in Oregon

We create opportunities for young people ages 13–35, centering Black, Indigenous, youth of color and intersectional youth, to build their individual and collective power. Since 2002, our work has scaffolded a wave of young people who are leading the charge to dismantle oppressive systems and institutions so that our communities can thrive.

## Impact Snapshot

**600+**

alumni of our youth leadership cohorts

**7**

unique leadership and internship programs

**40%**

Oregon youth voter turnout in 2022, compared to 27% nationwide



## LISTENING SESSIONS SUMMARY

**2**

LISTENING SESSIONS

**39**

TOTAL PARTICIPANTS

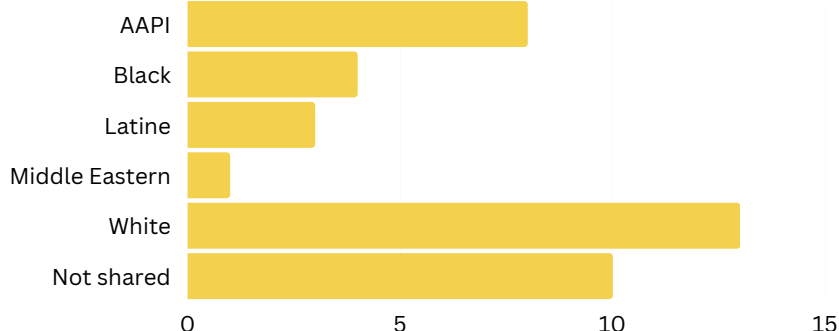
**22**

MEDIAN AGE

**28**

AVERAGE AGE

### RACE/ETHNICITY



## GOALS

- Provide community members with the foundation to understand how the Regional Transportation process works
- Lay out the values that Metro has set in the RTP Process
- Explore the projects that would be funded through the Regional Transportation Plan
- Guide community members in a discussion of their lived experiences interacting with our current forms of transportation and sharing feedback on the RTP values, and potential projects

## TOP THEMES



"Active transit is important to me because it **promotes climate resiliency** in our projects and maintains a **sustainable future** for transportation."

**PARTICIPANT**

"'The Historical Context of Racist Planning,' documents the **lack of investments in parts of our city from a racist perspective** on why we are currently in a position where **parts of our city has better infrastructure than others.**"

**PARTICIPANT**

"I'd like to see some sort of **public repository for the history of neighborhoods and transportation** – the why and how of transportation and neighborhood design."

**PARTICIPANT**

**LISTENING SESSION REFLECTIONS**

# REFLECTIONS ON ACCESS

ACCESSIBILITY FOR YOUTH WHO ARE THE MOST IMPACTED AND THAT ARE BLACK, INDIGENOUS, BROWN, DISABLED, LOW-INCOME, IMMIGRANT, AND QUEER AND TRANS

01

**"Safe and accessible routes to school and for those who rely on mobility devices to get to transportation."**

02

"The equity of accessibility seems like an afterthought or a 'nice to have,' but it's really a 'need to have' because access for folks who have limited mobility is used and good for all. **Budgeting for accessibility should be a priority.**"

03

"Maybe better road signage, **as in signs that more clearly direct people through common routes in Portland.** When driving on the highways here, we have to make many quick decisions before choosing an exit."

04

"There's a service for people who can't get around (folks who can't walk). Folks could get picked up. Would like to see that get expanded. **When you have to get somewhere and you have to plan ahead, it's hard.** We need to improve a Metro-supported Uber. Let's think outside the box."

05

"Abolishing zoning laws that segregate residential and commercial areas, so that **people can easily walk to get goods and services instead of having to use cars.** People wouldn't even need to use buses or trains much!"

06

"More **non-invasive transit close to natural spaces.** I hate that places like Oxbow aren't more accessible by public transportation."

# REFLECTIONS ON COST

REMOVE COST BARRIERS FOR ALL TRANSIT RIDERS

01

"Free  
TriMet  
and free  
transit  
for all."

02

"It seems like there's going to **be growing inequity for people who don't have the money to buy an electric car.** Use this plan to push agencies to convert faster, but the worry is that if it's not done equitably, then that cost will be pushed to the most vulnerable people."

03

"Some barriers would be limited transportation options in suburban and rural areas, **lack of affordable and accessible public transportation.**"

04

"I believe citizens of the Metro area **need to know that when something is not done right or is too costly etc, projects and programs and contractors will be held accountable in a public way** and that solutions be discussed & acted on publicly."

05

"Tolling is necessary to hold people who drive cars accountable – **the cost of that infrastructure maintenance.**"

06

"Freeway tolling should **fund fareless transit**, creating a better travel experience for all."



# REFLECTIONS ON SAFETY

SUPPORT COMMUNITY WELLBEING WITHOUT MORE POLICING

01

"There should be a **stronger 'barrier' or division of where riders are and where non riders are.**

Because the space is so open, I think that may play into unsafe situations. When you're at a MAX station, you can't tell who's a rider and who's not. In other cities, you have a paid area."

02

"With the backlash on public health measures, there are people who don't care to **protect others' health.** Maybe there aren't very many of them, but it can be uncomfortable."

03

"I have not used public transportation that much in the past year because of **safety concerns: worry about anti-asian sentiment** as well as the number of people who seem possibly violent on public transit."

04

"Cleaner buses with **better heating and ventilation.** Improving and enforcing covid precautions – and other communicable and contagious infections."

05

"I used public transportation prior to the pandemic, but I switched to driving because of **anti-Asian sentiment. It doesn't feel very safe in the MAX stations because of the lack of personnel.** There are still other sicknesses. I still don't feel very safe using public transportation, although I would like to."

06

"Separate bike lanes like they have in the Netherlands, which have grass between bikes and cars."



07

"**Waiting for a long time in dark areas,** places where there's no hard stop, just a sign, no lighting. That's how it is in my area in SW Portland. To get there there are no sidewalks."

08

"It would be good to unpack **the goals around climate. Public safety is an issue. Roads that are not maintained by the city or by anyone else.** I have to use private roads that are wrecked. Basic road maintenance."

09

"I live in SW and we don't have **transportation access that is safe for kids and people with mobility devices.** Our sidewalks are limited to the library area in Hillsdale."

10

"**When I hear about dangerous biking experiences, it scares me from biking. Interested in carpooling, but it takes more planning.**"

11

"I'd love to be able to bike, but **I don't feel safe biking in most of East Portland,** even with new bike lanes. Cars drive so fast, even around bike lanes. I have seen fatal accidents...investment s in Gresham, and things seem safer."

12

"I would like to be able to bike AND bus to shopping and recreation. **Segregated lanes for bicycles and better, safer, lighted stops for bus commuters** would help immensely. Walking is also not easy, particularly in the suburbs. Stroads, like Hwy 8, prevent walking."

## LOOKING FORWARD

"Are there opportunities to work on the transportation issues **in my neighborhood**?"

"Oftentimes I will learn about a project **too late to get involved** in the preliminary engagement process."

"Make projects have **community planning** sessions. Find ways to get the community involved, maybe through public art. Community gets excited about art."

"I want to **hear back** what happens with this feedback – if it makes its way into the plan directly."



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## LISTENING SESSIONS SUMMARY

**2**

LISTENING SESSIONS

**39**

TOTAL PARTICIPANTS

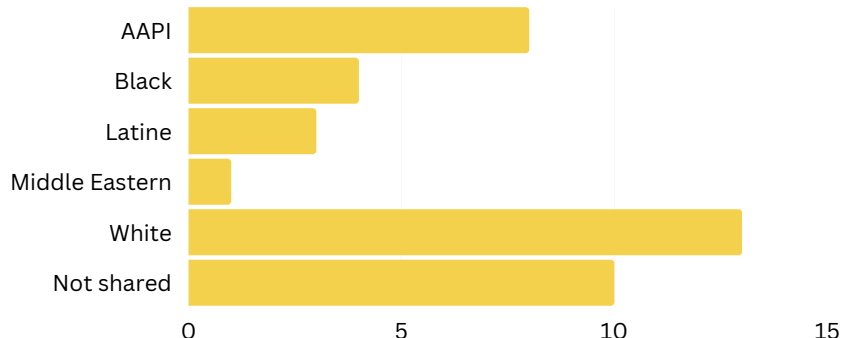
**22**

MEDIAN AGE

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AVERAGE AGE

### RACE/ETHNICITY



## GOALS

- Provide community members with the foundation to understand how the Regional Transportation process works
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## TOP THEMES



# Summaries of public engagement and agency consultation – Spring 2023

OPAL Engagement Report: 2023 Regional Transportation Plan

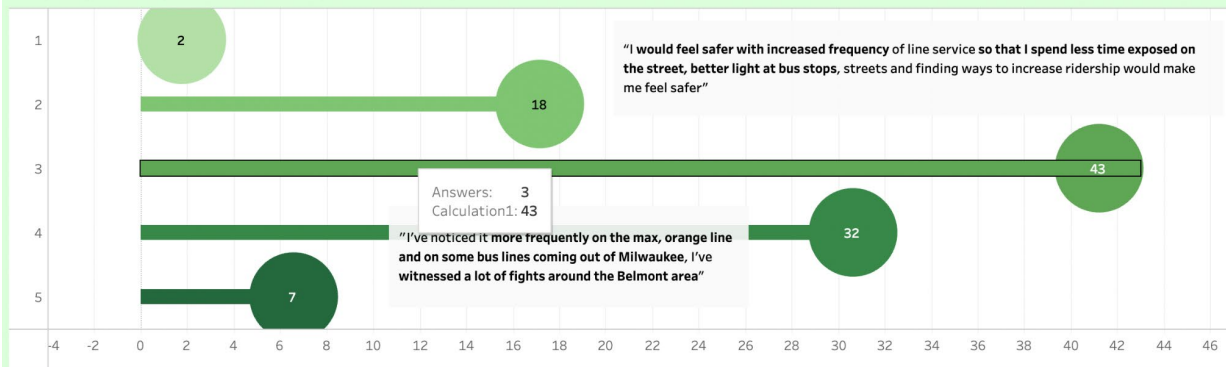
Links include dynamic engagement reports

RTP Community Engagement			
Engagement Tactic	Number of Participants	Data	Notes
<a href="#">Transportation Needs Survey</a>	105 responses over 1 week	<a href="#">First Survey responses</a>  <a href="#">Second Survey responses</a>	<p>Two copies of the survey were posted. The first survey did not include a CAPTCHA so was flooded with bot responses. Data was cleaned, please only reference highlighted green responses in the “first survey responses” document. All other responses were identified as fake.</p> <p>\$20 visa gift card sent to all respondents.</p>
<a href="#">Listening Session 1</a>	36 total participants over 2 listening sessions	Recording linked	Virtual, \$100 gift card provided for full 2 hour participation
<a href="#">Listening Session 2</a>	See above	Recording linked	Virtual, see above



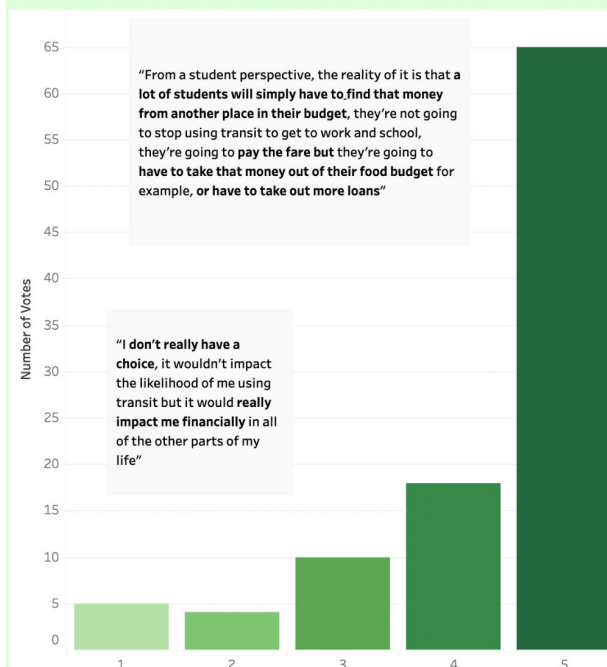
# Summaries of public engagement and agency consultation – Spring 2023

## Do you generally feel safe when you use transportation?



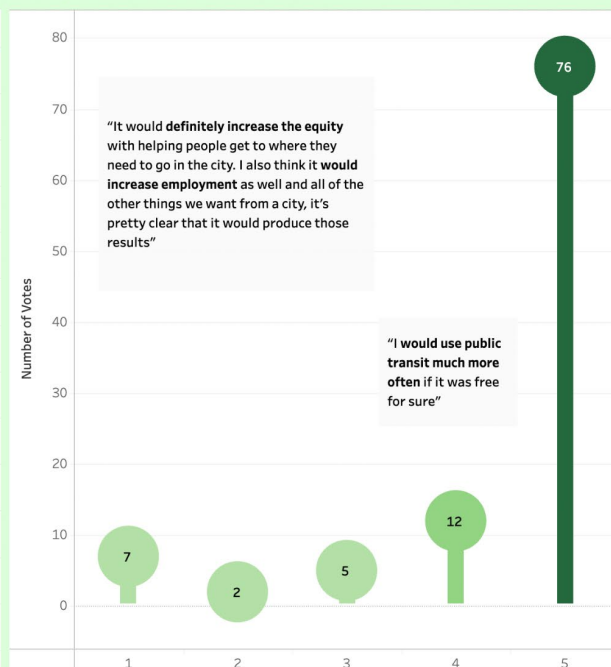
1: Never feel safe; 5: Always feel safe

## TriMet considering fare increase, How do you feel that would impact accessibility & equity on transit?



1: Would not impact at all; 5: Dramatically decrease accessibility & equity

## If system was completely fareless, Would you use public transport more?

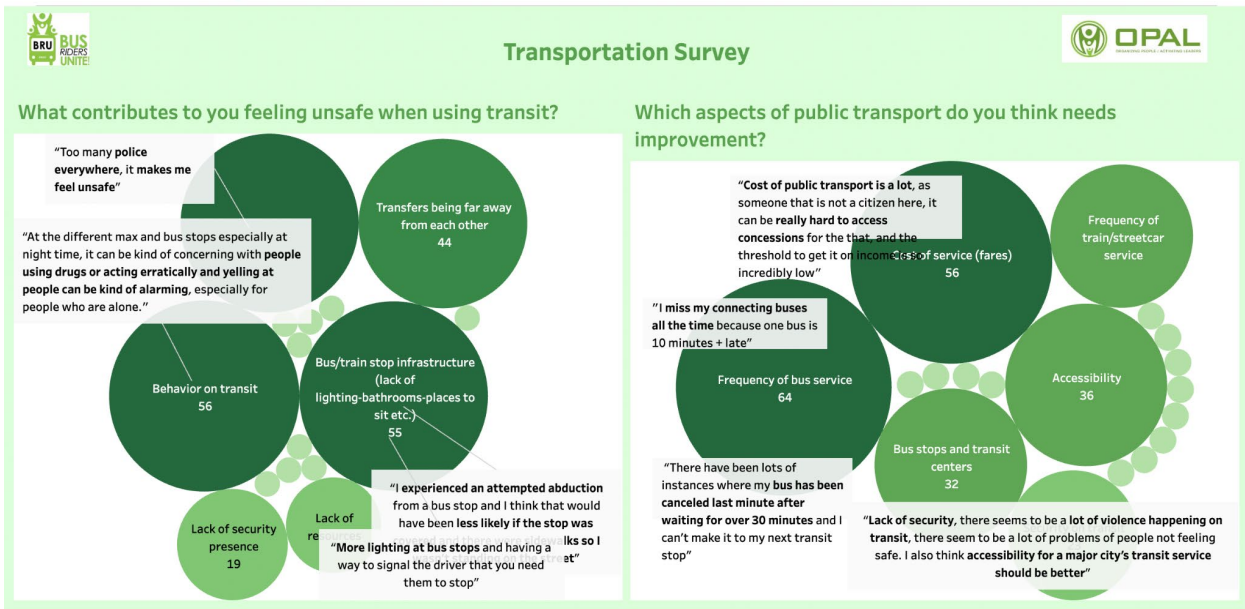


1: Would use it the same amount; 5: would be able to use the system more

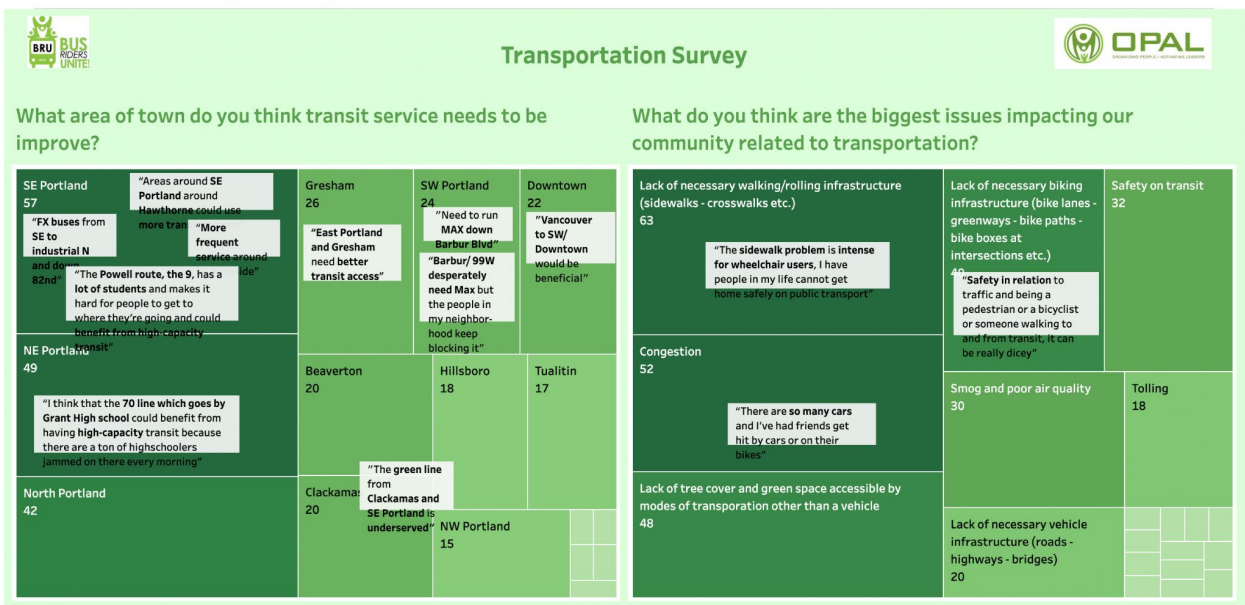


# Summaries of public engagement and agency consultation – Spring 2023

OPAL Dashboard 3 by [Jignasu Vekariya](#)

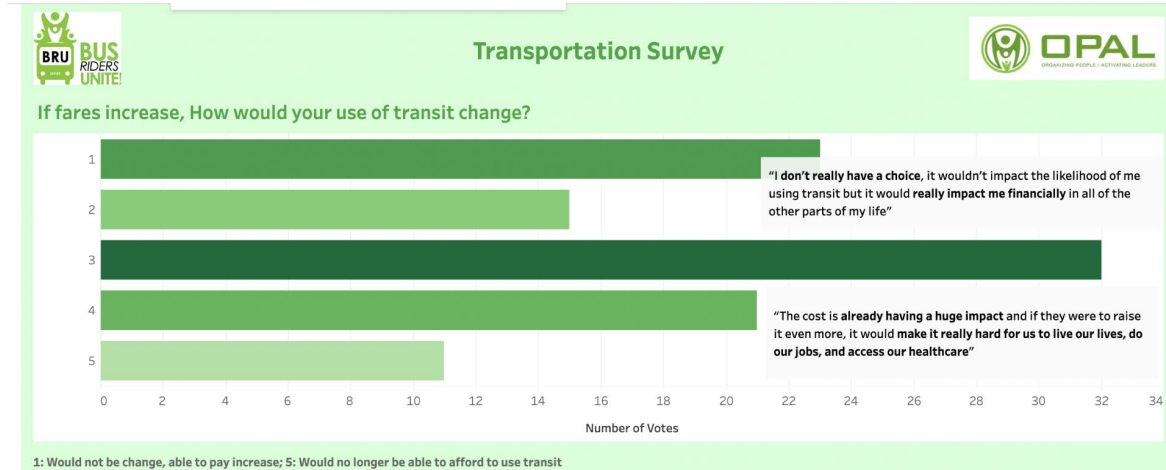
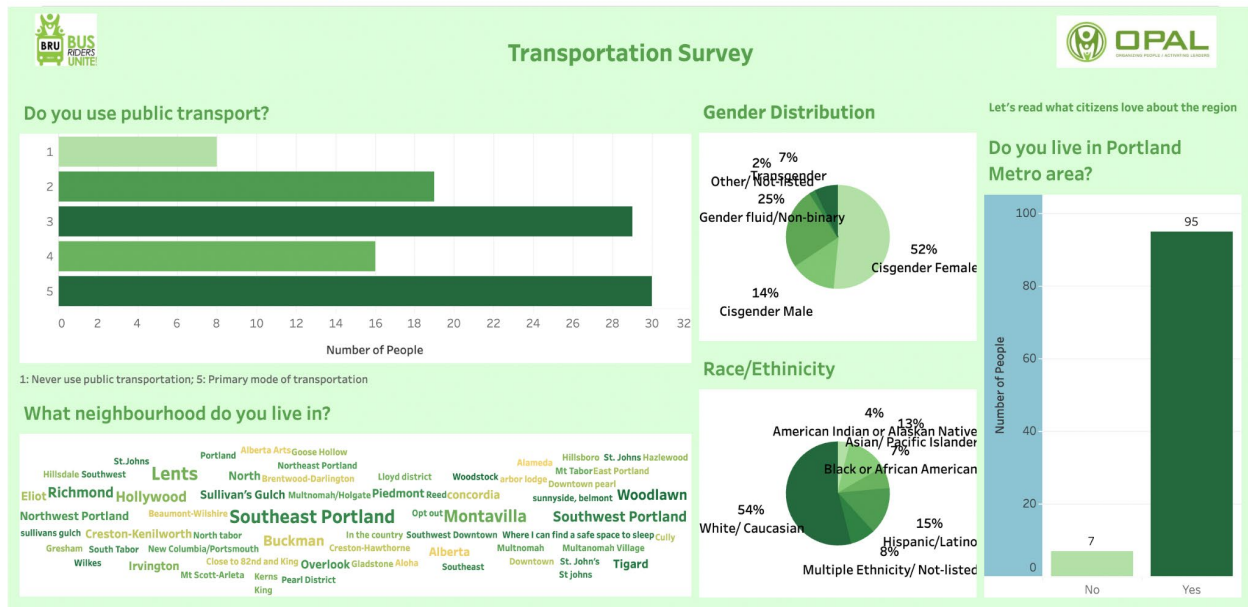


OPAL Dashboard 2 by [Jignasu Vekariya](#)



# Summaries of public engagement and agency consultation – Spring 2023

OPAL Dashboard 1 by [Jignasu Vekariya](#)





# **Community Engagement Report**

## **2023 Regional Transportation Plan (Phase 3)**

Prepared by

**Unite Oregon**

Submitted to

**Metro Regional Government**

**March 2023**

## Executive Summary

Phase 3 of the Regional Transportation Plan (RTP) focuses on updating regional transportation needs and revenue forecasts to guide updating the Plan's project and program priorities. The goal of Phase 3 is to collect feedback from community members about the needs and priorities as well as gaps in investments related to transportation improvement projects.

Equitable access to transit, biking and walking connections, and streets and highways where traffic flows is critical to allow the low-income black, indigenous, and people of color (BIPOC) immigrants and refugee communities that Unite Oregon serves to reach everyday places. Additionally, past TOD projects in North and Northeast Portland have resulted in involuntary residential and business displacement of BIPOC communities, Unite Oregon has been working tirelessly to address the impact associated with these major infrastructure investments to give all residents an opportunity to live and thrive.

Unite Oregon is partnering with Metro to conduct community engagement in the Southwest and TV Highway Corridors to inform these priorities. We interviewed 21 community members in both regions as part of the community engagement activities for Phase 3. Of the total participants, 81% identify as BIPOC, while 19% identify as White/Caucasian. Ten participants provided feedback about their transportation-related experiences in the Southwest Corridor and the other 11 shared information about their experiences in the TV Highway Corridor. About 91% of the interviewees in the TV Highway Corridor mentioned that they live and recreate in the area, while 63.6% and 54.5% said they work and worship in the corridor, respectively. In the Southwest Corridor, 80.0% of the interviewees reported that they recreate in the corridor; although some of them do not live there they usually visit family and friends.

Unite Oregon's interview had two sections informed by four priority areas related to transportation improvement projects including safety and wellbeing, accessibility, commute/travel time, and project information & implementation. Common themes were identified across the four different priority areas. A number of issues overlapped with needs highlighted in multiple priority areas, including improvement of sidewalks and crosswalks to make them safe and reliable, and accessible and safe areas for folks using wheelchairs who are currently forced to use bike lanes instead of uneven sidewalks. The community-identified needs, priorities, and investment gaps are described in detail throughout this report.

## Background

The Regional Transportation Plan (RTP) is the blueprint that guides investments for all forms of travel including driving, taking transit, biking and walking, and the movement of goods and services throughout the greater Portland area. The Plan was last updated in 2018 and it's due for an update by the end of this year.

[Unite Oregon](#) has been engaged in the RTP update process generally because having equitable access to transit, biking and walking connections, and streets and highways where traffic flows is essential to allow the communities we serve, particularly low-income black, indigenous, and people of color (BIPOC) immigrants and refugees, to reach everyday places.

More specifically, Unite Oregon convenes two community-centered coalitions of residents and community-based organizations focusing on Transit-Oriented Development (TOD). These are the Southwest Corridor Equity Coalition (SWEC) and the TV Highway Equity Coalition (TEC). Both coalitions are supported by Metro and work in collaboration with local governments.

While SWEC advocates for equitable development of a Light Rail Transit (LRT) extension along the Southwest Corridor<sup>1</sup>, TEC considers the development of a Bus Rapid Transit (BRT) along the TV Highway Corridor<sup>2</sup>. We work with our partners to ensure everyone in our communities has access to the benefits of these opportunities.

Concurrently, given the fact that past TOD projects in North and Northeast Portland have resulted in involuntary residential and business displacement of BIPOC communities, we have been working tirelessly to address the impact associated with these major infrastructure investments to give all residents an opportunity to live and thrive.

## Community Engagement: Goals and Process

Following the completion of Phase 1 (Scoping) and Phase 2 (Data and Policy Analysis) of the RTP update process, Phase 3 is focused on updating regional transportation needs and revenue forecast to guide updating the Plan's project and program priorities. Unite Oregon partnered with Metro to conduct community engagement in the Southwest and TV Highway Corridors to inform these priorities.

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<sup>1</sup>The Southwest Corridor comprises multiple jurisdictions and many different neighborhoods, extending from South Downtown Portland along Barbur Boulevard to Downtown Tigard and further south along I-5 to Bridgeport Village.

<sup>2</sup>The TV Highway (Oregon Route 8) is an important regional and county urban arterial that supports the movement of goods and people through Beaverton, Aloha, Hillsboro, Cornelius and Forest Grove in Washington County.

Our team designed a semi-structured interview process to talk with community members in both regions, Southwest Corridor and TV Highway Corridor. This interview has two sections informed by four priority areas related to transportation improvement projects including safety and wellbeing, accessibility, commute/travel time, and project information & implementation.

The first section asks participants to rate a series of statements on a 5-point scale from 1 (low) to 5 (high). Depending upon their rating, they are then asked follow-up questions to gain more insights on their response. The second section asks about people's view of the specific anticipated TOD projects: LRT in the Southwest Corridor and BRT in the TV Highway Corridor. Appendix A presents the full list of interview questions.

A total of 21 community members in both regions were interviewed. Interview participants had a wide range of experiences using transit services, driving, biking and walking along the two corridors. Some participants also provided insights on their experiences with transportation related projects and activities in other parts of the region.

**The discussions at the several meetings of the Southwest Corridor Equity Coalition and the TV Highway Equity Coalition uncovered a number of concerning issues that would negatively impact the communities living in both areas if clear and thoughtful equity measures were not considered when implementing TOD projects. These concerns include early investment in expanding and preserving affordable housing; providing co-located services, especially for healthcare and education; support for small business owners before, during, and after project construction; safety and accessibility improvements; in addition to service reliability.**

## Findings and Discussion

Out of the 21 participants, 10 provided feedback about their transportation-related experiences in the Southwest Corridor and the other 11 shared information about their experiences in the TV Highway Corridor. Table 1 shows a summary of the demographic information of interview participants, who were asked to choose from a list of options and also had the chance to self-describe their ethnicity, if preferred. About 43% of participants (n=9) chose to self-describe as they did not feel the direct options provided fairly described their ethnicity. The other ethnicities identified by interviewees are Scandinavian & Keltic (n=1), Taiwanese American (n=1), Somali Americans (n=3), Mexican Indigenous (n=1), and Indian (n=1), and multiracial (2).

The interview also asked about the connection of participants to the two targeted areas. Figure 1 shows that about 91% of the interviewees in the TV Highway Corridor mentioned that they live and recreate in the area, while 63.6% and 54.5% said they work and worship in the corridor, respectively. In the Southwest Corridor, 80.0% of the interviewees reported that they recreate in the corridor; although some of them do not live there they usually visit family and friends.

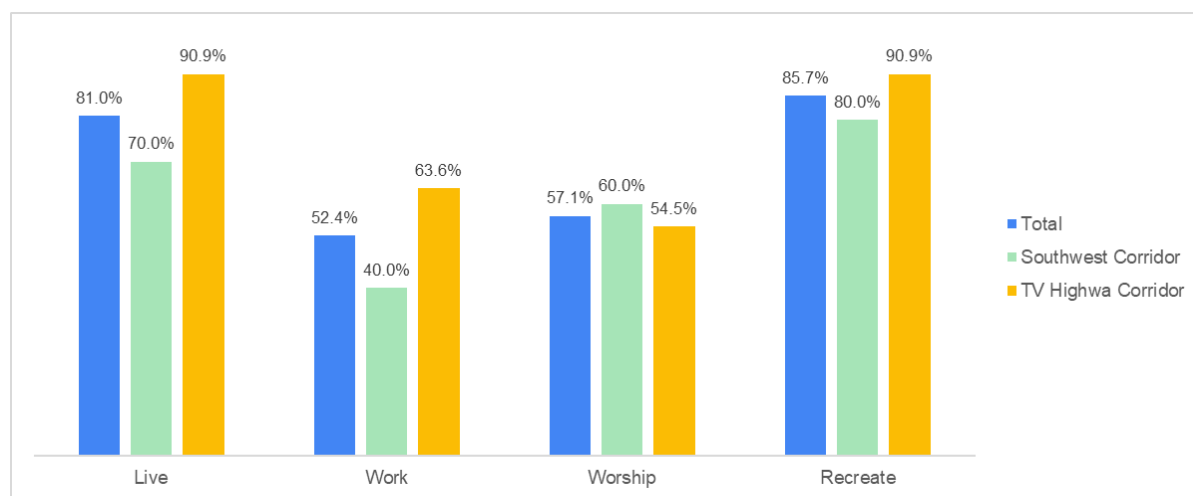


**Table 1: Participants demographic information**

Description	Total (n=21)		Region 1 <sup>a</sup> (n=10)		Region 2 <sup>b</sup> (n=11)	
	n	%	n	%	n	%
<b>Ethnicity</b>						
Black/African American	3	14.3%	1	10.0%	2	18.2%
LatinX	3	14.3%	0	0.0%	3	27.3%
Middle Eastern/North African	2	9.5%	2	20.0%	0	0.0%
White/Caucasian	4	19.0%	1	10.0%	3	27.3%
Prefer to self-describe	9	42.9%	6	60.0%	3	27.3%
<b>Gender</b>						
Woman	13	61.9%	7	70.0%	6	54.5%
Man	5	23.8%	3	30.0%	2	18.2%
Non-Binary	2	9.5%	0	0.0%	2	18.2%
prefer to self-describe	1	4.8%	0	0.0%	1	9.1%
<b>Residential Status</b>						
U.S. born citizen	11	52.4%	4	40.0%	7	63.6%
U.S. citizen by naturalization	4	19.0%	1	10.0%	3	27.3%
Immigrant	1	4.8%	0	0.0%	1	9.1%
Prefer to self-describe	4	19.0%	4	40.0%	0	0.0%
Prefer not to share	1	4.8%	1	10.0%	0	0.0%

a Region 1 = Southwest Corridor

b Region 2 = TV Highway Corridor



**Figure 1: Participants connection to the corridors**

## Interview Findings

As explained above in the Community Engagement: Goals and Process Section, the interviews consisted of two parts, the first of which asked about four priority areas related to transportation improvement projects and the second focused on the impacts of two Transit-Oriented Development projects, one in each corridor. The following sections present a summary of the interview findings, in addition to a brief discussion of the patterns that were identified. Appendix B outlines specific locations/projects that interview participants mentioned.

### Section 1: Transportation-Related Priorities

This section provides a series of statements that participants were asked to rate from 1 (low) to 5 (high) based on their personal views. Table 2 presents all these statements and the ratings given by the participants in both regions; the Southwest Corridor and the TV Highway Corridor. Depending on their rating, a series of follow up questions were asked to get a better understanding of people's experiences.

#### Priority 1: Safety & Wellbeing

Public Transit Services: When asked about how safe they feel using public transportation services, 70.0% and 72.7% of the participants provided low ratings (3 or below) for their experiences in the Southwest Corridor and TV Highway Corridor, respectively. Interviewees mentioned a range of reasons related to safety traveling to and from stops and also while riding on the bus/train.

Lack of safe and reliable sidewalks and crosswalks, unsheltered and unlit bus stops, walking around homeless tents, fear of reckless drivers and those who exceed speed limits, and the fact that bus stops are far from residential areas are some of the main elements that make people unsafe reaching to and from transit facilities.

On the other hand, interview participants expressed the need for more security/safety employees (not police officers) on TriMet facilities. Cleanliness was another issue that several people identified. Other participants mentioned that they repeatedly experienced harassment on public transit due to their race or appearance which reflects their religious affiliation.

Driving, Biking, and Walking: Participants rated three statements about their experiences driving, biking, and walking along the two corridors. For driving, more people in the Southwest Corridor (70.0%) provided high ratings (4 or 5)

#### Participants said:

- TV Highway was built for cars and other vehicles; not for cyclists, pedestrians, and those with mobility needs.
- We need to implement more security on all public transportation. Not only for the riders but the conductors as well.
- Being a woman and a visible Muslim makes it hard and unsafe. I have been harassed several times. We cannot control other people. I appreciate there are security officers on MAX, though.
- I don't feel safe because people drive too fast and the bus stops are sometimes far away from people's homes.

**Table 2: Participants ratings of transportation-related priorities in both regions (percentages)**

Statement	Rating (1=low, 5=high) scale (n=21)									
	Region 1 <sup>a</sup> (n=10)					Region 2 <sup>b</sup> (n=11)				
	1	2	3	4	5	1	2	3	4	5
<b>Safety and wellbeing</b>										
I feel safe using public transportation services	0%	50%	20%	20%	10%	9%	18%	45%	9%	18%
I feel safe driving along the Corridor	0%	10%	20%	50%	20%	18%	18%	27%	27%	9%
I feel safe biking along the Corridor	40%	20%	40%	0%	0%	45%	36%	18%	0%	0%
I feel safe walking along the Corridor	40%	10%	0%	40%	10%	27%	45%	18%	9%	0%
Traffic signs, road conditions, and speed limits are effectively designed to offer a safe experience for commuters and pedestrians	20%	20%	20%	40%	0%	27%	27%	36%	9%	0%
<b>Accessibility</b>										
I have easy access to public transportation to reach everyday places	0%	20%	10%	40%	30%	0%	27%	18%	36%	18%
Sidewalks and crosswalks are available and conveniently placed along the corridor	30%	10%	30%	20%	10%	64%	18%	18%	0%	0%
Public transportation services are suitable for people who have mobility/physical disabilities	10%	30%	40%	10%	10%	36%	18%	36%	9%	0%
<b>Commute/Travel Time</b>										
I spend a reasonable time commuting to work, school, or to catch an important appointment	20%	40%	10%	10%	20%	9%	18%	27%	18%	27%
Using public transport takes less or the same amount of time compared to driving my own vehicle to get to everyday places	60%	20%	10%	10%	0%	45%	0%	36%	18%	0%
<b>Project Development &amp; Implementation</b>										
I receive timely information about the planned transportation improvement projects	40%	30%	0%	20%	10%	64%	18%	9%	9%	0%
Transportation projects address the needs of the diverse communities along the corridor	30%	20%	30%	20%	0%	27%	45%	27%	0%	0%

<sup>a</sup> Region 1 = Southwest Corridor

<sup>b</sup> Region 2 = TV Highway Corridor

compared to those who drive along the TV Highway Corridor (36.4%). This is due to the fact that TV Highway is considered one of the most dangerous highways in the region. Several deadly accidents were reported in the past months.

With respect to biking safety none of the participants in both regions provided a high rating. People either don't bike themselves, due to safety concerns, or they have been observing several safety concerns for people who bike along the corridors. These concerns include bike lanes being narrow and close to the cars on the road, road conditions force bikers to ride on roadway or sidewalks, and drivers do not respect bikers or signage that protects pedestrians.

Speaking about safety walking along the corridors, 50.0% of interview participants in the Southwest Corridor provided high ratings compared to only 9.1% in the TV Highway Corridor. This is again attributed to how dangerous TV Highway is regardless of the mode of mobility used to get to everyday places.

Traffic Signs, Road Conditions, and Speed Limits: Most of the participants (90.9%) in the TV Highway Corridor offered low ratings to the statement "Traffic signs, road conditions, and speed limits are effectively designed to offer a safe experience for commuters and pedestrians," while the percentage of low ratings was 60.0% in the Southwest Corridor. Potholes in different places along the roadway and uneven sidewalks were the two most highlighted concerns.

Two of the interviewees who use wheelchairs mentioned that sometimes they are forced to use bike lanes instead of uneven sidewalks, and this puts them in a critical dangerous situation. Other participants mentioned that many transportation-related infrastructure changes are done after people are hurt, and that must not be the case. From a driver's and rider's perspective, participants listed commuting at night as a less preferable option due to lack of lighting.

## Priority 2: Accessibility

Easy Access to Public Transportation: The first of the three statements that interview participants were asked to rate was about their experience accessing public transit to get to everyday places. In the Southwest Corridor, 70.0% of the interviewees provided high ratings (4 or 5) compared to 54.5% in the TV Highway Corridor. Some of the issues that were

### Participants said:

- There are places where there are no sidewalks and sometimes bikes are in the actual car lanes which makes me fear for their safety.
- Being visible to cars is really important, I was hit by a car while walking along the TV Highway.
- Congestion is a big issue, especially on narrow roads. Traffic can build up very easily and makes it difficult for drivers.
- My son walks 3 quarters of a mile going and coming back from school. The bus stop on Barbur Blvd. is far from our house.
- During snow storms, we need better transit options, and more attention to clearing off the roads for cars on busy highways.
- We need lighting on the roads and better road signs with reflective paints to glow in the dark.

Interviewees mentioned that lack of paved sidewalks and safe crosswalks makes them feel unsafe walking in both regions.

common in both regions, but more emphasized in the TV Highway Corridor, are the distance people need to walk to reach a bus stop, transfers from line to line or between buses and trains, rush hour congestion and lack of “bus only” lanes.

**Sidewalks and Crosswalks:** All participants in the TV Highway Corridor offered low ratings to the statement “Sidewalks and crosswalks are available and conveniently placed along the corridor,” with 63.6% giving the lowest rating. For the SW Corridor, 70.0% of all interviewees provided low ratings (3 or below). In both regions, and specifically for TV Highway, crosswalks are not available where pedestrians need them; people have to walk long distances to be able to cross the road, and this gets worse when sidewalks are not available or are in bad shape.

**Transit Services for People with Mobility issues:** Only 9.1% of the participants in the TV Highway Corridor indicated that Public transportation services are suitable for people who have mobility/physical disabilities, compared to 30.0% of participants in the Southwest Corridor. Big ledges on sidewalks can become an obstacle for those who may struggle with mobility, especially when bus ramps could not be lowered for people to board the bus.

Another concern mentioned by participants is the time it takes to lower the ramp and then the driver needs to help passengers to put a strap on the wheelchair (2-3 minutes). This needs to be faster. Oftentimes, people on wheelchairs have to miss the bus and wait for the next one either during rush hours when they cannot access the area designated for them or when the ramp/elevator is not working. Participants also reported that, occasionally, some riders are not helpful to give a place to people with disabilities.

### **Priority 3: Commute Time**

**Reasonable Time Commuting:** Only 30.0% of the participants in the Southwest Corridor and 45.5% in the TV Highway Corridor offered high ratings to the statement “I spend a reasonable time commuting to work, school, or to catch an important appointment.” The main causes identified for the delays are heavy traffic jams, especially during rush hours; frequent accidents, especially along TV Highway; time needed to reach bus stops, many of which have already been removed; in addition to bus delays/MAX shutdowns in snow days.

#### **Participants said:**

- A lot of left turns need to have a green turn signal, not only yellow flashing.
- Using transit services takes significantly more time than driving; that’s why I bought a car. It’s also cheaper to use my own car than ride buses every day.
- Bus stops need to be on sidewalks that are accessible, it is hard to get off the bus if you are using a wheelchair and there is no even sidewalk.
- My mosque is 5 minutes by car. I have to take the MAX to Beaverton Transit Center to take bus 57 down to 169th. This takes 35 minutes each way, if I make the connection right away.
- A 30-minute drive sometimes takes 2 hours.

Barbur Crossroads is in the top 10% of dangerous roadways listed in the statewide Safety Priority Index System, and although ODOT has been working on improvements, participants felt that much more is needed to make the area safer.



## Participants said:

- I live in Southwest Portland and work in Southeast. It takes me too long to commute and I am often late to work.
- Instead of removing bus stops, we need more buses that run more frequently added to the route.
- I would be more open to using public transit if things changed.
- Before I got involved in Unite Oregon's leadership development cohort, I hardly ever came across information about transportation projects.
- It's kind of a shame to have the Barbur Transit Center sitting while it can be redeveloped to better benefit the community.
- After the failure of the 2020 bond measure, Barbur Boulevard improvements got kicked way back.
- I would implore the government agencies to look at cities that have good transit systems to see what positive things they are doing.

Instead of removing bus stops to attempt reducing commute time, the community wants to see more frequent bus services. Other needs highlighted by interviewees include ensuring elevators/ramps are working all the time and also providing security in stations and on board transit facilities because many people, including those with mobility challenges, prefer not to ride in crowded buses to avoid harassment. Also, creating "bus only" lanes will enhance safety and shorten trip time for riders.

Time Spent Driving Vs. Using Public Transportation: The majority of interview participants (90.0% in the Southwest Corridor and 81.8% in the TV Highway Corridor) did not agree with the sentence saying that "using public transport takes less or the same amount of time compared to driving my own vehicle to get to everyday places." However, participants indicated that using MAX services could be more effective in certain situations like going to Downtown Portland which saves time and effort finding parking if they were to drive their own vehicles.

## Priority 4: Project Information & Implementation

Timely Updates on Plans: Most participants in both regions (70.0% in the Southwest Corridor and 90.9% in the TV Highway Corridor) indicated that they don't receive timely information about planned transportation improvement projects. Even those who offered high ratings for this statement explained that they became informed after joining the leadership development programs offered by Unite Oregon and other community-based organizations within the Southwest Corridor Equity Coalition (SWEC) and the TV Highway Equity Coalition (TEC).

Other participants indicated that even when information is available, it is not easily accessible to the public and the way they get updates about these projects is through thorough research and active communications with TriMet and local government agencies. People don't have time to look for information, and the government needs to find better ways to reach them including working with nonprofits and culturally specific organizations to spread the word out to the diverse community in different languages, and those who may not be online or using smartphones.

*"If they can send a voting pamphlet to registered voters' homes, they can send information to us directly as well."*



**Projects to Address Community Needs:** All participants in the TV Highway Corridor and 80.0% of interviewees in the Southwest Corridor did not feel that transportation improvement projects address the needs of the diverse communities along the corridor. For example, a participant mentioned that TriMet ignored community inputs and listened to manufacturers recommendations when they designed the FX line. This resulted in aisles that are also too narrow, making it difficult for wheelchair users to move on the bus.

Another participant questioned the need to build an island and add plants starting on SE Cypress St. continuing onto SE 32nd Ave., indicating that making the roads safer is a higher priority than making them look pretty. In the Southwest Corridor participants were frustrated that the proposed improvements on SW Taylors Ferry Rd. were not funded by Metro's Regional Flexible Fund Allocation (RFFA). Also, interviewees consider it a shame that Barbur Transit Center has not been redeveloped despite many calls from the community to build affordable housing and/or establish a multicultural hub.

## Section 2: Transit-Oriented Development Projects

This section aimed to get participants feedback on two mega transportation infrastructure projects in the two targeted geographies. Participants were asked the same questions about each of the projects. For the Southwest Corridor, the focus was on the anticipated Light Rail MAX line from Downtown Portland and extending along the Barbur Boulevard corridor to Downtown Tigard and further south along I-5 to Bridgeport Village. In the TV Highway Corridor, the questions were about the Bus Rapid Transit (BRT) which is currently being studied to improve bus line #57.

**Excitement for the Project:** All interview participants indicated that they are excited to hear about both projects, especially as they see that community-based organizations are leading community-centered planning processes in partnership with Metro and TriMet. Several participants mentioned that they would be more interested in using public transportation services if those projects were implemented in an equitable and inclusive way. Then, roads will be less congested with cars, riders will benefit from shortened commute time and less stress about safety and accessibility.

## Other Priorities:

Sustainability, environmental consciousness, service affordability for all riders, hygiene on TriMet facilities, training for conductors on becoming culturally competent to address the needs of riders effectively in addition to providing them with special driving skills to keep them, the riders, and other users of the road safe.

## Participants said:

- Without careful planning, the planned MAX line in SW Portland will strike low-income households who live or own businesses in the area.
- Oregon does not have the best housing system and this could make more people houseless. It will be too late to think about it after the project is implemented
- Metro and TriMet need to work with nonprofits to engage the community in TOD projects.

However, some participants in the TV Highway Corridor were not sure about how they felt about the BRT project since planning efforts are still underway, but they were hopeful that community inputs will be used in the design and implementation phases.

Concerns about the Project: The biggest concern all interviewees mentioned was the risk of residential and business displacement, which would be more critical in the Southwest Corridor. Some participants were skeptical as to how much can be done, especially in the TV Highway Corridor as the train tracks are in close proximity to the roadway and everything that comes along will have to be negotiated with the railroad companies. Another concern was about lack of engagement efforts with the larger community, except for some activities championed by nonprofits. The need to design new transit services to better serve people with mobility issues was also voiced by participants.

Equitable Project Implementation: Given the concerns highlighted above, the first suggestion provided by participants to make these projects equitable and provide benefits to all members of the community was to strengthen community resilience through early investments in preserving and expanding affordable housing and commercial spaces in both corridors. People need to receive timely information about the projects and be involved in decision making around critical issues that would impact historically underserved communities. Adhering to equity will also advance the local economy and offer more jobs and better career paths to low-income residents.

## Conclusion

This report presents the findings from 21 interviews conducted by Unite Oregon staff with community members in the Southwest Corridor and the TV Highway Corridor as part of the community engagement activities for Phase 3 of the Regional Transportation Plan update process. The goal was to get feedback from community members about the needs and priorities as well as gaps in investments related to transportation improvement projects. Table 3 summarizes the identified need/gaps.

Common themes were identified in four different priority areas namely, safety and wellbeing, accessibility, commute time and information about projects design and construction. However, it was found that a number of the issues mentioned by interview participants in one priority area overlap with needs highlighted in other priority areas. For example, building and improving sidewalks and crosswalks responds to accessibility needs while at the same time advances safety for everyone using the roads.

Participants also shared their thoughts on the benefits and concerns associated with two transit-oriented development projects, one in each of the targeted geographies: The Light Tails extension project in the Southwest Corridor and the Bus Rapid Transit project in the TV Highway Corridor. These conversations will be continued as we implement Phase 4 of the community engagement plan to get feedback from the community about specific transportation projects, which Metro will then use to update regional project and program priorities.

**Table 3: Summary of the identified needs, priorities, and investment gaps**

<p><b>Safety and Wellbeing</b></p> <ul style="list-style-type: none"> <li>• Need for improvement of sidewalks and crosswalks to make them safe and reliable.</li> <li>• Repair many potholes in different places along the roadway and uneven sidewalks.</li> <li>• Providing shelters and lighting for many bus stops.</li> <li>• Providing security employees (not police officers) in stations and on board transit.</li> <li>• Cultural competency training for conductors and improving their driving skills to keep riders and other users of the road safe.</li> <li>• Safe and accessible areas for folks using wheelchairs, who are currently forced to use bike lanes instead of uneven sidewalks</li> <li>• Repairing/expanding bike lanes to ensure bicyclists are not forced to use the roadway</li> <li>• Addressing safety issues related to reckless driving behaviors.</li> <li>• Taking a proactive approach to infrastructure issues rather than making changes after people are hurt or killed.</li> <li>• Hygiene products such as hand sanitizer in TriMet facilities.</li> </ul>	<p><b>Accessibility</b></p> <ul style="list-style-type: none"> <li>• More bus stops that are close to residential areas.</li> <li>• More bus services running at more frequent regular intervals.</li> <li>• More sidewalks and crosswalks that are conveniently placed along the corridors to prevent people from having to walk long distances to be able to cross the road.</li> <li>• Improvement of sidewalks and crosswalks to make them accessible and reliable.</li> <li>• Repairing potholes along the roadway and uneven sidewalks.</li> <li>• Service affordability for all riders.</li> <li>• Ensuring elevators/ramps are working all the time for folks with disabilities.</li> <li>• Design new transit services to better serve people with mobility issues.</li> </ul>
<p><b>Commute Time</b></p> <ul style="list-style-type: none"> <li>• Creating more “bus only” lanes and more frequent bus services to enhance safety and shorten trip time for riders.</li> <li>• Rush hours congestion and lack of “bus only” lanes results in buses being delayed and commute times being long.</li> <li>• Need more accessible stops. Transfers from line to line or between buses and trains takes a very long time.</li> <li>• Contributions to long commute times: heavy traffic jams, especially during rush hours; frequent accidents, especially along TV Highway; time needed to reach bus stops, many of which have already been removed; in addition to bus delays/MAX shutdowns in snow days.</li> </ul>	<p><b>Project Information &amp; Implementation</b></p> <ul style="list-style-type: none"> <li>• Providing timely &amp; accessible information (in multiple languages) about planned transportation projects.</li> <li>• Providing information in a multitude of ways for folks who do not have access to wifi or smartphones.</li> <li>• Involving historically-underserved people in decision-making around critical issues that would impact them.</li> <li>• Working with nonprofits and culturally specific organizations to spread the word out to diverse communities.</li> <li>• Inter-agency collaboration to address community needs effectively.</li> <li>• Learning from other cities that have good transit systems.</li> <li>• Ensuring sustainability and environmental conscious practices.</li> </ul>

## Appendix A: Interview Guide & Questions

**Background:** Every five years, Metro brings together the communities of greater Portland to update the [Regional Transportation Plan](#) (RTP). The RTP is the blueprint that guides investments for all forms of travel—driving, taking transit, biking and walking—and the movement of goods and services throughout greater Portland. For a project to receive Federal funding it must be in the RTP. The plan was last updated in 2018.

**Purpose:** In collaboration with Metro, [Unite Oregon](#) is working to engage community members who are most impacted by transportation projects to identify gaps in investments and define the process for updating the RTP project and program priorities by the end of 2023.

**Process:** Our team plans to conduct one-hour interviews with 20 individuals who represent the diverse communities that live, work, worship and recreate in the Southwest Corridor<sup>1</sup> or TV Highway Corridor<sup>2</sup>. Information gathered from interviews will be kept confidential. When reporting themes from the interviews, no person or organization's name will be associated with any results. Interview participants can request to receive a summary report of this process.

After the interview, participants will receive \$100 stipends to compensate for their time and contributions to the RTP update process.

**Interview Questions:** This interview has two (2) sections informed by a number of priority areas related to transportation improvement projects. First, you will be asked to rate a series of statements on a 5-point scale from 1 (low) to 5 (high). Depending upon your rating, you'll then be asked a follow-up question to gain insight on your response. Second, you will be asked a few questions about your view of specific projects as well as your personal travel patterns.

**Section #1:** The following table lays out four (4) priority areas, rating statements, in addition to follow-up questions:

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<sup>1</sup>The Southwest Corridor comprises multiple jurisdictions and many different neighborhoods, extending from South Downtown Portland along Barbur Boulevard to Downtown Tigard and further south along I-5 to Bridgeport Village.

<sup>2</sup>The TV Highway (Oregon Route 8) is an important regional and county urban arterial that supports the movement of goods and people through Beaverton, Aloha, Hillsboro, Cornelius and Forest Grove in Washington County.

# Summaries of public engagement and agency consultation – Spring 2023

Priority Areas	Rating Statements 5-point scale (1=low to 5=high)	Follow-up Questions If low rating
Safety & wellbeing	<p>I feel safe using public transportation services</p> <p>I feel safe driving, biking, walking along the Southwest Corridor</p> <p>Traffic signs, road conditions, and speed limits are effectively designed to offer a safe experience for commuters and pedestrians</p>	<p>What needs to happen to make these services safer for you and your community?</p> <p>What aspects of your transportation experience make you feel less safe? i.e., other drivers, lighting at night, etc.</p> <p>How can your experience be improved and who should be responsible for that?</p>
Accessibility	<p>I have easy access to public transportation to reach everyday places</p> <p>Sidewalks and crosswalks are available and conveniently placed along the corridor</p> <p>Public transportation services are suitable for people who have mobility/physical disabilities</p>	<p>What are the top 1-3 challenges you face trying to access public transportation?</p> <p>What areas along the corridor require better sidewalks/crosswalks?</p> <p>How can those services be improved to give all riders a better experience?</p>
Commute/travel time	<p>I spend a reasonable time commuting to work, school, or to catch an important appointment</p> <p>Using public transport takes less or the same amount of time compared to driving my own vehicle to get to everyday places</p>	<p>Where and at what times do you see most time wasted while traveling along the corridor? i.e., many stops, slow traffic</p> <p>How can transit services be improved to become more reliable? Would you be more open to using transit if that happened?</p>
Project development & implementation	<p>I receive timely information about the planned transportation improvement projects</p> <p>Transportation improvement projects address the needs of the diverse communities along the corridor</p>	<p>What barriers are keeping you less informed about these projects? Who is responsible to fix that?</p> <p>What are some projects that you feel were not needed or could have been implemented differently?</p>

**Section #2:** The following questions aim to capture more details about your personal opinion and experiences regarding transportation priorities/needs in your community.

- 1) In addition to the priority areas highlighted in Section #1, what other priority areas can you identify? the Other priority areas?
- 2) Metro and its partners are exploring the development of a Light Rail MAX extension project along the Southwest Corridor, which is expected to be associated with other improvements in the area.
  - What excites you about this project?
  - What aspects of the project and/or the impacts associated with it may be concerning to you and your community?
  - In your opinion, how would implementing this project in an equitable way benefit all residents and riders along the corridor?
- 3) [Optional] Would you be willing to share the following information when we report your answers? This helps Metro better understand certain characteristics of the communities benefiting from/impacted by the plan (**no name or contact information will be reported**)
  - Ethnicity
  - Gender
  - Residential Status
- 4) Please provide any additional information you would like to share. You could also reach out with questions/comments via email until March 31, 2023.
  - Learn more about Unite Oregon on our [website](#).
  - For more information on how to join our programs, please contact our team:
    - Mohanad Alnajjar [mohanad@uniteoregon.org](mailto:mohanad@uniteoregon.org)
    - Juan Moreno [juan@uniteoregon.org](mailto:juan@uniteoregon.org)
    - Myell Thompson [myell@uniteoregon.org](mailto:myell@uniteoregon.org)



## Appendix B: Locations Mentioned By Interview Participants

Location	Need
N 29th Avenue (Cornelius) – SW Dennis Avenue (Hillsboro Winco)	Sidewalks and better lighting needed on both sides. Was mentioned by several interviewees
SW 170th Avenue (Aloha) – SW Murray Boulevard (Beaverton)	Needs better lighting
SE Cornelius Pass Road (Hillsboro) – SW 185th Avenue (Aloha)	Need for sidewalks and better lighting on both sides
SE 30th Avenue (Hillsboro) – SE Cornelius Pass Road (Hillsboro)	Needs better lighting and sidewalks on the southern side of TV Highway
SE TV Highway & SE 44th Ave	Crosswalk needs more safety measures
SE Brookwood Avenue – TV Highway intersection	Unsafe, interviewee was hit here many years ago before some infrastructure changes
10th avenue (Hillsboro) – Beaverton TC, and SW Murray Blvd. – Highway 217 or beginning of Beaverton-Hillsdale Highway	TV Highway Traffic hotspots
Barbur Crossroads	Dangerous intersection for all road users. Although it may be difficult to restructure the road, there needs to be a plan to improve safety and accessibility
SW Taylors Ferry Rd.	Despite advocacy by community groups, a proposed project to improve sidewalks and safety was not funded
Capitol Highway in the Southwest Corridor	Recent sidewalk improvements are useless and won't serve the community. It's near the freeway ramp so, even if it had a bench, nobody would sit in it
Bus stop near Casey Eye Institute on S Bond Ave	Once you get off the bus, there is no sidewalk and it's usually muddy and dangerous for people to walk
Homestead Drive – Williger Boulevard	There is no lighting along the road and certain areas have no clear signs which makes it dangerous causing head-on collisions
Barbur Transit Center	It's frustrating the TriMet and ODOT are not listening to the community when we ask to use this space to build affordable housing and/or create a multicultural center

# Summaries of public engagement and agency consultation – Spring 2023

## Phase 3 Summary Report

### Metro RTP Community Engagement - Call for Projects

#### Verde / Latinx Community

## Adult Focus Group

Meeting Date: 1.31.23

Language: Spanish

Number of participants: 17

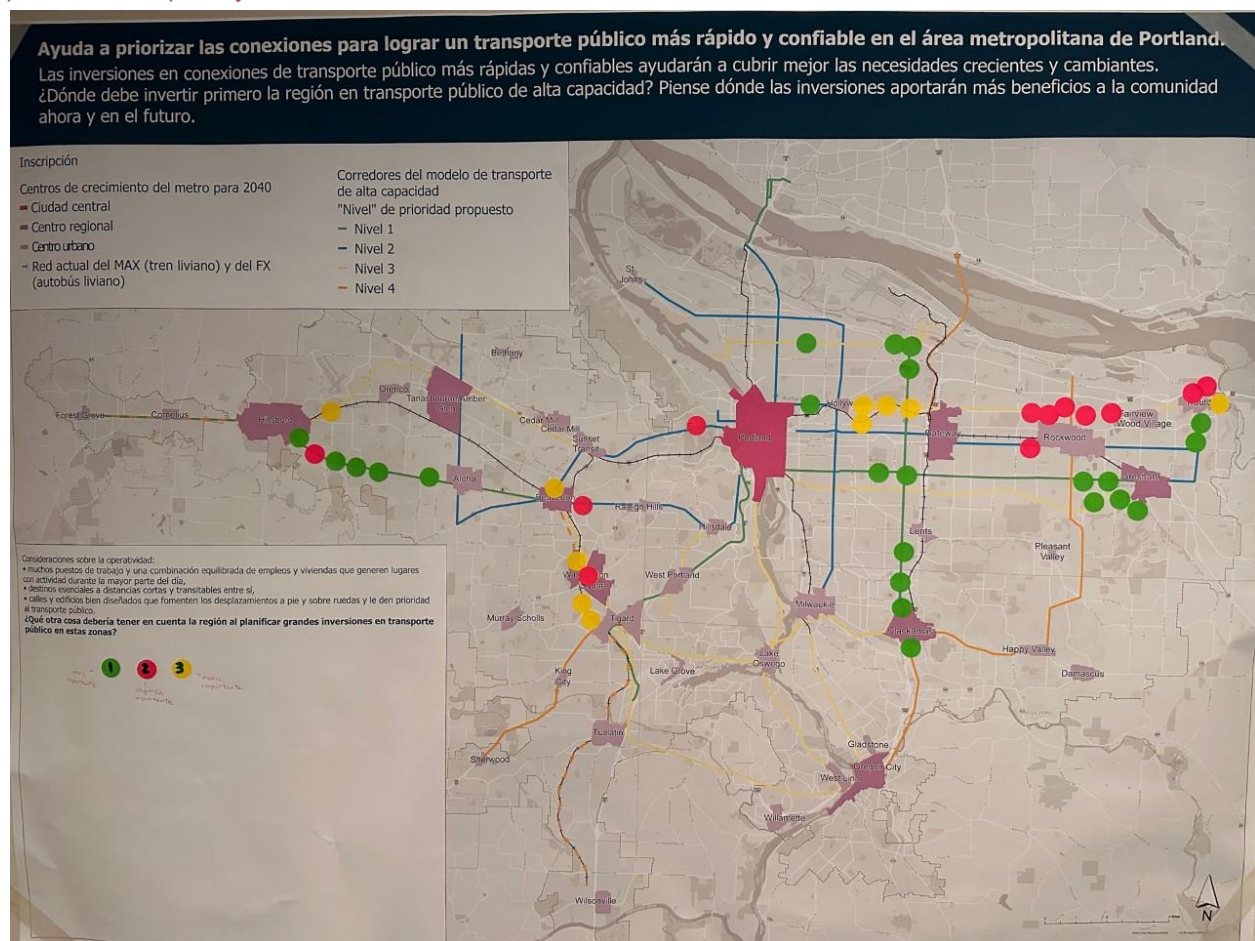
### Map activity (segments):

Each participant had 3 stickers\*

green = highest priority

yellow = second priority

pink = lowest priority



\*Several participants used two green stickers to mark two top priorities.

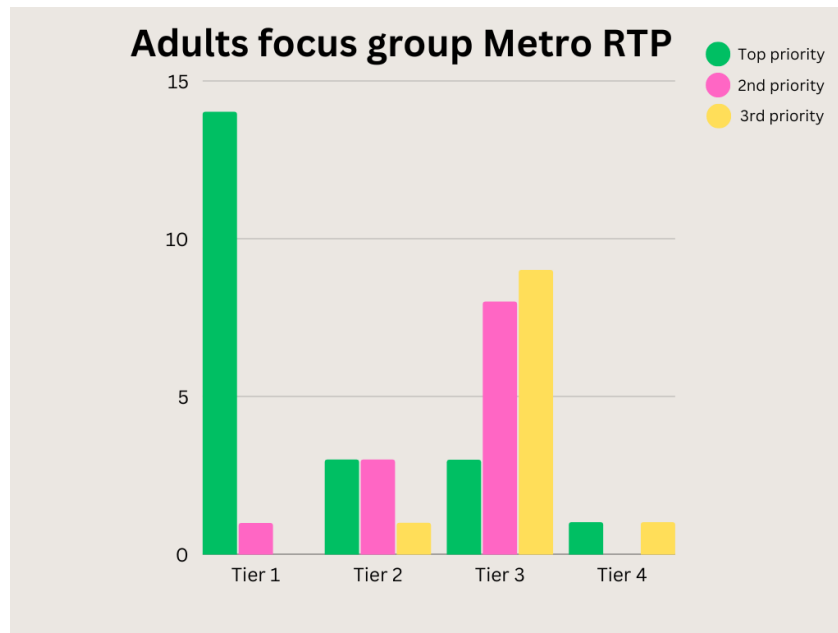
# Summaries of public engagement and agency consultation – Spring 2023

## Phase 3 Summary Report

### Metro RTP Community Engagement - Call for Projects

#### Verde / Latinx Community

#### Map Activity Bar Chart (tiers):



#### Individual Feedback:

Rogelia	we need a bus FX on 82nd, Tier1: for more comfort and safety
Lizet	FX 82nd, Tier1: better community and safety, Tier 2: safety and reliability
Ana B	FX on 82nd, Tier1: Better community and safety, Tier 4 Avoid traffic
Flor	FX on 82nd, Tier1: - Better community and safety, Tier 3 - I would use it to take my children to swimming and it would be faster for my errands/shopping.
Andres	FX on 82nd, Tier 4 to avoid traffic
Wendy	Prioritize Killingsworth to downtown Portland, Killingsworth to Troutdale
Hilda	Prioritize Killingsworth to Beaverton
Lupe	72 Bus: Stores, frequently go to the hospital 8, most frequent transportation. 72 Max WS. Green Blue Line. Bus 72, more frequent
Teresa	Tier 3: 17S Portland to Oregon City, 18 E Hollywood to Troutdale, 5 Hwy 26 Sunset TC to Hillsboro Easier to visit my family
Rosa Isela	Tier 3: 17S Portland to Oregon Clty, 18E Hollywood to Troutdale, 5 Hwy 26 Sunset TC to Hillsboro

# Summaries of public engagement and agency consultation – Spring 2023

## Phase 3 Summary Report

### Metro RTP Community Engagement - Call for Projects

#### Verde / Latinx Community

	Mexican Stores
Alma	Tier 3: Cover from NE to Gresham near Powell and Troutdale and they're direct routes. Safety/security at the bus stops and inside the bus.
Marlene	Tier 2 - Because it's a busier area and there are more community members who use public transportation. At the same time it would reduce traffic for people who use cars on the freeway and encourage the use of the MAX/bus more. They avoid contamination by encouraging the community to use the bus/MAX.

#### Priorities/Concerns

- Well, I want there to be more safety/security on the bus and for it to be cleaner
- On the corner of where I live, when it's raining there is no shelter. Lighting because it's dark.
- They're on the corner and get wet. The stops on Fairview and Sandy, where the packing companies are, are dangerous and there is no lighting. There's a lot of parks.
- At some stops, in dangerous areas, there needs to be safety/security
- We need transportation that goes from Cully to Downtown Providence Park.  
Safety/security at the bus stops and inside the bus, all day. Bus drivers to be more polite to people of all races and be so polite as to wait for people, who can not run to catch the bus, to get on board.

#### Personal Stories:

- Security/safety to avoid kidnappings. My daughter was waiting for bus 15, the one from 82nd to Powell. Between two cars they wanted to follow her because no one was there. It was two cars of black people, 82nd and Burnside, where the MAX passes through, we need security.
- On a Sunday she was waiting for the bus and a woman attempted to hit her. The person that tried to hit her was drugged. She felt that this person was rude. In English, the person told her to go back to her country.

#### Key Take-aways:

Many participants were interested in an FX bus on 82nd, more direct buses running from Cully to downtown, and transportation to/from the Gresham area. Safety and security (reduced waiting time, more lighting, better shelters) were among the highest concerns for adults.

# Summaries of public engagement and agency consultation – Spring 2023

## Phase 3 Summary Report

### Metro RTP Community Engagement - Call for Projects

#### Verde / Latinx Community

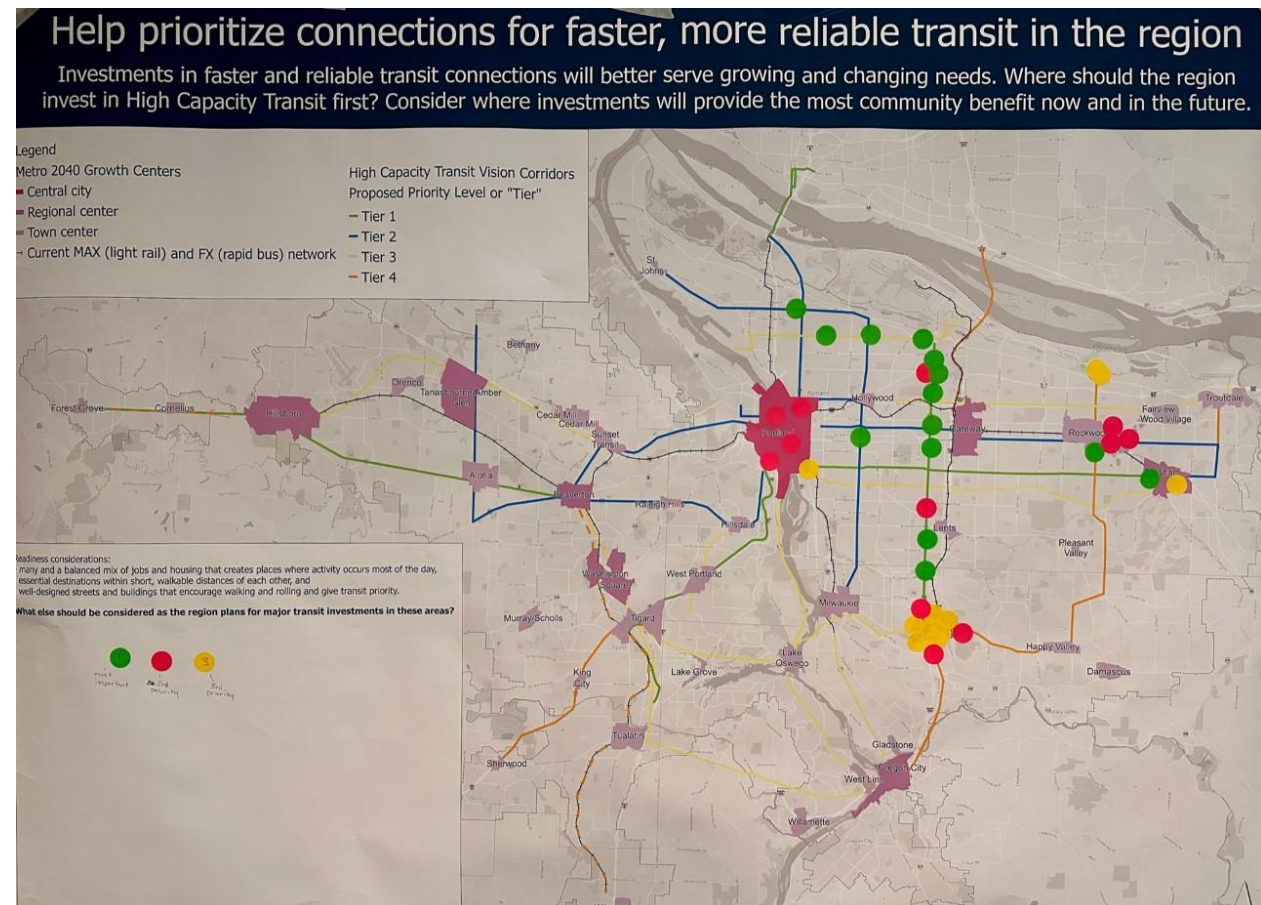
## Youth Focus Group

Meeting Date: 2.2.23

Language: English/Spanish

Number of participants: 16

### Map activity (segments):



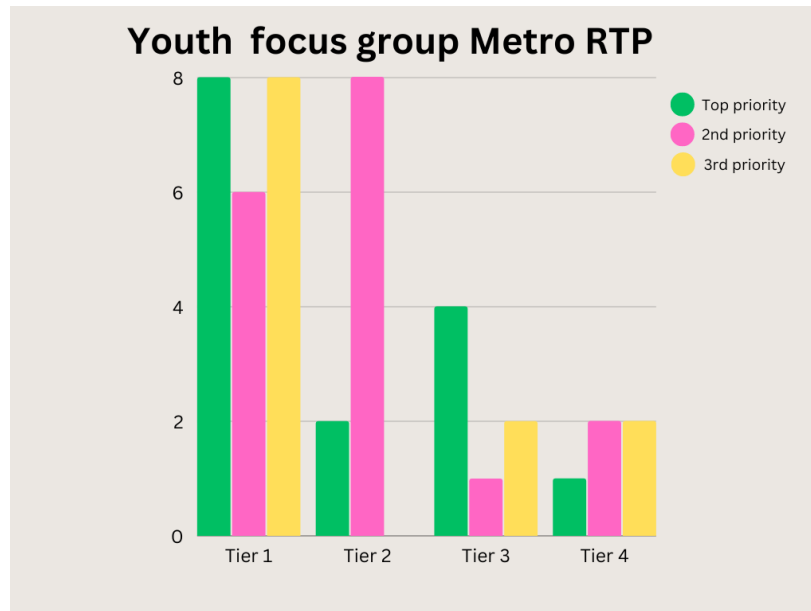
# Summaries of public engagement and agency consultation – Spring 2023

## Phase 3 Summary Report

### Metro RTP Community Engagement - Call for Projects

#### Verde / Latinx Community

#### Map Activity Bar Chart (tiers):



#### Key take-aways and summary:

Highest priority for youth is 82nd Ave. (school, family), followed by routes leading to the Clackamas Town Center mall (shopping, recreation). Other priorities include routes between downtown Portland and the Rockwood/Gresham area, as well as lines that travel along NE Killingsworth (family, friends, other).

Top priorities were around the need for increased capacity on 82nd as many buses are crowded after school and youth often need to wait for a few buses to pass before they can get on one. Safety and security on buses was a main concern for youth participants, including some concerns around the houseless population. Safety issues posed a significant barrier to youth taking public transportation in the first place.



# Summaries of public engagement and agency consultation – Spring 2023

Phase 4 Summary Report

Metro RTP Community Engagement - Priority Transportation Projects

Verde / Latinx Community

Meeting Dates: 4/19/23 and 4/25/23

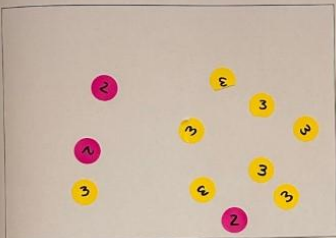
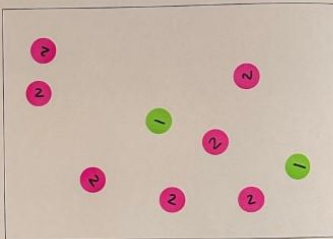
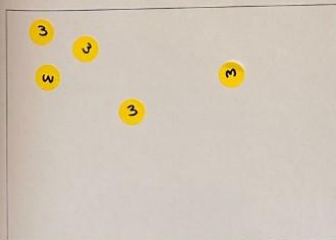
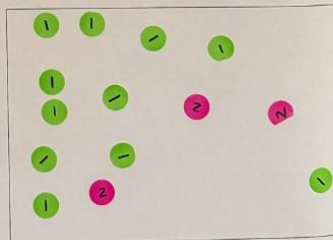
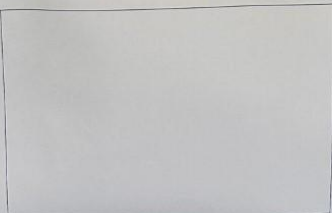
Participants: 13 adults, 7 youth


## Prioritizing Goals for next 5-10 years:

### Adult Group:

adultos

¿Qué metas son más importantes para los próximos 5 a 10 años? Ponga estas metas en orden de importancia, con la número 1 siendo la más importante.

Transporte equitativo	La resiliencia y la toma de acción frente al cambio climático
	
Una economía vibrante	Un Sistema seguro
	
<p>Opciones de movilidad</p> 	

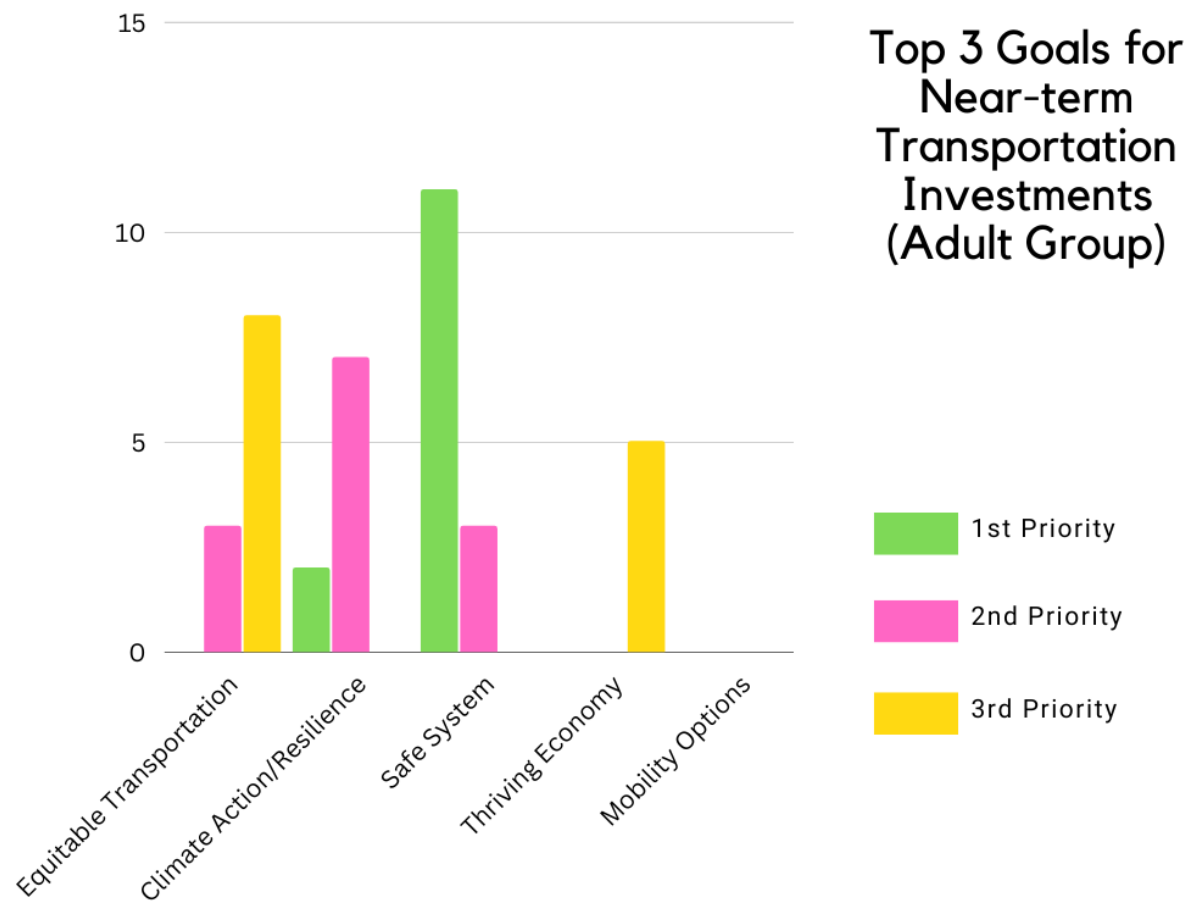
 Metro

# Summaries of public engagement and agency consultation – Spring 2023

Phase 4 Summary Report

Metro RTP Community Engagement - Priority Transportation Projects

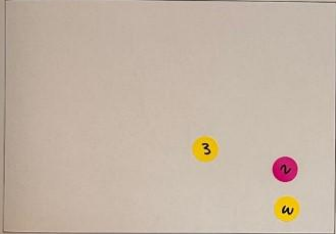
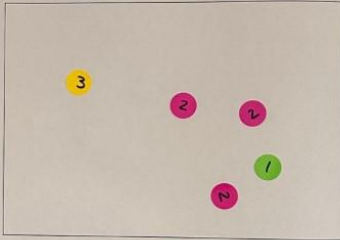
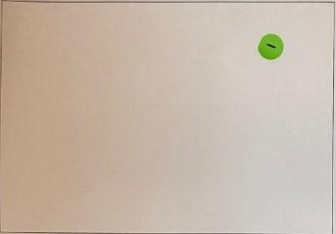
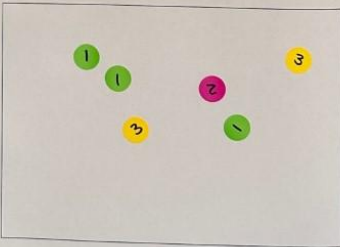

Verde / Latinx Community




#### Youth Group:

*jovenes*

**¿Qué metas son más importantes para los próximos 5 a 10 años? Ponga estas metas en orden de importancia, con la número 1 siendo la más importante.**

Transporte equitativo	La resiliencia y la toma de acción frente al cambio climático
	
Una economía vibrante	Un Sistema seguro
	
Opciones de movilidad	
	

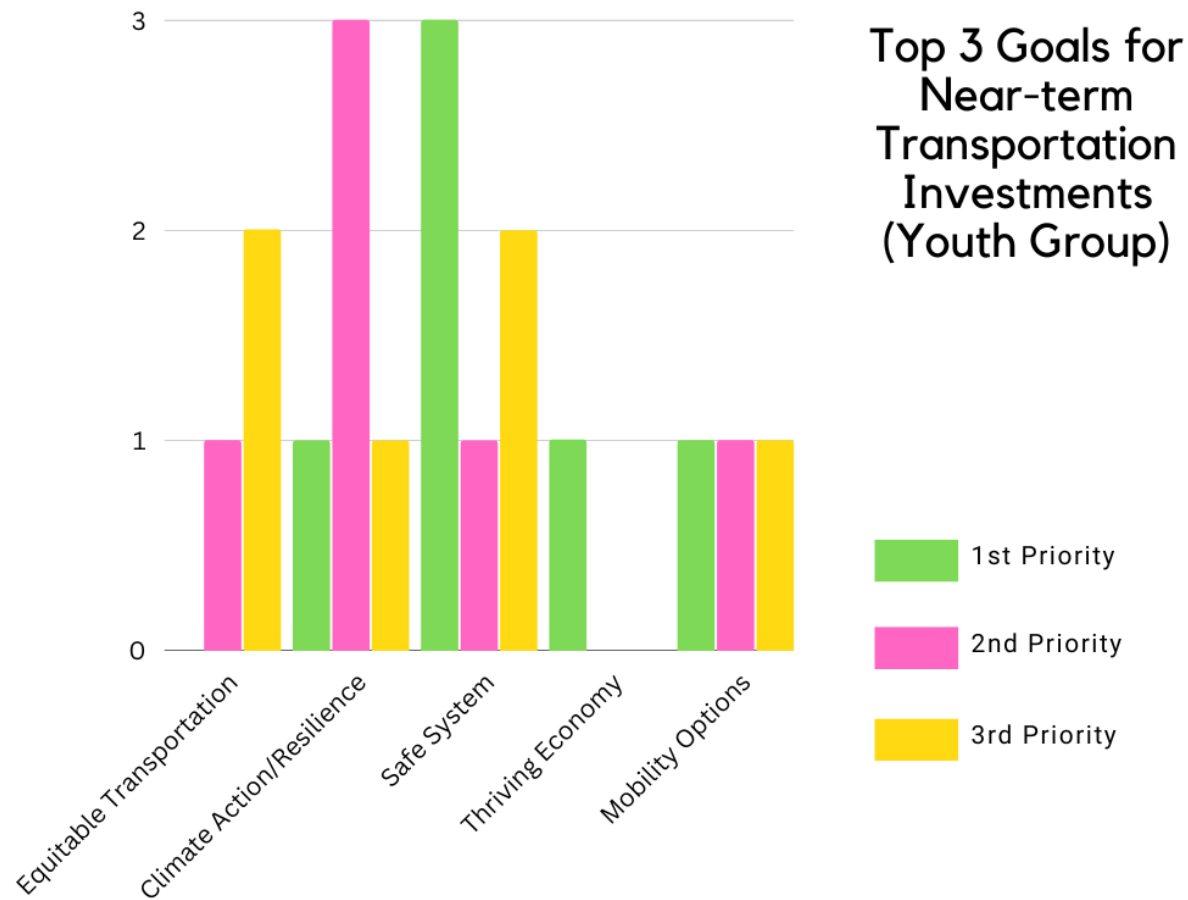
 Metro

# Summaries of public engagement and agency consultation – Spring 2023

Phase 4 Summary Report

Metro RTP Community Engagement - Priority Transportation Projects

Verde / Latinx Community



## “One thing that would make getting around better for me and my community is...”

### Adults:

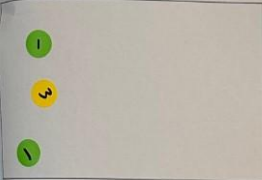
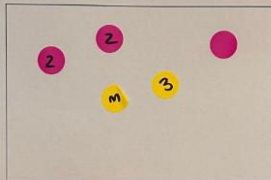
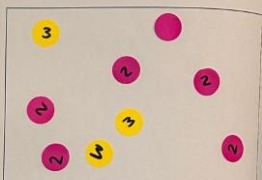
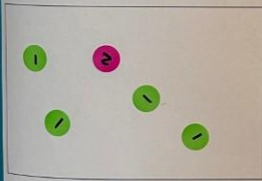
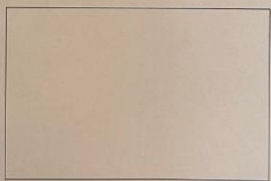
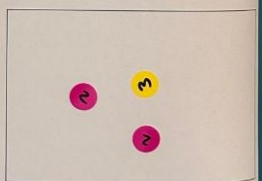
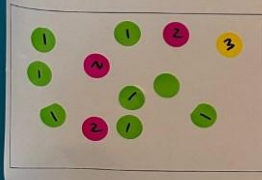
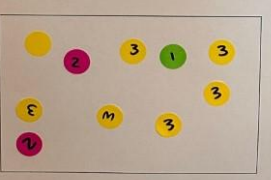

- Safety and more stops
- Safety so we feel confident and secure
- Security at bus stops. The waiting time for buses. More routes
- Safety. More frequent bus stops. More people from the street can get on buses
- Better security and economy for my family and community
- Security at bus stops, cleaning garbage by homeless and light that illuminates well at night for more safety
- More security on buses and max, and more monitoring so we feel safer and want to use it
- On time bus schedule
- Better security, constant travel, and friendly well-trained drivers
- More safety
- Earlier schedules, more space for bikes
- Cleaner buses and max. Lower rates
- Safety. Cleanliness. Punctualness.
- More security on the bus and on the train


### Youth:

- Better safety also with an increase in buses
- More safety on buses
- Buses being on time
- The attention of our government
- More communication
- Safety
- Make the trimet faster

## Prioritizing Investment Categories (adults & youth):

**Los proyectos caen en distintas categorías de inversiones. Escoja sus tres prioridades más altas.**

<p>Caminar y montar bicicleta</p> 	<p>Capital para el tránsito</p> 	<p>Calles y puentes</p> 
<p>Vías de paso</p> 	<p>Acceso para mercancías</p> 	<p>Información y tecnología</p> 
<p>Servicios de tránsito y operaciones</p> 	<p>Mantenimiento de tránsito</p> 	<p>Mantenimiento de calles y puentes</p> 

 Metro

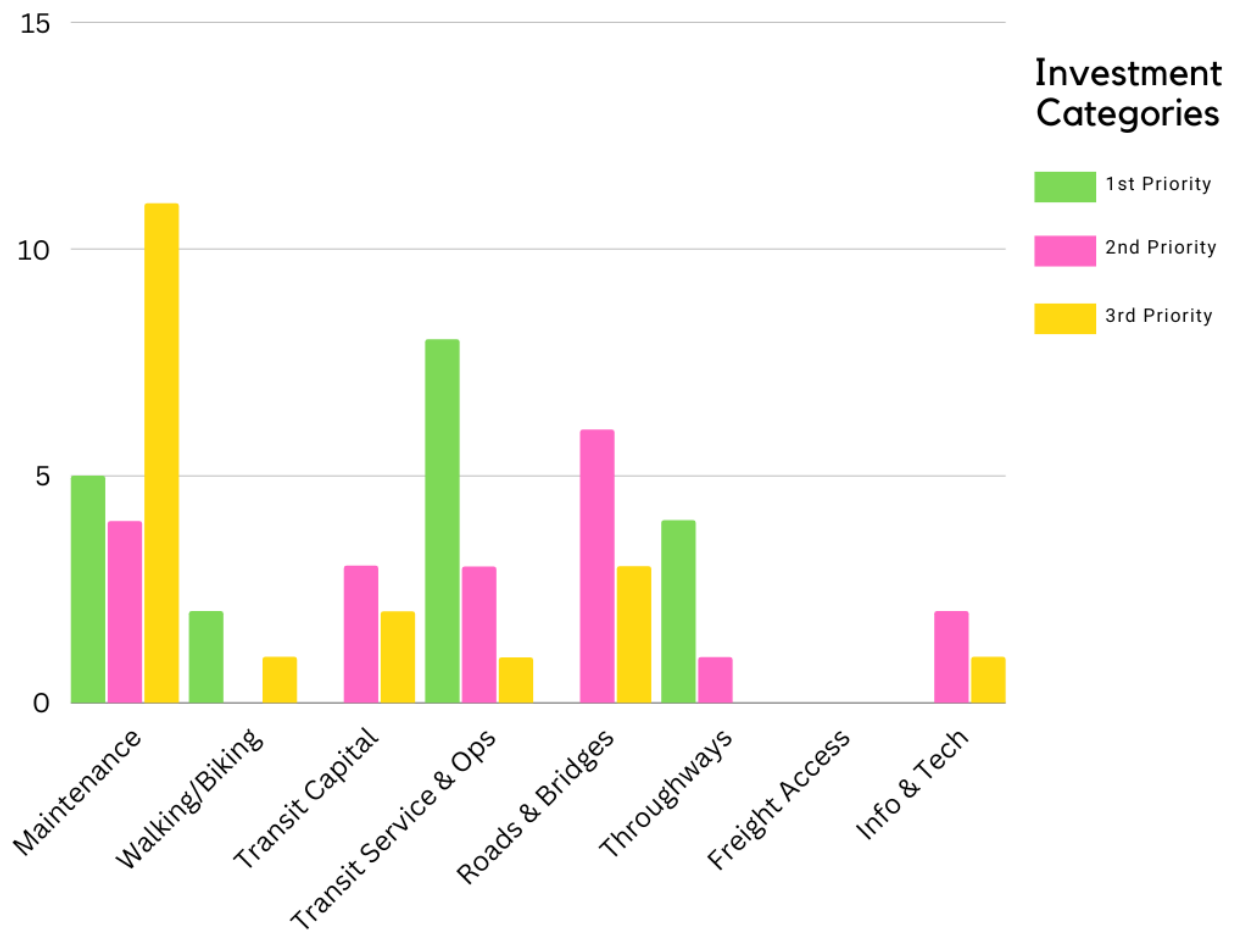


# Summaries of public engagement and agency consultation – Spring 2023

## Phase 4 Summary Report

### Metro RTP Community Engagement - Priority Transportation Projects

#### Verde / Latinx Community



# Summaries of public engagement and agency consultation – Spring 2023

## Phase 4 Summary Report

### Metro RTP Community Engagement - Priority Transportation Projects

#### Verde / Latinx Community

## Summary and Key-takeaways:

85% of adults chose the Safe System goal as their number 1 priority. 2nd highest priority for adults overall was Climate Action & Resilience, and Equitable Transportation as 3rd. We saw a similar ranking in the youth group.

The Safe System priority was also reflected in their responses to “One thing that would make getting around better for me and my community..” The majority of responses mentioned safety and security on buses and at bus stops.

The other responses include more frequent bus stops, on-time stops, more routes, and cleaner buses.

For investment categories, prioritizations leaned towards maintenance and transit services/operations, followed by roads/bridges and throughway investments.

Overall, the most dominant feedback and need identified from the community was for increased safety and security.

## Photos:



# Summaries of public engagement and agency consultation – Spring 2023

## Phase 4 Summary Report

### Metro RTP Community Engagement - Priority Transportation Projects

#### Verde / Latinx Community



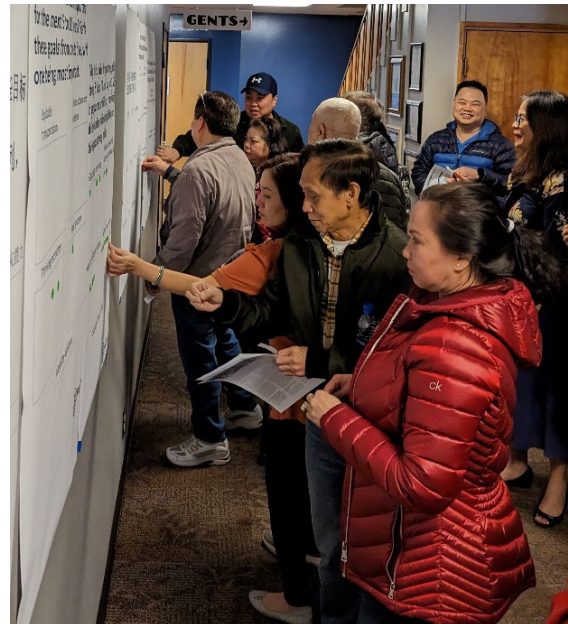
# **Summary of language specific community forums**

**2023 Regional Transportation Plan**

April 15, 2023

## Participant overview

In early 2023, regional agencies submitted draft lists of priority investments for the 2023 Regional Transportation Plan (RTP). Metro asked the public to weigh in on how the draft investment list aligns with regional priorities and community needs. During the comment period, Metro partnered with the Community Engagement Liaisons (CELs) Program to provide four language-specific project forums, which included community members from the Russian, Vietnamese, Chinese, and Spanish-speaking community. Participants were asked to consider the long-term future of greater Portland, and to provide feedback on priorities the region should focus on in the near term (next five to 10 years). A total of 59 participants attended the forums (16 Russian, 20 Vietnamese, 17 Chinese, and six Spanish). Each participant received a \$50 gift card to Fred Myers for taking time to attend the project forums.



## Engagement goals

The main objectives of the of project forums included:

- Inform community members about the purpose of the Metro Regional Transportation Plan.
- Share the high-level considerations that go into creating the constrained and unconstrained list for the RTP, including budget, timeline, transportation mode, geographic diversity, etc.
- Hear from community members about their short- and long-term transportation needs and priorities. Learn how projects on the list address their needs and those of their family and community.
- Educate attendees on the next steps of the RTP and how the project list will be used to secure federal funding for the region over the next 10 years.

## Engagement format

In-person project forum sessions were held on Saturday, April 15, 2023. All four forums happened at the same place, PKS International's office space on SE Main and SE 12<sup>th</sup> Ave in Portland, OR. Each forum session was an hour and a half long. Participants showed up and were handed a one-page factsheet on the RTP, translated into the four respective languages, as well as a list of the different investment categories being considered in the RTP project list. Metro staff gave a presentation on Metro, the role of the RTP in the region, and information on the different investment categories in the RTP, as well as some of the funding and cost considerations for each investment category. There was an interpreter present for each of the project forums.

After the presentation, attendees were able to ask Metro staff questions on the RTP and the future of transportation in the region. Each participant received 6 sticker dots and asked to place them on two large print outs, one with the proposed plan goals and the other with the investment categories. They were asked to place three stickers on each sheet, representing their three main priorities for

# Summaries of public engagement and agency consultation – Spring 2023

each list. Finally, participants were also asked to write their thoughts on a post it note to the prompt, “One thing that would make getting around better for me and my community...”

## Key Themes overview

Each group of participants shared their main thoughts and issues around short-term and long-term transportation needs. During the question-and-answer section of the presentation, many participants took the opportunity to share their current experiences while traveling on the transportation network. Some major themes that arose during the conversations are below.

## Safety concerns regarding active and public transportation

Safety is the top priority for community participants at the project forums. Safety concerns were the prominent theme that emerged from community members’ discussions about transportation priorities. Concerns about safety included both personal safety and traffic safety. These concerns overlap for transit riders and people walking and biking, where there is not good lighting, sidewalks, or places to wait for transit. Participants cited harassment, unpredictable, unsafe and sometimes violent behavior on transit and at transit stops.

Many participants shared stories about their own experience riding transit and how unsafe they felt taking their children on the MAX. They cited cleanliness issues at bus stops, observations about the decrease of families using public transit, and concerns about long wait times for buses on weekends.

***“People are taking transit less because they don’t feel safe. I spend nearly two hours on MAX each day and the whole time I keep my head down. Things are dirty and [it smells].” - Spanish forum participant***

*Table 1. Which goals are most important for the next 5-10 years? Rank these goals from one to five, with one being most important.*

	Equitable Transportation	Climate Action and Resilience	Thriving Economy	Safe System	Mobility Options
Spanish	4	0	0	13	0
Vietnamese	14	7	15	21	2
Chinese	4	4	9	16	10
Russian	6	4	6	19	12
<b>Total</b>	<b>28</b>	<b>15</b>	<b>30</b>	<b>69</b>	<b>24</b>

## Investment in maintenance throughout the system

Across each of the project forum communities, people prioritized investment in maintenance. Comments about maintenance spanned transit, roadways, and sidewalks. Although people prioritized taking care of the existing system, it was not a focus of conversation. Participants talked about the lack of sidewalk infrastructure in certain locations and concerns about how this maintenance gets paid for once electric cars become more popular and the gas tax no longer provides as much funding for improvements.



# Summaries of public engagement and agency consultation – Spring 2023

Table 2. Projects fall into different investment categories. Pick your top three priorities.

	Walking & biking	Transit capital	Roads & bridges	Through ways	Freight access	Information & technology	Transit service & operations	Transit maintenance	Road & bridge maintenance
Spanish	4	0	2	0	0	1	5	4	2
Vietnamese	5	6	12	7	1	3	6	6	13
Chinese	5	3	14	9	0	2	7	4	15
Russian	11	5	11	1	2	4	2	2	17
<b>Total</b>	<b>25</b>	<b>14</b>	<b>39</b>	<b>17</b>	<b>3</b>	<b>10</b>	<b>20</b>	<b>16</b>	<b>47</b>

## Investments in roads and bridges, biking and walking and transit

Forum participants included improved sidewalks and crosswalks, lighting, bike lanes and generally needing improved roads as investments they would like to see. Community participants also cited concerns about congestion and the time it takes to get where they want to go.

Participants also identified a need for both investment in transit capital and operations.

Improvements in frequency and reliability were reoccurring themes. Community members mentioned improvements to transit stops, such as lighting, shelters and bathrooms, as priority investments.

***“Waiting time for bus on weekend takes too long. Can frequency be as good as weekday? People work on weekends too. They have to wake up so early to make time to take transit.” – Vietnamese forum participant.***

Sidewalks and lighting were the most frequently mentioned types of investment related to biking and walking. Community members also discussed not feeling safe on bike facilities where they were close to vehicle traffic.

***“Where there are no sidewalks, people are forced to drive.” – Russian forum participant.***



# Engagement Report

## DRAFT

Summary of 2023 Regional Transportation Plan  
survey #3: Investment Priorities

May 2023



## **Metro respects civil rights**

Metro fully complies with Title VI of the Civil Rights Act of 1964 that requires that no person be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination on the basis of race, color or national origin under any program or activity for which Metro receives federal financial assistance.

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Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1700 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 5 business days before the meeting. All Metro meetings are wheelchair accessible. For up-to-date public transportation information, visit TriMet's website at [trimet.org](https://trimet.org).

**Metro is the federally mandated metropolitan planning organization** designated by the governor to develop an overall transportation plan and allocate federal funds for the region.

The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council. The established decision-making process strives for a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds. Together, JPACT and the Metro Council serve as the MPO board for the region in a unique partnership that requires joint action with the Metro Council on all MPO decisions. The Metro Council adopts the recommended action or refers it back to JPACT with a recommendation for amendment.

**Project website:** [oregonmetro.gov/rtp](https://oregonmetro.gov/rtp)

The preparation of this report was financed in part by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. The opinions, findings and conclusions expressed in this report are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration

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## PURPOSE AND BACKGROUND

### Purpose

This report summarizes the results of the third online public survey for the 2023 Regional Transportation Plan (RTP). The input will help decision makers and project staff prioritize investments and finalize the RTP project list to address regional transportation needs.

### Background

The RTP is the state and federally required long-range transportation plan for the Portland metropolitan area. The plan sets regional transportation policy that guides local and regional planning and investment decisions to meet the transportation needs of the people who live, work and travel in greater Portland – today and in the future.

Metro is the regional government responsible for regional land use and transportation planning under state law and the federally designated metropolitan planning organization (MPO) for the Portland metropolitan area. As the federally designated MPO, Metro coordinates updates to the Regional Transportation Plan every five years.

Under federal law, the next update is due by Dec. 6, 2023, when the current plan expires. Providing continued compliance with federal planning regulations, ensures continued federal transportation funding eligibility for projects and programs in the region.

The 2023 RTP, adopted by the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council, will provide an updated policy foundation that guides future planning and investment in the region's transportation system. The updated plan will address regional challenges and areas of focus identified during the scoping phase.



Find out more about the 2023 RTP at [oregonmetro.gov/rtp](https://oregonmetro.gov/rtp)

## OPPORTUNITIES TO PARTICIPATE

### Online Survey

The online survey was available from April 5 to May 1, 2023. The survey was promoted through Metro’s social media platforms, Metro stakeholder lists including the transportation interested parties list, the Transportation Policy Alternatives Committee (TPAC), Metropolitan Technical Advisory Committee (MTAC), and Joint Policy Advisory Committee on Transportation (JPACT) interested parties list. The survey was shared with community-based organizations and offices of public involvement at city and county agencies throughout the region. Email notifications also included sample promotional text to support partners in getting the word out.

### In-Person Public Forums

During the survey comment period, Metro partnered with the Community Engagement Liaisons (CELs) Program to provide four language-specific, in-person project forums, which included community members from Russian, Vietnamese, Chinese, and Spanish-speaking communities. The forums engaged participants in questions similar to those in the online survey. The forums are summarized under a separate cover.



## SURVEY CONTENT

Survey participants were asked to share their input and feedback about priority goals and transportation investments throughout the greater Portland area, focusing on what is most important in the next five to ten years. Participants were informed that public input from the survey would be shared with Metro Council and other regional decision makers to help guide transportation investments.

The survey consisted of five sections focused on the following topics:

- An **introduction** informed survey participants about the RTP update.
- A section about **goals** provided participants with the opportunity to learn about five long term goals for the region and provide feedback about how those goals should be prioritized.
- An **investment priorities** section asked participants to provide feedback on the importance of eight categories of transportation investments and a total of 41 subcategories, using a one-to-five star rating system.
- A **project priorities** section provided participants with an interactive map that included the projects included on the draft RTP list. Participants were asked to click on projects on the list to learn more about them and indicate whether they thought a specific project was a priority.
- The final section asked participants to **tell us a little about themselves** through some optional demographic questions.

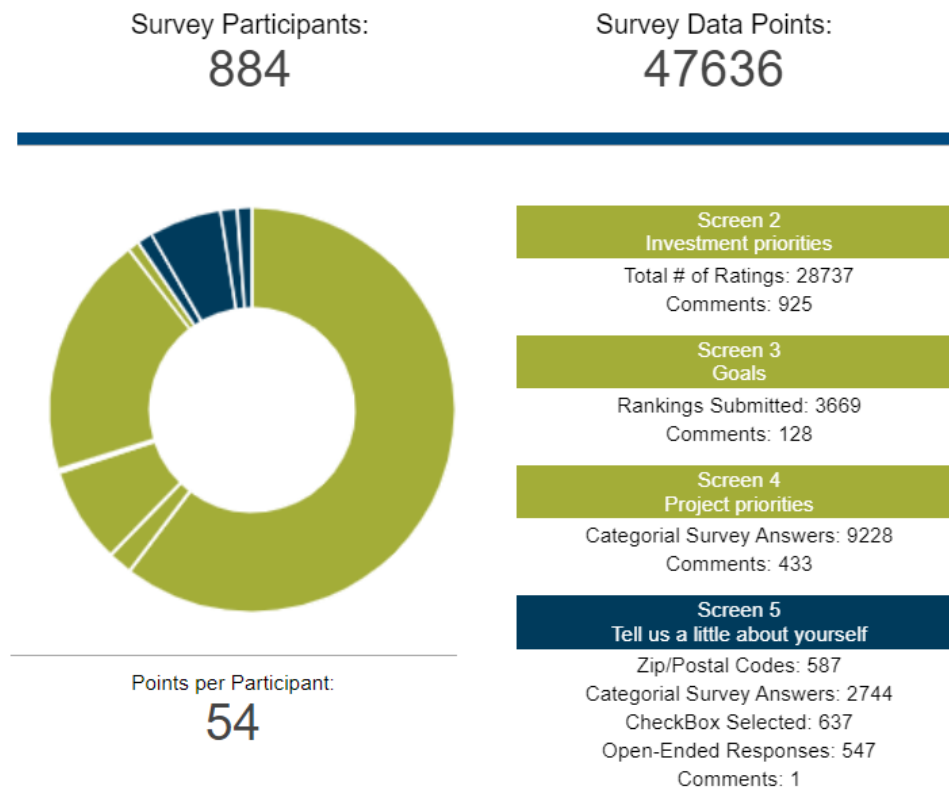
The survey also provided participants opportunities to share open-ended comments throughout all five sections.

## **NEXT STEPS**

Input from this engagement will be shared with regional decision makers as they work together to refine the draft 2023 RTP for adoption in November 2023. The public comment draft of the 2023 RTP will be available in July and August.

## SUMMARY OF SURVEY RESULTS

There were 884 people who participated in the survey. This report summarizes the results of the survey by topic area. This input will be considered alongside the results of other community engagement activities.



**Figure 1: Survey Participation Dashboard**

The survey included five screens that participants were able to engage with. The first screen was an introduction to the project and the purpose of the survey. The second screen described the long term goals that are guiding the regional transportation policy. The third screen provided a list of near term investment categories. The fourth screen included an interactive map with all of the projects on the draft project list. The last screen asked participants a few questions about demographics.

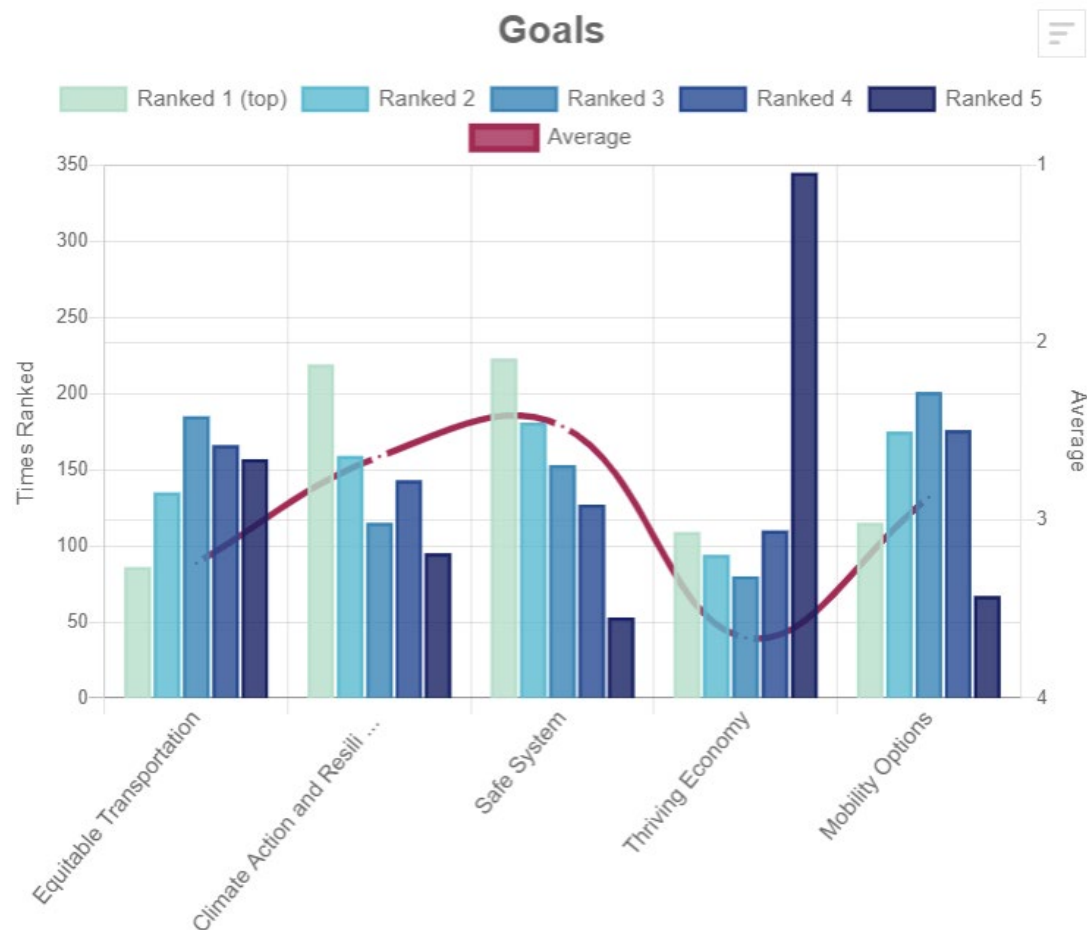
Participants were able to move through the screens freely and choose which sections of the survey they wanted to respond to. Each screen had a high level of engagement across all question options. A summary of survey results by topic is included in the next section.

## Goals

Participants were asked to rank the five draft 2023 RTP goals in order of priority near-term transportation investments. One indicated the goal is a top priority for near term investments and five indicated it is a lower priority for near-term investments.

Among survey participants the most important goals in the near term, by average ranking, are: 1) safe system, 2) climate action and resilience 3) mobility options, 4) equitable transportation and 5) thriving economy.

**Figure 2. Goals distribution of responses across all five goals.**



## Safe System

**Goal: Traffic deaths and serious crashes are eliminated, and all people are safe and secure when traveling in the region.**

**A safe system was most frequently ranked as the top goal** by survey participants, with 223 participants ranking it as their top priority and only 53 participants ranking it as their lowest priority.

**Table 1: Safe System Goal Ranking Distribution**

Rank	Number of responses
Ranked 1 (top)	223
Ranked 2	181
Ranked 3	153
Ranked 4	127
Ranked 5	53

Safety concerns were the prominent theme that emerged from community members' comments about transportation priorities. Participant comments emphasized prioritizing safety, improving infrastructure for alternative modes of transportation, and addressing various issues to create a safer and more inclusive transportation system.

Most commenters specifically mentioned safety concerns related to their mode of travel and supportive infrastructure like signage, protected lanes, visibility at crosswalks, etc.

*“Current bike infrastructure does not encourage new riders who feel unsafe. Improve, enhance, and expand safe bike infrastructure. Make bus routes safe and welcoming for pedestrians.”*

*“Safety is job one. Pedestrians, especially in East Portland, need help.”*

*“Safety is the no. 1 concern keeping many from biking. We need more than paint. Protected lanes using anything from street parking as a buffer to plantings between driving lanes and bike lanes. More traffic calming.”*

Some commenters also mentioned concerns about personal safety on transit related to increased security personnel, fare enforcement, and criminal activity near transit infrastructure.

*“You absolutely need to staff the green and blue MAX with one security guard per train to keep people from smoking meth and fentanyl on it. That's why I started reluctantly using my car. My son is six. They don't even kick the person off until a major hub.”*

## Climate Action and Resilience

**Goal: People, communities, and ecosystems are protected, healthier and more resilient and carbon emissions and other pollution are substantially reduced as more people travel by transit, walking, and bicycling and people travel shorter distances to get where they need to go.**

**Table 2: Climate Action and Resilience Goal Ranking Distribution**

<i>Rank</i>	<i>Number of responses</i>
<i>Ranked 1 (top)</i>	219
<i>Ranked 2</i>	159
<i>Ranked 3</i>	115
<i>Ranked 4</i>	143
<i>Ranked 5</i>	95

**Climate Action and Resilience was the second highest priority goal**, with 219 participants ranking it as their top priority and 95 ranking it as their lowest priority.

In the comments for this goal, survey participants emphasized the importance of sustainable, equitable, and safe transportation options that prioritize community well-being, reduce pollution, and enhance the overall quality of life.

*“Less dependence on gas, less catering to automobiles, more investment in neighborhood transportation (pedestrian access, bike infrastructure, cheap busses/rail).”*

*“This has to be our #1 priority. And commerce doesn't have to suffer. For example, Tokyo banned dirty-diesel vehicles in 2000. Transformed the city. Owners of diesel vehicles adjusted.”*

*“Walking and biking are the two most environmentally friendly modes. We need more infrastructure to make them serious, competitive alternatives to driving. This means making our bike infrastructure visible and direct, such as protected lanes along major corridors like Sandy and 82nd.”*

## Mobility Options

**Goal: People and businesses can reach the jobs, goods, services, and opportunities they need by well-connected, low-carbon travel options that are safe, affordable, convenient, reliable, efficient, accessible, and welcoming.**

**Table 3: Mobility options Goal Ranking Distribution**

<i>Rank</i>	<i>Number of responses</i>
<i>Ranked 1 (top)</i>	115



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Ranked 2	175
Ranked 3	201
Ranked 4	176
Ranked 5	67

**Mobility Options was ranked as the third highest priority.** There were 115 participants who rated Mobility Options as their top priority and 67 participants ranked it as their lowest priority.

Overall, the mobility options goal was the third highest ranked goal by survey respondents. Respondents emphasized in the comments the importance of investing in a multimodal transportation system that prioritizes safety, accessibility, sustainability, and equity while providing viable alternatives to car dependency.

*“Portland has a MASSIVE issue with accessible sidewalks. I can go blocks and blocks without seeing a sidewalk with a sloping grade so folks using wheelchairs can cross the street. All busses and rails*

*should have the ability to accommodate passengers with wheelchairs. Additionally, infrastructure for folks with vision impairments (braille signs at cross walks, braille on bus route maps, etc.)”*

*“Well-connected is the key.”*

## Equitable Transportation

**Goal: Transportation system disparities experienced by Black, Indigenous and people of color and people with low incomes, are eliminated. The disproportionate barriers people of color, people with low incomes, people with disabilities, older adults, youth, and other marginalized communities face in meeting their travel needs are removed.**

**Table 4: Equitable Transportation Goal Ranking Distribution**

Rank	Number of responses
Ranked 1 (top)	86
Ranked 2	135
Ranked 3	185
Ranked 4	166
Ranked 5	157

Equitable transportation was chosen as a top priority by 86 survey participants while 157 participants ranked it as the lowest priority. Overall participants' comments in this section were focused on equity, affordability, and accessibility in transportation planning,

with an emphasis on providing alternatives to car-dependent lifestyles and ensuring that transportation options are safe, efficient, and inclusive for all members of the community.

*“I only put this 3rd because safe, robust active and public transportation is equitable transportation, given that the cost of driving is prohibitive and poverty-inducing for many Portlanders. Having safe, efficient, convenient and comfortable alternatives would give them the ability to save money and still travel with dignity. It would also reduce air pollution levels in many of the areas with higher rates of BIPOC and low-income Portlanders by reducing VMT.”*

*“Improved access to services for persons with disabilities. As someone who has a partner who cannot drive due to a visual impairment I'm familiar with the issues that come with relying on public transit as your only means for travel and how disruptive it can be to have to take a full day off for one appointment because of the time it takes to travel on public transit.”*

## Thriving Economy

**Goal: Centers, ports, industrial areas, employment areas and other regional destinations are accessible through a variety of multimodal connections that help people, communities, and businesses thrive and prosper.**

**Thriving Economy rankings were very similar to Mobility options** with 109 participants who ranked it as their top priority and 67 participants who ranked it as their lowest priority.

The key takeaway from the comments are the need to create a transportation system that supports economic growth, promotes sustainable alternatives to car-dependent lifestyles, enhances access to job centers, and prioritizes the well-being and prosperity of communities and businesses in the Portland area.

*“A thriving economy will develop out of green, active, safe transportation systems, but green, active, safe transportation systems will not necessarily result from a thriving economy.”*

*“Focusing on people over moving cars is one of the best ways you can create wealth from our streets. Close streets to cars, lower speeds, build protected bike lanes and fill sidewalk gaps. Get people into the community and out of their car.”*

**Table 5: Thriving Economy Goal Ranking Distribution**

Rank	Number of responses
Ranked 1 (top)	109
Ranked 2	94
Ranked 3	80
Ranked 4	110
Ranked 5	345

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A crosstabs analysis was completed for all the data in the goals section to identify any differences in responses by county and by race/ethnicity. The analysis concluded that there were **no noticeable differences in rankings for survey participants in Washington, Multnomah & Clackamas County.**

When the data was filtered by participants **who identified as a race or ethnicity other than or in addition to white, they also ranked the goals priorities similarly to the whole participant population** with a safe system being the highest priority followed by climate action and resilience, mobility options, thriving economy and finally equitable transportation.

## Investment Priorities

Participants were asked to rate the importance of different types of investments within eight investment categories. Using a star rating system, respondents were able to rate a variety of types of investments under each investment category with up to five stars. Five stars indicated that the investment was very important and one star that it was not very important.

The investment categories are listed below, ordered by the category that received the highest level of interaction to the category that received the lowest level of interaction. Under each category is listed the top three priorities for that investment category, as indicated by survey participant ratings.

### **Maintenance (4,632 interactions)**

1. Fix potholes and pavement
2. Clean bike lanes
3. Transit vehicles in good repair

### **Transit Capital (4,227 interactions)**

1. Faster, more reliable buses
2. Transit oriented development
3. More MAX

### **Walking and biking (3,583 interactions)**

1. Walk and bike connections
2. Protected bike lanes and pedestrian facilities
3. Road crossings

### **Transit service and operations (3,476 interactions)**

1. More frequent bus and MAX
2. Increased bus service coverage
3. Zero emissions vehicles and infrastructure

### **Roads and bridges (3,419 interactions)**

1. Complete streets for all users

2. Main street retrofits
3. Dedicated lanes

## **Throughways (3,377 interactions)**

1. Roadway pricing
2. Incident response
3. Freeway capacity

## **Freight access (2,643 interactions)**

1. Intersection designs
2. Road and railroad crossing upgrades
3. Freight rail upgrades

## **Information and technology (3,380 interactions)**

1. Transit reduced fare programs
2. Traffic signals
3. Transportation option programs

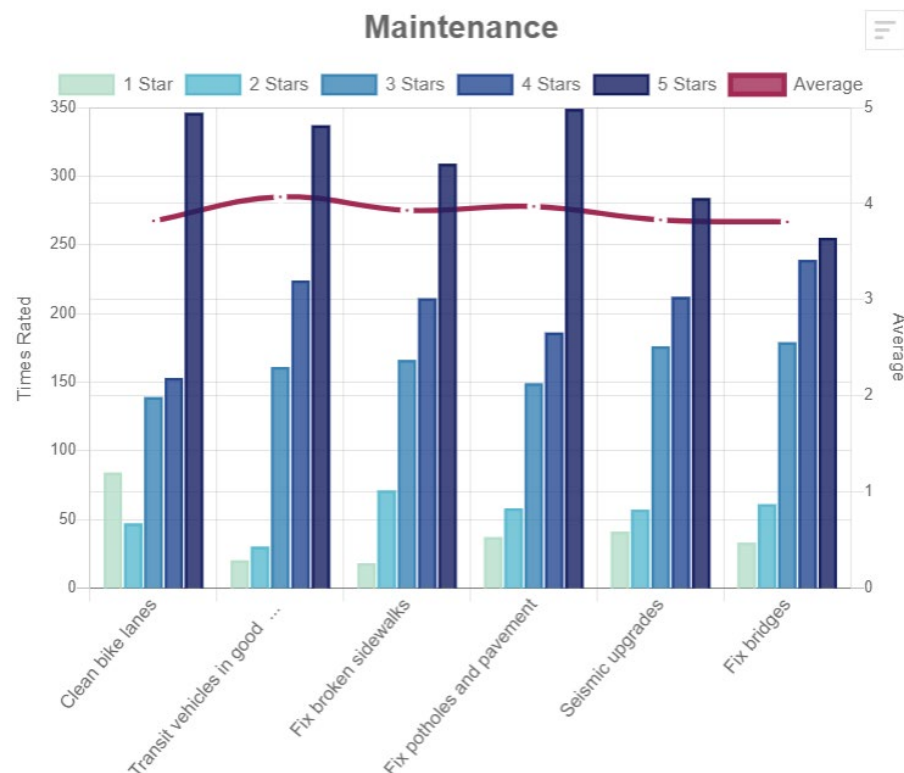
## **Maintenance**

About 42% of the operations and maintenance spending in the constrained project list is dedicated to keeping the transportation system in good repair. This includes investments such as clean bike lanes, transit vehicles in good repair, fixing broken sidewalks, fixing potholes and pavement, seismic upgrades, and fixing bridges.

Maintenance received the highest level of engagement with 4,632 interactions. Of the subcategories, the top three highest rated priorities were:

- Fix potholes and pavement (349 five-star ratings)
- Clean bike lanes (346 five-star ratings)
- Transit vehicles in good repair (337 five-star ratings).

**Figure 4: Maintenance Investment Priority Ranking Distribution**



Many participants commented on the necessity of having clean bike lanes both as a usability issue as well as a safety issue.

*“Bike lanes often become a gutter for leaves, trash, broken glass, and gravel. Having bike lanes that aren’t well maintained essentially equates to not having them at all if we can’t use them.”*

*“Keeps bicyclists from getting flats and having debris flung in their face. Also beneficial to drivers and transit because it keeps bikes from having to use the roadway to dodge debris”*

There were also many comments on potholes that specifically mentioned the need to prioritize pothole repairs on transit streets or multi-modal roads.

*“Stop building and fixing expensive roads for cars, build more streets for transit and pedestrians instead. The maintenance costs are much lower. Making the roads more attractive to drivers just induces additional demand.”*

*“This should be prioritized only on bus routes. It shouldn’t be prioritized as much on solely car routes.”*

Participants who commented on the need for transit vehicles being in good repair, frequently specified the need for safe vehicles and a desire to see more fuel-efficient vehicles.

*“Citizens deserve the best transit vehicles that are safe for all users, clean and available”*

*“Converting the fleet to EVs should be a higher priority than continuing to maintain diesel buses”*

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A majority of respondents from Multnomah County gave five-star ratings to all Maintenance categories, indicating maintenance is a high priority investment. Clean bike lanes received the highest rating.

On average, Clackamas County respondents rated maintenance between three and five stars. The top three categories identified were: fix potholes and pavement, fix bridges, and seismic upgrades. Clean bike lanes received the least amount of support with the least amount of five stars and the most amount of one stars.

Washington County respondents assigned lower ratings to maintenance categories compared to respondents from Clackamas and Multnomah Counties, mostly ranging from three to four stars. The top-rated category was fix potholes and pavement, while clean bike lanes consistently received one to three stars.

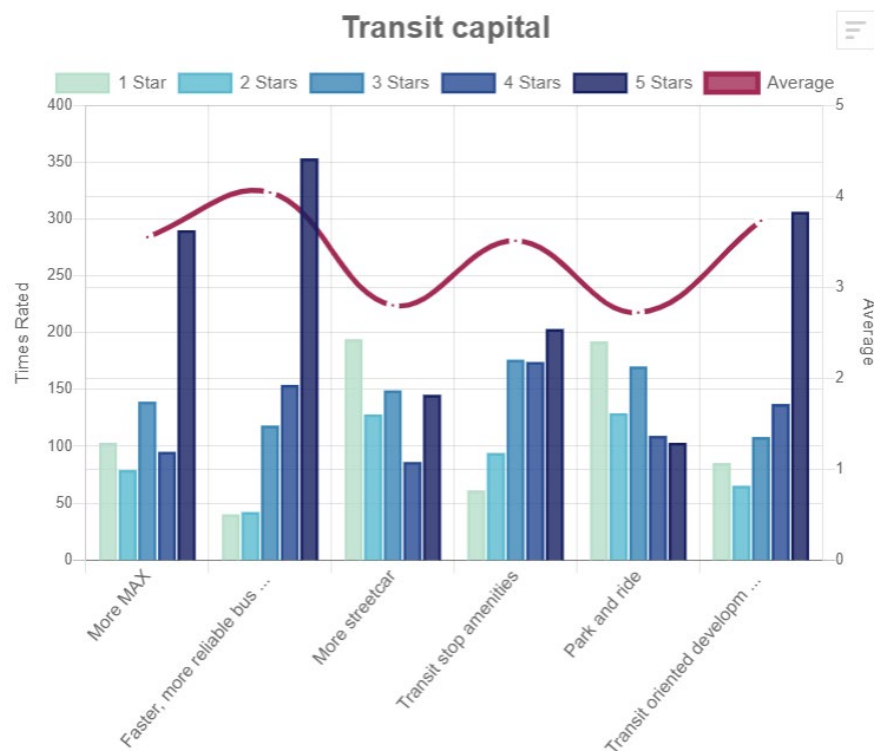
Participants who identified as a race or ethnicity other than or in addition to white rated maintenance categories similarly to all respondents. Clean bike lanes was the highest priority with 46% rating it with five stars compared to 45% of respondents of all races and ethnicities.

## **Transit capital**

About 11% of the capital spending in the constrained project list is dedicated to building transit projects. This includes adding more MAX light rail, faster, more reliable buses, adding more streetcar, adding transit stop amenities, additional park and ride facilities at transit stops, investing in transit-oriented development.



**Figure 6: Transit Capital Investment Priority Ranking Distribution**



Transit Capital received the second highest level of engagement with 4,227 interactions. Of the subcategories, the top three highest rated priorities were:

- Faster, more reliable buses (353 five-star ratings)
- Transit oriented development (306 five-star ratings)
- More MAX (290 five-star ratings)

Participants who commented on topics in the transit capital section were generally in favor of transit related investments that would improve frequency and reliability.

*“Expanding the rose lane project for the busiest lines speeds up service and makes the bus more appealing”*

*“Give buses uninterrupted dedicated lanes on both surface roads and freeways to create a network of express buses bus lanes on TV highway, Beaverton Hillsdale, Scholls Ferry Road, Highway 26, I-5, I-205. Make the bus the fastest way to get around. Also incorporate better methods to bring a bike onto the bus. Bus bike racks currently cannot fit most fat tire e bikes”*

*“I love the MAX, but dedicated BRT lines are flexible, cost-efficient, and quick to roll out.”*

There were a lot of comments and mixed opinions from participants about MAX light rail. While some are very supportive of MAX system expansion, some suggested that it is not the most cost effective or appropriate option. Many expressed a need for more suburban area and SW Portland to be connected to the MAX system.

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*“I don't think light rail is a cost-effective use of public dollars. It is very expensive, limited in service area, and does not adapt to changes in development, usage pattern, and can't be rerouted. I'd prefer to see more bus routes and better frequency on those routes. I think Bus Rapid Transit is a much better alternative than Light Rail.”*

*“I strongly support MAX investment that will expand service area and get people out of cars. Less support for MAX upgrades since the system is concentrated inequitably”*

*“MAX is great, and it can be even better by expanding lines to suburban communities and provide a rapid transit option to the neighborhoods that need transit service.”*

Multnomah respondents generally ranked priorities similarly to all participants, but park and rides were, on average, less of a priority for Multnomah respondents than respondents from Clackamas and Washington Counties.

Clackamas County respondents generally ranked priorities similarly to all participants, but a strong majority gave a one-star rating to more streetcar investments.

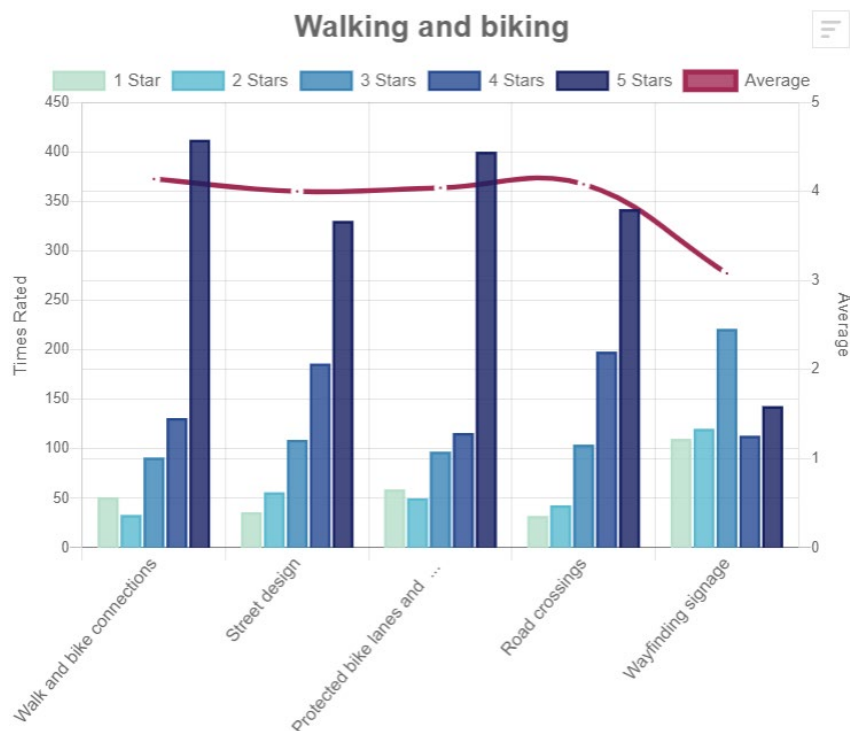
The top two categories for Washington County respondents were transit oriented development and more MAX. Similar to Clackamas County, a strong majority gave a one-star rating to more streetcar.

There were no noticeable differences in ratings for survey respondents who identified as a race or ethnicity other than or in addition to white.

## **Walking and Biking**

About 12% of the capital spending in the constrained project list is dedicated to building walking and biking projects. This includes pedestrian and bike connections, street design, protected bike lanes and pedestrian facilities, road crossings, and wayfinding signage.

**Figure 5: Walking and Biking Investment Priority Ranking Distribution**



Walking and biking received 3,583 interactions. Of the subcategories, the top three highest rated priorities were:

- Walk and bike connections (412 five-star ratings)
- Protected bike lanes and pedestrian facilities (400 five-star ratings)
- Road crossings (342 five-star ratings).

Participant comments emphasized the need for protected lanes, connectivity, and better signs and signals. Several commentators suggested that these investments would improve safety and encourage more people to walk and bike.

“More people would bike if they thought it was safe, and biking is zero emissions! Please create more real infrastructure for bikes and remember, paint is not infrastructure!”

“Protected bike lanes should be the standard. Pedestrian facilities are also sorely needed.”

“This is the single biggest need in this city, especially as e-bikes are starting to show evidence of helping replace car trips. If it passes, the e-bike bill will provide access, and this piece of the puzzle will take care of the safety aspect to really shift modes towards biking.”

“Install automatic bicycle and pedestrian detection systems that minimize pedestrian and bicycle wait times and change right after they approach the crossing. If it is raining outside, peds and bikes get soaked waiting 5min for an outdated, unintelligent signal to change for them. Let motorists wait a bit longer in their insulated vehicles to prioritize the comfort of more vulnerable road users.”

“Street diets and slowing traffic should be priority number one. Speed kills. Let’s protect our bikers and walkers.”

There were no noticeable differences in ratings for survey participants in Washington, Multnomah & Clackamas County.

Survey participants who identified as a race or ethnicity other than or in addition to white generally rated priorities in a similar manner to respondents who identify as white only.

## Transit Service and Operations

About 58% of the operations and maintenance spending in the constrained project list is dedicated to transit service and operations projects. This includes implementing initiatives such as increasing the frequency of bus and MAX (light rail) services, expanding the coverage of bus services to reach more areas, providing special transit services to cater to specific needs, investing in zero emissions vehicles and infrastructure, and improving transit rider information to enhance the overall user experience.

**Figure 7: Transit Service and Operations Investment Priority Ranking Distribution**



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Transit service and operations received 3,476 interactions. Of the subcategories, the top three highest rated priorities were:

- More frequent bus and MAX (352 five-star ratings)
- Increased bus service coverage (295 five-star ratings)
- Zero emissions vehicles and infrastructure (238 five-star ratings).

Many comments in this section expressed support for more frequent service and more bus service in areas that are currently underserved.

*“Current bus headways can dissuade transit usage as wait times are far too long. Additionally, MAX headways can become uncomfortably long during service disruptions. Increasing headways and constructing new projects with signaling to accommodate more frequent trains should be a priority.”*

*“Frequent transit makes the system more rider-friendly.”*

*“Induced demand works for bus and trains too, the more trains and the nicer and faster and more convenient the experience, the more people will want to ride the train”*

*“Bus coverage is lacking particularly lacking in SW Portland and in communities west of the SW hills.”*

There were no noticeable differences in ratings for survey participants in Multnomah County and Washington County.

Clackamas County rated increased bus service higher than more frequent bus and MAX and rated special transit services higher than all respondents. Respondents also gave zero emissions vehicles and infrastructure one-star ratings more consistently than all respondents.

Survey participants who identified as a race or ethnicity other than or in addition to white generally ranked priorities in a similar manner however there were more five-star ratings for special transit services.

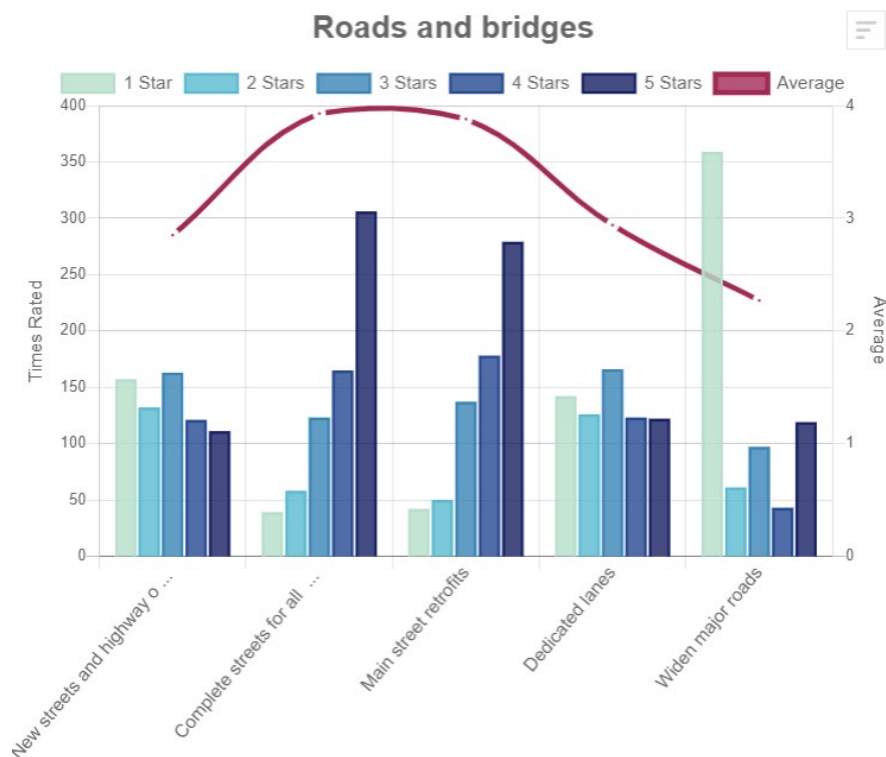
## Roads and Bridges

About 31% of the capital spending in the constrained project list is dedicated to building roads and bridges. This includes the development of new streets and highway overcrossings, completion of streets for all users, main street retrofits, creation of dedicated lanes for specific modes of transportation, and the widening of major roads.

Roads and bridges received 3,419 responses. Of the subcategories, the top three highest rated priorities were:

- Complete streets for all users (306 five-star ratings)
- Main street retrofits (279 five-star ratings)
- Dedicated lanes (122 five-star ratings)

**Figure 8: Roads and Bridges Investment Priority Ranking Distribution**



Widen major roads was the sub category that had the most engagement and also received a significant majority of one-star ratings. This category also received a large number of comments specifically mentioning opposition for widening roads in all cases.

*“Major roads should have less lanes and change that ROW to expand walkability and roll/bike ability.”*

*“Road widening projects are expensive and unnecessary. The only time a road should be widened is to improve accessibility, safety, and travel times for non-driving modes.”*

*“Widened roads make neighborhoods less vibrant, discourage or eliminate pedestrian activity, encourage speeding, and lead to more injuries and deaths for pedestrians, cyclists, and drivers. This is the opposite of what we should be doing.”*

*“We need to stop widening roads and freeways. Period. All of the funding from existing programmed road widening projects, including 217, 205, I-5, the Sunrise Corridor, and the roadway expansion projects in the suburbs, such as around Tigard and Wilsonville, need to be ended now so those funds are not wasted and can be re-purposed to building out our bicycle, pedestrian, and transit networks. We're in a climate crisis and we need to act like it.”*

Clackamas County ranked Complete streets for all users as their highest investment priority, while all other investment priorities were relatively evenly rated.

Multnomah County respondents generally ranked priorities similarly to all participants with a significant majority of respondents giving Widen major roads a one-star rating.

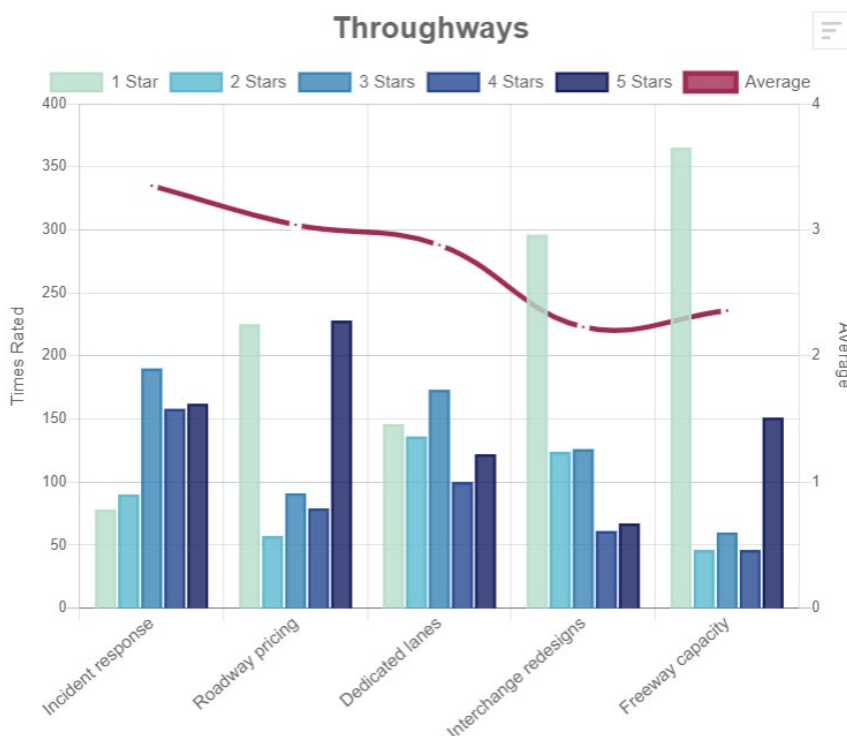
In Washington County, most respondents gave widen major roads a one-star rating as well. The highest five-star rating was assigned to main street retrofits.

Survey participants who identified as a race or ethnicity other than or in addition to white generally rated priorities in a similar manner.

## Throughways

About 19% of the capital spending in the constrained project list is dedicated to throughways (not including the I-5 Interstate Bridge Replacement Program). This includes increased incident response, implementation of roadway pricing, creation of dedicated lanes, interchange redesigns, and increased freeway capacity.

**Figure 9: Throughways Investment Priority Ranking Distribution**



Throughways received 3,377 interactions. Of the subcategories, the top three highest rated priorities were:

- Roadway pricing (228 five-star ratings)
- Incident response (162 five-star ratings)
- Freeway capacity (151 five-star ratings)



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Many of the Throughways subcategories received strong majorities of low ratings as well, expressing investment priorities that are opposed by many respondents. These subcategories were:

- Freeway capacity (363 one-star ratings)
- Interchange redesign (295 one-star ratings)
- Roadway pricing (223 one-star ratings)

Roadway pricing notably received an almost equal amount of one-star and five-star ratings, splitting opinions between strong agreement and strong disagreement.

*“Congestion pricing works, but only in regions with transit times that compete with driving. If congestion pricing or tolls are implemented, they should not fund road expansions. They should fund existing road maintenance, transit, walking, and biking infrastructure”*

*“I would like to see a real plan on how to counteract the negative economic impact of these ideas for low income disadvantaged & underserved communities. Until public transit is free, the cost of this is a real issue”*

*“Oregonians already pay the highest taxes in the country. We should not be penalized for operating in a city with a lacking public transportation system. How about actually tax rich people?”*

Many respondents in Clackamas County rated roadway pricing with one-star. Like most respondents, they were divided in their opinions on freeway capacity with an equal number of one-star and five-star ratings.

In Multnomah County, there was a significant majority of respondents who rated freeway capacity with one star, making it the least rated category. Roadway pricing emerged as the category with the highest number of five-star ratings.

*“Do NOT expand the freeways with more lanes. This encourages more car use instead of encouraging alternative methods of transit!”*

*“Please don't widen freeways. This only induces demand and creates maintenance liabilities for future generations. Widening freeways has never solved traffic problems.*

*“We all know about induced demand. Widening freeways (that includes so called auxiliary lanes) is hugely expensive and doesn't solve any problems. The only solution to road congestion is practical alternatives like transit and biking.”*

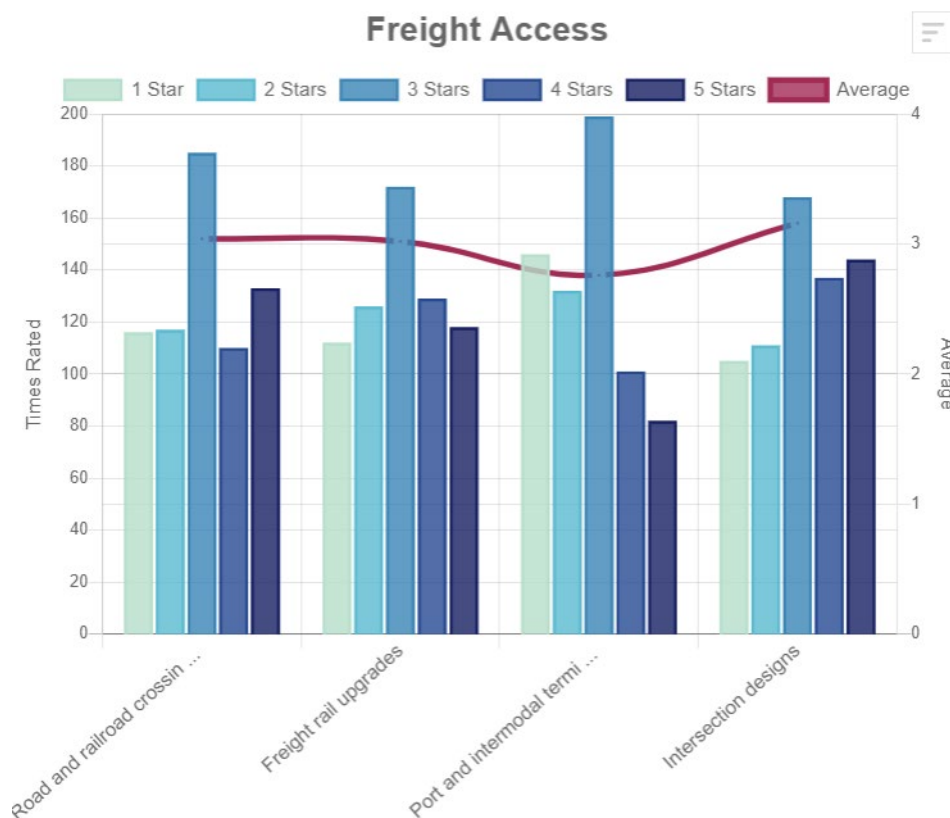
In Washington County, there were strong majorities of respondents giving one-star ratings to roadway pricing, interchange design, and freeway capacity. Additionally, there was a split among respondents, with an almost equal number of five-star ratings assigned to freeway capacity.

Survey participants who identified as a race or ethnicity other than or in addition to white generally ranked priorities in a similar manner however there were more five-star ratings for roadway pricing.

## Freight Access

About 2% of the capital spending in the constrained project list is dedicated to freight access. This includes upgrading road and railroad crossings, freight rail upgrades, improvements to port and intermodal terminal access, and improved intersection designs.

**Figure 10: Freight Access Investment Priority Distribution**



Freight access had the lowest level of engagement amongst all categories with 2,643 interactions. Of the subcategories, the top three highest rated priorities were:

- Intersection designs (144 five-star ratings)
- Road and railroad crossing upgrades (133 five-star ratings)
- Freight rail upgrades (118 five-star ratings)

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Respondents who commented on Freight Access frequently stated concerns about safety, specifically when trains or trucks are sharing space with other transportation modes.

*“Support wide turns for freight but not at the expense of active transportation users. Use different tools like curb extensions with mountable truck aprons to accommodate trucks without disregarding vulnerable road users”*

*“I would hope that freight is generally on a separated network from active transit modes.”*

A few commenters mentioned concern about the impact that at-grade crossings have on traffic delays.

*“SE 12th Avenue at Division is blocked a lot because of freight trains. The MAX doesn’t close the street much but I have gotten stuck for over an hour waiting for a freight train to move.”*

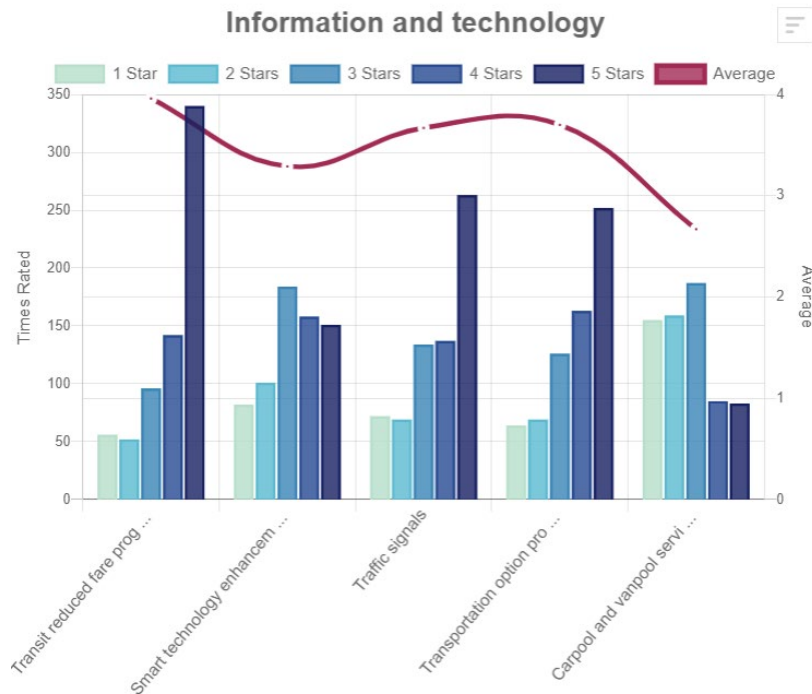
There were no noticeable differences in rankings for survey respondents in Multnomah County and Washington County. Clackamas County residents, however, rated port and intermodal terminal access improvements slightly higher, with more four- or five-star rankings than all respondents.

Survey participants who identified as a race or ethnicity other than or in addition to white generally rated priorities in a similar manner.

## **Information Technology**

About 2% of the capital spending in the constrained project list is dedicated to information and technology projects and programs. This includes reduced transit fare programs, smart technology enhancements, improved traffic signals, transportation option programs and increases carpool and vanpool services.

**Figure 11: Information Technology Investment Priority Ranking Distribution**



Information and technology received 3,380 interactions. Of the subcategories, the top three highest rated priorities were:

- Transit reduced fare programs (340 five-star ratings)
- Traffic signals (263 five-star ratings)
- Transportation option programs (252 five-star ratings)

Commenters frequently expressed support for free transit and the return of Fareless Square.

*“Bring back the Fareless Square! Make the Streetcar cost-effective and free in the Fareless Square also.”*

*“Honestly, TriMet needs to be free. I’d like to see a real plan developed of how we could get there, if we really want to get more cars off the road this is what it will take”*

*“Transit should be a human right and free for all to access. Until then, this is a good start.”*

Participants who commented on traffic signals specifically mentioned the importance of using signal technology to prioritize people walking, biking, or using mobility devices.

*“Not sure about buses and freight trucks. The focus should be people walking, rolling and bicycling so they spend less time waiting.”*

*“Yes! Waiting forever for a crossing signal discourages walking to your destination and encourages more vehicles on the road. You cannot prioritize cars on the road and expect less of them to be there”*

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Several comments about transportation options mentioned programs to support children getting to and from school.

*“Implement a regional 'bike bus' program to incentivize kids to bike and walk to school. The bike bus has seen success at Alameda Elementary in Portland and could be spread across the region.”*

There were no significant differences in rankings among survey respondents from Multnomah County and Washington County. Clackamas County residents generally ranked priorities similarly; however, they gave slightly lower ratings to Traffic signals.

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## Project List Priorities

Respondents were asked to review a project map that included about 800 projects on the draft financially constrained 22 year project list. Respondents were able to click on a project to learn more about it, give a thumbs up or thumbs down as to whether they believed that project should be a priority, and they were able to provide comments and feedback on each specific project.

Table 6 provides a list of the 50 projects that received the highest number of thumbs up (yes) votes. The projects in the tables are listed in order of the percentage of yes votes that they received. The table shows the projects with the most consensus of support towards at the top and those with more mixed support at the bottom of the table.

It is important to note that several of the high-profile projects that received many yes votes also received a large number of no votes, decreasing their overall percentage of support. Those projects show up towards the bottom of the table.

**Table 6: Top 50 Priority Projects**

Project name	Yes votes	Yes (%)	No votes	No (%)
Jade & Montavilla Connected Centers Project	43	98%	1	2%
NE Killingsworth St Corridor Safety Improvements	36	97%	1	3%
HCT: 82nd Ave Transit Project	70	97%	2	3%
Inner NE Glisan St Corridor Safety Improvements	37	95%	2	5%
Inner Holgate Blvd Corridor Improvements	49	94%	3	6%
57th/Cully Safety Improvements	30	94%	2	6%
ETC: NE MLK Jr Blvd Enhanced Transit Project	43	93%	3	7%
Broadway/Weidler Corridor Improvements	70	93%	5	7%
North Portland Greenway Segment 5	53	93%	4	7%
Hollywood Town Center Safety Improvements	53	91%	5	9%
OR 8: TV Highway Transit Access and Multimodal Safety	31	91%	3	9%
North Portland Greenway Segment 4	31	91%	3	9%
60th MAX Station Area Improvements	31	91%	3	9%
Post Office Blocks Transportation Improvements, Phase 2	41	91%	4	9%
HCT: Tualatin Valley Highway Transit Project	39	91%	4	9%
Inner E Burnside Corridor Improvements	58	91%	6	9%
Blue Line Station Rehabilitation	38	90%	4	10%
ETC: SE Powell Blvd Transit Project	53	90%	6	10%
Foster Rd Corridor Improvements, Phase 2	52	90%	6	10%
SE Powell Blvd ITS Improvements	34	89%	4	11%
ETC: Inner North Portland Enhanced Transit Corridor Improvements	42	89%	5	11%
82nd Ave Corridor Improvements	42	89%	5	11%

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Springwater Gap Trail	33	89%	4	11%
SW Multnomah Blvd Ped/Bike Improvements, Phase 2	31	89%	4	11%
HCT: Southwest Corridor Engineering and ROW Support	60	88%	8	12%
Central City Multimodal Safety Improvements, Phase 2	49	88%	7	13%
Earthquake Ready Burnside Bridge: Phase 3 (Construction)	48	87%	7	13%
HCT: Steel Bridge Transit Bottleneck Project Development	53	87%	8	13%
Inner Powell Blvd Corridor Improvements: Local Contribution to State-Owned Arterial	52	87%	8	13%
SE 92nd Ave Safety Improvements	31	86%	5	14%
St Johns Connected Centers Project	31	86%	5	14%
HCT: MAX Red Line Improvements Project: Capital Construction	42	86%	7	14%
US 26 Multi-use Path	36	86%	6	14%
ETC: East Burnside/SE Stark Enhanced Transit Project	36	86%	6	14%
I-405 South Portland Crossing Improvements	39	85%	7	15%
ETC: SE Hawthorne/Foster Ave Enhanced Transit Corridor	44	85%	8	15%
Water Ave Corridor Improvements and Realignment	58	84%	11	16%
Inner Milwaukie Streetscape Improvements	35	83%	7	17%
Flanders/Naito Crossing	43	83%	9	17%
ETC: NE Sandy Blvd Enhanced Transit Project	30	81%	7	19%
Upper I-405 Trail	41	80%	10	20%
NE 12th Ave Bridge Replacement	35	80%	9	20%
Killingsworth/Interstate Connected Centers Project, Phase 1	31	79%	8	21%
Fields Park Pedestrian / Bicycle Bridge	42	79%	11	21%
Cesar Chavez Corridor Improvements	30	79%	8	21%
HCT: Portland Streetcar Operational Improvements	34	74%	12	26%
HCT: Streetcar Montgomery Park Extension	41	73%	15	27%
SE Hawthorne Blvd Corridor Safety Improvements	35	73%	13	27%
I-5 Interstate Bridge Replacement Program	37	52%	34	48%
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	31	42%	42	58%



# Summaries of public engagement and agency consultation – Spring 2023

Table 7 shows provides a list of the 50 projects that received the highest number of thumbs down (no) votes, indicating the project is not a priority. The projects in the tables are listed in order of the percentage of no votes that they received. This provides a summary list of the projects that received the most no votes out of the complete project list and shows the projects with the most consensus of opposition towards at the top of the table and those with more mixed support at the bottom of the table.

It is important to note that several projects on the table below received enough no votes to qualify for the inclusion on this table but several of those projects received a high number of yes votes as well, which indicates a higher overall sentiment of support compared to opposition.

**Table 7: Bottom 50 priority projects**

Project Name	No total	No %	Yes total	Yes %
I-205 Southbound and Northbound widening (PE, ROW)	22	81%	5	19%
Going St Connected/Automated Vehicle Connection	12	80%	3	20%
Jackson School Road Traffic Signal	13	76%	4	24%
I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	22	76%	7	24%
I-405 Operational Improvements	30	71%	12	29%
I-5 Southbound Truck Climbing Lane	24	71%	10	29%
I-5 Northbound Braided Ramps I-205 to Nyberg	23	70%	10	30%
I-405 Corridor ITS Improvements	10	67%	5	33%
NW Northrup Traffic Signals	14	64%	8	36%
Water/Yamhill Traffic Signal	14	64%	8	36%
Hwy 99E & I-205 SB Interchange Access	12	63%	7	37%
I-205 / 10th Street Improvements	12	63%	7	37%
I-205 Tolling Project (PE)	16	62%	10	38%
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (PE, NEPA, ROW)	37	60%	25	40%
OR 224 Milwaukie Expressway improvements	13	59%	9	41%
I-5 South Operational Improvements	21	58%	15	42%
OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (PE, ROW)	11	58%	8	42%
OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	19	58%	14	42%
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	42	58%	31	42%
OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	15	56%	12	44%
I-5 Freight Operational Improvements	26	55%	21	45%

# Summaries of public engagement and agency consultation – Spring 2023

Project Name	No total	No %	Yes total	Yes %
North Portal Street Improvements	11	55%	9	45%
I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry - Phase 2	18	55%	15	45%
US 26 (Sunset Highway) Operational Improvements	31	54%	26	46%
Park Avenue Park & Ride	17	53%	15	47%
OR 99E & I-205 NB Interchange Access	10	53%	9	47%
SE Yamhill /Taylor Couplet	13	52%	12	48%
I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	27	50%	27	50%
I-205 Active Traffic Management	16	50%	16	50%
I-5 Interstate Bridge Replacement Program	34	48%	37	52%
I-84 Operational Improvements	16	47%	18	53%
Post Office Blocks Transportation Improvements, Phase 1	15	45%	18	55%
W Burnside St/Rd ITS Improvements	10	43%	13	57%
Passenger Ferry Pilot	13	42%	18	58%
Marine Dr Corridor Safety Improvements	10	40%	15	60%
Southern Triangle Access Improvements	12	39%	19	61%
I-205 Abernethy Bridge (CON)	10	38%	16	62%
Vista Bridge Renovation	12	36%	21	64%
SW Broadway Traffic Improvements	10	36%	18	64%
Interstate-Larrabee Overpass	10	32%	21	68%
Inner W Burnside Corridor Improvements	12	32%	26	68%
W Burnside Corridor Improvements	9	27%	24	73%
SE Hawthorne Blvd Corridor Safety Improvements	13	27%	35	73%
HCT: Streetcar Montgomery Park Extension	15	27%	41	73%
HCT: Portland Streetcar Operational Improvements	12	26%	34	74%
Fields Park Pedestrian / Bicycle Bridge	11	21%	42	79%
NE 12th Ave Bridge Replacement	9	20%	35	80%
Upper I-405 Trail	10	20%	41	80%
Flanders/Naito Crossing	9	17%	43	83%
Water Ave Corridor Improvements and Realignment	11	16%	58	84%

# Summaries of public engagement and agency consultation – Spring 2023

Table 8 provides a list of the projects that received the most comments. High profile regional throughway projects occupied the top five places on this list. Comments are included in Appendix C.

**Table 8: Projects Comments**

Project name	Total Comments
I-5 Interstate Bridge Replacement Program	14
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	8
I-205 Southbound and Northbound widening (PE, ROW)	7
I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	7
I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	7
HCT: MAX Red Line Improvements Project: Capital Construction	5
OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	5
HCT: Streetcar Montgomery Park Extension	5
TV Highway Safe Access to Transit	5
I-5 Northbound Braided Ramps I-205 to Nyberg	5
I-205 Tolling Project (PE)	5
HCT: Tualatin Valley Highway Transit Project	5
French Prairie Bicycle/Pedestrian/Emergency Bridge	4
OR 10: Oleson Rd. Improvement Ph. 1	4
I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry - Phase 2	4
ETC: SE Powell Blvd Transit Project	4
Region-wide safety & Operations Projects: 2023-2030	4
HCT: Southwest Corridor Engineering and ROW Support	4
HCT: Steel Bridge Transit Bottleneck Project Development	4
Outer Taylors Ferry Safety Improvements, Segment 1	3
I-205 Active Traffic Management	3
North Portland Greenway Segment 5	3
OR 212 Intersection Improvements	3
SW Pomona/64th Ped/Bike Improvements	3
122nd Ave Corridor Safety and Transit Improvements	3
Beaverton-Hillsdale Hwy Bike Lanes	3
NE Broadway Corridor Improvements	3
US 26 (Sunset Highway) Operational Improvements	3
OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	3
Tiedeman Ave Complete Street	3
HCT: 82nd Ave Transit Project	3
Inner NE Glisan St Corridor Safety Improvements	3
I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (PE, RW)	3

## Summaries of public engagement and agency consultation – Spring 2023

Capitol Hwy Bridge Seismic Retrofit	3
HCT: 185th Avenue/MAX Grade Separation	3
Boones Ferry Capacity Improvements (TS Rd Intersection)	3

## Demographics

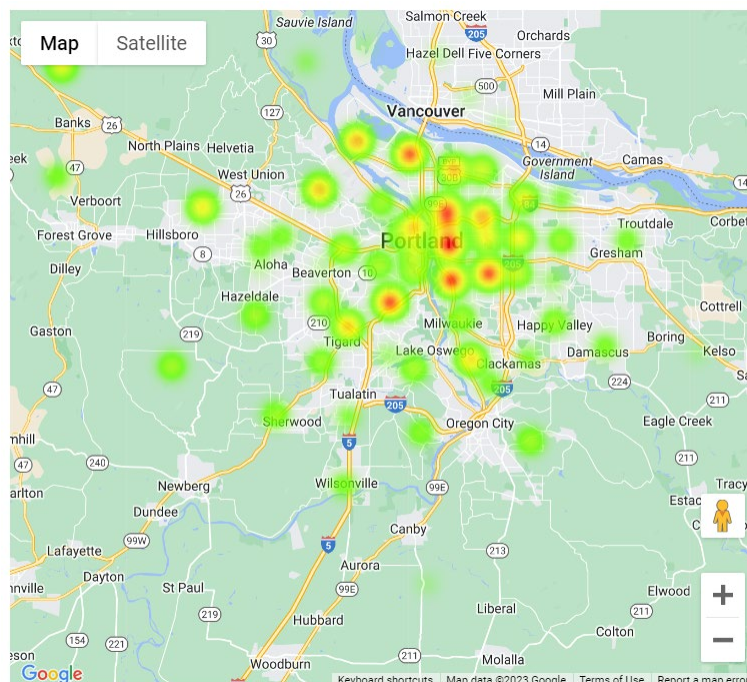
The survey asked participants to share more about themselves through optional demographic questions to determine whether the respondents reflect the region's diverse communities and broad range of experiences.

Metro recognizes that there is typically an opt-in bias that occurs with online engagement opportunities like this one. This often results in an over-representation of people who have the time, comfort, and access to participate. This skews participation toward higher-income people who speak English and have a level of trust in government. Groups that are underrepresented in respondent information by four percent or more are indicated in red.

## Zip code

The survey asked participants to share their zip code. The question gathered 587 responses. People from 78 different zip codes participated in the online tool. The most frequently selected zip codes included 97214, 97202, 97219, 97206, and 97217. Figure 12 showcases the zip code heat map distribution.

**Figure 12: Zip Code Heat Map**



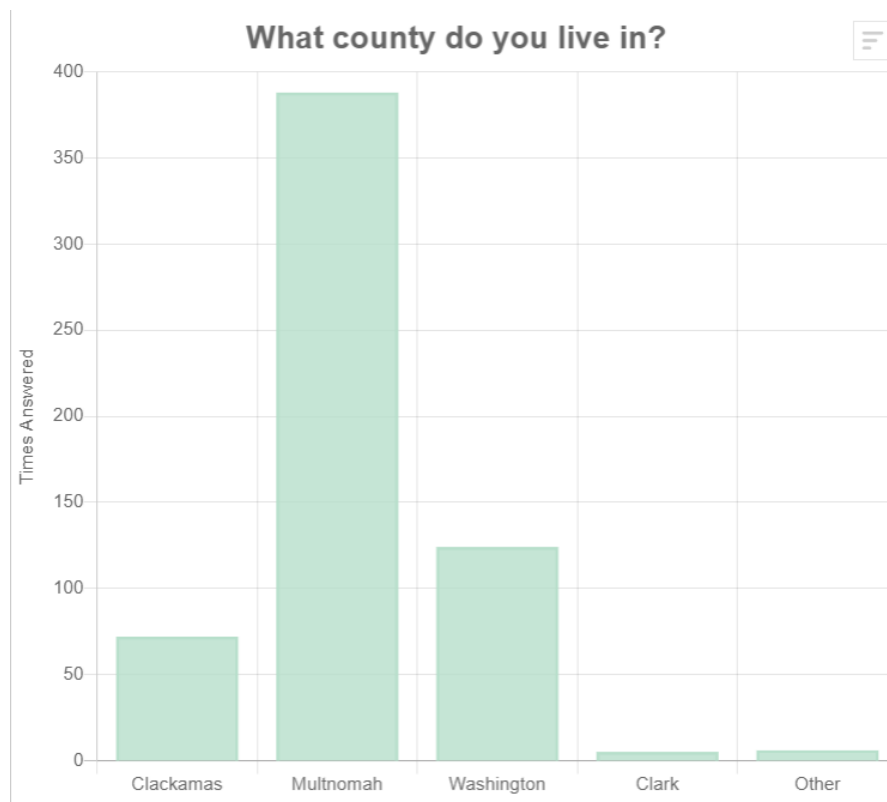
## County

The survey asked participants to share the county they live in. The question gathered 587 responses.

65% of survey participants indicated they live in Multnomah County. Washington County was the second most selected option indicated by 21% of respondents and 12% of respondents indicated that they live in Clackamas County.

**Figure 13. County of survey participants**

## Racial or ethnic identity



The survey asked participants to share their racial or ethnic identity. The question gathered 637 responses.

Compared to the metropolitan Portland area demographic averages, according to the 2020 Census, the survey overrepresents respondents who identify as White, and underrepresents other respondents who identify as people of color (American or Indian/Native American or Alaska Native; Asian or Asian American; Black or African American; Hispanic, Latino or Spanish origin) and Other.

# Summaries of public engagement and agency consultation – Spring 2023

**Table 9: Race or ethnic identity of survey respondents compared to metropolitan Portland Area**

Racial or Ethnic Identity	Survey respondents	Metropolitan Portland area
American or Indian/Native American or Alaska Native	2%	3.4%
Asian or Asian American	4.2%	11.3%
Black or African American	2.3%	5.3%
Hispanic, Latino or Spanish origin	5.1%	13.8%
Pacific Islander	.31%	Data not available
White	72.6%	66.0%
Race/ethnicity not listed	2.2%	Data not available
Prefer not to answer	11%	Data not available

## Annual household income

The survey asked participants to share their annual household income. The question gathered 522 responses. The largest percentage (18.2%) of responses came from participants with a household income of \$200,000 or more. The lowest percentage (4.21%) of responses came from those with a household income of \$180,000 to \$199,999.

**Table 10: Annual household income of survey respondents**

Annual Household Income	Survey Respondents
Under \$19,999	4.41%
\$20,000 to \$39,999	5.94%
\$40,000 to \$59,999	10.54%
\$60,000 to \$79,999	11.69%
\$80,000 to \$99,999	11.30%
\$100,000 to \$119,999	13.79%
\$120,000 to \$139,000	11.3%
\$140,000 to \$159,999	5.36%
\$160,000 to \$179,999	3.26%
\$180,000 to \$199,999	4.21%
\$200,000 or more	18.2%

## Gender

The survey asked participants to share their gender. The question gathered 551 responses.



Roughly 50% of the people who responded to this question self-reported as men. 40% as women, and the remaining 10% self-reported as non-binary or chose not to respond to the survey. Compared to the metropolitan Portland area demographic averages in the 2020 Census, the spread of survey respondents represents a similar distribution of genders. It is worth noting that the census data does not include response data from non-binary or genderqueer individuals, which could explain the difference.

**Table 11: Gender categories of survey respondents compared to metropolitan Portland area**

Gender categories	Survey respondents	Metropolitan Portland area
A gender not listed here	0%	<i>Data not available</i>
Man	49.4%	49.48%
Non-binary, Genderqueer or Third Gender	6.2%	<i>Data not available</i>
Prefer not to respond	5.3%	<i>Data not available</i>
Woman	39.2%	50.52%

As data for all gender categories is not available for the metropolitan Portland area demographic average, groups that are underrepresented in respondent information by 4 percent or more will *not* be indicated in red.

## Disability

The survey asked participants to share if they identify as a person with a disability (including but not limited to vision, hearing, speech, mobility, cognitive, and invisible disabilities). The question gathered 533 responses.

Most survey participants responded that they do not identify as a person with a disability (78.4%) followed by those who do identify as a person with a disability (17.1%) and those who opted not to respond (4.5%)

Metropolitan Portland area demographic averages, according to the 2020 Census, were not readily available for people who identify as a person with a disability.

# Summaries of public engagement and agency consultation – Spring 2023

## Age

The survey participants were asked to share their age. The question gathered 541 responses.

A vast majority of respondents were between the ages of 25 and 74. Compared to the metropolitan Portland area demographic averages, according to the 2020 Census, the spread of survey respondents underrepresents people ages 24 and under and overrepresents people between 35 and 74.

**Table 12. Age categories of total survey respondents compared to metropolitan Portland area**

Age categories	Survey respondents	Metropolitan Portland area
Under 18	1.3%	20.60%
18-24	4.3%	7.93%
25-34	19.4%	16.49%
35-44	27.4%	15.44%
45-54	14.4%	13.22%
55-64	11.3%	11.98%
65-74	13.3%	8.86%
75 and older	6.7%	5.48%
Prefer not to answer	2%	<i>Data not available</i>

# Summaries of public engagement and agency consultation – Spring 2023

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

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May 2023

**APPENDIX A: 2023 REGIONAL TRANSPORTATION PLAN SURVEY #3**

## APPENDIX B: 2023 REGIONAL TRANSPORTATION PLAN SURVEY #3 DATA

**Table 13: Goal Ranking**

<i>Goal</i>	<i>Rank</i>					
	<b>1 (top)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total rankings</b>
<i>Safe System</i>	223	180	153	126	53	735
<i>Climate Action and Resilience</i>	218	158	115	143	95	729
<i>Mobility Options</i>	115	175	200	175	67	732
<i>Thriving Economy</i>	109	94	80	110	343	736
<i>Equitable Transportation</i>	85	135	184	166	157	727

**Table 14: Investment Categories Rating**

<b>Investment Categories</b>						
<b>Row Labels</b>	<b>1 Star</b>	<b>2 Stars</b>	<b>3 Stars</b>	<b>4 Stars</b>	<b>5 Stars</b>	<b>Grand Total</b>
<b>Freight Access</b>	<b>474</b>	<b>484</b>	<b>724</b>	<b>477</b>	<b>472</b>	<b>2631</b>
Freight rail upgrades	111	125	172	129	117	654
Intersection designs	105	110	168	137	142	662
Port and intermodal terminal access improvements	144	132	199	101	81	657
Road and railroad crossing upgrades	114	117	185	110	132	658
<b>Information and technology</b>	<b>428</b>	<b>448</b>	<b>721</b>	<b>683</b>	<b>1085</b>	<b>3365</b>
Carpool and vanpool services	154	158	186	85	83	666
Smart technology enhancements	82	100	182	158	151	673
Traffic signals	72	69	133	137	261	672
Transit reduced fare programs	56	52	95	141	339	683
Transportation option programs	64	69	125	162	251	671
<b>Maintenance</b>	<b>230</b>	<b>320</b>	<b>969</b>	<b>1222</b>	<b>1873</b>	<b>4614</b>
Clean bike lanes	83	47	139	153	344	766
Fix bridges	32	60	179	239	254	764
Fix broken sidewalks	18	70	166	210	308	772
Fix potholes and pavement	37	56	149	185	349	776
Seismic upgrades	41	57	175	212	282	767
Transit vehicles in good repair	19	30	161	223	336	769
<b>Roads and bridges</b>	<b>734</b>	<b>427</b>	<b>684</b>	<b>627</b>	<b>932</b>	<b>3404</b>

# Summaries of public engagement and agency consultation – Spring 2023

Complete streets for all users	39	58	123	162	306	688
Dedicated lanes	141	126	165	123	121	676
Main street retrofits	41	50	137	178	277	683
New streets and highway overcrossings	156	132	162	121	110	681
Widen major roads	357	61	97	43	118	676
<b>Throughways</b>	<b>1104</b>	<b>451</b>	<b>639</b>	<b>443</b>	<b>725</b>	<b>3362</b>
Dedicated lanes	146	135	173	99	121	674
Freeway capacity	363	46	60	46	150	665
Incident response	77	90	189	158	161	675
Interchange redesigns	295	123	126	61	66	671
Roadway pricing	223	57	91	79	227	677
<b>Transit capital</b>	<b>667</b>	<b>536</b>	<b>858</b>	<b>754</b>	<b>1394</b>	<b>4209</b>
Faster, more reliable buses	39	42	118	154	351	704
More MAX	102	79	139	94	289	703
More streetcar	192	128	149	86	144	699
Park and ride	190	128	170	109	103	700
Transit oriented development	84	65	107	137	305	698
Transit stop amenities	60	94	175	174	202	705
<b>Transit service and operations</b>	<b>359</b>	<b>404</b>	<b>752</b>	<b>774</b>	<b>1172</b>	<b>3461</b>
Increased bus service coverage	48	49	129	172	294	692
More frequent bus and MAX	43	44	96	160	350	693
Special transit services	58	104	181	177	173	693
Transit rider information	97	123	201	150	118	689
Zero emissions vehicles and infrastructure	113	84	145	115	237	694
<b>Walking and biking</b>	<b>283</b>	<b>302</b>	<b>620</b>	<b>742</b>	<b>1621</b>	<b>3568</b>
Protected bike lanes and pedestrian facilities	58	50	97	116	398	719
Road crossings	31	43	104	197	341	716
Street design	35	56	109	185	329	714
Walk and bike connections	50	33	91	131	410	715
Wayfinding signage	109	120	219	113	143	704
<b>Grand Total</b>	<b>4279</b>	<b>3372</b>	<b>5967</b>	<b>5722</b>	<b>9274</b>	<b>28614</b>

# Summaries of public engagement and agency consultation – Spring 2023

**Table 15: Demographic Questions**

<b>Demographics Questions</b>		
<b>What county do you live in?</b>		<b>Count</b>
	Clackamas	72
	Multnomah	388
	Washington	124
	Clark	5
	Other	6
<b>When asked about your racial or ethnic identity, how do you identify?</b>		
	American Indian/Native American or Alaska Native	13
	Asian or Asian American	27
	Black or African American	15
	Hispanic, Latine or Spanish origin	33
	Pacific Islander	2
	White	463
	An ethnicity not included here	14
	Prefer not to answer	70
<b>What is your annual household income?</b>		
	under \$19,999	23
	\$20,000 to \$39,999	31
	\$40,000 to \$59,999	55
	\$60,000 to \$79,999	61
	\$80,000 to \$99,999	59
	\$100,000 to \$119,999	72
	\$120,000 to \$139,999	59
	\$140,000 to \$159,999	28
	\$160,000 to \$179,999	17
	\$180,000 to \$199,999	22
	\$200,000 or more	95
<b>What is your gender?</b>		
	Woman	216
	Man	272
	Non-binary, Genderqueer or Third Gender	34
	A gender not listed here	0
	Prefer not to respond	29
<b>Do you identify as a person with a disability (including but not limited to vision; hearing; speech; mobility; cognitive; and invisible disabilities)?</b>		
	Yes	91



# Summaries of public engagement and agency consultation – Spring 2023

	No	418
	Prefer not to respond	24

## Which of the following age ranges includes your age?

	Under 18	7
	18-24	23
	25-34	105
	35-44	148
	45-54	78
	55-64	61
	65-74	72
	75 and older	36
	Prefer not to answer	11

## How many people live in your household?

	1	99
	2	256
	3	98
	4	58
	5	27
	6	5
	7	1
	8	1
	9	1

## APPENDIX C: 2023 REGIONAL TRANSPORTATION PLAN SURVEY #3 COMMENTS

Table 16: Goal Comments

Goals Comments
<b>Climate Action and Resilience</b>
<i>Adding more street parks, greenways, trails, and parks, etc, in neighborhoods that are predominantly low-income and BIPOC areas will greatly decrease crime and give those living around those areas a sense of ownership and pride. This allows for the initiatives below to have an easier path got success. Allowing our communities with those who aren't deemed worthy will only further that notion and propel the problem not solve it.</i>
<i>Again, focus on the mobility options and this goal will improve too.</i>
<i>Better and safer connected bike infrastructure, and more reliable transit that serves a wider area through high speed options like trains</i>
<i>Dirty Air should not be the "cost" of transportation. No person should be subjected to breathing illness (chronic, deadly or otherwise bad health) creating exhaust as a result of transportation systems. Cars, diesel and all transportation vehicles must be equipped with emissions reducing or emissions preventing equipment before being permitted to travel in our neighborhoods, through our urban centers or on highways.</i>
<i>Electric vehicles &amp; charging, better transit (and not just to downtown!!!), safe pedestrian and bike infrastructure, infrastructure that stands up to extreme weather</i>
<i>Everything can be seen through this lens. Even economy!</i>
<i>EVs destroy the planet through resource mining, cause all sorts of pollution from manufacturing processes, perpetuate our cities being paved over asphalt, space wasting nightmares and go to the landfill in mass droves. We could do so much better for our urban and suburban spaces than making them mere parking lots and boring, depressing, characterless places. We need more green spaces, vertical agriculture, pocket forests, pollinator habitats, parks, food gardens, greenhouses and the like.Please!</i>
<i>Forest management and collaboration with native oregon tribes</i>
<i>Growth is good but not at the cost to our life. Ban businesses from selling single use items.</i>
<i>Improvements to existing Pedestrian, cyclist and transit infustructure and safety, and more of this infustructure in general. It is utterly terrifying to walk, or bike around most neighborhoods and business areas in the metro area simply because of auto/truck traffic and behavior. Do whatever it takes to tame this, the issue is deeper than infustructure I understand, but thoughtful logical infustructure can make a difference. I don't expect you to dismantle "car culture" but please help!</i>
<i>Less dependence on gas, less catering to automobiles, more investment in neighborhood transportation (pedestrian access, bike infrastructure, cheap busses/rail).</i>

# Summaries of public engagement and agency consultation – Spring 2023

---

*Lithium batteries are bad for the environment*

---

*More focus on providing safe options for zero-emission modes of transport (especially walking and biking)*

---

*New busses and rail options should be at least carbon neutral and ideally completely electric. Gas-based options should be deprioritized and pushed for technology upgrades whenever possible.*

---

*None of these priorities are mutually exclusive. Just expand and improve active transportation infra and transit.*

---

*Provide credits for ebikes like other cities have done! Depave parking lots, expand non auto use of neighborhood streets, back the Frog Ferry and other river based travel options*

---

*Remove space for auto travel and storage in order to spur infill development (as it will become harder to travel long distances by car, reducing demand for sprawl)*

---

*This has to be our #1 priority. And commerce doesn't have to suffer. For example, Tokyo banned dirty-diesel vehicles in 2000. Transformed the city. Owners of diesel vehicles adjusted.*

---

*Walking and biking are the two most environmentally friendly modes. We need more infrastructure to make them serious, competitive alternatives to driving. This means making our bike infrastructure visible and direct, such as protected lanes along major corridors like Sandy and 82nd.*

---

*We need more dense, mixed use development around transit and our urban cores*

---

*While people here love the climate, using public transit is currently wildly unsafe. Without better investment in public safety, this goal is unrealistic and hurtful to everyday people.*

---

*Would like to hear more about what specific actions have been taken here?!*

---

## **Equitable Transportation**

*Cleaner bike lanes and roads.*

---

*Compulsory car ownership is an urban planning failure. Commodification of societal necessities is a political and social failure. Wasting our taxpayer dollars to fund car-centric sprawl is a moral and intellectual failure. There will always be some vehicles such as emergency vehicles or cars for people who really want them and purchase them as consumer goods and they should be electric, but they should always be optional and our infrastructure needs to allow equal access for the disabled, everyone*

---

*Create rebates for regressive (but necessary) carbon-intensive travel pricing schemes, to be paid towards lower income populations. These rebates can then be used to pay for tolls, parking, etc. or used on other things if the household opts to use transit, walking, biking to reach destinations. Also, work towards making more neighborhoods walkable and bikeable so that it isn't an expensive commodity, and is affordable to all.*

---

*Free transportation for those who qualify, NOT discounted only*

---

*Goes without saying low-income folks should be the focus. Same with under-served.*

---

*I only put this 3rd because safe, robust active and public transportation is equitable transportation, given that the cost of driving is prohibitive and poverty-inducing for many Portlanders. Having safe, efficient,*

---

# Summaries of public engagement and agency consultation – Spring 2023

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*convenient and comfortable alternatives would give them the ability to save money and still travel with dignity. It would also reduce air pollution levels in many of the areas with higher rates of BIPOC and low-income Portlanders by reducing VMT.*

---

*Improved access to services for persons with disabilities. As someone who has a partner who cannot drive due to a visual impairment I'm familiar with the issues that come with relying on public transit as your only means for travel and how disruptive it can be to have to take a full day off for one appointment because of the time it takes to travel on public transit.*

---

*Improvements to existing Pedestrian, cyclist and transit infrastructure and safety, and more of this infrastructure in general. It is utterly terrifying to walk, or bike around most neighborhoods and business areas in the metro area simply because of auto/truck traffic and behavior. Do whatever it takes to tame this, the issue is deeper than infrastructure I understand, but thoughtful logical infrastructure can make a difference. I don't expect you to dismantle "car culture" but please help!*

---

*In addition to those priorities it is just wrong to foist the worst consequences of freeway building upon the poorest neighborhoods. The NIMBYs should pay for that.*

---

*It was hard to separate our equitable from mobility options — I see how they are different but it seems like a truly equitable system would have a broad array of mobility options for different abilities/preferences/needs and a system with true options would be equitable.*

---

*Less bikes lanes in outer se in exchange for better roads and side walks*

---

*make transit free and expand BRT beyond downtown (NE to SE, N to SE, Outer East Portland, to/from Vancouver)*

---

*Many of the above support equity. I did not place it last because it is not important but rather I think it should be included in all the above.*

---

*Nobody with an income below ~60k should have to pay for public transportation. Tax the rich. Put more, and more connected, routes into lower income areas. Add routes that connect these areas to necessities, shopping and businesses, and natural areas.*

---

*Provide faster and more efficient public transportation for residents not currently connected well to urban core. Light rail along Powell/Division should replace bus line in future. Consider rail extending to Oregon City*

---

*Require masks on public transit so that it is actually equitable and stops putting our community at risk*

---

*Stop being racist against caucasians*

---

*supported fares for public transportation. stable affordable fares for public transportation. Ideally, No Charge Fares for public transportation aka bus. Bus transportation is Free of Charge.*

---

*Supporting transportation options and modes beyond cars*

---

*The suburbs should not have the max. It just brings in crime. The city needs to manage who is buying property and for what purpose so that rentals are not being used short term or at extravagant price. Stop*

---

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*displacing people and start focusing on population control. Oregon long term residents need to be the priority.*

---

*We need max lines that serve more areas in southeast*

---

*Wider and separated "bike" lanes that can be made open to a variety of vehicles and speeds. That way people who use mobility/adaptive devices, parents with children, cargo bikes, and just people with varying comfort levels can feel safe, while faster modes can move ahead.*

---

## General Comment

*A safe system will promote the other 4 goals. Without safety in place people will not look to public transit, walking or biking or consider using any of these modalities if they don't feel safe.*

---

*A thriving economy will develop out of green, active, safe transportation systems, but green, active, safe transportation systems will not necessarily result from a thriving economy.*

---

*Each of these goals have a place in the discussion. I prioritized "thriving economy" as this is the engine which makes these investments possible.*

---

*No, all of this is mutually exclusive. It's kind of their job to maintain all of them.*

---

*None of these are mutually exclusive????? Who wrote this? What info could Metro possibly learn from this question? These "goals" are super vague as to what they even mean in practical terms.*

---

*should we kill people and the planet with cars fairly, or economically*

---

## Mobility Options

*Automobiles as the primary mode of transportation is incredibly wasteful in every way and aren't the future, electric or not. They physically perpetuate the racist idiocy of Robert Moses redlining. They make our cities ugly blight and reinforce the hollowness caused by white flight and the inequities of gentrification by making the city grueling to get to for the workforce who make it function as they have to live way outside of the city and then pay for parking. Cars are prohibitively expensive.*

---

*Better access to frequent bus routes, transit stops that are located in safe to access areas that include lighting, sidewalks and crossing areas*

---

*Clear sidewalks.*

---

*expand free transit, invest in neighborhood "main street" business districts*

---

*Faster transportation*

---

*Give us options other than a car. Park and ride is a pipe dream, if you're in your car already you're driving the whole way.*

---

*Improvements to existing Pedestrian, cyclist and transit infrastructure and safety, and more of this infrastructure in general. It is utterly terrifying to walk, or bike around most neighborhoods and business areas in the metro area simply because of auto/truck traffic and behavior. Do whatever it takes to tame this, the issue is deeper than infrastructure I understand, but thoughtful logical infrastructure can make a difference. I don't expect you to dismantle "car culture" but please help!*

---

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---

*Investments should be made in projects that promote getting people outside of their cars. The more we can get residents to utilize other transportation options, the better we'll all be served.*

---

*Make sure your transit related elevators actually function consistently*

---

*More ADA friendly sidewalks wider sidewalks*

---

*More lanes, more lanes, and more lanes.....*

---

*Please look at Vancouver BC as a model for how to invest in transit options and equity. Not only this but compare our regional system with theirs. Why are we so far behind? Why is our system so much less safe? Why is our system so much slower? We do we have NO Transit Oriented Development that has ACTUAL transit? Why is the most of what we have Development Oriented Transit instead?*

---

*Portland has a MASSIVE issue with accessible sidewalks. I can go blocks and blocks without seeing a sidewalk with a sloping grade so folks using wheelchairs can cross the street. All busses and rails should have the ability to accommodate passengers with wheelchairs. Additionally, infrastructure for folks with vision impairments (braille signs at cross walks, braille on bus route maps, etc.)*

---

*Private car ownership MUST DIE. Incentives for not owning, using a private vehicle MUST BE PRIORITIZED.*

---

*Provide them.*

---

*Rather than only encouraging people to use unsafe public transit, offer mobility options but don't make people pay a premium for not using them. It only hurts people and local business. When people have to pay for parking, they have less to spend on small business.*

---

*Reduce maintenance budgets for auto infrastructure and spend that money retrofitting those spaces for walking, biking, and transit. This will allow us to do more with our existing budget and provide access to multimodal travel to more people.*

---

*See comments above.*

---

## **TRAINS AND ELECTRIC CARS AND BUSES**

---

*Transit, not just to downtown!! I want to be able to travel to dinner and the airport and my doctor on a bus / max / streetcar!*

---

*Separated bikeways that allow for longer distance travel and travel between neighborhoods, which is way more accessible to more folks with the availability of ebikes.*

---

*People who aren't hardcore cyclists and don't understand the system (which isn't intuitive at all) won't bike longer distances if we have to travel super indirect routes.*

---

*We need a regional ride share program. We need investments in single occupancy modes of travel, ebikes, escooters, local trip tiny cars, etc. Modes of travel that have less impact on the transportation infrastructure. Not necessarily things that older drivers will use but future drivers will appreciate the less is more options.*

---

*Well-connected is the key.*

---

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## Safe System

*An armed society is a polite society.*

*Current bike infrastructure does not encourage new riders who feel unsafe. Improve, enhance, and expand safe bike infrastructure. Make bus routes safe and welcoming for pedestrians.*

*Fare gates. Why would I take transit when I must ride next to fare-see dodging psychopaths?*

*Stabbing deaths on a MAX? Come on!*

*Stop expanding a system you cannot properly police.*

*Focus on the real problem—driving under the influence. Add more street lights so people can see at night. Time lights and crosswalk signs at delayed intervals. Stops signs at all 4way intersections would be great. Still missing paved streets in outer SE. and most importantly...End every corner is a crosswalk nonsense. It's complicated, leads to dangerous behavior and ignores cdc distracted driving and walking data. We are a city not a town*

*I see safety and mobility options as inextricably linked. People can't and won't bike, walk, and take transit if they don't feel safe. Folks walking and rolling need to be safe from cars first and foremost. But also the actual and perceived sense of safety from an environment that actively promotes mobility options — lighting, clearing debris, pavement conditions — create an environment where more people are out of their cars and even further promotes safety.*

*Improvements to existing Pedestrian, cyclist and transit infrastructure and safety, and more of this infrastructure in general. It is utterly terrifying to walk, or bike around most neighborhoods and business areas in the metro area simply because of auto/truck traffic and behavior. Do whatever it takes to tame this, the issue is deeper than infrastructure I understand, but thoughtful logical infrastructure can make a difference. I don't expect you to dismantle "car culture" but please help!*

*Investments back into safe public transit. While government wants to incentivize the use of public transit, it is currently unsafe. People are attacked on it constantly. Invest in patrol. Or understand that people would rather drive out of safety and control of their environment. Having to pay a premium to park hurts individuals, businesses, and the economy. The more people have to pay to park, the less they can spend on local business or see their friends and family.*

*It's hard to say safety second or third but it's frustrating that society struggles so much to be safe. Safety requires individual thought not expensive infrastructure. Just look at school zones, you can't get safer than a school zone yet people just don't slow down, even the parents delivering the kids.*

*Less crowded freeways*

*More safety mechanisms (on vehicles, signage on road ways, lighting at crossings, etc.) must be in place to PREVENT traffic & bus deaths. No one should be killed by a bus, MAX train or delivery truck. All transportation and public transportation vehicles must be up to date and continuously maintained to proper safety standards. Doing so would create and support good paying jobs - supporting the local economy.*

*Protected bike lanes and more connected greenways. More of a security presence on MAX lines outside of normal commute times, especially at night, just to observe and intervene if any passengers become violent*

*reduce speed limits to 20mph on all city streets, increase speed camera use*



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*Reducing VMT and removing the assumption the SOVs can access every area by default. Also lowering speeds and right of way design choices that make people pay attention when they are operating a motor vehicle.*

---

*Require a driving course on how to navigate bikers and bike lanes. I know countless people who have been hit by cars. Also, fines for breaking traffic (INCLUDING PARKING TICKETS) laws should be based on income bracket.*

---

*Require masks on all public transit*

---

*Road narrowing, street closures to private cars, more reliable and safer access to other modes than cars, better pedestrian and cycling facilities.*

---

*Safe driving and slower streets are more important than fast travel from A to B*

---

*Safe walking and biking paths are invaluable. Being able to safely walk or bike throughout the area is not only good for the health of the community but also helps to reduce the number of trips people rely on vehicles to take. I would like to see more protected pedestrian pathways and better bike lanes. I would also like more designated crosswalks and more access to sidewalks in high traffic residential areas*

---

*Safety is job one. Pedestrians, especially in East Portland, need help.*

---

*Safety is the no. 1 concern keeping many from biking. We need more than paint. Protected lanes using anything from street parking as a buffer to plantings between driving lanes and bike lanes. More traffic calming.*

---

*Sidewalks*

---

*Slow traffic speeds and protect other road users from all traffic above 30 mph.*

---

*Stop spending money on cop cars and instead provide money to organizations that find housing for homeless folks*

---

*We need actual stations and not just stops called stations. We need employees who protect shelters and infrastructure along with helping riders rather than fare inspectors. We need to bring back fareless square as well as Night Owl Service. I got fined right after fareless square disappeared without knowing better and had to sacrifice groceries to pay the fine because I had finals in college on the "TriMet Tuesday" trash pick up day. Despite this crappy situation I still advocate ardently for you*

---

*We need more safe cycling infrastructure. The west hills in particular are a disgrace. Why on earth aren't there bike lanes on Skyline?!*

---

*We need to seriously prepare for the inevitable reality of self-driving vehicles.*

---

*When ever repaving roads or rebuilding them, safe and dedicated cycling/pedestrian infrastructure should be prioritized.*

---

*you absolutely need to staff the green and blue MAX with one security guard per train to keep people from smoking meth and fentanyl on it. That's why I started reluctantly using my car. My son is six. They don't even kick the person off until a major hub.*

---

# Summaries of public engagement and agency consultation – Spring 2023

---

*You have to have police and you have to treat everyone the same when it comes to safety and the law.*

---

## Thriving Economy

*A thriving economy equals innovation.*

---

*Build a thriving economy where people can appreciate short trips, local living/working, safe and reliable ride sharing and the community will rally and if the economy is thriving we can afford safe facilities.*

---

*By no means unimportant. Bringing up poor and underserved communities, for example, is a tremendous boon to the economy.*

---

*Commuter rail infrastructure maximizes space efficiency and is an economic driver for the local economy. It prevents time from being wasted in traffic congestion, saves tons of automobile related expenses to residents and avoids massive expenditures caused by cars (EVs or not) to the city too. Carcentric urban sprawl prevents foot traffic and makes getting around to window shop hostile and even lethal. We'll have no economy when the planet is on fire. Please end the failure of the automotive city.*

---

*End sidewalk camping. Expedite permits. Help better protect small biz from repeated theft, vandalism, and harassment*

---

*Focusing on people over moving cars is one of the best ways you can create wealth from our streets. Close streets to cars, lower speeds, build protected bike lanes and fill sidewalk gaps. Get people into the community and out of their car.*

---

*I believe that investing in the welfare of our communities will ultimately invest in our communities. By providing and requiring areas to have lower pollutants, equitable housing, and resources allowing those in crisis to be able to participate in the economy of Portland. When those basic needs aren't met we can't expect our metro to thrive and succeed. Our priority on the economy shouldn't be a priority until the others are met.*

---

*Improvements to existing Pedestrian, cyclist and transit infrastructure and safety, and more of this infrastructure in general. It is utterly terrifying to walk, or bike around most neighborhoods and business areas in the metro area simply because of auto/truck traffic and behavior. Do whatever it takes to tame this, the issue is deeper than infrastructure I understand, but thoughtful logical infrastructure can make a difference. I don't expect you to dismantle "car culture" but please help!*

---

*Increased public transportation network and service frequency.*

---

*Invest in giving my tax money back because you clearly can't handle the responsibility of spending it correctly.*

---

*job connector shuttles, low emissions freight hubs to minimize pollution impacts on neighbors and environment*

---

*Make it easy to bring businesses into greater pdx*

---

*More Parking, more Ev stations, more accessible roads. Less bike lanes, more car lanes. Traffic sucks and trimet is too dangerous. People outside of their neighborhoods means more businesses with customers.*

---

*More pedestrian zones with green spaces where small businesses can thrive. People will stay longer and are more likely to try a new shop or restaurant on foot than in a car.*

---

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---

*More reliable transit and safe bike routes for people to access major job centers.*

---

*Multimodal connections are great for small businesses (less so for big box stores). I have personally discovered many new favorite shops and restaurants by getting out of the car and observing my surroundings at a slower walking/ biking pace. Also, the fewer parking lots a place is surrounded by, the more comfortable and inviting it is.*

---

*No economy will thrive if the people who work minimum wage jobs cannot afford to live in the area where they work. Those working in Portland Metro but coming from outside should have free, FAST (light rails) public transportation options.*

---

*Raising the minimum wage*

---

*Reduce parking meter prices to encourage spending in the economy.*

---

*Support neighborhood (local) business districts with better bus service, more bike infrastructure, and welcoming pedestrian environment. Reduce auto access downtown (central city) and create more bus, bike, and pedestrian thoroughfares to promote active public spaces. These efforts will bring people back downtown, but also promote thriving, 20-minute neighborhoods outside of central city.*

---

*You cant have a thriving economy if you tax majority of people into poverty. But you all already know this or dont care.*

---



**Table 17: Investment Priority Comments**

Investment Priorities Comments
<b>Freight Access</b>
<b>Freight rail upgrades</b>
<i>Again, not qualified enough to comment here</i>
<i>Fix the grade-level crossings in inner SE portland. The railroad should be grade-separated through all of SE</i>
<i>I guess this is important but I don't know a thing about it.</i>
<i>Moving large quantities long distances is always going to be cheaper and more efficient by train. Full stop.</i>
<i>Need more info to rate</i>
<i>NW industrial area? Fine.</i>
<i>Outer NE Portland (NE 122nd and Sandy) near multi-family housing. No.</i>
<i>Odd question for this audience. I'm not sure what the terminal traffic looks like and I think that's true for most people completing this survey.</i>
<i>The only freight rail upgrades we should make should be electrification; but this should be conditioned on transfer to public ownership of the track right of way and associated infrastructure.</i>
<b>Intersection designs</b>
<i>Again, this should be specific. Defined routes for this should be the basis. We could also begin using smaller transport vehicles for local stuff which would decrease this need on a widespread basis.</i>
<i>Bad idea! for areas outside of NW industrial, Swan Island and Columbia Blvd. corridor.</i>
<i>Coming off of the ugly Marquam bridge to try to cross into the close-in Eastside area and there's an at-grade freight train going slowly? Horrible! Also, we need to bury I-5 on the Eastside, it's a nightmare and ruins the entire part of town.</i>
<i>Focus on bikes and pedestrians.</i>
<i>I would hope that freight is generally on a separated network from active transit modes.</i>
<i>I'm not sure what this entails but I'm uneasy with the idea of "supporting freight turning movements." It's my understanding that the intersection of SE 26th and Powell was altered to do just that before a cyclist was killed there last year by a freight truck turning right after coming out of the rail yard. Again, safety before convenience. I have my two small kids on the back of my bike and this kind of scenario keeps me up at night.</i>
<i>In southern Hillsboro on TV highway, it's super scary to be a pedestrian because of the lack of sidewalks. In some places you literally need to walk on the shoulder!</i>
<i>Limits need to be placed on the length of freight trucks. It is not possible to increase the size of intersections everywhere to accommodate huge trucks turning corners.</i>

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*Once again, this will be a waste of money if congestion pricing is enacted, but very important if Portland decides that being a major port is actually important. The congestion pricing scheme is practically designed to drive business away.*

---

*Prioritize safety at all levels.*

---

*Support wide turns for freight but not at the expense of active transportation users. Use different tools like curb extensions with mountable truck aprons to accommodate trucks without disregarding vulnerable road users*

---

*The problem with these designs is they often result in high speeds and reckless driving by the masses. I approve of changes such as increasing visibility or slowing oncoming traffic to make turns easier, but things such as slip lanes that raise speeds should be avoided.*

---

*This is especially important in light of the recent death on SE Powell.*

---

*We need to get 18-wheelers and other large vehicles off of regular streets. They have no place there and endanger other users. Build the streets for smaller delivery vehicles and let the market figure out how to make it work.*

---

*Where makes a big difference. Wipe out downtown building to make it easier for semis to travel through downtown Gresham? No thanks*

---

*Yes, reduce conflict between modes but don't automatically favor freight*

---

## **Port and intermodal terminal access improvements**

*Actually, I think this is very important not unimportant as I have selected. The reason I put it as not important is that it will be waste of money if congestion pricing happens. Trucking and shipping will bypass Portland and go other ports that are more business friendly and cheaper. So, very important if Portland remains business friendly and a waste of money if congestion pricing drives business away (as it inevitably will).*

---

*Although this is important, if the congestion pricing goes into effect it will ultimately just throw money away as trucking and shipping will just move to other ports to avoid the expense. So, don't even bother with this if congestion pricing happens.*

---

*Dedicate specific routes to freight and heavy cargo movements so they are more efficient. We can enable economic efficiency while also minimizing the impact of freight / cargo to common routes*

---

*Don't know anything about it so my opinion is moot.*

---

*I would gladly support this if it meant more physical separation from commuters. Safety should be prioritized over convenience.*

---

*If we could use our port more regularly or better we might bring back more commerce, jobs, and could possibly have a dredge fleet again*

---

*Need more info to rate*

---

*Need more info to understand what's being solved and how it relates to other options*

---

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*NW industrial area and Swan Island need more access? Why?*

*Portland is not Long Beach, California.*

*Odd question for this audience. I'm not sure what the terminal traffic looks like and I think that's true for most people completing this survey.*

## **Road and railroad crossing upgrades**

*Freight can already get everywhere from everywhere. We need to stop wasting money incentivizing fossil fuel use, and re-direct these funds towards transit, pedestrian, bicycle, streetscape, and TOD projects.*

*Freight trucks/semi trucks cause almost all road damage. These companies can pay for road repairs instead of our taxes being thrown away to subsidize them without our approval.*

*I'm not familiar enough with these to comment, but I do get stuck behind trains a lot in this city. It's my understanding the problem is more the length of the trains than the quality of the crossings*

*Please invest most in St. John's / north Portland area around this*

*Put the rail line in the central east side into a trench like Reno. Why is no government talking about that?*

*Road or railroad? Those are two very different questions*

*SE 11th crossing is terrible*

*SE 12th Avenue at Division is blocked a lot because of freight trains. The MAX doesn't close the street much but I have gotten stuck for over an hour waiting for a freight train to move.*

*trains seem already to have priority, so the benefits would be mostly for road users*

*Where? Like down near the old Kmart property at NE 122nd and Sandy?*

*See above comment mentioning Jerry Brown; stop encouraging industries touting minimal local job expansion for a pollution-prone idea (warehouse and semi-trailer traffic).*

## **General Comment**

### **General Comment**

*42% is allocated towards maintenance? I understand that labor, materials, and changing technologies are expensive but if we are continually maintaining the roads and transit infrastructure shouldn't that percentage reduce for the future? If we are diligent on road and pothole upkeep the money we allocate for those projects could be used for major critical projects. Being a resident for 13+ years I've come to assume we only use band-aids to fix issues instead of preventive measures, change it.*

*The advancing arrow at the bottom right of each page covers up the comment bubble for the bottom question. Consider redesigning the survey so that the advance button doesn't obscure content.*

*The WES commuter line should not just be a commuter line. It should run more frequently all week long and into the evenings.*



# Summaries of public engagement and agency consultation – Spring 2023

*When it comes to freight, I think hardening the system to keep it working in the event of a major emergency (such as a giant earthquake) would be a worthy goal.*

## Information and technology

### **Carpool and vanpool services**

*I car- and van-pooled for a decade. Didn't seem to damage me (although I had to give up singing lustily and reciting Shakespeare. It is surely cheaper for society to provide multi-occupant vehicles than single occupant vehicles and the capacity for them. And then there is the issue of who benefits and who pays.*

*I think this will socially be a hard sell and is likely not the best use of resources at this time.*

*If people are willing to pool. This suggestion may be an anachronism as working from home maybe changing the necessity of pooling.*

*Non sequitur, Rebuild the Jazz District*

*This has been around forever & should be managed by employers.*

*This should be lower on overall priority than improving the trains and bicycle networks*

*This should be the responsibility of the employer.*

*Vanpool maybe, but carpooling is only used to cope with inadequate driving alternatives. We should focus more on a solution and less on a coping strategy.*

### **Smart technology enhancements**

*A lot of "smart technology" projects are deployed to reduce congestion. As such, they're a waste of money. We need to stop reducing congestion, and start investing in alternatives to driving.*

*Add public transit to Apple Wallet*

*I do not support ramp meters, as these encourage sprawl.*

*Make sure traffic signals at big crosswalks give folks enough time to cross the street. Make it safe for people to cross the street.*

*Not related but...Rebuild Little Italy and the old Jewish Neighborhood*

*Sounds smart. People tend to be more patient if they are kept aware of what is going on.*

*The light in Hillsboro for Main St and 10th Ave is very dim and is hard too what color it is until you're right under it*

*Traffic enforcement tech too, please*

*Variable speed signs are a WASTE. Please no more!!!*

*Yes for sensors used to collect Data for research, but stop installing those giant message screens that are rarely used*

## Traffic signals

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*Definitely prioritize bikes and pedestrians.*

*Freight interests can get stuffed.*

*get rid of beg buttons and do not prioritize freight!*

*I am not in favor of speeding up travel for large vehicles like trucks or busses.. they go too fast as it is. This was a trick question as you added bicycles and wheel chairs in the same priority.*

*Improved signal efficiency is important to serve everybody on all modes.*

*I'm not a big fan of prioritizing one citizen over another like some of the options listed.*

*not freight trucks*

*Not freight trucks. That's private business*

*Not sure about buses and freight trucks. The focus should be people walking, rolling and bicycling so they spend less time waiting.*

*Not sure I agree that freight trucks should be given any priority over private citizens.*

*People are not the same as freight.*

*Please explain how/why freight should be prioritized in the same sentence as people who are walking/biking and are incredibly at risk in these environments?*

*Portland is good at timing signals which allows good thru traffic flow. Beaverton sucks big time. "Where traffic goes to die"*

*Prioritize bikers and walkers.*

*Prioritize buses, bikers and walkers.*

*Prioritize transit and biking/walking.*

*This would work if it be be EFFECTIVELY done in real-time. Otherwise, it just adds to delay and frustration.*

*Yes to bus signals. Pedestrian and bicycle detection are a must too (with a backup button in case it doesn't work). The signal should change right as a bike or ped approaches, or right after. In inclement weather, it keeps vulnerable users from standing around getting soaked. Without this technology, bikes and peds wait too long, get fed up and end up crossing illegally. This puts the pedestrian or bicyclist at risk and then leads to drivers waiting at a red light for no reason.*

*Yes! Waiting forever for a crossing signal discourages walking to your destination and encourages more vehicles on the road. You cannot prioritize cars on the road and expect less of them to be there*

## **Transit reduced fare programs**

*And keep their ride safe!*

# Summaries of public engagement and agency consultation – Spring 2023

*Bring back the Fareless Square! Make the Streetcar cost-effective and free in the Fareless Square also.*

*Crack down on fent-smokers and ear-biters and maybe older people and students will actually want to ride the max.*

*Encouraging other modes of transit rather than cars is the best way to reduce congestion.*

*Fairless transit now*

*Fare free transit*

*Fare free transit is necessary and needed*

*Honestly, TriMet needs to be free. I'd like to see a real plan developed of how we could get there, if we really want to get more cars off the road this is what it will take*

*I believe in an equitable fare program, but I went from a very frequent Trimet user to almost zero in the last few years because I'm tired of rolling where I need to go inside a homeless shelter. If you don't ENFORCE fares & rules, than the reality is the 10% of people who ride, for free, bevause of no oversight, cause 90% of the disturbance for other riders and drivers. Is a multi-tiered income based fare system possible? Instead of people making \$14k a year paying same as \$140k?*

*I don't think citizens of Portland who pay taxes in the city should have to pay to ride the train. That would bring ridership way up, which would make them safer, further inducing additional demand and getting more cars off the street. We can save money by no longer maintaining expensive highways that nobody will use.*

*I think these programs will cost the taxpayers more to administer than any benefit they would provide.*

*It would be cool to have a fare rate for federal/nor government employees!*

*It's worth noting that only 2% is dedicated to these specific SOV programs. That is a shame. We must heavily and deeply invest in giving people the support to travel in ways other than a personal vehicle.*

*Make public transit free - do we honestly make more from these small fares than it costs for us to monitor that people are paying? How much does it cost to pay officers, maintain server structure, pay contractors, and put in the station infrastructure? Just make the damn thing free so people will use it and pay for it with tax dollars.*

*Other places have free transit. Look at Kansas City and list the to the Freakanomics podcasts about transportation costs. It's eye opening. Most budget doesn't come from rider fares.*

*Public transit should be a human right that is free to access for everyone. In the meantime, this is a good program.*

*Public transit should be free for everyone!*

*Public transit should be free to all!*

*Public transportation is paid for by the people. It should be free up to a certain income point.*

*Rollout to everyone.*

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## *STRONG YES - BRING BACK FARELESS SQUARE*

*The subsidized fare programs currently in place are great. Please do NOT expand subsidies to people (like me) who can afford to contribute to the cost of the system*

*Transit should be a human right and free for all to access. Until then, this is a good start.*

*Transit should be a human right and free to access for all, but this is a good start in the meantime.*

*Transit should be a human right and free to access, but this is a start.*

*We need Farr free transit*

*Yes but not at the expense of service coverage and frequency*

### **Transportation option programs**

*Add funding for transportation options around school (school streets, bike buses)*

*Again, safe streets also mean our kids being protected from dangerous criminals living in tents on our streets*

*But, finally, you need to put the right (and not the wrong) facilities in place, rather than talking about them.*

*Create shuttle services in neighborhoods that are more than a mile away from a bus stop!*

*I believe incentives and encouragement are the best way to get more people walking and biking, but they need to apply to everybody and not discriminate.*

*I want to give this 5 stars, but I'm not convinced it moves the needle (at least not as much as infrastructure improvements)*

*Implement a regional 'bike bus' program to incentivize kids to bike and walk to school. The bike bus has seen success at Alameda Elementary in Portland and could be spread across the region.*

*Need more information on this one.*

*Please, just start enforcing the fare requirements. 90% of the disturbance is caused by the 10%, many of those who either didn't pay there fare, or did pay and are not trying to get anywhere but seeking shelter. What happened to fare inspectors???*

*Support the bike bus bill!!!*

### **Maintenance**

#### **Clean bike lanes**

*Bike lanes often become a gutter for leaves, trash, broken glass, and gravel. Having bike lanes that aren't well maintained essentially equates to not having them at all if we can't use them.*

*Bike lanes should not only be kept clean, they should be repaired when damaged by cars, e.g., when the delineator posts are run over by cars.*

# Summaries of public engagement and agency consultation – Spring 2023

*Bike lanes that I use are littered with debris. Let's change this, please.*

*Clean up homeless trash and tents*

*Definitely, keep bike lanes clean and safe to use for bikers.*

*Great low-cost and predictable operational budgeting option that may increase attractiveness of cycling.*

*How about sweeping them clear of campers, first.*

*Please! Sweep bike lanes. Is that really an effective use of resources?*

*I don't drive due to my disabilities, so riding a bike has been my mode of transportation for whatever reason.*

*I know many people who have been injured on bike paths that become slick with moss or covered in gravel on Metro maintained paths. There is also wear and tear on bicycles*

*I ride my bike every day for errands, commuting, etc. PBOT does a TERRIBLE job of keeping the bike lanes clear, esp the new "protected" (wanded) bike lanes. I know people who won't ride b/c the lanes are not maintained, so if we want people to bike, PBOT needs to clean the bike lanes weekly or bi-weekly.*

*If bike lanes aren't clear they might as well not exist. Cyclists can't ride in dirty lanes.*

*I'm a bike rider and I can handle leaves and debris in the lane*

*In my 8 years of biking, I've seen it all from the typical glass hazards in the bike lane to dirty diapers, to full shopping carts, to full cars parked in the bike lanes sometimes for days! If you insist on keeping a law requiring cyclists to be in a bike lane, when one is provided I don't know how this issue of keeping the bike lanes clear of obstructions at all times is still an issue. Seems like it's time to remove that mandatory side path law!*

*It is important for bike lanes to be clear but more important for them to be protected from traffic.*

*Keeps bicyclists from getting flats and having debris flung in their face. Also beneficial to drivers and transit because it keeps bikes from having to use the roadway to dodge debris*

*Major roadways were not cleared of debris/gravel until over 2 months after the snowstorm. This was pushed into the bike lanes and made traveling precarious or forced bikes to interact with cars.*

*Portland would like to have more bike riders, but there just isn't as many as the city would want.*

*The current conditions are a sad reflection of whatever y'all hoped they'd be*

*The upright stanchions separating bike lanes from traffic impede street cleaning of bike lanes. Would raised dots (Bott's dots) be sufficient?*

*This is crucial to getting people to actually bike, and is a safety issue*

*We need clean and safe bike lanes.*

*We need clean bike lanes. It makes it safer for people to ride.*

# Summaries of public engagement and agency consultation – Spring 2023

*We need to maintain our bike infrastructure.*

*We need to transition away from bike lanes, which do not provide physical protection for vulnerable road users, to physically protected cycle tracks. We need to stop trying to pretend like we're the experts, and just follow the examples of places that have demonstrated they have safe bicycle systems through high mode share for bicycles and attainment of vision zero goals.*

*Would be necessary IF there were any bikes on the bike lanes! Foolishness...not stars here.*

*You can't ride in the bike lanes when there is a ton of debris, it's dangerous.*

## **Fix bridges**

*Adding transit lines to bridges should be a priority.*

*And add transit to bridges.*

*Bridges carrying more transit and freight first*

*Focus on adding transit to bridges.*

*Not to the extent that it encourages car use.*

*Only repair if transit is enhanced in the process.*

*Safety first*

*The IBR 15 bridge replacement project is a stealth freeway expansion that will blight downtown vancouver and allow wealthy, white vancouverites to dump their transportation emissions on poor black communities in north portland. The current design of the 15 Bridge replacement according to ODOT is unacceptable from a climate, equity, and safety standpoint.*

*This is probably most important*

*We obviously rely on bridges no matter which transit mode you use, and should keep them in good repair.*

## **Fix broken sidewalks**

*Absolutely critical to provide accesible walking to nearby locations - particularly to schools, medical facilities, and community centers.*

*Accessibility can already be difficult for people, make it easier to wheelchair*

*Adding sidewalks in neighborhoods that lack is even more important than fixing broken ones. Being able to walk and roll through the city is the most important thing.*

*And provide more sidewalks in areas that need them*

*as a step to making walkable communities where people want to be - to live, work, play*

*Consider replacing broken concrete with asphalt sidewalks, which is a standard flexible material in many European cities*

# Summaries of public engagement and agency consultation – Spring 2023

*Extremely important for folks with impaired mobility*

*For those that actually make the effort to ambulate, it would be nice to avert a fall due to uneven walkways*

*Honestly, every item on this list is a high priority. But I prioritized this one lower, as safety accidents seem like they'd be worse if bike lanes aren't clear and bridges aren't fixed.*

*I definitely walk around too.*

*Make sidewalks wider and allow for more/permanent outdoor seating at restaurants and cafes.*

*residential or commercial?*

*Sidewalks need to be safe for all users*

*So many trip hazards & bad cutouts.*

*Some pedestrian sidewalks do not connect. Sometimes sidewalks in Portland end abruptly. Sidewalk connectivity is absolutely imperative. Cracks in the sidewalk will always be there, even big cracks, that in my opinion should be less of a concern. (If people want to skateboard on a perfect flat surface then they can go to the skatepark for that.)*

*This is a nice to have. But realistically we need sidewalks and bike lanes in areas that don't currently have them far more desperately than we need to fix up existing ones. A broken sidewalk is still safer than no sidewalk.*

*This is pretty crucial for our friends and neighbors with disabilities*

## **Fix potholes and pavement**

*42% of the budget is on maintenance and it seems that potholes/pavement are never fixed. There are pothole hotline signs everywhere but the potholes are still there and are degrading at an alarming rate. Fixing potholes and pavement will allow more people to bike safely, this reducing cars/ and the emissions they cause.*

*Bumpy roads bother my double scoliosis.*

*Feels like we are losing ground on regular maintenance. Need to vastly increase investments to get caught up before everything has to be replaced and the cost is even higher*

*Fixing of potholes should be prioritized along bike right of ways. Maintenance of roadways for auto uses should be sharply decreased because the current level is unsustainable given the level of sprawl.*

*Fixing potholes along bus lines should be the first priority. Car-only streets should be a lower priority.*

*Hard on those bus tires and suspension.*

*I don't care about potholes, but I do care about culverts that are barriers to fish or wildlife*

*I don't care about potholes. I don't see how this is related to barriers for wildlife (of which there should be options, like green bridges, for this species)*



# Summaries of public engagement and agency consultation – Spring 2023

*If it encourages more car use, don't do it. Make that policy clear. Lead people to better home/job location decisions*

*Let's focus on maintenance of existing infrastructure, instead of increasing this*

*Pave smooth, wider shoulders on more rural roads for the safety of bikes and peds*

*Please stop throwing a bunch of loose gravel on the pothole patches it's SO dangerous for cyclists, who, surprise!, also use the roads our income taxes pay for.*

*Potholes and degrading pavement are not only slowing car traffic down, but also extremely expensive to replace.*

*Prioritize along bus routes. If a street is car-only, it should be on the back burner.*

*Prioritize Greenways and other bike routes that are often in worse condition than major arterials.*

*Prioritize potholes/pavement issues in bike lanes*

*Road's conditions in Beaverton and Portland Metro are in terrible condition!!!! Fix and maintain existing infrastructure!!*

*Stop building and fixing expensive roads for cars, build more streets for transit and pedestrians instead. The maintenance costs are much lower. Making the roads more attractive to drivers just induces additional demand.*

*Streets are a mess. This should be No1 priority*

*This impacts the safety of all. If drivers are crossing centerline or swerving into bike lanes to avoid potholes we all lose.*

*This is expensive because we overcommitted past what we could maintain. Some roads should be turned back into gravel if they do not pay for themselves to be paved. That is very hard to determine, but our other transportation priorities take precedent over car infrastructure in urban areas that does not meet the demands of its environment. Many potholes and pavement repair issues also slow cars down, which has many safety benefits.*

*This may be an unpopular take, but the cost to maintain expanding infrastructure focused on personal transit like cars is a losing battle. The paradox of transportation systems - we can't sufficiently fund active transport options or roadway expansion and repair, so both inevitably become non-viable options.*

*This should be a main priority along bud lines. Car-only streets shouldn't get priority.*

*This should be prioritized only on bus routes. It shouldn't be prioritized as much on solely car routes.*

*We need much higher investment than we've been giving. This is a major issue we need to get on top of. Or we will keep paying double to rebuild everything. Expand beyond just major arterials so people walking and biking get some benefit*

## Seismic upgrades

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*Bridges certainly should be seismically sound, but I don't understand how a road can be. Rail I assume would be mangled in an earthquake, buses should be no worse off than cars.*

---

*Focus this specifically on transit first before other infrastructure.*

---

*I know this is a legitimate need, but please don't let it be an excuse for colossal mistakes like the current plan to add more freeway lanes to the I5 replacement bridge. We should be able to upgrade to seismically resilient structures without bloating the size and budget of roads and bridges.*

---

*Seismic upgrades to transit are most important as it can move the largest amount of people.*

---

*Seismically upgrading the bridges will help in the regional recovery after the "big one". It will also help for emergency services do their work in such an event.*

---

*The Seiiwood is not likely to stand after a major cascadia subduction zone quake.*

---

*If the plan is to cut-off the westside of the Willamette from the Eastside, after a major quake. Then we are ready.*

---

*Too bad that all those disaster supplies being stored just east of the gorge will only be acceptable by road to everyone east of the river*

---

*This should not be used as an excuse to increase motor vehicle capacity.*

---

*We might be better off if the Abernathy Bridge fell down. Then we would no longer have 31,000 commuters from Clackamas County to Washington County and 23,000 in the reverse direction. They would find jobs closer to home, save money and time and energy. I-5 bridge has I-205 bridge as backup, so backup would not be needed post-Cascadia event (where there would be massive damage all the way around).*

---

*When the Big One hits, sturdy bridges will be vital.*

---

## **Transit vehicles in good repair**

*Can we stretch out time between replacements? Climate impact of new vehicles/embodyed cost needs to be factored (not just emissions)*

---

*Can we stretch the time between replacements. There are climate impacts to new buses (embodyed costs), not just an emissions calculation. There's not enough info provided to understand how to prioritize this investment*

---

*Citizens deserve the best transit vehicles that are safe for all users, clean and available*

---

*Converting the fleet to EVs should be a higher priority than continuing to maintain diesel buses*

---

*High-quality, well-maintained transit invites its use by commuters, reduces localized pollution, and reduces future deferred repair costs.*

---

*I can't wait until all the old Trimet light rail series 1 cars have been retired, a promise years in the making, that i have yet to witness! And please make rapid transit lines actually rapid, 15-20 minutes between buses is not rapid. I wish double decker buses were used for some lines, make bus riding cool and fun!*

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# Summaries of public engagement and agency consultation – Spring 2023

*I do take public transportation due to my born double scoliosis.*

*I'm choosing the local over the regional for this priority list (maintenance). Generally I support the use of public transit over the use of private autos, always.*

*Safe vehicles are important to successful public transit.*

*See comment on potholes, below.*

*Should be on an as-needed basis. I occasionally take transit and the vehicles seem relatively good but could use more frequent cleaning.*

*Transit vehicles should be in good repair for a working system.*

*Upgrade the MAX trains possibly.*

*We need safe transit vehicles.*

*We need safe vehicles for people to ride.*

## **Roads and bridges**

### **Complete streets for all users**

*Bicycle lanes should be on every street! If a road is repaved they should be added as a default. Engineers should have to seriously work to justify not adding one.*

*Don't understand this concept. Need more information.*

*Focus on bikers and pedestrians as they are the most vulnerable.*

*Focus on pedestrians and bikes.*

*i do not know what this looks like. not enough detail*

*I live in SW Portland and apparently the design code is "if you're a pedestrian who is not an able bodied adult, you should be in a car." Consider updating this design standard for SW Portland.*

*I think this could do our communities a lot of good and be fairly straight forward to implement. My problem is that some "Complete Streets" are still car centric. If you have a traffic speed over 25 miles per hour, you do not have a complete street. And until that is a part of the definition, I do not support complete streets. If it is, then I do support it.*

*Lack of intersection capacity is our most common bottleneck, and I especially support more capacity through major intersections and other capacity pinch points.*

*More center-median trees, more bioswales, improve the urban forest tree canopy. For example de-pave part of NW 13th Street between NW Davis and Hoyt to permanently allow those trees and plants to grow into the ground instead of permanent pots. Ask yourself when was the last time that a car needed to drive on that section of 13th?*

# Summaries of public engagement and agency consultation – Spring 2023

*Reduce the presence of driveways scattered across high-speed roadways. Those lead to increased conflicts. Reduce road and street widths where possible to accommodate wider sidewalks, bus lanes, or cycle tracks*

*Stop making up confusing new designs and build out bike infrastructure that has actually been proven to work!*

*The goal should be the safety of people not in cars. Make auto traffic slow down with design.*

*This is one of the best ways Metro can reduce traffic incidents and deaths.*

*We need to move away from making cars the focus of how streets are designed.*

## **Dedicated lanes**

*A dedicated bus lane is the ultimate HOV lane and should be the only use. I don't think i know anyone who intentionally carpools just to use an HOV.*

*Anything to encourage modes of travel other than single driver car*

*Create more bus lanes without a doubt, but carpool lanes are ineffective, expensive, and do not reduce traffic*

*Dedicated lanes for busses, but multi-passenger cars should not be able to use these lanes.*

*dedicated lanes for transit, not for carpools*

*Dedicated to buses, yes (red lanes). Car-pools, no.*

*Doesn't seem to help on I-5*

*HOV needs to be 3 people of driving age or more. And install cameras to enforce the use.*

*Hov-2 lanes exist in Hampton Roads where i came from.*

*I don't know the impact of this on traffic loads so can't really rank*

*I think educating drivers about their responsibilities to other road users would be more helpful. Riding in a bike lane downtown, I once narrowly missed a potentially lethal collision when a driver suddenly opened his car door into the bike lane without looking for me. Just my braking too hard to avoid hitting him and his door sent me off my bike. Had the door hit me as I was passing, I would surely have been thrown straight into oncoming traffic.*

*Maybe for new development areas but this is not a cost effective solution*

*Metro should focus on constructing dedicated transit ROWs rather than mixed-use for carpools and other private vehicles.*

*More lanes = more induced demand. Historically this has not been a successful strategy to ease traffic in the long term in the United States and elsewhere.*

*People do not respect the rule. We know that adding more lanes does not reduce traffic but invites more people to rely on their cars.*

# Summaries of public engagement and agency consultation – Spring 2023

*Should be the ONLY investment we make in road capacity.*

*Strongly support bus lanes, I do not support carpool lanes.*

*The question is, can you enforce it?*

*Think of the carpool lanes of I-5 N. of downtown. Do drivers honor those? I think not.*

*This has already been tried and traffic is still abhorrently disastrous*

*This is easy to do via re-striping and has solid benefits for bus transit times.*

*This is really broad and nonspecific. We need dedicated lanes for buses and bicycles. We do not need dedicated lanes of any sort for cars, be they carpools or not.*

*Too often, dedicated lanes are used as an excuse for freeway and roadway expansion. We should only create dedicated lanes by re-purposing existing mixed-flow lanes.*

*Would rather see 3 people or more. Two is not enough of an impact*

## **Main street retrofits**

*Absolutely. Let's increase livability.*

*Again, amenity is part of safety*

*And to include carless zones!!!! See Church Street in Burlington, VT and the increase in shopping despite removing cars.*

*As long as this isn't focused on improving access for cars, I'm all for it.*

*Bike infrastructure on commercial streets, please!*

*Eliminate Stroads. Decide if it's a road fast point a to point b, w/ little to no businesses OR a street with businesses on it with pedestrians etc.*

*Make pedestrian and rolling paths off the roads and make a robust street network to allow interconnections between communities*

*Focus on pedestrians and bikers, not cars.*

*More infrastructure for pedestrians*

*More protected bike lanes*

*Our lived environment should be designed and built to prioritize human beings and our communities rather than vehicles. Reduce traffic in community spaces by building out pedestrian usable spaces (seating on former parking spaces, common areas for farmers markets, restaurants and shops etc). More green spaces and human oriented communities*

# Summaries of public engagement and agency consultation – Spring 2023

*Portland's great strength is its walkable neighborhoods. We should capitalize on that in every possible way, by encouraging the growth of pleasant, complete streets and discouraging roads for cars only.*

*The safer, the better.*

*Yes to ALL of this!*

## **New streets and highway overcrossings**

*Cars have enough infra, need more for active transit / dedicated public transit facilities*

*Don't need overcrossings if we just admit when an urban highway is no longer right for high speed car traffic*

*Dumb. Boomer brain idiocy. No.*

*Freeway cap with buildable thriving economy on top*

*Having a goal of sustainability and climate resiliency while catering to car-centric infrastructure is paradoxical. You cannot have both.*

*Highway crossings that are both ped and bike friendly would be great!*

*Improve sunset/hwy26. Beach traffic is a total stand still because of the two lanes. People who live on the cross roads have no way to enter the hwy safely.*

*integrate local road grid as much as possible for all modes of transit. Exploring more decking options over freeways and rail*

*Lidding the 405 through downtown should be considered. Two rows of continuous arches. One set of arches over the northbound lanes, the other continuous set of arches over the southbound lanes. And also arches over parts of the onramp/off ramps. On top of the highways consider mostly a park type space. No need for heavy buildings over the highways. This would make Portland more liveable and would parallel many other USA cities like Seattle's Viaduct project and Boston BigDig for example.*

*Local streets and crossing, yes. Highway crossings should not be a priority for Metro.*

*More pedestrian and bike bridges should be built over Highway 26, I-5, and 217*

*More streets will simply induce more demand*

*Need car free crossings, those are 5 stars.*

*Need safe options for pedestrians*

*No Stick with surface streets and traffic flow regulations. Too much seismic investment.*

*L A., California is not a place one should seek to emulate.*

*Only if this is a cap over a freeway that will allow the building of dense housing above. Or bike and walking only.*

# Summaries of public engagement and agency consultation – Spring 2023

*Overcrossing are good when the roadway is submerged, otherwise I prefer underpasses (assuming they are kept clean and clear of homeless).*

*Support local travel via non-car options.*

*The pedestrian/bike bridges aren't cost-effective.*

*The resources are already too tight for these kinds of solutions, especially when ADA access is considered.*

*There is no easy way to get to Highway 26 from southern Hillsboro. Adds an extra 20 minutes my commute*

*This should be extremely targeted.*

*We don't need more streets. If there are caps over freeways that allow the building of dense housing, then I'm for it.*

*We don't need more streets. We need safe bike paths and pedestrian ways, especially for longer distances from the suburbs into downtown and between suburban cities.*

*We don't need new streets. Pedestrian or bike crossings are ok. Caps over freeways to allow the building of dense communities above is even better.*

*We don't need new streets. Pedestrian/bike overpasses are ok. Even better would be caps above freeways that would allow the building of dense housing above.*

*We need to decrease our roadway coverage. Take away 5 on the east side, there is no reason to have that pollution when it is just a redundant road.*

*We need to stop it with the building of new infrastructure for cars and trucks. They can already get everywhere from everywhere. This mode is built out. We need to focus on transit, bikes, and pedestrians, and TOD.*

*What is this exactly?*

*Rose Quarter caps - high priority*

*Bridge over some overengineered arterial so that cars can drive faster - lowest priority*

*Yes over grade-level rail lines; no on vanity projects like Flanders*

*Yes, but the overcrossings need to feel safe. I live right by I-5 and sometimes walk the long way to get to the MAX because I don't feel safe in the alley and on the ped bridge where no one else can see what's happening.*

## **Widen major roads**

**ABSOLUTELY NO MORE ROAD EXPANSIONS, INVEST IN ALTERNATIVE TRANSPORTATION**

*Absolutely not. Widening roads induced demand and you end up with just as much congestion. It's a fool's errand.*

*Add protected bike lanes, wider safer sidewalks, and dedicated transit freight lanes. No more widening roads for SOVs!*



# Summaries of public engagement and agency consultation – Spring 2023

*Adding more lanes to roads has been proven to do nothing to reduce traffic and creates induced demand. The focus should be on getting cars off of the road and providing reliable transit options*

---

*boooo negative stars*

---

*Broad research on induced demand has proven time and time again this does not reduce traffic.*

---

*Deprioritize automobile traffic. Widening roads means more traffic, more pollution, more costly road maintenance.*

---

*Do not do this at all. Manage the space better for all users that we already have.*

---

*Do not widen roads. Instead, reduce the number of lanes, add turn lanes and bike lanes.*

---

*Don't build car infrastructure it is not sustainable and wastes a lot of money*

---

*Expand roads in the 21st Century after we know all the harms (pollution, congestion, sprawl, safety, noise, GHG emissions, heat island effect, etc) they cause?!?!? Please please no. Not another dime on roadway widening*

---

*Get regional traffic back on the freeways (where their crash rates are lowest) instead of cutting through our communities.*

---

*I think that re-striping existing streets with turn lanes would be more effective and valuable than expanding them.*

---

*I would rather have infrastructure that makes biking, walking, and taking public transit easier.*

---

*If any existing roads are widened, they should exclusively be for bus/bike/streetcar use*

---

*Induced demand dictates that when you widen roads, you end up with congestion just like before. Do not widen any roads or freeways.*

---

*Induced demand is real. This may be needed in super specific locations for safety but in general this is not the best use of funds and only increases car use which is counter to all the other things.*

---

*Induced demand means widening roads does not improve congestion. It in fact stays the same or gets worse. Please do not widen roads.*

---

*Induced demand. Widen roads with bike lanes.*

---

*Left-hand turn lanes? Fine. More lanes, in general, for flow? No. More electric buses, electric automobiles, less electric trains.*

---

*Major roads should have less lanes and change that ROW to expand walkability and roll/bike ability.*

---

*Making roads bigger doesn't help traffic - make public transit better!*

---

*More induced demand*

---

*More lanes and more car infrastructure is a policy failure; it will not reduce traffic. Make other forms of transportation more appealing than driving to reduce traffic.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*More roads just = more cars*

---

*Nah ...come on, guys. "No one has ever built out of congestion"*

---

*Never should be done, we can't even maintain what we have why build more*

---

*Never widen. It increases drivers speeds, encourages speeding and reckless behavior.*

---

*No stars*

---

*No widening roads unless it's for non vehicle traffic*

---

*NO!*

---

*No, widening roads is not a priority*

---

*No. Stop making it easier to drive and drive faster*

---

*No. Absolutely not. Science has proven widening projects to be failures.*

---

*NO. Traffic calming please. No more lanes.*

---

*Not sure what this means. Not in favor or more lanes that will increase traffic. Turn lanes are a good thing though.*

---

*Only if this means adding protected bike and pedestrian infrastructure*

---

*Only widen to add bike infrastructure, thanks*

---

*Please don't widen roads. We can't maintain the roads we already have and widening makes roads less safe for everyone.*

---

*Please no!*

---

*Please stop giving over public space to cars, and prioritize giving space back to humans instead*

---

*Road expansions (for motor vehicle mobility purposes) are unacceptable and should not happen*

---

*Road widening projects are expensive and unnecessary. The only time a road should be widened is to improve accessibility, safety, and travel times for non-driving modes.*

---

*Say no to induced demand, don't add lanes for cars.*

---

*Sidewalks, green spaces, and dedicated transit ROWs should be constructed instead of streets being widened for more private vehicles.*

---

*Streets should only be widened if they are going to accommodate modes of transportation other than cars.*

---

*This is bad city planning. Cars provide no increase in wealth to the city.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*This is the most important, it's been ignored for years. Cars are not going away, they're evolving, so should we.*

*This only induced demand and does not improve congestion. Do not widen major roads.*

*We know from studies that adding more lanes doesn't reduce traffic, but invites more people to rely on their cars.*

*We need to REDUCE VMT, not INCREASE.*

*We need to stop widening roads and freeways. Period. All of the funding from existing programmed road widening projects, including 217, 205, I-5, the Sunrise Corridor, and the roadway expansion projects in the suburbs, such as around Tigard and Wilsonville, need to be ended now so those funds are not wasted and can be re-purposed to building out our bicycle, pedestrian, and transit networks. We're in a climate crisis and we need to act like it.*

*We should absolutely not be adding more road miles. We already can't afford to maintain the ones we have. Stop digging a deeper hole*

*Why? All you are doing is make it easier to drive and drive faster.*

*Widen roads will only encourage people to continue to focus on cars. Focus on pedestrian and bicycle safety.*

*Widened roads make neighborhoods less vibrant, discourage or eliminate pedestrian activity, encourage speeding, and lead to more injuries and deaths for pedestrians, cyclists, and drivers. This is the opposite of what we should be doing.*

*Widening major roads is just going to cause more traffic deaths and induced demands. We need to rethink our streets for all users and stop prioritizing single-occupancy cars*

*Widening roads doesn't help. This has long since been proven. Induced demand is more people using it until it's clogged again and bottlenecks and side roads are backed up like never before. Even, and especially, "super highways" fail. Get off it already!*

*Widening streets is a bad idea because it encourages car use, and causes climate change. It destroys neighborhoods and quality of life. It's expensive and inefficient, requiring relocation of homes, businesses, and infrastructure. It doesn't solve congestion, which is due to a lack of public transportation options and poor urban planning. Cities should prioritize sustainable and equitable transportation solutions such as bike lanes, public transportation, and pedestrian-friendly streets.*

*Wider roads induce more traffic and faster speeds. Please please please don't widen roads. Some of the worst high-crash corridors in Portland (and throughout the US) are the widest roads, and this isn't a coincidence.*

*Yes, please. The general infrastructure was planned 50 years ago. The road system is way over capacity due simply to population growth. It's a 'system'; you have to increase road capacity at roughly the same rate you create capacity for mass/alternate transit (eg Max, bus, bikes, walking). Not all new people to the region will take mass/alternate transit and people change their modes throughout their life (I drive everyday because I have to do kid pick up/ drop off and activity runs).*

## Throughways

### Dedicated lanes

# Summaries of public engagement and agency consultation – Spring 2023

*3+ people of driving age*

*3+people of driving age.*

*Bus*

*Buses and bikes, yes. Single occupant vehicle, no.*

*But don't create these extra lanes. Convert car lanes into dedicated lanes. Many of our arterials and freeways would support this.*

*Carpool lanes are unnecessary, expensive, and end up with the same traffic as the general-purpose lanes. This leads to buses and more efficient modes being slowed down by personal vehicles. Even in a dedicated lane*

*Dedicated lanes for bus. Not by adding more lanes but by repurposing existing.*

*Dedicated lanes should only be constructed for transit vehicles.*

*Dedicated lanes should ONLY be provided by re-purposing existing mixed flow lanes, and NEVER through roadway or freeway widening projects.*

*Induced demand*

*Not for cars. 12+ people per vehicle*

*Our freeways are confusing enough to navigate as it is when someone is in an area for the first time. More lanes = more confusing decisions.*

*People do not respect this rule. We know that adding more lanes does not reduce traffic but encourages more people to rely on their cars.*

*People don't adhere to these now, why spend more money on this. It only adds to congestion.*

*Prefer 3+ people*

*See comment, above*

*See my comment above (yes to dedicated bus lanes, no to other HOV lanes)*

*There should only be a dedicated bus lane. We should be discouraging car use instead of making it more appealing to drive everywhere.*

*Waste of money without enforcement*

*yes for buses, not for carpool though. They have been proven ineffective*

## **Freeway capacity**

*Absolutely not. No. Science has proven that this fails.*

# Summaries of public engagement and agency consultation – Spring 2023

*Add more freeway capacity by improving public transit and alternatives (biking walking etc). More lanes doesn't help traffic, it allows more traffic.*

---

*Adding capacity induces demand and makes traffic worse! Don't do it!*

---

*Adding freeway capacity does not decrease traffic congestion. Traffic congestion has been empirically proven to grow proportionally to road capacity increases.*

---

*Adding more lanes is costly and ineffective at reducing congestion due to induced demand*

---

*Again, induced demand means widening freeways will only lead to the same congestion or worse. It's a waste of time. We should be removing freeways so our communities can heal and dense housing and retail can take their place.*

---

*Do not add new freeway lanes. Take other measures to incentivize reducing the number of vehicles*

---

*Do NOT expand the freeways with more lanes. This encourages more car use instead of encouraging alternative methods of transit!*

---

*DONT WIDEN ROADS*

---

*Every cent spent on freeway capacity is wasted on encouraging sprawl and longer commutes*

---

*For the future of my daughter and future generations, DO NOT DO THIS.*

---

*For the love of all things holy, please no. This country has enough freeways and I've never seen any kind of legitimate data showing that widening freeways improves congestion (at least long-term). What I have noticed is that the cities with massive freeways running through them are some of the most dystopian ones I've visited.*

---

*Freeway widening clogs highways for years via construction, all for the goal of adding an extra lane that immediately becomes gridlocked. It's a waste of money and is a step backward in our fight against climate change.*

---

*Heck no. No. No. No. Build efficient, reliable and frequent rail between Salem and Portland*

---

*Heck no. Build rail connections between Salem and Portland*

---

*Hell no. Only an ignoramus would reflexively, thoughtlessly say yes. Experts say hell no and they would know.*

---

*I am specifically against any widening of freeways.*

---

*I'm from Southern California and have invested time to research the value of freeways, it's been proven time & time again that better non-single car infrastructure supports traffic rather than widening freeways, making carpool/toll lanes etc.*

---

*If I could emphasize one thing in this survey it would be to not widen any freeways*

---

*If I could give this one a million stars I would. Infrastructure was planned 50 years ago. Now over capacity just by growth. You can't push all new to the region to mass/alternate modes. Most will be drivers so plan for that.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*If our solution to congestion is adding capacity, then maybe not today, maybe not next month, and maybe not next year, but eventually we'll be Houston. Congestion must be solved through myriad tools OTHER than adding lanes (congestion pricing, alternative mode availability, land use and housing changes, etc)*

*If we invest in public transit and active transportation we won't have to widen freeways.*

*If you build more lanes they will come. Induced demand is real, not a fantasy. Build wider safer bike lanes and meet you climate goals!*

*Increasing freeway capacity does not help traffic. Look at Los Angeles.*

*Induced demand*

*Induced demand dictates that this is a waste of money and won't solve congestion. Do not do this.*

*Induced demand means adding freeway lanes only leads to more congestion. This is not where I want money being spent. Freeways should be removed from our cities to repair the vibrant communities they destroyed.*

*Induced demand means adding lanes will only increase congestion. Do not widen freeways.*

*Induced demand. More lanes will not solve traffic in the long term. It will be better for 2 years max. Please look at the history of induced demand in the United States. I'm honestly shocked to see this question given the sustainability plans Metro has laid out.*

*More freeway capacity does not decrease congestion*

*More freeways will not solve congestion and is too expensive. Quit wasting money on cars.*

*More lanes do not help resolve any issues of our current day*

*More lanes never equals less traffic! If you want to reduce traffic and eliminate bottlenecks make transit so appealing the number of vehicles on the road drastically decreases*

*Never. Induced demand happens. Missing climate goals. and it just plain old encouraging crashes and death.*

*No added freeway lanes*

*No more freeway capacity. Induced demand is really a thing.*

*No more freeway expansion. This will just create problems with induced demand and lead to more traffic!*

*NO NEW FREEWAY CAPACITY!!!*

*No new freeways. Ever. No more lanes.*

*No no no! No more freeway lanes even if you call them "auxillary". Price the roads first and then see how traffic volumes adjust before considering widening.*

# Summaries of public engagement and agency consultation – Spring 2023

*No no no! We know that adding more lanes does not reduce traffic, but invites more people to rely on their cars.*

---

*No stars*

---

*No thanks.*

---

*No thanks. We have enough lanes.*

---

*No widening*

---

*NO!*

---

*No. Don't keep widening freeways.*

*Jerry Brown was correct. People are going to come, whether you prepare or don't.*

*However, people frustrated with unpreparedness turn around and leave.*

*Don't encourage people to come and stay. Make people learn to work with what is already available.*

---

*No. Induced demand*

---

*Nope. Any freeway expansion is unacceptable. Under no circumstances should we still be doing freeway expansions*

---

*NOT for capacity management. But projects for flow management, like acceleration lanes - reducing merging and ensuring a minimum of 3 lanes each direction for all stretches of limited-access roads within metro boundaries. Finding solutions for flow of freight across metro area - incentives for transport during off hours, specialized tolling schemes, peripheral routes to divert freight traffic from populated areas*

---

*Please do not add any freeway lanes for cars! It does not work to alleviate traffic and is horrible for our environment!*

---

*Please don't widen freeways. This only induces demand and creates maintenance liabilities for future generations. Widening freeways has never solved traffic problems.*

---

*Please stop wasting our money with freeway expansion projects, this will only exacerbate carbon emissions growth when we need to reduce carbon emissions in the transportation sector. We need to make it as easy to take public transit or bike or walk as possible, and make it as difficult to drive as possible.*

---

*Surely you jest*

---

*The freeways are the backbone of our transportation system. When they are backed up, traffic cuts through our communities causing more crashes and speeding, and making people feel less safe walking or biking.*

*If we want our communities to work, we need to make our freeways work.*

---

*The one exception is the bottleneck on I-5 southbound near the Rose Quarter. That bottleneck should be removed with a single additional lane. Otherwise, no new freeway lanes, period!*

---



# Summaries of public engagement and agency consultation – Spring 2023

*This never works! show me a freeway expansion that has ever reduced traffic. Induced demand is a thing.*

*This should not be a priority for Metro.*

*TOP priority. we have added 1 million people to the metro(including Vanc) in last 20 years and the last hwy built was 205..*

*We absolutely should not be expanding freeway capacity.*

*We all know about induced demand. Widening freeways (that includes so called auxiliary lanes) is hugely expensive and doesn't solve any problems. The only solution to road congestion is practical alternatives like transit and biking.*

*We do not need additional freeway capacity, especially if this plan is going to take climate change seriously. Focus on expanding active transportation infrastructure, transit, and maintaining existing roadways.*

*We DO NOT NEED MORE FREEWAY CAPACITY. We need to not spend another dime on freeway expansion; all projects currently in the works need to have all work immediately stopped, and the funds re-purposed for bicycling, transit, pedestrian, TOD, and streetscape projects.*

*We don't need wider freeways, we need alternatives like transit and safe bike paths.*

*We know this doesn't help.*

*We should not be adding more freeway capacity. It does not solve bottlenecks because it just causes induced demand. This is a waste of money and that's been proving. See NYT: <https://www.nytimes.com/2023/01/06/us/widen-highways-traffic.html>*

*Also, you should double check your UX on this survey because the comment button on the freeway capacity is hidden behind the next slide arrow, making it almost impossible to comment on this item.*

*Zero stars*

## **Incident response**

*Congestion reduces VMT. Don't spend any money trying to keep a failing system working.*

*Fire departments will oppose pedestrian and bike infrastructure in the name of response times, but will say nothing about increased street parking which should also impact them.*

*Keep areas clear of the homeless so that this is easy for first responders!*

*No funding to cops*

*Provided they can do so without risk to life and limb.*

*Drivers around here are terrible and this is why accidents are occurring. Passively forcing them to slow down is the key.*

# Summaries of public engagement and agency consultation – Spring 2023

*Reducing delays needs to be de-prioritized as a system goal. When our goal is to reduce VMT, delays are actually a friend. We need to DISINCENTIVIZE driving and INCENTIVIZE walking, bicycling, and taking transit.*

*The ambulance vehicles need to be rethought. It is against the law for vehicles (of that size) to just sit around all day and idle their motors. Ambulances need to charge their equipment and so just idle all day. This is a foolish and impolite practice.*

*This should be done via the dedicated lanes strategy outlined in roads and bridges.*

*This should not be an excuse to widen highways and increase traffic. Shoulders should be wide enough to accomplish this task.*

## **Interchange redesigns**

*Again why? You're just encouraging driving.*

*Do not widen offramps. It makes it difficult to walk or bike across when it opens to main thoroughfare.*

*Don't see this accomplishing much if the traffic is eventually moving into narrower lanes. The real goal needs to be to get more cars off the roads. Don't want to turn Portland into a vast array of highways.*

## **DONT WIDEN ROADS**

*Hmmm. Where are you gonna do this off I-84 from 181st west? There's no room or easement (save, eminent domain).*

*Induced demand*

*Interchange ramp terminals are among our biggest bottlenecks, and must have adequate capacity for our system to function adequately and safely.*

*Nah*

*No thanks*

*No widening!!!*

*No. Induced demand*

*One star is what I'm considering a complete no. If no star is an option please consider my one star responses to be absolutely adverse to the subject.*

*So more cars can clog the rest of the system? Hasn't worked yet*

*stop wasting tax money on widening roads.*

*The 405 exits from 26 need real help. Things back up for miles up to the transit center regularly because people don't anticipate the left-lane exit. Some more signage about that exit could probably go along way*

*The comment button was blocked by the next arrow button. Do not add new freeway lanes. Focus on how to get people out of their cars. Focus on better public transit.*

# Summaries of public engagement and agency consultation – Spring 2023

*The on ramp to I-5 south from the Ross Islands bridge is non-existent and is a death trap*

*This is unnecessary and we should be focusing on public transit. The end-goal should be to remove freeways from the city as they destroyed vibrant neighborhoods to be built. This past of injustice needs to be rectified, our city healed.*

*Trying to write this about Freeway capacity but the survey UX design doesn't let me click that button - I am strongly against freeway expansion as it is NOT a proven way to decrease traffic - traffic use will rise as freeway capacity increases. This is not a good use of public funds which should be modernizing our transit system not buying into archaic auto-centric infrastructure.*

*Use the money to improve and expand the MAX / bus / streetcar system to make it easier and faster to get from A to B. Expanding roadways does not reduce traffic because it induces demand.*

*We could spend billions on this in Portland and would still have traffic congestion, still have complaints that we need to widen roads, still have the same problems we have now. This is a waste of money. Invest in projects that improve the livability of our city.*

*We don't need to widen anything. We must focus on public transit. Freeways should be removed so the city can return back to the vibrant neighborhoods that were destroyed by them.*

*We need less interchanges. I would support deconstruction.*

*We need to STOP with wasting funds on interchanges and ramps. This is still wasting money on incentivizing driving, when we need to reduce VMT and prioritize walking, bicycling, and transit.*

*We should be removing freeways that destroyed once vibrant communities so dense housing/retail could return. We should not be trying to put lipstick on the pig of our freeways.*

*we should be shrinking our freeway footprints not growing them*

*We shouldn't change our freeways anymore. The goal should be to remove them from our cities soon. They destroyed the vibrant fabric of our communities when they were forced in by eminent domain.*

*Widening off ramps seems to be an invitation to speed on said off ramps*

*Widening should not be a priority for Metro.*

*Without working to to alleviate bottlenecks at interchanges the other items in Throughways will fail. The widening of the I-84 east to I-205 north is a perfect example of alleviating a bottleneck and improving safety by changing the design of the interchange.*

## **Roadway pricing**

*Absolutely against this- we pay enough taxes in the state and local taxes, work within your budget!!!! Stop finding unnecessary beautification projects, etc. and expanding public transportation, which ridership does not equal the investment of taxpayer dollars into that.*

*Apply congestion pricing and use the revenue to subsidize transit service.*

# Summaries of public engagement and agency consultation – Spring 2023

*Congestion pricing to reduce VMT is good, Congestion Pricing with the aim of generating revenue for future road projects is bad.*

*Congestion pricing works, but only in regions with transit times that compete with driving. If congestion pricing or tolls are implemented, they should not fund road expansions. They should fund existing road maintenance, transit, walking, and biking infrastructure.*

*Definitely no tolls because this disproportionately impacts people who need to drive for work (use their vehicle for work), people who don't have frequent/reliable transit options (limited bus services, max), and people who drive into Washington/Oregon for work.*

*Definitely not. This will disproportionately harm people who must drive for work and people who travel into Washington for work.*

*Do not do this! It is a regressive tax on citizens and businesses and will negatively affect the entire area. Portland will not recover from the economic downturn the will happen when businesses will move out and trucking transport avoids the entire metro area. This is an economic disaster in the making.*

*Don't charge people money to use public roads*

*Ensure that pricing actually manages demand - volume based, not time based. When volume low, do not charge tolls*

*Greatly support tolling on I5 and 205 specifically in northern portland high congestion areas.*

*HECK NO*

*how does this make any sense? why would we want to target the already financially unstable households along TV HWY to NOT drive during congested times.*

*I find this tax to be regressive and inequitable.*

*I worry about equity with this policy, but am generally pro-policies that discourage driving.*

*I would like to see a real plan on how to counteract the negative economic impact of these ideas for low income disadvantaged & underserved communities. Until public transit is free, the cost of this is a real issue*

*In my opinion, tolls will not reduce when people drive. Their work and school schedules designate when they drive.*

*You should promote tolls for what they really are; the price to pay for using the roads we drive on.*

*Jeff Speck stated in 2015 that as a general rule of thumb, every mile driven costs society a quarter and every mile on a bicycle gives society a quarter. Today, drivers are heavily subsidized and do not easily see what the true cost of their choice to drive was. Make them see how expensive taking a car actually is, and we may see some change in behavior, desires, and culture.*

*Mixed feelings about this a I feel this could impact those who can the least afford to spend more. Also believe it could encourage people to drive through neighborhoods to avoid tolls; creating more danger for pedestrians...*

*More funding for max lines and bike pathways and etc*

# Summaries of public engagement and agency consultation – Spring 2023

*More tolling. It is a user fee. Not everyone drives. Why should non-drivers have to pay the same hefty amount for road upkeep than daily drivers.*

*Never! It's hard enough, don't make it harder. Traffic is not the enemy. Impeding the poor is not the answer.*

*No one wants tolls. Please Stop. Get funding from existing sources instead of creating another layer.*

*No tolling. Period. It destroys local economy, will put small business out of business and create a huge local issue as traffic moves into residential and other roads to avoid it.*

*No tolls, worst idea*

*NO!*

*No. Hell no. We pay enough in taxes already. Absolutely no tolls/congestion pricing.*

*On the one hand, I like the idea of discouraging needless road usage at peak times. On the other hand, I have a feeling that pricing in this way would hit working people hardest if they have to commute by car at a particular time because no competitive public transit option exists for their situations.*

*Oregonians already pay the highest taxes in the country. We should not be penalized for operating in a city with a lacking public transportation system. How about actually tax rich people?*

*Roadway pricing is great, but the funds cannot be used to fund roadway widening projects. We're in a climate crisis and we need to act like it. All roadway pricing revenue must be directed towards the transit, pedestrian, and bicycling systems.*

*something tells me we wouldn't have much of a positive reaction to this from the public haha!*

*sounds good in theory. cities that have this like in california and washington still have plenty of traffic problems.*

*Stop asking people to spend money on travel. It only adds to traffic problems and congestion and decreases tourism.*

**STRONG NO TO ROADWAY PRICING**

*The plan to toll 205 with "congestion pricing" is idiotic. People aren't sitting in traffic going through West Linn because they feel like it. They're either diverting around Portland on a long distance trip (in which case they can't really plan for traffic they didn't know about) or they're getting to work on a set schedule. Congestion pricing would make sense to charge people who live in Portland for driving when they have plenty of alternatives.*

*This is key because it offers a feedback loop where people consider the value of the infrastructure they use and also help fund its maintenance into the future.*

*This is not equitable with out more/other transit options*

*This is stupid. It will negatively affect every business and citizen. It will drive trucking and shipping to other cities. It will cause a further downturn in our already precarious local economy. It will also negatively affect local neighborhoods as vehicles (including big rigs) will use local streets instead of highways to avoid tolls. I*

# Summaries of public engagement and agency consultation – Spring 2023

*know I will, no matter how much time is added to my trips and gas wasted. It will still cost less than your proposed tolls.*

---

*This punishes people who have to be at work during peak hours.*

---

*This should be scaled to the value of the vehicle being driven, which would be easy to assess from the VIN.*

---

*This will encourage transit use during the everyday commute and the surge pricing could be used to pay for transit improvements*

---

*TOLL BOOTHS with tire-spike turnpikes and a dedicated tow truck to move violators out of the lanes quickly to nearby, dedicated parking areas where they await their tow to a repair shop or abandon their ride (which will then be towed at their expense).*

---

*Tolls just cause people to divert around them using smaller roads that are less-safe and more disruptive.*

---

*Tolls on all highways from Eugene to the Columbia River crossing.*

---

*Tolls on every highway from Eugene to the Columbia River*

---

*Tolls will increase neighborhood traffic. Employers define work times; work with them on schedule changes/flexibility.*

---

*Tolls will just move cars onto neighborhood streets & make things worse.*

---

*Ultimately, pricing for full cost is the best way to community efficiency. The technology is available (and pretty cheap) to price ALL road use. Not politically easy, but then, its the job you chose.*

---

*Unless there is a major investment in reliable, fast, and comprehensive mass transit we should not be incorporating tolling. For many not living in the Central City, there are no real options to get into Portland without a car, even if they wanted to.*

---

*User fees such as tolls will only create more congestion on alternate routes. With GPS, it's easy for people to avoid tolls but they will likely go through neighborhoods and other areas not designed for increased traffic. No tolls!*

---

*we do not want it stop pushing it on us!!!!*

---

*We should congestion toll all our roads progressively. Low income folks wouldn't pay, and higher earners would pay more depending on how much they make. We should also charge for all parking in a similar progressive way. Funding from this should go to pay for transit expansion.*

---

*We should progressively congestion toll all roads. Low income folks wouldn't pay and higher earners would pay more depending on their income. We should also charge for all parking progressively in a similar way. Money from this should go to fund public transit and bike/pedestrian infrastructure.*

---

*We should progressively congestion toll all roads. Low income people wouldn't pay, and higher earners would pay more as income increases. We should also charge for all parking progressively. This money could be used to fund public transit and biking/walking infrastructure.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*We're already the highest taxes population and our education, transportation, economy and crime are awful. People are leaving because of this, take the hint and leave us alone, you can't be trusted with our hard earned money.*

*Yes to congestion pricing that limits travel, no to just financing more projects... ideally we'd be able to spend that money on other modes*

*Yes, and these congestion tolls should be progressive so low income folks don't pay them and high income earners pay more depending on how much they earn. We should also charge for all parking using a similar progressive system. And all roads should be congestion tolled. Use the money to pay for public transit.*

*Yes, but please don't use the money for road/freeway expansion!*

*You can fix traffic with congestion pricing and tolling, not widening roads and highways*

*You're kidding, right? So not in favor of this.*

## Transit capital

### **Faster, more reliable buses**

*All Frequent Services need to be at least ten minutes frequency and FX needs to be five minutes at least*

*And do they need to be so damn big? I never see a full bus. They should be smaller and more numerous and frequent.*

*Buses should have priority.*

*Commuter rail infrastructure is a marvel that forms the backbone of walkable communities whereas buses are just buses and get stuck in traffic or are at least dependent upon roads even if they have their own lanes*

*Dedicated Bus Lanes! We already have the lanes on many of roads - just need to take them from the cars. People will gripe, but it needs to happen. We need to reduce VMT, and congestion is a great way to do that.*

*Dedicated lanes and signals!*

*Expanding the rose lane project for the busiest lines speeds up service and makes the bus more appealing*

*Fix the streets (see potholes comments) and purchase electric buses.*

*Give buses uninterrupted dedicated lanes on both surface roads and freeways to create a network of express buses bus lanes on TV highway, beaverton hillsdale, scholls ferry rd, highway 26, I-5, 205. Make the bus the fastest way to get around. Also incorporate better methods to bring a bike onto the bus. Bus bike racks currently cannot fit most fat tire e bikes*

*I love the MAX, but dedicated BRT lines are flexible, cost-efficient, and quick to roll out.*

*I'd add: quieter and less impactful to localized pollution. A potential solution would be electric "Trolley Buses." Diesel buses could be retrofitted to run off of overhead wires used for streetcar and MAX, without the capital cost of building track in the road. Trolley buses could be used to fill service gaps in existing routes with overhead wire.*



# Summaries of public engagement and agency consultation – Spring 2023

*More bus priority signaling please!*

*More buses arriving more frequently will benefit transit riders.*

*More fully dedicated bus lanes and signal priority*

*More FX lines!*

*Please!! Some buses come early & I watch it drive by me as I'm on my way to the stop. This wouldn't hurt as bad if I knew one was coming in 5 minutes rather than 15. This has caused me to be late to work at least 3x this year.*

*Ridership is significantly down- re-assess viability of public transit vs investment of public tax dollars. Spend funds elsewhere!!*

*Rose Lanes are working, but I'd love to see more enforcing of these lanes. I see drivers abusing them daily.*

*The rose lane project is a good start but more is needed. Actual bus lanes the length of a city block would be nice.*

*Transit is unusable. Enforce laws on max and bus. It doesn't feel safe to have meth zombies smoking drugs on the max or 3 year olds getting shoved onto the tracks or a guy's ear getting chewed off on the max.*

*Any investments in expanding transit don't make sense until you fix the safety issues with the system you have.*

*we need BRT, cheaper than MAX and a faster way to reach underinvested areas*

*We need more bus service.*

*We need to take away lanes from cars, and add more dedicated bus routes*

*Yes, BRT please! Dedicated bus lanes are proven to induce mode shifts!*

## **More MAX**

*As long as the homeless and addicts make them unsafe, ridership will continue to decline so why waste money on more*

*Bring it down to Salem*

*Build out the MAX infrastructure as much as possible. Build it down Lombard into St. Johns. Build it into Vancouver, extensively. Build it into SW. build it into a loop connecting Oregon City. And build a subway downtown to fix the bottleneck. And more as our region grows.*

*Build that line to Tigard for equity!!!! Or inforce a rent cap and provide affordable housing options closer in to the city*

*Build the Southwest Corridor MAX expansion. Build the MAX tunnel through downtown. Extend the MAX north further into vancouver once the IBR project is right-sized. Build a MAX corridor horizontally along powell boulevard. Build a MAX expansion along fremont into St Johns. Upzone Cesar Chavez and consider a MAX line North/South. Consider running an automated light metro, as is used currently in Vancouver, BC to cut down on operating costs.*

# Summaries of public engagement and agency consultation – Spring 2023

*Do NOT add more MAX routes running at-grade with car traffic.*

---

*do not waste any more money- We need new roads*

---

*Extend down to Salem*

---

*Figure out how to fund the SW Corridor project and build it. Get rid of all the park and rides and stupid car-centric olive branches and you'll actually get support from transit advocates and those that actually care.*

---

*Fixed lines are too expensive. The exception: Extend MAX to Vancouver*

---

*Fixed-rail costs way too much.*

---

*I don't think light rail is a cost-effective use of public dollars. It is very expensive, limited in service area, and does not adapt to changes in development, usage pattern, and can't be rerouted. I'd prefer to see more bus routes and better frequency on those routes. I think Bus Rapid Transit is a much better alternative than Light Rail.*

---

*I don't use the max as much as in the past, but I don't think adding more max trains will alleviate the situation. See street car comment.*

---

*I strongly support MAX investment that will expand service area and get people out of cars. Less support for MAX upgrades since the system is concentrated inequitably.*

---

*If people aren't going downtown as much anymore, then make the MAX more usable for portlanders. Create connections for us to travel between neighborhoods that currently take an hour or more by bus (and I'm in a close in neighborhood!!!)*

---

*Invest in faster travel times, and system resilience/seismic preparations. (1) Need alternative to Steel Bridge. (2) Close loop from Milwaukie (Orange line) to Clackamas Town Center (Green) to allow Tillicum to serve in event of disaster. (3) Underground or elevated lines through downtown with limited stops for Red and Blue lines to speed East/West travel times.*

---

*MAX is great, and it can be even better by expanding lines to suburban communities and provide a rapid transit option to the neighborhoods that need transit service.*

---

*Max isn't the solution. It costs a ton and doesn't go anywhere useful.*

---

*Max isn't safe enough for me to use like I used to*

---

*More MAX is being done to get more (federal) DOLLARS.*

---

*Stop the MAX metastasis!*

---

*This light-rail network is only acting as a means of moving blight from one place to another.*

---

*Just take the Burnside easement through east Portland into Gresham. It's an alley for vagrancy and attendant crime.*

---

*The MAX needs to be rebooted as a concept before even beginning to ponder further expansion it.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*MORE MAX is ludicrous. We have one of the largest systems by trackage. We need BETTER Max. FASTER MAX. SAFER MAX. Max is TOO SLOW. Tourists tell me constantly they take the bus or walk because the max is in weird locations and WAY TOO SLOW. MORE max is madness. Better max is desperately needed. Please I am begging you go look at the SkyTrain in Vancouver! Please go see how we should be treating MAX. Mass Rapid Transit - NOT Public Transit!!! Please!!!!*

---

*More security presence on Max lines*

---

*Need to increase capacity of the roads. I know no one wants to hear that but the general infrastructure was planned 50 years ago. The population has dramatically increased since then and therefore road capacity is undersized by today's population. You can't push all new needs to mass/ alternative transit; it all needs to increase relatively equally.*

---

*Need to make max feel more safe. More riders to balance the number of homeless riding.*

---

*No more light rail, build new MAX lines as automated light metro like SkyTrain in British Columbia.*

---

*Not without security and safety*

---

*SW Corridor, MAX down Powell, Orange line to Oregon City, MAX tunnel we need all*

---

*The east side could use a couple east-west lines!*

---

*The max system is good, but we should consider a build out of faster, heavy rail lines along with a more regional rail system. MAX is incredibly slow and the point of a rail system is to have a high-capacity system with travel times that are competitive with driving. Projects to maintain and speed up travel times for existing max lines, along with investment in heavier rail are preferred.*

---

*This should be a huge priority for Metro. A lack of grade separation along key areas of the MAX system is one of the main factors degrading the quality of MAX service. Grade separation will provide numerous benefits to our light rail system.*

---

*Transit is unusable. Enforce laws on max and bus. It doesn't feel safe to have meth zombies smoking drugs on the max or 3 year olds getting shoved onto the tracks or a guy's ear getting chewed off on the max.*

---

*Any investments in expanding transit don't make sense until you fix the safety issues with the system you have.*

---

*Until we all remember NOT to put MAX lines along highways, we shouldn't bother with more rail lines - they can't fully support community stations.*

---

*Voters voted down a bond measure to expand max just a couple of years ago.*

---

*We need to expand MAX to cover even more of the metro area. Into St. Johns, into Vancouver, into southwest, connecting Oregon City, and more. We need to put MAX in a subway to fix the downtown bottleneck.*

---

*We need to expand the MAX. Into St. Johns down Lombard, into Southwest and Tualatin, down to Oregon City connecting green and orange lines, in Vancouver extensively, add a subway downtown to fix the bottleneck there, and much more.*

---

# Summaries of public engagement and agency consultation – Spring 2023

*We need to expand the MAX. Put it down Lombard into St. Johns. Into Vancouver extensively. Into Southwest. Down to Oregon City connecting green and orange lines in a loop. And more.*

*We need way more max lines and more frequent service. We need a downtown tunnel, that is the only way to improve frequency.*

*When is the Purple Line/Southwest Corridor Project going to resume already? We need light rail crossing into Vancouver too. We need Cascade High Speed Rail to avoid the pollution, insane stress and money wasting of CONUS flights.*

*Yes the only way moving forward is with excellent transit. Now that Oregon eliminated R1 housing zoning requirements we will be seeing Portland become more dense. As density increases, transit will become more relevant. I want us to consider a MAX line to Salem.*

## **More streetcar**

*Add a streetcar line in North Portland running from St Johns to PDX!*

*Adding more streetcar lines, increasing streetcar headways, and creating dedicated streetcar ROWs would be huge in increasing the reliability of the system.*

*And allow streetcars to have stoplight overrides.*

*And re-do schedules so the central city has staggered stop times, not back-to-back.*

*Anything but CARS*

*Around downtown and the industrial Eastside? Yes!*

*Further East, North or South? No!*

*Don't allow the streetcar to transport blight, as the MAX does, currently.*

*Bring it back to SE Hawthorne Blvd. :)*

*Bring Streetcar to Outer East Portland*

*Do NOT include any more in-traffic streetcar lines.*

*Everyone I know walks instead of streetcar because the streetcar is so slow.*

*I feel like these questions pit transit types against each other and they shouldn't. We should invest in more transit period, and invest in the mode that is most efficient for that particular need.*

*I keep seeing old pictures of Portland's streetcar lines - their disappearance is a transportation tragedy. Imagine where we'd be as a community if you could just hop on a streetcar in our neighborhoods.*

*I want the streetcar extended everywhere. Down Sandy Blvd. Down 82nd Ave. Down 122nd Ave. And more.*

*Maybe. Could we withdraw some parallel road capacity as we do, to encourage a shift of business locations and denser housing?*

# Summaries of public engagement and agency consultation – Spring 2023

*Not sure whete expansion of the system makes much sense. Need more info*

*Repair the Washington Park Railway tracks for transportation between the zoo and the rose garden*

*Streetcar is good only if it has dedicated lanes, and curbs to keep cars from obstructing it. Without those its slow AF.*

*Streetcar lines serving popular business districts is convenient for locals as well as tourists. A streetcar line connecting the central city could help boost its recovery.*

*Streetcar to Montgomery Park and further up MLK, out to Hollywood*

*Streetcars up and down SE 82nd Ave, streetcars on T.V highway. We need to dream bigger with our streetcar infrastructure. Also the city needs to leverage the advantage of the streetcar routes to the business opportunities nearby. Example: "what are the best restaurants along the streetcar loop?" That is a difficult answer to find in a Google search.*

*The streetcar expansion northwest to montgomery park has taken unacceptably long, perhaps as long as a MAX line.*

*We need more streetcar lines. Down Sandy Blvd, down 82nd Ave., down 122nd Ave., and more.*

*We need to expand streetcar all over the city. Up Sandy Blvd, down 82nd Ave., down 122nd Ave., and more.*

*We need to expand streetcar onto Sandy Blvd, along 82nd Ave., along 122nd Ave., and more.*

*We need to keep building up and extending the streetcar lines! We also need electric ferries for transit along our river ways and the streetcars can tie-in with the docks! Rebuild Murnane Wharf! Rebuild Portland buildings lost to carcentric I-5 etc., parking lots, gentrification and other disasters!!!*

*Would need to know more about where streetcars would be placed to decide if I value this.*

*Yes, but give the streetcars their own dedicated lanes. Or else there would not be much of a point.*

## **Park and ride**

*As long as the garages/lots are patrolled for safety.*

*Can we get bike parking instead? I would drive less for longer trips if I could bike to a station and leave my bike there knowing it would be in one piece when I got back. Otherwise a massive surface level parking lot for cars still encourages driving and takes up valuable real estate (which could be used for TOD for example)*

*Combined with a reliable and regional rideshare this is how to get folks to avoid single person vehicle trips*

*Fix safety issues at park and ride that you already have!*

*I would go back to taking the MAX again if I had a park and ride near me in Hillsboro near highway 8*

*If bus connections are well set up to get to max... extra parking should not be needed. It will also add to carbon emissions...*

# Summaries of public engagement and agency consultation – Spring 2023

*If people get into a car, they are going to just drive where they want. People are used to sitting in traffic now, they don't care anymore. A parking space is the worst possible way to utilize the land near public transit - it should be banned.*

*It would be better if there was enough and reliable transit so that park and ride wasn't needed so much!*

*many people have no safe way to get to transit options*

*Maybe as an interim measure to get people out of their cars, but the real deal is to get businesses to set up near stations along the transit.*

*No park and ride. Use that land to build dense housing with retail mixed in to activate transit stops, not make them parking lots.*

*No, just no*

*park and ride is an outdated model that relies far too heavily on personal vehicles, I should be able to get to a station without having to drive.*

*Park and rides are a horrible waste of money*

*Portland has way too many park and rides. They are almost never used. Convert them to Transit Oriented Development.*

*Stop wasting money on Park and rides. Just build homes and businesses around stations.*

*The land around a transit spot is the most valuable land. Why waste it on a car parking lot???*

*There is already plenty of parking at stations, this is not how you expand transit ridership. Replace parking spaces at stations with TOD when the opportunities arise*

*There should be no park and rides. We should convert that land into dense housing with retail mixed in. Activate the transit stops instead of turning them into parking lots.*

*There should be no parking lots next to transit stops. We should build dense housing with retail mixed in around of transit stops.*

*This has historically been important for office commuters which seems less important these days, however I could see great use cases for park & ride to help non-office folks get to work (if it is useful to them) and also for recreational use cases, like to help people get to sporting events instead of driving or taking Uber/lyft*

*This is car infrastructure. Its not going to help reduce dependence on single occupancy vehicles.*

*This is terrible land use. Stop putting storage for metal boxes. Housing near transit.*

*Train stations should be near walkable communities with fun things to do. Not a parking lot that people taking the train then have to walk through to get to anything. Planning communities/neighborhoods around a train stop is way more ROI for the city than a parking lot.*

*Transit and mobility solutions should not incentivize and bake in private car usage. Plus, people who drive to a park-and-ride are likely to just drive to their final destination.*

# Summaries of public engagement and agency consultation – Spring 2023

*We don't need park and rides. That land should be used for dense housing and businesses.*

*We need to replace car trips, not just make them shorter.*

*We need to transition away from park & rides and towards transit oriented developments. We should not build any more park & rides; we should re-develop all existing park & rides. Their land banking function needs to be replaced by the use we have been land banking them for: HOUSING! And employment.*

*With a well engineered, adequately invested in and properly implemented commuter rail system(s) these aren't necessary*

*Your trains are no good for middle class folks if they take forever and there is nowhere to park*

## **Transit oriented development**

*Affordable housing*

*Better sidewalks, bike lanes and more frequent service means that people don't have to live next to a bus station to find benefit. Living next to noisy and noxious buses sounds awful*

*Build density all over Portland, but especially next to transit stops. Try to force out low-density use of land next to transit stops.*

*Build new housing and public spaces instead of parking spaces. Sunset TC would be a great option. An express bus line or infill max station stopping at Sylvan with housing and mixed-use development in place of those empty offices would be an optimal reuse of a convenient beautiful location.*

*DOWNTOWN PORTLAND - office conversion NOW!!! Downtown has SO much potential for expanded housing and related neighborhood development with existing transit infrastructure. Portland needs this now!!!*

*Given that we are in a long term housing shortage, building transit oriented development seems like a win-win*

*I appreciate that more affordable housing is being built near public transit. However, as a woman freelance performing artist, even if I prefer to bike or to take public transit most of the time, the lack of parking at these new buildings is a barrier. I have to drive a car to get to gigs that are farther away and to late night jobs, and to show up looking nice (instead of sweaty and smelly with makeup running after biking).*

*Must be affordable*

*MUST include TRULY affordable housing!!*

*Only if this is AFFORDABLE HOUSING. By which, affordable for a single person making minimum wage.*

*So so so important to help make transit useful to people*

*The profound potential of the Gateway Regional Center has been squandered, resulting in the Gateway Ghetto. As a transportation hub, the area is unparalleled. INVEST here!*

*This is the most important part, there is so much transit that is begging for dense development nearby*

*This should happen organically with the right zoning.*



# Summaries of public engagement and agency consultation – Spring 2023

*This shouldn't be limited to housing. Build destinations (employment, shops, etc.) near transit.*

*TOD surrounding key bus lines and the MAX system are lacking. Constructing more affordable housing near transit should be a top priority for Metro.*

*TODs are a no-brainer way to generate ridership and income for transit while working to solve our region's acute housing crisis.*

*Trimet should be building TOD itself to generate revenue for the system.*

*Trimet should consider developing near transit as a revenue-generating activity.*

*We have thousands&thousands of empty housing units in Portland proper alone serving only as financial assets in investment portfolios of hedge fund cretins instead of as direly needed shelter for human beings. We've lost so many cherished local landmarks&gorgeous structures for homogeneously hideous petrochemical yuppie kennel condos intentionally priced out of reach of the workforce to be built by profiteering developers&price gouging corporate slumlords. We can't outbuild greed. We need rent caps*

*We need to be upzoning near transit stops extensively. And upzoning much more of the city to make robust public transit much more feasible.*

*We need to drastically upzone around all transit stops. We also need to upzone all over metro so we can build more robust transit into transit-oriented places.*

*We should drastically upzone to allow more dense housing with retail next to our transit stops. The rest of the city should be up zoned for density to make them transit-oriented for future transit expansion.*

*What type of housing? Section 8 HUD!?*

*Buses from HUD developments to MAX stations; if MAX access (i.e. fare avoidance) is not going to be continually-enforced, then make it difficult for the criminal element(typically associated with such housing) to access the MAX station. If they don't have the fare, they are not going get on the bus. And if they can't get on the bus, they are not likely to walk the distance to the MAX platform.*

*YES 100% THIS*

## **Transit stop amenities**

*And Security guards on site. Not just lights but security presenc*

*Being pregnant at most MAX stations, especially the transit centers, is punished heavily by the lack of restrooms.*

*Effective covers! It rains here! And the suburbs sorely lack any shelters.*

*Garbage cans at transit stops*

*Great idea, provided you can ACTUALLY make such areas safe. Assaults and killings under the current setup haven't been brought under control.*

*I cannot see how such amenities will magically make the criminal activities discussed unlikely.*

# Summaries of public engagement and agency consultation – Spring 2023

*Having comfortable, clean stations and stops makes public transit more appealing.*

*Higher priority for bus shelters in the suburbs.*

*Honestly they are already overbuilt. If we overbuild transit stops, then we will have homeless people taking shelter in them. Most people have Google Maps or some equivalent in their hands that they reference for the time the transit will arrive. The need for bus shelters is much less because of this. Lastly it makes the city space look better with more of a minimized transit stop approach.*

*It is absolutely ridiculous that our transit system does not have turnstiles or other barriers that only allow paid participants access to MAX and other mechanisms for street cars. Across Europe fare integrity is essential and people (including tourists) abusing their system are subjected to enforced fines. I see no investment dollars going toward such an obvious safeguard. Our MAX and street cars are scary to "clean riders" as we witness drugs being used, addicts shouting and filthy smells.*

*Lack of access to clean, safe, maintained, and well-supplied restrooms is a major deterrent to riding public transportation for me.*

*More police at stations and on patrol on the vehicles*

*Need restrooms desperately*

*Overdesigned transit stops represent a large money sink that doesn't address the #1 thing people require from transit: frequent, reliable service.*

*Regularly maintain these amenities. Also include working security cameras and clearly located buttons for emergency help. We need more security at stations.*

*Ridership will increase with better design and amenities, especially in outer East Portland where the infrastructure is an embarrassment.*

*Safety at stops/stations and while riding. Add transit officers.*

*Safety!!! I don't feel comfortable walking or waiting alone at a lot of the MAX stops. Also need more "watchers" on trains*

*Seems like restrooms would really up the cost so don't favor that. Definitely lighting is important.*

*sidewalks to get to the stops*

*The Barbur Station is trash*

*Transit is unusable. Enforce laws on max and bus. It doesn't feel safe to have meth zombies smoking drugs on the max or 3 year olds getting shoved onto the tracks or a guy's ear getting chewed off on the max.*

*Any investments in expanding transit don't make sense until you fix the safety issues with the system you have.*

*Will just keep getting destroyed by homeless and antifa*

*would love more safety features near MAX stations! perhaps safety calling button for authorities, etc.*

## Transit service and operations

# Summaries of public engagement and agency consultation – Spring 2023

## **Increased bus service coverage**

*Better than more MAX lines and the dregs they with which they're associated; see prior comments.*

*Bus coverage is lacking particularly lacking in SW Portland and in communities west of the SW hills.*

*Bus routes should be expanded.*

*Bus service should be increased.*

*Buses should serve more of the metro.*

*Express lines with connections to local lines.*

*Express lines that run suburb to suburb, with a max of 2 pickup/drop off stops on each end. Ex. Bridgeport park and ride to Clackamas town center transit stop, with 1 stop at a park and ride near Gladstone/Ore City*

*Bus rapid transit lines/corridors where buses receive priority green lights*

*I would encourage short loops centering around MAX stops. Too many MAX stations leave you in the middle of a parking lot with a Bus connection that runs every 45 minutes.*

*I'm close to a bus line but it only runs every 38 minutes. And we wonder why ridership has cratered?*

*Increased coverage is good, but not if it comes at the expense of fast and frequent service. Coverage expansion can only happen after reliable core service is ensured.*

*Many regional governments are telling people they should transit instead of driving, but transit doesn't go where they need to go*

*More bus service is needed.*

*More buses = More Traffic. Schedule buses more appropriately!*

*no senior transport in Cedar mill to hospital or stores on Cornell Rd or back from local roads Salzman/ NW Thompson. Residents want access downhill not uphill to the Transit ctr. Bus discontinued due to ridership. Kids have no safe bike paths or bus service.*

*not until there are corresponding land use plans and investments*

*One example: No or limited bus service to Westside shopping areas, eg Costco/WinCo/Walmart on SW Dartmouth Rd*

*Only if the frequency adds to the overall service and helps expand options for lower income communities to get to work. Bus twice a day at awkward times isn't helpful*

*Only if the frequency and schedule actually help conveniently connect people to their jobs. Some of the expanded lines are ineffective*

*Specifically within this, creating BRT / express lines that link key transit corridors.*

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*The amount of money of taxpayer dollars that are spent on public transportation does not equal the number of people utilizing it - funds need to be spent elsewhere or another creative solution to public transportation.*

*This should only be a fill-in until our passenger rail system is up to snuff. We need another rail revolution and to honor the Oregon Electric and Red Electric Railways. We need to rebuild fascinating Portland places stolen from us out of myopic avarice by parasitic plutocrats of privilege who divvy up our job earned taxpayer dollars funded public sector part and parcel to sell off. Our local heritage and historicity is something we've been robbed of. It's a tragedy more people are noticing.*

*Transit is unusable. Enforce laws on max and bus. It doesn't feel safe to have meth zombies smoking drugs on the max or 3 year olds getting shoved onto the tracks or a guy's ear getting chewed off on the max.*

*Any investments in expanding transit don't make sense until you fix the safety issues with the system you have.*

## **More frequent bus and MAX**

*#1. Every 5 minutes where now it is every 15, and every 10 where now it is every hour. Frequency matters way more than comfy bus stops. Existing lines more important than new lines.*

5

*As density increases, this will become more of a prior. Right now it is not a print. Given ridership levels, we do not need to add more routes. Wait times are good right now and not too much.*

*As you see, MAX is currently a failure because of the lack of safety. You need to enforce civil ridership and collect fares from everyone. Until you get that issue solved there is no sense in increasing its ridership amenities.*

*Current bus headways can dissuade transit usage as wait times are far too long. Additionally, MAX headways can become uncomfortably long during service disruptions. Increasing headways and constructing new projects with signaling to accommodate more frequent trains should be a priority.*

*Definitely, increase frequency of bus and MAX and streetcar. This will make it much more reliable and fast.*

*Frequent transit makes the system more rider-friendly.*

*How does a hill full of hospitals (Marquam Hill) not have commuter rail service? Our community colleges should all have rail since there's no lodging and college students are usually poor at junior college along with busy...And too tired oftentimes to drive safely!*

*If it takes twice as long -/ at least — by transit, why take transit?*

*Induced demand works for bus and trains too, the more trains and the nicer and faster and more convenient the experience, the more people will want to ride the train*

*More frequent bus is most important.*

*Light Rail is not important.*

*More frequent transit improves the system for users.*

# Summaries of public engagement and agency consultation – Spring 2023

*More frequent transit will make the system more robust and usable.*

*Particularly when personal safety on a platform cannot be assured.*

*People feel less safe riding public transit than in recent years. We don't need more of these, we need more safety measure to people aren't attacked and generally feel safer using public transit.*

*Please start the max earlier! I have so many friends who have to frequently get from one side of portland to the other to get to work at 6am! Theres NO OPTIONS for them besides wasting a ton of money uber, cabs, or begging for rides from coworkers. Its ridiculous yall have all these lines and yet on cater to those who work "normal" hours. Fix it. I bet youll see a huge decrease in traffic since COUNTLESS people have a super early morning schedule. But unable to use any form of publix transit.*

*Right now we have mass transit, not rapid transit.*

*Sometimes more hours. I'm on a commuter route, so too bad for me if I want to get to evening downtown events or the airport*

*The bus doesn't come often enough near where I live. To get to downtown, I can drive 10-20 minutes, or I have to catch the bus sometimes more than an hour before I need to be at my destination. I have difficulties with executive functioning and move more slowly than most people in the morning even when I get up extra early, so fewer chances to catch the bus on time is a barrier to my taking the bus at all.*

*The MAX is by far my favorite mode of public transit, but the trains are shockingly infrequent, even during rush hour. I'd love to see this improved.*

*They should be faster not more. Max is so slow car drivers have no incentive to ride them.*

*This is the single most important thing to getting people to use more transit.*

*This must be combined with an overall view and plan to reduce and disincentivize private auto use, including private EVs.*

*Transit is unusable. Enforce laws on max and bus. It doesn't feel safe to have meth zombies smoking drugs on the max or 3 year olds getting shoved onto the tracks or a guy's ear getting chewed off on the max.*

*Any investments in expanding transit don't make sense until you fix the safety issues with the system you have.*

*Yes! 20 minute wait times is not rapid!*

## **Special transit services**

*And it not cost extra. I live off of ssi and dont work due to my different disabilities.*

*I would look for coordination of changes in land use plans for business with commitments to provide shuttle service along corresponding routes. Perhaps co-sponsored by the businesses. We should be near the technology level for driverless shuttles to serve these (probably backed up by more supervisors)*

*Is more service needed? Would increase max or fx buses eliminate some need for specialty service? Not enough info to answer this appropriately*

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*Paratransit should be expanded.*

*Really, this is the only way that one can expect the TRULY disabled to be able to get around.*

*This would be awesome*

*We have an aging population. The ableism in our transit planning is outrageous*

*We have an aging population. We also need shuttles, such as between MAX & Kaiser Sunnyside, Kaiser Westside; Nike; Intel.*

*We need more paratransit.*

*We should expand paratransit.*

*With a proper public transit network, services like these are not as necessary.*

## **Transit rider information**

*Already have good rider transit information. Keep it up.*

*Google and trimet are fairly well integrated but I would like to see accuracy improved on the trimet app, sometimes buses never come.*

*I think this is already well done from what I have observed.*

*Please work to get the tickets available on Apple Wallet*

*Right! The less time one must spend on a dark, relatively isolated platform, the better.*

*This already exists, both at transit stations and via mobile apps.*

*This is a crucial step in getting people to ride transit more.*

*TriMet already does a great job of this.*

## **Zero emissions vehicles and infrastructure**

*A big yes to purchasing zero-emissions buses. Harder to justify personal EV charging infrastructure coming from public funds if those funds are more badly needed for mass transit.*

*Although zero emission vehicles are important -- it is more important, from a climate perspective, that we encourage as much ridership on transit vehicles as possible, even if those vehicles are not yet battery electric or otherwise electrified. The priority should be as much service as possible (frequency), and high quality service that creates a positive experience for riders.*

*Battery buses are a waste. Metro should be looking at trolley buses.*

*Becoming carbon negative is important— we need electric busses.*

*Cars aren't the wave of the future. The auto industry sabotaged our commuter rail systems our ancestors paid for and built through privatization and premeditated neglect along with bribery of our elected politicians. Then they sold us out and betrayed us by ditching the country and our workforce to move out of*

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*country which destroyed entire cities eg Detroit. Then we've bailed them out and they always just make their executives richer through stock buy-backs... To hell with the auto industry.*

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*Electric buses are great, but not as high a priority as just running more service.*

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*Electric buses are nice, but we should not be focusing on them so much. Buses inherently reduce emissions by moving people more efficiently and we should not scrap existing buses that work just fine and buy zero emissions buses (those take resources and energy to produce). The focus should be on building a rider base and increasing ridership, THAT is how you reduce emissions.*

---

*Electric Vehicles only solve one problem - the emission problem. They are remarkably heavier, so they are far more deadly and rough on infrastructure. They are more expensive and have much less utility. They are a small part of the solution. Nearly half of all car trips in America are under 3 miles - any money not spend directly on bringing that percentage down is wasted.*

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*I'd rather see money spent on easing access and increasing frequency A full diesel bus is better for environment than and people driving because we chose equipment over service*

---

*I'm an environmental professional and I think we should focus on the bigger picture of reducing emissions by building infrastructure that encourages public transit use, biking, and walking.*

---

*More electric buses, less electric trains.*

---

*Please consider trolleybuses. They will be less expensive (every transit agency in the country is trying to buy battery electric buses at the same time!) and more reliable from an operational perspective (shorter layovers means fewer buses needed) and there are plenty of nearby cities (Seattle, SF, Vancouver) with expertise in both operations and maintenance*

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*remove as many barriers as you can for transition to EVs.*

---

*Solves the climate change problem, but none of the other issues with car dependent urban design*

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*This is great to have, but the biggest emissions and livability gains come from removing private cars from the road. Invest money toward that!*

---

*This needs to be prioritized for transit and freight, NOT for private vehicles.*

---

*Trimet should power buses with CNG, which uses energy more efficiently than NG converted to electricity, or coal. Trimet is performative about electrification and we see through it.*

---

*Trolley buses might be a much quicker and more pragmatic approach to zero emissions vehicles, especially where overhead MAX/streetcar wire exists.*

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*We need to become carbon negative. Electric transit vehicles can help achieve this.*

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*We should aim to be carbon negative. To get there, electric vehicles for transit will help a lot.*

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*We should be aiming to get carbon negative as soon as possible. This means electric vehicles.*

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*Zero emissions buses are a distraction. With limited budgets and political capital, ZEV's are an opportunity to appear to be making progress while ignoring the ridership death spiral. The dirtiest bus is cleaner than the cleanest single-occupancy vehicle. I don't care if the infrequent, late bus is electric.*

## **Walking and biking**

### ***Protected bike lanes and pedestrian facilities***

*All new bike lanes should be protected as a standard. Pedestrian facilities should be improved.*

*Although this would be amazing to have, the practicality of it may not be achievable at this point. In the meantime having wider lane, or even green barriers would be beneficial for different issues.*

*Ensure the sweeping and cleaning of said bike lanes and maintain separation between bicycles and pedestrians. If a shared use path must be built, ensure it is wide enough to accommodate both modes (14ft minimum)*

*Except those candlesticks seem to prevent most maintenance of these paths. They need to be swept MUCH more regularly. A better way forward might be restricting private vehicles altogether on some streets.*

*I bike daily but I don't need "protected" lanes - regular bike lanes are good enough for me as I prefer to ride with traffic and be treated like a vehicle. And I believe pedestrian facilities should be separate from bike facilities.*

*More people would bike if they thought it was safe, and biking is zero emissions! Please create more real infrastructure for bikes and remember, paint is not infrastructure!*

*Our budget needs to reflect our aspirations. This investment can't be window dressing any longer*

*Paint isn't infrastructure*

*Pedestrians are notorious for waking in the bike lanes. There needs to be more surface delineation.*

*Portland's HOP greenway goes through areas without sidewalks, making pedestrians, wheelchairs, baby strollers, people using walker and cyclists all using the street. IT DOES NOT WORK!*

*Protected bike lanes should be the standard. And pedestrian facilities would be great.*

*Protected bike lanes should be the standard. Better pedestrian facilities would be beneficial, as well.*

*Protected bike lanes should be the standard. Pedestrian facilities are also sorely needed.*

*See comment, above*

*The east bank Esplanade between OMSI and Hawthorne Bridge is a good example of this. A separation from that highly utilized oath and the rest of the OMSI parking lot would make the people feel safer from cars. At minimum a curbed tree island as a way of separation.*

*The suburbs lack sidewalks in many areas.*

*This is the single biggest need in this city, especially as e-bikes are starting to show evidence of helping replace car trips. If it passes, the e-bike bill will provide access, and this piece of the puzzle will take care of the safety aspect to really shift modes towards biking.*

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*This type of design should be a higher priority for new infrastructure. However we should NOT be prioritizing reworking existing infrastructure into this design. If there are already bicycle lanes and sidewalks leave it alone and focus on adding new ones where there are none. We made poor choices in the past, oh well, we'll do better going forward.*

*We need to transition away from bike lanes, which do not provide physical protection for vulnerable road users, to physically protected cycle tracks. We need to stop trying to pretend like we're the experts, and just follow the examples of places that have demonstrated they have safe bicycle systems through high mode share for bicycles and attainment of vision zero goals.*

*Yeah, it's scary out there*

## **Road crossings**

*A network isn't a network if it's interrupted by a giant road that's terrifying to cross or a stopped freight train is in the way.*

*Crossings, especially ones that are across busy streets such as Powell, need to be lighted rather than just striped. In my experience, cars do not look for pedestrians at crosswalks if there is not a flashing light or stop light.*

*Especially near schools, ie 80th and Glisan by Vestal Elementary*

*Especially needed over 217*

*Focus on bikers and pedestrians by adding more crossings.*

*High priority for grade-level RR crossings, such as along Naito*

*Install automatic bicycle and pedestrian detection systems that minimize pedestrian and bicycle wait times and change right after they approach the crossing. If it is raining outside, peds and bikes get soaked waiting 5min for an outdated, unintelligent signal to change for them. Let motorists wait a bit longer in their insulated vehicles to prioritize the comfort of more vulnerable road users*

*ODOT closing crosswalks in the name of liability has been an act of negligence and casts doubt on their ability to design and maintain transportation infrastructure.*

*See comments above.*

*The simplest and cheapest solution to solving gaps and issues in our active and public transit networks would be to completely remove all freeways from our urban areas. Since we are a few generations away from that, we desperately need comfortable and prioritized crossings across our freeways and arterials. In some cases, we will need bridges or undercrossings. But cheap prioritized signal crossings should be the #1 pick. They will increase congestion, which will in turn decrease VMT.*

*The system feels adequate already in this area.*

*These crossings must be raised, have a pedestrian leading indicator, and prioritize the human and not the vehicle*

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*This would provide safer places for people to cross without the danger of getting killed. Having lit crosswalks is a must on busy roads.*

*We need narrow roads and more pedestrian bridges and tunnels*

*What is this exactly?*

*Rose Quarter caps - heck yes!*

*Ped bridges across tv hwy so cars can drive even faster - not interested.*

## **Street design**

*Although if the changes to Hawthorne near Chavez are any indicator, changes seem to make it worse. It's a nightmare now*

*As long as it done with total people throughput, and not just car throughput. Lower speeds, narrower lanes, etc*

*Autos already exceed posted speed limits. Address this issue.*

*Bring good design to outer East Portland.*

*Street trees and amenities are actually part of SAFETY!*

*Dispense with the speed bumps! Just install photo radar, which more than pays for itself.*

*I find this especially important*

*Improving/ creating places for bike riders on shoulderless roads will greatly reduce driver frustration and road rage.*

*Let's not fix signal timing to make car travel more attractive.*

*Make it harder for people to drive at dangerous speeds.*

*Making it more difficult for people to speed is very important.*

*Maximize traffic flows. Some changes that have been made created more traffic (medians and reducing lanes)*

*Please focus on on raised crosswalks across intersections where pedestrian & cyclist safety is at risk*

*Please implement raised crossings as well, as pedestrian deaths are much lower when cars are traveling at lower speeds, and nothing slows cars down better than physics*

*Portland prides itself on being a bike/walk-friendly city so why are we commuting only 12% of the spending to encouraging, accessibility, and design? Is maintenance included in the 12% or is that part of the 42%? Street design shouldn't be limited to the technologies but should also include multipurpose and beneficial solutions.*

*Street diets and slowing traffic should be priority number one. Speed kills. Let's protect our bikers and walkers.*

*the city has really been klunky since the light timing has been trying to force people to slow down. It's made traveling around the city very frustrating.*

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*The last 20 years is teaching us that street design will not deliver safety without enforcement. Installation of speed/red light cameras should be prioritized*

*There's no comment option for the walking and biking section in general but I think y'all need to invest more than 12% of the budget to this stuff.*

*This is hands the biggest priority to me. It lays the groundwork from all the other projects.*

*This is very necessary. The drivers of this region are terrible and indifferent to pedestrians. Slowing vehicular traffic is a necessity to everyones' safety.*

*This never works, only makes drivers madder, so don't try it*

*Too many roads are designed for high speeds but had their speed limits lowered after their construction. We can address this cheaply using speed cameras, but that doesn't address the core issue. The road design should reflect the speed limit. If we want to truly reach Vision Zero and encourage alternative modes of transit, outside of separated automobile roads the speed limit should never be above 25 MPH. That would feel awkwardly slow with the current design of many of our roads.*

*Traffic signal timing is never consistent anywhere. We need wider bike lanes to accommodate ALL the bikes, trikes and scooters and faster electric versions all in the same space - 3' width is not enough.*

*We need more road diets. Speed kills and cars should be forced to go slowly with street design.*

*When designing streets, ensure that there is adequate traffic calming and design features that match the designated speed.*

*While I'm a huge biking advocate, I believe we should focus on separated facilities and trail networks and street design solutions have cross sections that become unacceptably large.*

*Why is downtown not more pedestrian only streets?*

*Widening roads and adding lanes worsens traffic and causes induced demand*

*Yes! The best way to slow traffic and make it safer and more comfortable to walk and bike is to install barriers to driving fast.*

## **Walk and bike connections**

*Ambulating on sidewalk that is not continuous defeats the purpose of attempting to ambulate from one point to the next.*

*Create a truly connected bike network in the region. So many great bike lanes dump you into unsafe conditions. We should be able to get anywhere in the region safely on a bicycle. We need a decent network of bike infrastructure. The current network of bike lanes is a joke. Unless you are fearless and dedicated to biking, it's not a viable option I'm our region.*

*Definitely, connect bike/walk infrastructure.*

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*Focus on building a network of biking and walking paths, in addition to the network approach, identify methods to cut down on travel times for these modes. Existing multi use paths are much too narrow and should be widened to accommodate for mixed bike and ped traffic*

*Gaps are deadly and often render beautiful infrastructure useless. Filling in gaps should be a top priority.*

*Hugely important. With sidewalks that do not connect, it feels like a waste of infrastructure. Sidewalks that end and lead the pedestrian astray make the city look like a bad planner. We need to feel safe and reliable as pedestrians.*

*If it were easier to make my entire trip I would exclusively commute by bike.*

*Improve our bike/walk trails. These are important networks to a healthy, sustainable metro.*

*Improve our walking and biking infrastructure.*

*In order to encourage multiple modes, there must be connected bike lanes/paths/etc to avoid bikes on busy streets in car lanes (legal but dangerous) or on sidewalks (legal but people really don't like it)*

*Increased and safer bike and pedestrian infrastructure is vital to the health of the planet and the Metro citizenry.*

*People > Bikes > Cars*

*Marine Drive is still unsafe despite a mostly completed loop. Minimal work is required to fix those gaps, and metro already has easements and plans for the land. Please fund it!*

*Our biking and walking routes are very important and should be improved and interconnected better.*

*The disconnected nature of bike lanes and walking paths discourages car free living due to danger and inconvenience and goes against metro's principles of climate resiliency and sustainability.*

*The greenest and cheapest thing we could do. Make it excruciatingly easy and pleasant to walk*

*There needs to be a priority placed on broken and missing sidewalks across the region.*

*this is a top issue for me - people need safe space to get to places nearby safely AND get to/from transit options*

*This is important, but secondary to commuter rail infrastructure. We need passenger rail (including High Speed Rail) to go longer distances*

*This should be the highest regional priority. We need to build out the complete regional bikeway and trails system before 2045, and show all relevant projects on the constrained projects list for full funding.*

*Yes please! We need entire networks, not isolated sections. Connecting them is crucial.*

## **Wayfinding signage**

*Coordinate with above efforts*

*I don't need wayfinding - it's nice to have but not essential in this age of Google Maps on everyone's phone.*

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*I feel that what would help more people is working with Google on bicycle directions for the city that prioritizes the safest option over the fastest one for cyclists, giving priority to greenways rather than busy street bike lanes for example. While the signs are helpful, most people get around by Google maps.*

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*I like this if it's being used to assist sight impaired navigation and signs oriented to regional travel needs - people trying to get to work or visiting friends in new neighborhoods, etc. Bike directional signs that are large enough to read and provide helpful guidance currently inconsistent around the region). If it's more signs welcoming tourists, it's not a high priority*

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*Is signage a word?*

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*Most everyone has Google Maps in their pocket. Also the Portland street grid is extremely simple to understand and navigate.*

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*Renaming "Bike Boulevards" to "Greenways" has confused people as to the best routes to bike on.*

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*Smart phones significantly reduce the want for these*

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*street signs are hard to read when navigating around town. They're blocked, confusing or only on opposite corners. Major intersections should have the cross street sign on the traffic light pole.*

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*This is a nice to have. Realistically we all have phones and Google maps already does a great job with this. This should be absolute last place on the priority pile.*

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*This will be important when Portland gets a subway or at least a tunnel beneath the Willamette so that the MAX system isn't put to a halt every time the Steel Bridge lifts, breaking the circuit of the entire system*

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*Wayfinding for people with sight impairments to easily navigate - high priority  
For people in our region trying to bike or walk to a new job or learn our way around an unfamiliar neighborhood - high priority  
Signs to welcome tourists or which are generally unhelpful in directions - very disinterested*

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**Table 18: Project List Comments**

RTP ID	Project Name	Comments
<b>Nominating agency: Beaverton</b>		
<b>12110</b>	Allen Boulevard Complete Street: Murray Blvd to Menlo Drive	Unless we plan on reducing the speed of traffic down to 25 MPH on Allen, I do not think there is any way to make that horrible traffic infested road pleasant or desirable for anyone outside of a car.
<b>12117</b>	Cedar Hills Boulevard/Canyon Road Intersection (Reconfiguration)	This should not include added turn lanes. Use the space for people not cars.
<b>10670</b>	Denney Rd: OR 217 to Scholls Ferry (Ped/Bike/Turn Lanes)	It will be very hard for me to ride along high speed traffic when fanno creek is right there.
<b>12123</b>	Downtown Loop Complete Street: Hall Boulevard - 1st to 5th	This should be a top priority.
<b>10664</b>	Downtown Loop Complete Street: Watson - Millikan Way to 1st	Downtown Beaverton has amazing potential for walkable main street type activity that has been really damaged by the lack of good pedestrian infrastructure. It has the potential to link downtown Beaverton with Cedar Hills and the Round, creating a huge walkable neighborhood that could rival any in the metro area.
<b>12125</b>	Downtown Loop Complete Street: Watson/Hall - Crescent to 5th	Downtown Beaverton has amazing potential for walkable main street type activity that has been really damaged by the lack of good pedestrian infrastructure. It has the potential to link downtown Beaverton with Cedar Hills and the Round, creating a huge walkable neighborhood that could rival any in the metro area.
<b>11896</b>	Hall Blvd/Allen Blvd Intersection (add turn lanes)	Stop spending money on things that will address congestion and therefore increase VMT.
<b>10669</b>	Hall Boulevard: 12th to Allen Blvd (Bike Lanes/Turn Lanes)	Bike lanes yes. Turn lanes no.
<b>10620</b>	Millikan Way Extension: Watson Avenue to Lombard Avenue	I'm uncertain. The area needs to be better used but I kinda like the dead end with the bike/ped connection to reduce traffic flows. I'd love to know more about the benefit of punching this road through and likely displacing that affordable housing.
<b>12113</b>	OR 8: Canyon Rd Complete Street: Hocken to 117th (Design)	Separated bike lanes and wide sidewalks are necessary here. Transfer to city of Beaverton and reduce car travel lanes.  Downtown Beaverton has amazing potential for walkable main street type activity that has been really damaged by the lack of good pedestrian infrastructure. It has the potential to link downtown Beaverton with Cedar Hills and the Round, creating a huge walkable neighborhood that could rival any in the metro area.
<b>Nominating Agency: Clackamas County</b>		



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<b>10054</b>	65th/Elligsen/Stafford Intersection Roundabout	This area is truly unsafe during the rush hours . I support this project to save lives, however it MUST be part of an overall plan to lower speeds and encourage people in Wilsonville to use alternative forms of transportation . It must be part of a larger system of transit oriented urban planning.
<b>10014</b>	82nd Ave. Multi-Modal Improvements	PLEASE FOR THE LOVE OF GOD FILL IN THE SIDEWALK AND BIKE LANE GAPS BUT ALSO DO PROTECTED BIKE LANES, NOT PAINTED. RIDING ON 82ND IN CLACKAMAS IS SCARY
		Trees
<b>10043</b>	Borland Rd: Tualatin to Stafford Rd	this will be sorely needed to allow for the added traffic if congestion pricing is enacted. This will become a major chokepoint. Needs bike specific facilities.
<b>11501</b>	Concord Rd	Sidewalks and bike lanes. please please please.
<b>11520</b>	Courtney Ave: OR 99E to Oatfield Rd	Desperately need - sidewalks and bike lanes. Make this safe for PEOPLE - prioritize PEOPLE not inanimate chunks of steel aka cars.
<b>10009</b>	Fuller Rd. Improvements	Trees
<b>11763</b>	Johnson Creek Blvd/79th Ave Intersection (TSAP)	Don't waste money on car infrastructure
<b>10024</b>	McLoughlin Blvd. Improvement	McLoughlin is completely and utterly unsafe and unpleasant for cyclists. Insane speeds. Unattractive and unsafe. McLoughlin needs a complete overhaul. Put people first NOT CARS.
<b>11494</b>	Monroe St	Trees
<b>11504</b>	Oak Grove Blvd	Sidewalks. For humans. Prioritize humans.
<b>12206</b>	Oatfield Road	This is DESPERATELY needed. Any day, look at all the people walking, rolling, stroller-ing in the median - completely unsafe and shameful for a wealthy county.
<b>11670</b>	OR 212 Intersection Improvements	Do NOT widen the highway or do whatever the massive road idea was for the Sunrise corridor or whatever. We need intersection safety improvements, as well as active and public transportation through this area but NOT more car capacity. I say this should be a priority because I understand it to be things like signalized intersections and such. Too many people spend too much time getting between Portland and Mt. Hood / Eastern Oregon. It's time to acknowledge this is the main route and help separate through and local traffic. STOP WIDENING ROADS! STOP SPRAWLING!
<b>12103</b>	Phillips Creek Regional Trail	Clackamas County had a plan like 20 years ago to daylight Phillips creek and build a linear park along it, then they never bothered to build it. They should really prioritize it!
<b>10029</b>	Stafford Rd Improvements	Needs bicycle specific infrastructure. STOP WIDENING ROADS! STOP SPRAWLING!

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12205	Stafford Rd Improvements	Needs bicycle specific infrastructure. STOP WIDENING ROADS! STOP SPRAWLING!
11668	Sunrise Multi- use path Phase II	We need better active and public transportation in this corridor - NOT more automobile infrastructure.
<b>Nominating Agency: Forest Grove</b>		
10784	David Hill Road Improvement	Quit catering to people with no common sense to stay off of rural one lane roads. This is a hazard to motorist and the agriculture community
12131	Forest Grove Bike Lanes and Sidewalks Infill	If the university feels the need for this they should pay for it
11973	Gales Creek Road Improvement	Quit catering to people with no common sense to stay off of rural one lane roads. This is a hazard to motorist and the agriculture community
11667	OR 47/ Fernhill-Maple St. Intersection Improvements	This intersection routinely sees accidents. Speed and geometrics contribute to the number and severity.  Very unsafe intersection for cars, pedestrians, and bicyclists. High rate of speed makes getting across or turning at intersection unsafe. When traveling north, busses must stop on the road before crossing railroad tracks. Many accidents and near misses at this intersection.
10779	OR 8/Pacific/19th Corridor Safety and Complete Street	Absolutely this should be a priority in western Washington County. OR8 is notoriously dangerous.  Unsafe for pedestrians and bicycles. Lot of people walk to/from businesses and bus stops close to traffic.
<b>Nominating Agency: Gresham</b>		
10498	182nd - Powell and Division Intersections: Add Turn Lanes and Transit Supportive Design	STOP WIDENING ROADS! STOP SPRAWLING!
10473	223rd at Stark: Add Turn Lanes	STOP WIDENING ROADS! STOP SPRAWLING!
10471	Butler - Binford to Rodlun: Extend Road and Bridge Crossing	STOP WIDENING ROADS! STOP SPRAWLING!
<b>Nominating Agency: Happy Valley</b>		
10035	Foster Rd (Upper): Widening and Multimodal	Lose the continuous turn lane, just use pockets at signals
11135	Rock Creek Blvd: New Road and Multimodal	STOP WIDENING ROADS! STOP SPRAWLING!
<b>Nominating Agency: Hillsboro</b>		
11752	209th Ave Widening and Improvements, Phase 2	Many people such as me who live in the area are open to biking places for transportation, but do not because of dangerous biking conditions at this road that must be traversed to get to the outside world. Adding separated bike facilities (that people of any age would be comfortable riding on) would greatly benefit mobility and offer an opportunity for exercise while going places.

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<b>11905</b>	25th Ave Turn Lanes and Bike/Ped Improvements	This is a road-widening, which makes things less safe for peds/bikes, don't combine the two types of projects.
<b>10838</b>	Davis Rd Turn Lanes and Bike/Ped Improvements	How dare Hillsboro pass off a 5 lane road as some kind of Active Transportation project. Bad Faith!
<b>12137</b>	Elam Young Pkway Bike/Ped Improvements	<p>You don't need widening at intersections to accommodate bike lanes. The road is too wide as it is.</p> <p>There is not enough traffic or usage for this to be a good use of time or money. 53rd should be watched because increased traffic.</p>
<b>10846</b>	OR 8: TV Highway Transit Access and Multimodal Safety	<p>Definitely improve pedestrian access. Bike lanes should be protected. Such projects should happen all over metro.</p> <p>Definitely improve this area for bikers and pedestrians. Bike lanes should be protected.</p>
<b>Nominating Agency: King City</b>		
<b>12151</b>	Fisher Rd. Extension - Phase 3	STOP EXPANDING ROADS! Especially outside the UGB.
<b>12101</b>	SW River Terrace Boulevard Corridor Extension	STOP SPRAWLING!
<b>Nominating Agency: Lake Oswego</b>		
<b>10087</b>	Lake Oswego to Portland Trail	<p>The is currently no convenient and safe way to bicycle between Lake Oswego and Portland. This is a very big need... along with a bike-ped bridge to connect LO to the east side of the river.</p> <p>This would be amazing! If only there was a way from Tigard to Lake O that felt comfortable on a bicycle.</p>
<b>11171</b>	Tryon Creek Ped Bridge (@Tryon Cove Park)	We need an alternative to State Street, which is scary dangerous.
<b>Nominating Agency: Multnomah County</b>		
<b>12076</b>	Earthquake Ready Burnside Bridge: Phase 3 (Construction)	This is too much to pay for a seismic retrofit of a bridge without even increasing its size or capacity. Isn't that area of the city built on landfill? If you want to retrofit a bridge to survive an earthquake, choose one that is currently built on bedrock... how about the Hawthorne?
<b>10401</b>	Marine Dr - Interlachen to I-84: Freight and Multimodal Improvements	but skip the wasted bike lanes. They will ultimately be used by no one.
<b>Nominating Agency: ODOT</b>		
<b>11969</b>	I-205 Abernethy Bridge (CON)	<p>This is an insane amount of money to spend on something that will congest and be useless in less than a decade.</p> <p>Another historically bad bottleneck that should be corrected, including planning for years into the future.</p>
<b>11305</b>	I-205 Active Traffic Management	A waste of money if congestion pricing is enacted. Sorely needed if Portland Metro wants traffic to use 205 instead of city streets.

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		No capacity increase until first tolling and seeing if reduced traffic obviates need for the capacity increase.
		STOP WASTING MONEY ON FREEWAYS!
11586	I-205 Southbound and Northbound widening (PE, ROW)	No tolling for additional freeway projects. Tolling should be used to reduce VMT and fund a transition away from SOV.
		No! I would like the improvements, but they are a waste of taxpayer money if tolls are included. I205 will no longer be the thoroughfare of choice and the improvements will help no one.
		No more freeway expansions.
		Why start tolling in Clackamas County? Do it in Portland first to set an example. They have the transit options we lack out here.
		Tolls are regressive, hurt those who have to commute to work and make less money and are marginalized the most. In our progressive city and world this is going backwards. It's bad policy. But - we need the improvements. Just don't fund them through tolls.
		Tolls first to see if that can manage congestion.
		This is a top priority, but needs to be done without the significant impacts and cost inefficiencies of tolls
11904	I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	No tolling for additional freeway projects. Tolling should be used to reduce VMT and fund a transition away from SOV.
		No No No!!!! If tolls are removed from this project, then yes, this is a great idea. I'd rather see money spent elsewhere to improve traffic conditions on city streets if tolls are enacted. They will no longer be needed as few will be driving on 205 anymore.
		No more freeway expansions.
		Tolls yes Widening no
		I don't need a wider freeway here. Bring the Max to OC, put high speed rail that stops downtown, in OC, Canby and Eugene, build safe bike lanes instead, please.
		Tolls are regressive, hurt those who have to commute to work and make less money and are marginalized the most. In our progressive city and world this is going backwards. It's bad policy. But - we need the improvements. Just don't fund them through tolls.
		Yes to tolls. No to widening
12099	I-205 Tolling Project (PE)	No tolling for additional freeway projects. Tolling should be used to reduce VMT and fund a transition away from SOV.
		Here again, the improvements are needed, but not if the road will be tolled. Few will use it and the money spent here would be better spent making the local roads better because of the greatly increased traffic they will have on them.

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		<p>I support congestion pricing to fund public and active transportation - not freeway expansions.</p> <p>Not needed.</p> <p>Tolls are regressive, hurt those who have to commute to work and make less money and are marginalized the most. In our progressive city and world this is going backwards. It's bad policy. But - we need the improvements. Just don't fund them through tolls.</p>
<b>11974</b>	I-405 Operational Improvements	<p>The only projects involving freeways within central Portland that Metro should endorse are removal without replacement. The land that 405 sits on is worth far more as part of a vibrant city than as an expressway for Vancouver-Beaverton trips.</p> <p>Until we cover I-405 with a freeway lid, re-designate it as I-5, and remove the current I-5 from the eastbank of the Willamette, this is a waste of money.</p>
<b>12304</b>	I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	<p>This should be done in a way that prioritizes reduction of VMT rather than revenue generation, spends the revenue it does generate towards pedestrian, bike, transit, and mitigates inequitable impacts. Should NOT be used to raise revenue for auto infrastructure.</p> <p>No tolls</p> <p>Don't use the funds from tolling for road expansions</p> <p>How on earth is it going to cost \$400 million to implement a toll program? That makes absolutely no sense at all. This I would consider supporting if funds were earmarked for non-highway projects.</p> <p>I assume congestion pricing is tolls. Tolls are regressive, hurt those who have to commute to work and make less money and are marginalized the most. In our progressive city and world this is going backwards. It's bad policy.</p> <p>Top priority for the Region as will generate revenue and promote regional transit use</p> <p>We need to use tolling to manage travel demand</p>
<b>11991</b>	I-5 Freight Operational Improvements	<p>Again as traffic will decrease when tolling is enacted this won't be needed as much. Otherwise, it's a high priority,</p>
<b>10866</b>	I-5 Interstate Bridge Replacement Program	<p>Lower cost of bridge, take lt. rail off and add lanes for autos.</p> <p>We need a robust express bus system/BRT, not a light rail that doesn't go anywhere. As someone who uses transit to get across the river, the idea of extending the Expo Line to Clark College is dumbfounding--no one travels from there, I-205 is already too congested at that point for Park &amp; Ride, and no one will choose a train that travels 15 MPH over their car or an express bus.</p> <p>Wont be needed when vheicle traffic will be avoiding I5/205 due to added tolls. This should not add more tolling either.</p>

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		<p>The current plans are wasteful and the project is being managed deceitfully. Until the bridge is right sized with either lift bridge or submerged tunnel, it should not be funded any more.</p> <p>I support a right-sized bridge replacement (no new lanes or auxiliary lanes, no added car capacity, no giant new interchanges) with better public and active transportation options and access.</p> <p>This is a freeway expansion, We should be doing a tunnel, it is better in every single way.</p> <p>Replace the bridge: yes</p> <p>Widen the highway, rebuild interchanges, dedicate 40% of the region's transportation budget to this project? No.</p> <p>It needs to be fixed. The failures here are embarrassing. But, fix it through the entire metro area and clear bottlenecks.</p> <p>Regardless how it takes shape, this project MUST occur and soon</p> <p>Just seismically retrofit the existing bridge, and construct a new light rail and local access bridge from the island to the city on each side. Cancel this project, it's just going to encourage sprawl and waste more money than the entire rest of the regional transportation budget. KILL THIS PROJECT!</p> <p>Integrating Vancouver with existing Portland passenger rail is hugely important. Adding a bike path and a pedestrian path is important too.</p> <p>why would Oregon pay for this? it is used by Washington folks to get to jobs. Clark county growing unchecked.</p> <p>There should be no added interchanges or auxillary lanes. Bike path and rail transit would be helpful. The bridge itself should be replaced or repaired to make it seismically safe. Tolls or congestion pricing should first be attempted to see if that decreases traffic sufficiently.</p> <p>Do not add lanes or bigger interchanges to freeways. This does not work in the long term. We cannot afford it, economically or ecologically.</p>
11989	I-5 Northbound Braided Ramps I-205 to Nyberg	<p>A waste of money if tolling happens on I5/205. I seriously doubt anyone would want to add more toll money by traveling on two toll roads.</p> <p>Having seen a Virginia DOT video of how braided ramps work, the improvements are extravagant, space-consuming, expensive, and not necessary to deal with traffic from I-205 west merging onto I-5 north. I know because I drive past this point at least 4 days every week.</p> <p>Seems like a nice to have - merge is a bit hazardous but traffic rarely encountered as flowing poorly here. Braided ramps would be much more effective for traffic and emissions reduction at Exit 286, which also has existing frontage roads that could be utilized for traffic management as well</p>

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		<p>Spend all of this money on improvements to WES and public transit in these areas. Any freeway expansion of capacity is bad.</p> <p>STOP WIDENING ROADS! STOP SPRAWLING! This project alone could be canceled to fund a bicycle greenway system countywide!</p>
<b>11402</b>	I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry - Phase 2	<p>a waste of money if tolling comes to I5 because traffic will be reduced.</p> <p>No freeway expansions!</p> <p>The existing auxiliary lane from Nyberg to Lower Boones Ferry works fine. I know because I drive past this point at least 4 days every week. Every so often, I use the lane myself to merge from Nyberg or exit to Lower Boones.</p> <p>No more capacity on I-5. Take all this money and use it to make WES better.</p>
<b>10867</b>	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (PE, NEPA, ROW)	<p>Any congestion reduction from widening the freeway will be short-lived. Tolling is a far better way to reduce congestion. The money would be better spent on improving safety for vulnerable road users.</p> <p>No.</p>
<b>11176</b>	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	<p>Again, traffic will be reduced when tolling is enacted making spending money here a waste. Otherwise, it should be a high priority.</p> <p>This project does not do what it claim to do, and thus does not serve the community. It does not reduce congestion, because of the law of induced demand, and how traffic will eventually fill the highway up again. It also does not improve safety, because of its ramps which do not seem to slow drivers down as they exit the freeway, and wide radius corners. Both of these aspects endanger those not in a motor vehicle. As such, the project will in fact make the conditions for non-drivers worse.</p> <p>No more freeways. Don't widen freeways in the city. Prioritize other modes and implement tolls. We can't avoid climate catastrophe while widening freeways. We can "enhance community connection" without bowing down to further expansion of car dependence.</p> <p>Also no</p> <p>These boondoggle projects will absorb so much capital away from projects that ACTUALLY SAVE LIVES, and not just quell the loudest voices concerned about lost time.</p> <p>Congestion is a great polluter. Expand the thoroughfare, reduce congestion, reduce emissions. It's pretty basis. This is the heart of our city and it needs to move traffic efficiently.</p> <p>Holy cow! If you ditch this project (and/or add tolling) then the money saved could pay for everything else on this map. And we all know that creating more traffic capacity here will only increase emissions.</p>



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		This may be the most needed of all
<b>11304</b>	I-5 South Operational Improvements	<p>This will not be needed when everyone is travelling city streets instead because of congestion pricing. A really high priority is congestion pricing is abandoned.</p> <p>The only operational improvement would be to re-direct I-5 around Portland, not through.</p>
<b>11984</b>	I-5 Southbound Truck Climbing Lane	it's shameful that the state would even consider spending \$203 million on a single highway lane. One lane!
<b>11993</b>	I-84 Operational Improvements	Again a waste of money if everyone is avoiding highways due to congestion pricing.
<b>11301</b>	OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	<p>If this was just about industrial land then sure, but this is mostly gonna be for more suburban sprawl in Happy Valley and Damascus. Its a bad project unless sprawl into Damascus is contained.</p> <p>This will certainly help with extra congestion that will be on this road if tolls are enacted on 205/I5.</p> <p>No more stroads! No more highway expansions! Put in public and active transportation. Do not enable further sprawl and expand automobile infrastructure.</p> <p>This need to be built before things get even worst</p> <p>Building new freeways in the year of our lord 2023? Please stop. This will only intensify suburban sprawl further out and will only worsen the regions traffic and livability.</p>
<b>11988</b>	OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	<p>Having seen a Virginia DOT video of how braided ramps work, the improvements are extravagant, space-consuming, expensive, and not necessary to deal with traffic.</p> <p>STOP INCREASING VMT</p> <p>Too much money</p>
<b>11350</b>	OR 224 Milwaukie Expressway improvements	<p>Traffic on this road will increase dramatically when tolls are enacted. Road improvements are necessary here.</p> <p>Oh my god no????? Stop expanding highways and freeways?????</p>
<b>11971</b>	US 26 (Sunset Highway) Operational Improvements	<p>We need to stop wasting money on making it easier to drive. Period. This project goes in the bin, too.</p> <p>Not enough information</p> <p>Please do this and find a way for people to not cross the solid white lines after leaving the tunnel. People always zoom down Market street and then cut everyone off going to 405</p>
<b>Nominating Agency: Oregon City</b>		
<b>10026</b>	Beavercreek Road Improvements, Phase 3A	STOP WIDENING ROADS! STOP SPRAWLING!
<b>10144</b>	Hwy 99E & I-205 SB Interchange Access	Don't waste money on car infrastructure

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<b>11183</b>	Linn/Leland/Meyers Road Roundabout	This pin is in the wrong location
<b>11184</b>	Main Street Bike & Pedestrian Improvements	Don't waste money on car infrastructure
<b>11546</b>	Meyers/Beavercreek Shared-Use Path	This pin is in the wrong location
<b>11182</b>	Molalla Avenue Roundabout	Don't waste money on car infrastructure
<b>11891</b>	OR 99E & I-205 NB Interchange Access	Don't waste money on car infrastructure
<b>Nominating Agency: Port of Portland</b>		
<b>11208</b>	T4 Modernization	Again a waste of money is congestion pricing is enacted. These will not be needed when the company will move out to more friendly to business ports.
<b>11207</b>	T6 Modernization	Actually ye, but ultimately a waste of money if congestion pricing goes into effect as business and demand will decline.
<b>Nominating Agency: Portland</b>		
<b>11868</b>	122nd Ave Corridor Safety and Transit Improvements	<p>122nd Avenue should be outer East Portland's version of MLK boulevard, complete with street trees, decorative lighting, amenities and a real sense of place. It should be a named boulevard like David Douglas Blvd or Lizzy weeks</p> <p>122nd is a dangerous street for all road users, but is also an important through-street in a part of town where you can only go so far on a low-traffic north-south street before it ends and one has toggle over to another street, which will then also end. Portland between 42nd and the Willamette is very easy to navigate by bike even if one doesn't know what they're doing. The further east one goes the harder and more dangerous this is.</p> <p>122nd Ave is a major issue and N/s connector. It's dangerous, fast, and horrible to bike and walk along. This should to a top priority.</p>
<b>12214</b>	148th Ave Corridor Improvements, Segment 2	STOP WIDENING ROADS! STOP SPRAWLING!
<b>11844</b>	82nd Ave Corridor Improvements	<p>Please add protected bike lanes!</p> <p>82nd is an economic artery for the eastern portion of the city.</p>
<b>11646</b>	Broadway/Weidler Corridor Improvements	<p>Add buffered bike lanes. Clean bike lanes. Slow down auto traffic. Remove a lane of Broadway.</p> <p>We don't need "enhanced bike lanes." We need a full road diet, so that only one lane of traffic remains in each direction. The balance of the road needs to provide protected cycle tracks, transit lanes, on street parking, street seating, additional street trees, and pocket parks.</p>
<b>11828</b>	Capitol Hwy Bridge Seismic Retrofit	Seismic retrofits are unreasonably expensive in a time of other needs. Of course maintain bridges and overpasses, but we as a people cannot expect to retrofit them. Seismic retrofit is my lowest transportation priority.

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		An earthquake is highly likely in a foreseeable time frame.
		Huge barrier to getting any SW Corridor work done. This is also a big safety issue.
10375	Cathedral Park Quiet Zone	This would be a life-changing improvement to local residents.
11841	Central Eastside Access and Circulation Improvements	I support the diverter additions and the addition of a signal at 11th and Ankeny (although a roundabout would be better)
10315	Cesar Chavez Corridor Improvements	Put Cesar Chavez on a road diet. Reduce lanes to 2, add a turning lane, add bike lanes.
		Cesar Chavez needs a road diet to reduce it to one lane in each direction, plus cycle tracks. Traffic signals should be replaced by roundabouts and traffic circles at all intersections, removing the need for turn lanes. All cross streets should be reduced to one lane in each direction.
10331	Columbia Blvd over Columbia Way and Railroad Bridge Replacements	Transfer railroad to public ownership with this project.
10312	Eastside MAX Station Pedestrian Improvements	Trees
		Definitely a priority for me in my power wheelchair with service dog. Cars fly down 139th. Please, please, please get someone to design a properly draining curb cut... Maybe a metal mesh/tiny cell grate where the ramp meets the street so the water can drain into the underground system. Even the new access ramps in Cully on Killingsworth (where I used to live) don't drain properly.
11834	ETC: SE Hawthorne/Foster Ave Enhanced Transit Corridor	Yes, the bus is super slow.
		Hawthorne needs commuter rail service again
10232	Flanders/Naito Crossing	This improvement will reduce a barrier to connecting from Old Town to the Steel Bridge bike/ped path.
11817	Foster Rd Corridor Improvements, Phase 2	Trees
10204	Gateway Pacific St Streetscape Improvements	Long, long overdue
11647	Halsey/I-205 Overcrossing Trail	I live in Madison South neighborhood and almost never go to the entire Gateway business district, including Mall 205, or really anything east of 205, on my bike because it's so difficult and dangerous and this crossing is one of many major reasons why. It's very dangerous, and also just annoyingly badly designed, and there's no meaningfully better alternative close enough to be practical. As a result, I almost always go west instead.
11851	Halsey/Weidler Safety and Access to Transit	All of Portland is challenged but this area is profoundly challenges and NEGLECTED. Halsey Weidler investments are desperately needed

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<b>10268</b>	Hollywood Town Center Safety Improvements	The whole central Hollywood business district is dangerous. Sandy cuts across diagonally making intersections complicated and therefore dangerous. Red lights are routinely run, drivers are impatient and annoyed, routinely turning abruptly onto other streets to get out of slow traffic--this happens routinely by the library at Tillamook and 41st. Drivers regularly use the 42nd bike lane as a right turn lane onto Sandy westbound. The whole 42nd/Sandy and 43rd/Sandy intersections should be rethought
<b>10273</b>	Inner Capitol Hwy Corridor Improvements	A ton of work is already being done in the Capitol Highway area; let's improve some other areas.
<b>10273</b>	Inner Capitol Hwy Corridor Improvements	Very active area with strong mix of modes
<b>11816</b>	Inner E Burnside Corridor Improvements	Burnside needs a continuous cycle track, and road diet to reduce it to one lane of traffic in each direction. All traffic lights should be replaced with traffic circles, eliminating turn lanes.
<b>10307</b>	Inner Holgate Blvd Corridor Improvements	Consider SE 46th, which is already the bikeway
<b>11818</b>	Inner Milwaukie Streetscape Improvements	Milwaukie needs a holistic redesign. I recommend getting in contact with the neighborhood association for ideas.
<b>12231</b>	Inner NE Glisan St Corridor Safety Improvements	<p>Fix the crossing at NE 78th - flashers or sign in the middle. Pedestrian island at NE 80th. Crosswalk /pedestrian Island at NE 71st Ave. Please consider considerable traffic slowing near Vestal Elementary school on Glisan between NE 78th &amp; 82nd!</p> <p>Glisan need some work, but a lot of it is easy and cheap. The bug 4 lane to 3 lane road dirt happened, but people still drive too fast and use the center turn lane as a passing lane. High speed traffic headed westbound from 82nd needs to be calmed as well. Pedestrian islands and medians would help this. Specifically the planned (but cancelled/shelved) crossing upgrades at NE 80th would be a great start. This is also a main route to Vestal elementary school for all the families north of Glisan.</p> <p>Crossing NE Glisan between 60th and 82nd Ave is very unsafe</p>
<b>10259</b>	Inner Powell Blvd Corridor Improvements: Local Contribution to State-Owned Arterial	<p>Add MAX to this stretch of Powell.</p> <p>I always feel like it is a gamble getting onto Powell in this area. Traffic flow and safety need improvement.</p>
<b>11959</b>	Inner W Burnside Corridor Improvements	Only if it includes a cycle track on Burnside from NW 23rd to the bridge.
<b>10242</b>	Interstate-Larrabee Overpass	<p>The NP Greenway needs to stay on the riverbank- this proposal is a travesty- huge mistake.</p> <p>Sounds like a great improvement</p>

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<b>11855</b>	Jade & Montavilla Connected Centers Project	82nd is an important "Main Street" for the many Asian American businesses and community along it. As it stands, it is still very unsafe and uncomfortable to access these without a car, and redesigning it to better serve the needs of those walking and biking on the street would be a much needed improvement.
<b>10186</b>	Lents Town Center Improvements, Phase 2	More tree canopy
<b>10337</b>	Marine Dr & 33rd Intersection Improvements	roundabout yes, stop building intersections
<b>11864</b>	Marine Dr Corridor Safety Improvements	This part is always trafficky
<b>10286</b>	Markham School Pedestrian/Bicycle Overpass	<p>We desperately need more ways across I-5 outside of a car that are safe and don't include high speed on/off ramps.</p> <p>If this project is going to remove cyclists and peds from the horror that is the Barbur Crossroads, then it needs to serve more than Markham School. It needs to allow access to the entire neighborhood and PCC. I currently cycle almost daily through the Barbur Crossroads.</p>
<b>11869</b>	Moody Ave Extension	Anything to improve access to South Waterfront is needed.
<b>11830</b>	Multnomah Viaduct Safety Improvements	I ride my bike over this viaduct almost every day and while I love the 1927 bridge, clearly there needs to be some investment in providing facilities for bikes, not just for cars and trucks.
<b>10299</b>	N Lombard Corridor Improvements: Local Contribution to State-owned Arterial	Deprioritize moving cars through our neighborhood fast and make Lombard people-first! Slow down traffic, protected bike infrastructure, plant trees, calm traffic.
<b>11797</b>	N Lombard St (formerly N Burgard Rd) Viaduct Replacement	a waste of money if congestion pricing goes into effect.
<b>12234</b>	N Lombard St Bridge Replacement	<p>Shouldn't BNSF pay for it?</p> <p>Since this is a major way in/out of St Johns, it is essential that this bridge be able to withstand an earthquake.</p>
<b>11842</b>	N Willamette Blvd Bikeway	This is the only corridor for cyclists and will result in huge increase in cycling from riders in St. John's who want to come downtown but high-stress riding on Willamette makes it challenging.
<b>10243</b>	NE 12th Ave Bridge Replacement	<p>this better have bike lanes, the Blumenauer Bridge it too disconnected</p> <p>Do repairs and improvements, but seismic upgrades are unreasonably expensive when so many other transportation projects are in need.</p>
<b>12312</b>	NE 60th Ave Rail Undercrossing Improvements	Please skip the nearly useless ped and bike part.
<b>11943</b>	NE Broadway Corridor Improvements	Improve bikeway along Broadway. Slow down traffic, remove auto lanes. Add more controlled pedestrian and bike crossings.

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		The bikeway would be best served parallel to the corridor due to the constrained nature along segments and the need for delivery parking for businesses on both sides of the street
		We don't need "enhanced bike lanes." We need a full road diet, so that only one lane of traffic remains in each direction. The balance of the road needs to provide protected cycle tracks, transit lanes, on street parking, street seating, additional street trees, and pocket parks.
11632	North Hayden Island Drive	We need more access to Vancouver from Hayden Island and PDX
11782	North Portal Street Improvements	It's a great idea but asking for a lot of money without a clear plan.
11642	North Portland Greenway Segment 3	Don't know the current usage/need for this. There's a really big natural area here that would be an incredible connector for St Johns.
11644	North Portland Greenway Segment 5	build this on the WEST side of Albina Yard! This is the once in a lifetime chance to get the alignment of our riverfront trail in the right spot- don't screw it up and put the path along Interstate Ave/Greeley! We need to rapidly expand and connect our biking, and greenway system. Connecting swan island to the rose quarter with a flat, car-free path seems like such a great idea that it's amazing it hasn't happened already. It's silly to make pedestrians and cyclists climb a hill and fight traffic to get from point A to B. Why not just take the direct, flat, easy and safe route?!
11814	NW Bridge Ave Multi-use Path	YES!
11860	Outer Foster Corridor Safety Improvements	There is so much development happening just east of here - Foster Rd is only going to get busier and more dangerous in the very near future. Improvements are very much needed to prevent deaths and injuries!
10318	Outer Glisan Corridor Improvements, Segment 1	Many of the profound challenges we face are rooted in inequity. Let's treat our area holistically and understand ALL parts of the city need great design and quality infrastructure
10203	Outer Glisan Corridor Improvements, Segment 2	Trees
10321	Outer Stark Safety and Access to Transit	Trees Due to the lack of sidewalks I have to ride my power wheelchair on the roadway (on the side streets) between Stark and Glisan around and on 139th. Cars fly down that road and I must walk my service dog twice a day. At times with the water filled curb cuts I can't cross Stark at 139th to reach the sidewalks. Can't someone design sidewalk ramps with proper drainage - maybe section of mesh/grate where the ramp hits the road - draining to the storm drains in which a cane will not get stuck?
10284	Outer Taylors Ferry Safety Improvements, Segment 1	This is a very crucial bike connector between Metzger area and SW Capitol Hwy

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		<p>I ride my bike here almost every day and it's really hairy. If you want more people to bike here, you need to add space for cycling.</p> <p>Very active location. Steep grades increase safety needs here.</p>
12311	Passenger Ferry Pilot	This is a waste of money. It's impossible for a ferry to be time competitive with a bus.
11840	Post Office Blocks Transportation Improvements, Phase 1	I am all for the development of that land, but do the roads actually need to go all the way through? Does the residential development project require through roads?
11795	Post Office Blocks Transportation Improvements, Phase 2	The benefits of getting this redevelopment right, including attractive bicycle and pedestrian infrastructure will be tremendous.
12207	Red Electric Trail, Segment 1	This would be so big for my family if completed.
10354	Red Electric Trail, Segment 2	This would be so big for me and my family.
10180	Sandy Blvd Corridor Safety Improvements	Please include a protected bike lane!
10271	SE 92nd Ave Safety Improvements	<p>This can't come soon enough. Protected bike lanes please.</p> <p>Trees</p>
11854	SE Hawthorne Blvd Corridor Safety Improvements	Hawthorne needs a protected cycle track.
11793	SE Yamhill /Taylor Couplet	<p>close ramp</p> <p>This would be a great project, once I-5 is removed from the East Bank of the Willamette. Until then, it's putting the cart before the horse.</p>
11821	Sixties Neighborhood Greenway	60th is a major I-84 crossing, including for cyclists, most of whom will not bike on 82nd since it's even worse. This leaves a huge area with no viable safe route to get to all the businesses on Glisan/Halsey, or to get through to other areas of town. Virtually all routes over freeways need to be made safe for cyclists, the longer distance there is between such through-streets, the more back-tracking one needs to do, making it harder to get around by bike, meaning fewer people will bike.
10319	Stark/Washington Multimodal Improvements	Stark/Washington are major I-205 crossings for all road users and as such need to be safe for all road users. Drivers will prioritize getting to a freeway one second sooner over the safety, even lives, of other road users, especially if a collision with them won't damage their vehicle significantly. This is unacceptable.
10280	Sunset Blvd Ped/Bike Improvements	Sunset Blvd is a prominent walking and biking route to three schools plus the local town center. People walking or biking are forced onto the shoulder where cars often tread. This is an important gap to fill
11351	SW Multnomah Blvd Ped/Bike Improvements, Phase 2	If you're going to build separated infrastructure, you need to have to plan to MAINTAIN it.



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		Very active area for community commercial and civis activities including community center and Spring Garden Park. Lets get thes safety improvements complete.
<b>11825</b>	SW Pomona/64th Ped/Bike Improvements	Just sidewalks would be the priority. No bike facilities. I use this for Tigard/Portland bike trips. Steep grade adds to safety needs in this road.
<b>11827</b>	SW Terwilliger Corridor Improvements, Segment 1	Why isn't the Taylors Ferry/Terwilliger intersection upgrade on the map? This would cost a fraction of what is proposed here, and would fix a failed intersection that only gets worse by the year and has a detrimental effect on businesses here as well as all surrounding neighborhoods.
<b>11831</b>	US 26 Multi-use Path	This is the best route between downtown and Beaverton. It's shameful that it has been essentially closed off to people walking and bicycling for decades, especially since they are most in need of a route that minimizes hills. This would be an amazing investment as the current connection is non existent.
<b>11789</b>	Vista Bridge Renovation	Not enough information
<b>11786</b>	Water Ave Corridor Improvements and Realignment	Bike way especially! I bike, run, and drive on Water Ave regularly and rarely have safety concerns or congestion. The high cost could be better spent elsewhere.
<b>11839</b>	Water/Yamhill Traffic Signal	close ramp Why should we increase automobile capacity, anywhere? Congestion is our friend. Delay is our friend. Try tolling the freeway first before doing another single thing to increase capacity.
<b>10287</b>	West Portland Connected Centers Project	I would prioritize ODOT spending in other locations...HWY 99, 8, and maybe some eastside at grade urban corridors.
<b>Nominating Agency: Sherwood</b>		
<b>11404</b>	Baler Way Extension	STOP SPRAWLING!
<b>10682</b>	Brookman Road Improvements	STOP WIDENING ROADS! STOP SPRAWLING!
<b>12044</b>	Langer Farms Parkway Extension	STOP SPRAWLING!
<b>10699</b>	Oregon Street Improvements	STOP WIDENING ROADS!
<b>10691</b>	Sherwood Blvd Improvements	STOP WIDENING ROADS!
<b>12046</b>	Tonquin Area East-West Collector	STOP WIDENING ROADS! STOP SPRAWLING!
<b>Nominating Agency: Tigard</b>		
<b>10755</b>	72nd Ave. Improvements - 99W to Dartmouth	This street is wide and traffic flows freely. Not important compared to other projects.
<b>12167</b>	Downtown pedestrian improvements (urban renewal)	It is currently very frustrating to get from Heritage Trail to Tigard TC

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10766	Fanno Creek Connections Project	I have been waiting for this since I moved to Tigard in 2017. I thought we were hiring contractors this summer? What?
12088	Fanno Creek Trail Gap (Bonita to Cook Park)	This region is very difficult to get through on a bike or walking. It would really give an active transportation connection between Tualatin and Tigard. Great regional trail...filling in this gap is a priority
11220	Hall Blvd. Improvements - Locust to Durham	Enhancing Hall Blvd needs to be a major priority for pedestrian safety Needed to complete jurisdictional transfer please help
11217	McDonald Street Improvements	STOP WIDENING ROADWAYS!
12170	North Dakota St (Fanno Creek) Bridge Replacement	Need better Fanno Creek alignment. Trailhead for Fanno Crk. Very active, many people running and biking, steep grades increase safety needs.
12168	OR 217 Ped-Bike Crossing at SW 95th Ave	This would be so impactful. There is no safe or comfortable way for any cyclists or pedestrians to get across 217 in this region. People walking have two bad options, either HWY 99 or Greenberg. This bridge will add a safer and more direct route for many who roll and stroll in Metzger. It also an area with a significant increase in MF housing within a Metro regional center. The area is ripe for this investment.
12171	SW 95th Ave Ped/Bike Rail Undercrossing at Commercial St and Heritage Trail	This would be huge for connecting to businesses and residents in this area.
12173	Templeton-Twality Safe Routes to School Improvements	SRS
11998	Tiedeman Ave Complete Street	Fanno Creek / Heritage Trail connection would be so amazing. Not if "urban standards" means widening to add traffic lanes. Provides access to Fanno Creek trail to multiple MF developments in area - very active area with lots of people strolling and rolling through however road built for cars so very unsafe.
11996	Tigard St (Fanno Creek) Bridge Replacement.	Very horrible to be not in a car here. Speed limit is 35 MPH which is outrageous.
11229	Walnut Street Improvements	Speed limit should be reduced to 25 MPH, lane width narrowed, and sidewalks with bike lanes on both sides of road.
<b>Nominating Agency: TriMet</b>		
12028	ETC: NE Sandy Blvd Enhanced Transit Project	We need more commuter rail!!
12033	ETC: SE Belmont Enhanced Transit Project	Not enough information

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12035	ETC: SE Powell Blvd Transit Project	Powell is such a strong corridor for growth and transit service. It should get a automated light metro similar to Vancouver's Canada line.
		Improving transit on SE Powell will greatly improve mobility (especially for those who don't own a car) and help get to our climate goals.
		Would love to see MAX on powell or division
		Do a MAX line
12032	ETC: SW Beaverton-Hillsdale Hwy Enhanced Transit Project	We need interurban heavies. We need the WES to extend down to Salem reconnecting the area with our capital once more! I-5 needs a rail alternative. We need a railvolution.
12029	HCT: 82nd Ave Transit Project	The 72 is one of the most busy Trimet lines, serving many marginalized communities and their business. Its speed and reliability however is comparability abysmal and needs to be improved in order to better allow better opportunities for this area.
		Real, actual BRT. Not that fake imitation "BRT" we got on Division. Dedicated lanes.
		High Capacity Transit needs to actual be high capacity. Running an articulated bus every 12 minutes for "most" of the day is not high capacity. Random bus routes in Seattle are higher capacity than the FX2 project by seats/day. The entire corridor needs bus lanes, and both local and express services should be considered. Stop planning mediocre bus projects and calling it high capacity.
10922	HCT: MAX Red Line Improvements Project: Capital Construction	YES! Improving the MAX line service to the airport would be HUGE!!!
		Isn't this funded?
		this is under construction
		Definitely improve reliability of MAX.
12050	HCT: Steel Bridge Transit Bottleneck Project Development	We need to improve this bottleneck for MAX. But the true solution is to make MAX entirely a subway downtown.
		Removing the bottleneck that is the Steel Bridge and moving MAX underground is likely one of, if not the most important project that would increase speed reliability of the MAX system. This would likely convince many to switch to MAX instead of driving.
		A central city MAX tunnel is easily the most important transportation project in the entire metro. Getting MAX service up to reasonable freuquencies will make the service so much more useful.
		Is this part of a central city tunnel and/or viaduct?
		Yes! Please look ahead into our future and realize that our entire regional express transit system FAILS during a large earthquake, with no backup plan ready. Please advance replacing the steel bridge or prepare the process of designing

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		a tunnel to accommodate MAX and busses crossing the Willamette
11319	HCT: Streetcar Montgomery Park Extension	Absolutely not. These neighborhoods have good bus service already!
		Expanding the streetcar here would be excellent. But streetcar should be expanded all over the city.
		Definitely, expand the streetcar here. It should be expanded all over the city: along Sandy Blvd, along 82nd Ave., along 122nd Ave., and more.
		We should expand the streetcar. It should also go down Sandy Blvd, down 82nd Ave., down 122nd Ave., and more.
		This is absolutely a must. Given all of the new development in that area.
11589	HCT: Tualatin Valley Highway Transit Project	TV Highway presents itself as an ideal corridor for an exceptional transit line serving hundreds of vibrant communities and their businesses. As is, the 57 is subpar at best in terms of frequency, transit access (pedestrian and bicycle amenities), stop amenities (lighting, trash bins, and bike parking), and land use.
		Preferably MAX instead of bus / brt
		If BRT is the chosen path here and Metro continues with the "FX" style of "BRT" (that is plainly not BRT in any way, shape, or form) I will have some stern words for someone at some meeting. It's embarrassing to live in a city that pretends to be a world class transit city that can't even do level boarding on their only "BRT" line.
		TV highway needs things like local and express service and fully dedicated bus ROW. Anything less is a waste of money
		Expanding MAX would be great. Also into SW and Tualatin, into St. Johns along Lombard, and into Oregon City connecting green and orange lines. And more.
12253	Park Avenue Park & Ride	We should be expanding MAX. Not just here. Put it into St. Johns along Lombard, into Oregon City to connect green and orange lines, into Tualatin in Southwest, deeply connected in Vancouver, as a subway downtown to fix a bottleneck.
		would rather see the orange line extended to Oregon City
		\$24 million for free 320 parking spaces on an underutilized rail corridor is just about the worst investment I could possibly imagine. TriMet park and rides are almost universally barely used these days. This should be TOD or nothing. It's embarrassing that this is on the map at all
Nominating Agency: Tualatin		

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<b>11422</b>	Boones Ferry Capacity Improvements (TS Rd Intersection)	Expanding this area will only make this road unsafe for pedestrians. Hopefully not learned anything from LA and how massive roads don't fix, but make the problem worse! This area is going through a lot of changes and not focusing on livability is a big mistake . Stop increasing car traffic capacity! Count people not vehicles! STOP WIDENING ROADS! STOP SPRAWLING!
<b>11962</b>	Grahams Ferry Rd Upgrade (SW Ibach to Helenius)	Very dangerous area for bikes and pedestrians. With all the increased commercial traffic I'm surprised nobody has been injured
<b>11430</b>	Helenius Upgrade to Urban Standards (109th to Grahams Ferry)	STOP WIDENING ROADS! STOP SPRAWLING!
<b>11428</b>	Martinazzi Safety Improvements (Warm Springs to TS Rd)	Very difficult to get through this area on a bicycle.
<b>10716</b>	Myslony Widening (Hedges Creek to 124th Ave)	STOP WIDENING ROADS! STOP SPRAWLING!
<b>10745</b>	Nyberg Creek Greenway Trail - East	Need more I-5 separated crossings for active transit users.
<b>10738</b>	Teton Ave Safety Improvements (Tualatin Rd to Avery)	STOP WIDENING ROADS! STOP SPRAWLING!
<b>Nominating Agency: Tualatin Hills Parks &amp; Recreation</b>		
<b>12043</b>	Beaverton Creek Trail (Regional) Seg. #3 & #4	I hate riding on SW Milikan Way through this neighborhood.
<b>11211</b>	Bridge crossing of Hwy. 26 by the Westside Trail	This would really help heal the damage that having these areas so badly cut up by 26 has done. I would use this regularly!!
<b>Nominating Agency: Washington County</b>		
<b>10546</b>	170th Ave. Improvements	Only if there are cycle tracks with protected intersections. 170th desperately needs them This roadway desperately needs sidewalks, and I would love to see a cycle track put in. I also want to make sure it's designed for very slow speeds (narrow lanes and only 3 lanes where turning pockets are necessary), with many cues to drivers that people walking and biking are respected. People drive at very high speeds on the street now, and it's only two lanes. As it is, I would never let my child cross it alone, and there is an elementary school and nature park right there.
<b>11480</b>	185th Avenue sidewalks and bike lanes: Kinnaman to Farmington	Several schools in the area. Seen many near misses. Traffic goes quickly and there are still some ditches. Had first-hand accounts of students being run into ditch for safety.
<b>10584</b>	Alexander St. Improvements	This road is falling apart and there is no safe way to walk down it at night.

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		To what end? It seems fine. I live very near here and see no issues.
<b>11470</b>	Basalt Creek Parkway	STOP WIDENING ROADS! STOP SPRAWLING! This project alone could be canceled, and the funds would be sufficient to build out a safe bicycle greenway system for the entire City of Portland. This is a total waste of funds.
<b>11925</b>	Beaverton-Hillsdale Hwy Bike Lanes	Do not use a simple painted line to separate the bicycles and traffic. There is a major school located along this road along with two located nearby. Students deserve a safe bikeway and large sidewalks they can use to get to school. I live here and would complete so many local trips by bike if there were separated bike lanes. Take out a lane or two of traffic if you have to, the local car trips will decrease if the street can accommodate other modes. Badly needed This project needs to be converted into producing protected cycle tracks. We need to stop wasting money on bike lanes, they don't work and worse, they create a false sense of security. They are not a part of an effective Vision Zero network.
<b>11577</b>	Beef Bend Rd	STOP WIDENING ROADWAYS
<b>11487</b>	Boones Ferry Improvements	Bicycle path is already in existence and this road is huge . Sidewalk already exist on the south side, the north side sidewalk. I'm sure will come when development starts. This road is also already unsafe and to fast
<b>10806</b>	Council Creek Regional Trail (East-West)	This project is already fully funded and should be advanced to construction. Great potential to connect people to Hillsboro for jobs and Max
<b>10612</b>	Greenburg Road	STOP WIDENING ROADS. The "urban standard" should be a single lane in each direction, with cycle tracks and sidewalks. Anything more is encouraging driving. KNOCK IT OFF!
<b>10595</b>	Hall Blvd. Improvements	Widening a road to 5 lanes does NOT improve it. It encourages speeding and traffic deaths. KNOCK IT OFF!
<b>11739</b>	Hall Blvd. Improvements	Widening a road to 5 lanes does NOT improve it. It encourages speeding and traffic deaths. KNOCK IT OFF!
<b>11045</b>	HCT: 185th Avenue/MAX Grade Separation	Do center running BRT in dedicated lanes. This street is wide enough for it. This area needs rail immensely I would much prefer this money be spend on so many other transit related projects than this.
<b>12300</b>	HCT: Southwest Corridor Engineering and ROW Support	Honestly, the planning for the SW corridor should be scrapped. A surface LRT is not the right move after just going through a dire operator shortage. Automated Light Metro like SkyTrain is the right mode for MAX expansion.

# Summaries of public engagement and agency consultation – Spring 2023

		<p>We should have had this decades ago and almost had it if not for oil funded shell organizations opposing it and the pandemic. Please don't wait another decade plus! We had better passenger rail through the area 70 years ago; how sad is that?!</p> <p>Perhaps reconsider the route to serve PCC and maybe hillsdale</p> <p>Being able to easily take transit downtown from Bridgeport would be a dream come true. There are limited options for 1-seat rides to where I want to go downtown on weekdays and nonexistent on weekends.</p>
<b>11464</b>	Jenkins Rd. Improvements	I'd take the bike lanes and sidewalks.
<b>10593</b>	Kinnaman Rd. Improvements	It is currently difficult for people who are open to riding a bike for transportation to go from South Hillsboro area to points east. Adding bike lanes to Kinnaman would allow me to ditch my car for my bike for more trips.
<b>12183</b>	Kinnaman Rd. Improvements	It is currently difficult for people who are open to riding a bike for transportation to go from South Hillsboro area to points east. Adding bike lanes to Kinnaman would allow me to ditch my car for my bike for more trips.
<b>10611</b>	Locust Avenue Bike Lanes and Sidewalks	This area could be a biking haven.
<b>10578</b>	Merlo/158th Improvements	<p>Great except for the road widening part</p> <p>Please do not make this a 5-lane roadway! People already drive at ridiculous speeds on it, and it connects to a school and a MAX station. There is a sidewalk today, but it feels very unsafe to walk on it, because vehicles travel very fast and there is no buffer from them. Yes to better sidewalks and an off-street multi-use trail, but please do not make the space bigger for cars too. They need to slow down, not speed up, I say this as someone who walks, bikes, and drives on this street.</p>
<b>11465</b>	Metzger Area Sidewalks and Bikeways	Busy street with some existing MF as well as potential for more MF (County zoning is TOD R15), near Metzger and Hall Blvd bus lines (43 & 78).
<b>10545</b>	OR 10: Oleson Rd. Improvement Ph. 1	<p>Terrible intersection - dangerous - please fix</p> <p>There are definitely cheaper alternatives for this intersection that would involve completely closing some access to the intersection and rerouting that traffic on other streets to access the intersection on the streets that don't get closed. For the property owners that would be affected by this, you could give them each \$1M to buy their dream home and still come out ahead.</p> <p>Fixing light timing and removing the little spur from Scholls Ferry to 10 should be tried first.</p> <p>Its priority to improve safety</p>
<b>11914</b>	Roy Rogers Rd	STOP WIDENING ROADS AND SPRAWLING!



# Summaries of public engagement and agency consultation – Spring 2023

<b>11451</b>	Saltzman Rd	the end of saltzman towards where it meets laidlaw is a dangerous, narrow, curvy stretch.
<b>11476</b>	Saltzman Rd	the end of saltzman towards where it meets laidlaw is a dangerous, narrow, curvy stretch.
<b>12192</b>	Saltzman Rd	the end of saltzman towards where it meets laidlaw is a dangerous, narrow, curvy stretch.
<b>10577</b>	Scholls Ferry Improvements	STOP WIDENING ROADS
<b>11915</b>	Scholls Ferry Rd	This is a highly traveled road for recreational bicyclists without bike lanes. It needs to be made safer!
<b>10596</b>	Scholls Ferry Rd. Improvements	This is a highly traveled road for recreational bicyclists and needs to be made safer!
<b>11452</b>	Scholls Ferry Rd. Improvements	This is a highly traveled road for recreational bicyclists and needs to be made safer!
<b>10567</b>	Taylor's Ferry Extension	This would add even more traffic onto SW Taylor's Ferry.
<b>11463</b>	Thompson Rd Realignment	this has been put off for almost two decades. it's working fine. create a small park at the corner of thompson & saltzman instead.
<b>11919</b>	Tile Flat Rd	Regardless of the Urban Growth Boundary, this area is growing like crazy and the roads are behind.
<b>12184</b>	Tile Flat Rd	Regardless of the Urban Growth Boundary, this area is growing like crazy and the roads are behind.
<b>11441</b>	TV Highway Safe Access to Transit	This is a heavily used bus route. They should definitely improve it for safety.
		This would be good for the area and make it safer for walkers and bikers. Bike lanes should be protected.
		Definitely improve this road for bikers and pedestrians. Make bike lanes protected.
		Very busy area with traffic that goes quickly. Lot of pedestrian and transit use. Not safe to get to stops.
		This is an insanely dangerous roadway and it has several roadside memorials that demonstrate this point.
<b>11440</b>	TV Hwy (and Canyon Rd) Corridor Safety and Access to Transit	TV Highway has many stops that are signs only with no sidewalks or covered stops. High speed traffic, no safe crossings of the road and many deep ditches. Very limited lighting and low visibility of drivers to see pedestrians.
<b>10569</b>	Walker Rd. Improvements	Absolutely not. This is a ton of money for minimal time savings and it will create a less safe/ more intimidating experience for non-car users. Table this one. We've got too many other good projects that need funding.
<b>11233</b>	Walker Rd. Improvements	Absolutely not. This is a ton of money for minimal time savings and it will create a less safe/ more intimidating experience for non-car users. Table this one. We've got too many other good projects that need funding.
<b>12188</b>	Walker Rd. Improvements	Absolutely not. This is a ton of money for minimal time savings and it will create a less safe/ more intimidating experience for non-car users. Table this one. We've got too many other good projects that need funding.

# Summaries of public engagement and agency consultation – Spring 2023

<b>12187</b>	Walker Rd. widen to 5 lanes: Park Way to Westfield	Widening will just feed more congestion in the area
<b>11239</b>	Washington County Neighborhood Bikeways (Ph. 1)	This could really transform this region.
<b>Nominating Agency: West Linn</b>		
<b>11754</b>	Salamo Bike and Ped Project	This is a great idea. The people in the lower income Willamette neighborhood could ride electric bikes to Safeway.
<b>10128</b>	Willamette Falls Drive Multimodal Improvements - OR 43 to 10th St.	Yes! More protected bike lanes and pedestrian ways in the suburbs, please! Help us get out of our cars.  Oregon city is another priority area that can be a walkable neighborhood if linked to other areas.
<b>12090</b>	Willamette Falls Locks Repair Project	I would like to see this. However, freight and tourism will take a huge downturn if tolling on the highways near here are enacted. So, ultimately, maybe this should be put off until it's known exactly how bad the hit on the local economy is from tolling before greenlighting this,
<b>10129</b>	Willamette River Greenway Trail	Wonderful! This is a great idea and will provide genuine alternative connectivity.
<b>Nominating Agency: Wilsonville</b>		
<b>12200</b>	Advance Road - Stafford to 60th: Complete Street	First off, this intersection is extremely dangerous as it stands right now . Hopefully the new development that has been planned for this area will have a better design than Frog Pond . Smart density that includes all the factors is desperately needed for this part of town. Little shops to walk to friendly transit accessibility , a tree lined walkable neighborhood with front porches to help reduce crime and promote community is all needed.  STOP WIDENING ROADS! STOP SPRAWLING!
<b>11555</b>	Boeckman Creek Trail	This is such an amazing area. 1) needed for commuting . Currently no safe way to ride from Wilsonville to the Tualatin or Sherwood area . 2) The Villaboia trails will connect up and the amount of people using this area already to enjoy the wildlife is incredible. 3) this being said the wildlife MUST stay protected as this green space expands. I know I don't have to say why this is important not just for wildlife but property values. People love seeing the array of wildlife out here already .
<b>10156</b>	Boeckman Rd. at Boeckman Creek	I agree about the safety issue. Also the speed is WAY to high especially considering all the new neighborhood expansions. This road leads right into a school zone. Trees, sidewalks, bike lanes, and bio swells are desperately needed along this entire road. Remember trees help slow traffic protected kids walking home and keep the town cooler in the hot summer.  STOP WIDENING ROADS! STOP SPRAWLING!

# Summaries of public engagement and agency consultation – Spring 2023

<b>11489</b>	Boones Ferry / I-5 off ramp improvements	This is already a massive intersection and a huge issue. cars here are already exceeding the speed limit and widening this will (as you know) enhanced speed and more fatalities . Remember bigger roads = faster cars and always more traffic.
<b>11764</b>	Boones Ferry Road Extension	As a cyclist, no one currently uses Boones ferry . Until ridership goes up at the park-and-ride. I feel that this is currently not a priority. Possibly one in the future.  STOP WIDENING ROADS! STOP SPRAWLING!
<b>11243</b>	Day Road Improvements	This area is going to see much more traffic on every level. With all the new industrial zones added. Keeping pedestrians and cyclists safe while trying to stay green is going to be tricky . Don't forget transit .
<b>10133</b>	French Prairie Bicycle/Pedestrian/Emergency Bridge	make it a bridge for all traffic to avoid congestion pricing and I'd change my mind about saying no.  Strongly believe that this historic crossing(if done, right) can become a destination focal point for this community. The Old town area of Wilsonville could have a small resurgence . .This bridge as we know it's part of a much larger planned bicycle trail infrastructure. This isn't just going to be good for Wilsonville but the entire west side of the metro area .  I'd support it if it were also a two-lane road bridge. I think it vital to have a second bridge to divert traffic from the I-5 bridge that is merely traveling between Wilsonville proper and the Charbonneau area. Recall there are no other road bridges for miles east and west. If built as a two-lane, moderate speed bridge, this would encourage just locals to use it, and it wouldn't become a shortcut for regional traffic compared to staying on I-5.  There is currently no good way across the Willamette rive except for ferries in this region.
<b>10853</b>	Garden Acres Road Extension	STOP WIDENING ROADS! STOP SPRAWLING!
<b>10588</b>	Grahams Ferry Road Improvements	STOP WIDENING ROADS! STOP SPRAWLING!
<b>11554</b>	I-5 Walking and Biking Bridge	This bridge and project is a crucial linchpin to connecting Wilsonville's city center design with the transit center across the freeway . If the UGB is going to stay strong Wilsonville is going to need infrastructure such as this to help keep this community connected. I've got much experience trying to walk/ride across I-5 and it's currently unsafe and down right scary.  Need more of these crossings across I-5
<b>12196</b>	Park Place Extension - Wilsonville to Courtside: Complete Street	I feel this area definitely needs improvement. However I'm not sure unless seeing the actual plans. I feel Wilsonville (as a long term resident here) desperately needs to focus on smart density . A connected infrastructure is going to be critical in making it work. Also I truly can't stress enough on how important it is to inform and educate the citizenry on basics of urban planning . People out here just don't understand the basics.

# Summaries of public engagement and agency consultation – Spring 2023

<b>11775</b>	Parkway Ave Urban Upgrade	<p>STOP WIDENING ROADS! STOP SPRAWLING!</p> <p>This area is in desperate need of sidewalks and bike lanes. I would walk or bike over to the shopping center but I don't feel safe doing so with it's current condition.</p>
<b>11776</b>	Printer Parkway Urban Upgrade	<p>Widen road but skip all the rest . Can this be made cheaper and more car traffic friendly?</p> <p>STOP WIDENING ROADS! STOP SPRAWLING!</p>
<b>11773</b>	Stafford Road Urban Upgrade	<p>This will only put more pressure on expanding the UGB . No a priority at this time</p> <p>STOP WIDENING ROADS! STOP SPRAWLING!</p>
<b>12197</b>	Wilsonville Road Intersection Modifications - Town Center Loop West to Town Center Loop East	<p>Pedestrian crossings and bike lanes should be the priority when planning not cars. Possibly setting up barriers to separate the bike lane from car traffic.</p>
<b>12201</b>	Wilsonville Town Center Cycle Track - Town Center Loop West to Memorial Drive	<p>Wilsonville is currently not a friendly biking community. This area is confusing and the street designs currently allow cars to drive way too fast ! I feel this project will be a good start in making this area safer for cyclists. This will definitely begin to encourage cyclists and show future developers that this region is serious about a more livable and vibrant city center.</p>



## 2023 Regional Transportation Plan

# Summaries of agency consultation – Spring 2023

During phase 4 of the 2023 Regional Transportation Plan (RTP), Metro conducted consultations with federal, state, regional and resource agencies and with tribal governments to understand areas of interest and concern related to the 2023 RTP project list and policies. These consultations were coordinated with consultation for the 2024-2027 Metropolitan Transportation Improvement Program (MTIP). The 2024-2027 MTIP and the 2023 RTP are seeking final adoption in summer and fall 2023, respectively.

Metro sent consultation invitations requesting formal consultation with agencies and tribal governments. Metro staff held three consultation meetings: one with Tribes on April 19, another with Tribes and natural resource agencies on April 20 and a third meeting with federal, state and regional agencies on April 28, 2023. Summaries of the consultation meetings with agencies are attached. Metro is working with Tribes to finalize consultation meeting summaries.



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

## Meeting summary

**Meeting:** Consultation with Tribes and Resource Agencies on the 2023 Regional Transportation Plan and 2024-27 Metropolitan Transportation Improvement Program

**Date/time:** Wednesday, April 20, 2023

**Location:** Virtual via Zoom

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### Agency representatives:

Susan Sturges, NEPA Reviewer, Transportation Sector Lead, U.S. Environmental Protection Agency (EPA)  
Region 10, Policy and Environmental Review Branch

\* This meeting also included a representative from a Tribe. The comments from the Tribe's staff are summarized in a separate document.

### Metro staff in attendance:

Grace Cho, Senior Transportation Planner, MTIP

Molly Cooney-Mesker, Communications Specialist

Tom Kloster, Planning Manager, RTP

Katie McDonald, Tribal Liaison

Lake McTighe, Principal Planner, RTP

Shannon Stock, RTP Program Assistant

### Welcome, purpose and introductions

Molly Cooney-Mesker and Katie McDonald outlined the purpose of consultation meeting, including sharing information and discussing and receiving feedback about the 2023 Regional Transportation Plan (RTP), the RTP draft environmental assessment in Appendix F and the 2024-27 Metropolitan Transportation Improvement Program (MTIP). Metro is at key phases in both the RTP and the MTIP.

### Overview of RTP and MTIP updates ([Link to recording of the presentation](#))

Molly Cooney-Mesker gave an overview of the update of the 2023 Regional Transportation Plan (RTP) and the draft 2024-27 the Metropolitan Transportation Improvement Program (MTIP). The RTP is updated every five years and is the blueprint that guides investments in all forms of travel throughout the region and the movement of goods and services. The 2023 RTP process established an updated vision and goals to guide investments in the region's transportation system through 2045. The MTIP implements the RTP by tracking the anticipated spending of

# Summaries of public engagement and agency consultation – Spring 2023

Federal funding on regionally significant transportation projects over the next four federal fiscal years.

## **Overview of RTP Chapter 3 environmental policies and environmental assessment**

Lake McTighe shared a PowerPoint presentation about the draft RTP policies that guide natural resource and environmental protection and introduced the draft environmental assessment.

### *Resource Agency comments*

Susan Sturges, EPA, asked for clarification about what is required in the RTP environmental analysis and what is not. Metro staff noted that Metro is not required to provide a NEPA analysis for the RTP.

Susan Sturges, EPA, suggested adding a summary of the 2040 Growth Concept to Appendix F, or a link to additional information. She also suggested reviewing the land use section of the policy chapter (Chapter 3) for updates. She commented that some of the recommendations and suggestions seem outdated, such as the recommendation in the first table. Metro staff noted this could be done.

## **Next steps**

Metro staff provided a timeline for additional comments on the RTP, MTIP and RTP Environmental Assessment.

- May 4, 2023 – Provide any additional questions or comments to Metro staff
- May 5, 2023 – Public comment period for 2024-27 MTIP closes. Metro to finalize and create adoption draft. Final deadline for submitting comments on the 2024-2027 MTIP is May 18.
- June or July 2023 – Staff will request JPACT approval Metro Council adoption of 2024-27 MTIP
- July 10 – August 25, 2023 – The Draft 2023 Regional Transportation will be available for public comment.
- Nov. 30, 2023 – Metro Council considers final action on the 2023 Regional Transportation Plan

Since this consultation meeting the EPA and the City Portland's Bureau of Environmental Services have submitted comments on the 2023 RTP Draft Environmental Assessment (Appendix F). The City of Portland was not able to attend the consultation meeting but received the invitation and materials. The substantive comments provided by these two agencies and Metro staff responses are attached.

The Tribes and agencies will receive revised versions of the 2023 RTP Draft Environmental Assessment during the public comment period for the 2023 RTP in July 2023.



Date: May 5, 2023

Topic: Additional comments submitted by resource agencies following the 2023 RTP and 2024-27 MTIP Consultation with Resource Agencies

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### Comments submitted by Susan Sturges, Transportation Lead, EPA:

Date: 5/4/23

- Appendix F, Section 1.2, Table 2. Recommend adding CWA Section 402 National Pollution Discharge Elimination System (NPDES) permit to Table 2.
  - Metro response: this will be added
- Appendix F, Section 3.2, page 36: Consider EPA's NEPAAssist for additional datasets. NEPAAssist is a web-based application that draws environmental data dynamically from EPA GIS databases and web services, providing immediate screening of environmental assessment indicators for a user-defined area of interest. Datasets include impaired streams and waterbodies; and Superfund, Brownfields, and hazardous waste (RCRA) sites. NEPAAssist is available at <https://www.epa.gov/nepa/nepassist>.
  - Metro response: Reference will be added to Section 3.2, as well as 4.11 Resources for mitigation activities
- Appendix F, Section 4.5, page 45: Recommend including reference to Compensatory Mitigation for Losses of Aquatic Resources under CWA Section 404 (Final Rule). Available at <https://www.epa.gov/cwa-404/compensatory-mitigation-losses-aquatic-resources-under-cwa-section-404-final-rule>.
  - Metro response: This will be added.
- Appendix F, page 49: This appears to be a repeated paragraph from previous page.
  - Metro response: Repeated paragraph has been removed.

### Comments submitted by City of Portland BES:

Date: 4/28/23

- Multiple grammatical corrections.
  - Metro response made all corrections.
- Appendix F, Introduction, page 2: Recommend refining for readability- “so that project costs can be accurately and to provide an accurate assessment of which projects and type of projects intersect with and could potentially water and fish, habitat quality and connectivity, floodplains, and tribal, historic, and cultural places or archeological resources.”
  - Metro response: Refinement will be made.
- Appendix F, Introduction, page 2: Question regarding wording - “permeability?”
  - Metro response: Will change to clarify that permeability is referring to fish and wildlife connectivity across/over/under roads.



# Summaries of public engagement and agency consultation – Spring 2023

MEETING TOPIC

FROM

DATE

- Appendix F, Section 1., page 6: Are both of these true for wolves or is there a missing species noted? - “(2) A small remnant run of the historical population migrates through the Columbia River. (2) The gray wolf is protected as endangered under the authority of the federal Endangered Species Act in Oregon west of Highways 395, 78, and 95.”
  - Metro response: Will review and make any necessary corrections.
- Appendix F, Section 2.3.1, page 16: For the table to stand alone, perhaps clarify that this is the % of capital projects only - “% of projects”
  - Metro response: Change will be made to the title of the tables.
- Appendix F, Section 3., page 33: Recommendation that it would make these analyses more clear and direct if the O&M projects were removed from the equation. These could be analyzed separately so the reader gets a better perspective of how the target projects fall among and against each other - “A total of 655 projects in the 2023 RTP financially constrained list of projects were included in the analysis, out of a total of 1,066 projects.”
  - Metro response: Will update to improve clarity.

## Meeting summary



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

**Meeting:** 2023 RTP and 2024-27 MTIP Consultation with State and Federal Agencies

**Date/time:** Thursday, April 27, 2023

**Location:** Virtual via Zoom

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### **Agency representatives:**

Ted Wenk, Oregon Bureau of Labor and Industries (BOLI)

Cody Meyer, Department of Land Conservation and Development (DLCD)

Kelly Reid, DLCD

Nathaniel Price, FEderal Highway Administration (FHWA)

Danielle Casey, Federal Transit Administration

Ali Mirzakhali, Department of Environmental Quality (DEQ)

Gerik Kransky, DEQ

Michael Orman, DEQ

Michael Freels, Oregon Department of Energy (ODOE)

Glen Bolen, Oregon Department of Transportation (ODOT), Region 1

Chris Ford, ODOT, Region 1

Erik Having, ODOT,

Dwight Brashear, SMART Transit

Kelsey Lewis, SMART Transit

Lynda David, Southwest Washington Regional Transportation Council (RTC)

Alan Lehto, TriMet

Tara O'Brien, TriMet

### **Metro staff in attendance:**

Grace Cho, Senior Transportation Planner, MTIP

Molly Cooney-Mesker, Engagement Specialist

Kim Ellis, Principal Transportation Planner, RTP Project Manager

Tom Kloster, Planning Manager, RTP

Ted Leybold, Planning Manager, MTIP

Lake McTighe, Principal Transportation Planner, RTP

Shannon Stock, RTP Program Assistant

### **Welcome, purpose and introductions**

Tom Kloster welcomed agency partners and outlined the purpose of consultation, including developing a shared understanding of the RTP and MTIP processes and receiving feedback on the 2023 Regional Transportation Plan (RTP) and 2024-27 Metropolitan Transportation Improvement Program (MTIP)

### **Overview of RTP and MTIP updates**

Molly Cooney-Mesker provided an overview of the update of the 2023 RTP and the draft 2024-27 MTIP. The RTP is updated every five years and is the blueprint that guides investments in all forms of travel throughout the region and the movement of goods and services. The 2023 RTP process

# Summaries of public engagement and agency consultation – Spring 2023

established an updated vision and goals to guide investments in the region's transportation system through 2045. The MTIP implements the RTP by tracking anticipated spending of regionally significant transportation projects over the next four federal fiscal years.

## **2023 RTP update - Presentation**

Kim Ellis shared a PowerPoint presentation that summarized the process for the 2023 RTP update, the draft policy framework and a summary of the draft project list. Kim also provided an overview of the draft findings from the high-level project assessment and system analysis results.

## **Summary of discussion topics**

Ali Mirzakhilili, DEQ, asked a question regarding how many significant projects are in the draft 2024-27 MTIP.

Metro staff noted regionally significant projects that are included in the MTIP. Staff explained the MTIP has 130 projects, but at this time the 2024-27 MTIP does not include any of the major projects covered in the media frequently, such as I-5 Rose Quarter or Interstate Bridge. The greater Portland region completes its obligations for its last maintenance plan in 2017, and is no longer mandated to conduct an air quality conformity analysis. As a result, air quality conformity is not a focus of the 2024-27 MTIP evaluation work. However, Metro does conduct a performance evaluation of the MTIP investment profile. Around half of the projects in the MTIP are maintenance and preservation projects and generally the activity is located within an existing footprint. The remaining capital projects included in the MTIP are smaller scale projects that work towards serving community needs. These smaller projects, because of their scale, don't result in big changes in advancing the larger regional goals as shown by the performance evaluation.

Tara O'Brien, TriMet raised a question relating to "A Better Red" and how it is accounted for in the MTIP. Grace Cho responded with context relating to A Better Red, "noting because A Better Red has obligated its last funding payment from FTA and opening date in 2024, it is not necessary to include in the 2024-27 MTIP. But it was noted the performance improvements would have counted as part of the 2021-24 MTIP performance evaluation. The MTIP serves as a monitoring and implementation tool.

Chris Ford from ODOT Region 1 commented about the 2023 RTP update. He requested that Metro and ODOT work together on the language related to auxiliary lanes in the draft RTP policy chapter to ensure that there is one consistent policy that applies everywhere. He noted some conclusions are not in line with national best practices. He expressed support for aligning the RTP policies with the Climate-Friendly and Equitable Communities (CFEC) rules but noted it should not go beyond what was adopted in the rules. He also noted that some early RTP policy language related to pricing has been challenging. Erik Havig, ODOT Headquarters, noted the RTP policies on pricing and mobility are pretty close and that the Oregon Transportation Plan is supportive of all the RTP goal areas. He noted that while the basics are there, ODOT does have some concerns with the draft auxiliary lane language.

DEQ representative, Ali Mirzakhilili raised the draft RTP climate and resilience policies for discussion. He noted climate resilience and earthquake preparedness are two very different policy areas and asked whether there is an opportunity to split the two policy areas. He explained they are addressing two different things - one is natural occurrence the other is human-caused. In addition, having earthquake

# Summaries of public engagement and agency consultation – Spring 2023

preparedness as the focus of climate resilience is a limited view. Resilience should include the concept of reducing the impact of climate change on people and infrastructure. He further explained that it is difficult to see how connecting the two policy areas drives the investment.

Metro staff agreed that this is a challenge. Kim Ellis, Metro, replied that resilience in the RTP does include more than earthquake resilience and commented that reducing impacts of climate change on people, particularly marginalized communities has been a focus of discussions. She acknowledged Metro has more work to do to further develop the resilience policies to address that. She acknowledged the important policy work happening at the state level on this topic, and noted there has been limited time to have those conversations during this RTP process. As a result, the RTP will identify the need to address resilience as future work. Earthquake and emergency preparedness have been a focus, in part due to the Phase 1 of the Regional Emergency Transportation Routes project that Metro completed in partnership with the Regional Disaster Preparedness Organization in 2019. DEQ staff suggested the policies refer to “infrastructure hardening” instead of climate resilience. Metro staff commented that these were valuable suggestions and that feedback would be incorporated in future work.

## *Specific discussion questions:*

### **Q: Does the draft RTP project list align with recent state policies and goals for climate, equity and pricing?**

ODOT staff commented they were unaware of Appendix F, and asked when the appendix will be shared and if there is any relationship to NEPA work ODOT has done in the region.

Metro staff described the purpose of Appendix F, which is to document an environmental assessment of the RTP project list following what is directed in the Code of Federal Regulations (in particular [23 CFR 450.316\(b\)](#), [23 CFR 450.324\(g\)](#), and [23 CFR 450.324\(f\)\(10\)](#)). Metro staff further explained, the analysis used for the draft 2023 RTP project list follows the same methodology used in the 2018 RTP, and previous RTPs – but with more recent data, when available. Staff confirmed that this is not a NEPA level of analysis but more high-level to identify projects that may impact natural, historic or cultural resources. Metro staff noted that the assessment also includes a discussion of the types of potential mitigation strategies that can be used. Metro staff have consulted with Federal, State and other natural resource agencies, and Tribes on the methodology and data during the scoping phase for the RTP update and more recently on draft assessment. A revised draft Appendix F that addresses feedback received will be released for public review in July as part of the RTP public comment period.

### **Q: Are there other policymaking, planning, or statewide rulemaking that the RTP or MTIP should be aligning with?**

Agency partners discussed incorporating changes from electric vehicles and the effects of telework trends on greenhouse gas emissions. DEQ staff requested more information about the research and analysis Metro staff and a consultant team recently completed in support of the RTP update. DEQ staff expressed the information could potentially inform the statewide Employee Commute Options (ECO) rulemaking underway. In particular, Oregon DEQ would like to understand the anticipated future impacts, based on Metro's climate modeling, of the state Employee Commute Options regulations requiring employers to provide alternatives to driving alone. Metro staff agreed to share this information at an upcoming technical meeting.

# Summaries of public engagement and agency consultation – Spring 2023

Kim Ellis, Metro, requested feedback about the Oregon Statewide Transportation Strategy (STS), particularly what state-led pricing actions should be assumed in the RTP climate analysis. She noted the memo in the meeting packet described the key questions and challenges. Brian Hurley, ODOT Climate Office, explained there is an “Adopted Plans” scenario Metro could use that reflects adopted state plans as of 2022. This does not include most of the STS pricing assumptions – but does have a modest assumption for pay-as-you-drive (PAYD) insurance that is somewhere between 0 and 100% by 2050. This assumption would be the minimum ODOT would like to see Metro include in the analysis. Questions about timing for VisionEval modeling and requested an opportunity to see that work.

Metro staff agreed it was timely to consult with ODOT, DLCD and DEQ on the climate analysis being conducted for the 2023 RTP to ensure the VisionEval model and technical assumptions align with state requirements for the analysis.

## **Q. Other feedback or comments you would like to share with Metro staff?**

Chris Ford, ODOT, suggested a post RTP debrief on what went well/did not go well. One concern has been the amount of staff time taken to participate in the RTP update. He noted different staff lead each piece and organized the work and review of the work in different ways, making it difficult to know what to expect. Other agencies present showed interest in a post RTP debrief.

Tara O’Brien from TriMet commented future updates could do more to integrate land use and transit in the conversations.

## **Next steps**

Metro staff outlined how they would be collecting and responding to feedback

- May 4, 2023 - Provide any additional questions or comments to Metro staff.
- May 5, 2023 - Public comment period for 2024-27 MTIP closes. Metro to finalize and create adoption draft.
- June 2023 – 2024-27 MTIP briefing to TPAC and JPACT
- July 2023 – Request JPACT approval Metro Council adoption of 2024-27 MTIP
- July 10 – August 25, 2023 – The Draft 2023 Regional Transportation will be available for public comment.

# Chapter 1

## **Introduction**

# 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This chapter will be provided in the June 15 JPACT packet.*

## Chapter 2

# **Our Shared Vision and Goals for Transportation**

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This draft is subject to design and copy edits, technical corrections and minor updates as it is finalized for public review.*

# Exhibit A to Resolution 23-5343 - Draft 2023 RTP

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## 2.0 INTRODUCTION

*The 2023 Regional Transportation Plan defines a shared vision for the greater Portland region’s transportation system that reflects the values and desired outcomes expressed by the public, policymakers and community and business leaders engaged in development of the plan.*

Transportation shapes our communities and our daily lives, allowing us to reach our jobs and recreational opportunities, access goods and services and meet daily needs. This chapter presents a shared, long-term vision and supporting goals, objectives and performance targets that will guide planning and building the transportation system serving the Portland metropolitan region through 2045. The vision reflects the continued evolution of transportation planning from a project-driven endeavor to one that is framed by a broader set of outcomes that affect people’s everyday lives.



Learn more about the 2023  
Regional Transportation Plan  
at [oregonmetro.gov/rtp](https://oregonmetro.gov/rtp)

Rapid growth and change across our region have exposed and exacerbated longstanding economic and racial inequities, threatening to undermine the broader benefits of economic growth as well as our region’s quality of life. The vision and supporting goals, objectives and performance targets in this chapter aim to better integrate transportation and land use efforts to protect the region’s economic prosperity, environmental quality, and quality of life and improve the lives of the people who call this region home.

To achieve our vision for the future, we must work together to address inequities as we build vibrant, walkable, bikeable, climate-friendly communities with affordable homes, provide safe, reliable, healthy and affordable transportation choices that reduce climate and other air pollution and address growing congestion, and protect critical natural areas and the irreplaceable farm and forest lands that surround the region.

Achievement of the plan’s vision and goals will occur through partnerships, ongoing engagement and implementation of a variety of policies, strategies and actions at the local, regional, state and federal levels. The vision laid out in these pages, will take sustained, focused work from every partner in the region. The various jurisdictions in the region are expected to pursue policies, strategies and projects that contribute to achieving the regional vision and goals of the Regional Transportation Plan (RTP) to ensure an equitable, prosperous and sustainable future.

## Chapter organization

This chapter is organized into the following sections:

- 2.1 Outcomes-based framework to guide transportation planning and decision-making:** The section describes the outcomes-oriented performance-based planning approach the plan uses to link transportation to a broader set of desired outcomes for vibrant communities, a healthy economy, equity and the environment. This approach also responds to more recent federal and state performance-based planning requirements.
- 2.2 Shared vision for the regional transportation system:** This section describes how the RTP will serve a key role in implementing the 2040 Growth Concept and supporting local aspirations for growth.
- 2.3 Goals and objectives:** This section lays out five goals and supporting objectives for the region's transportation system. The goals and objectives establish policy and investment priorities that will guide future planning, investment decisions and monitoring.
- 2.4 Regional transportation performance targets:** This section lays performance targets for the region's transportation system organized by the RTP goal areas. The performance targets are numerical benchmarks to assess the region's progress in achieving RTP vision and goals. These targets draw from federal and state requirements and regional policies, and will guide future planning, investment decisions and monitoring.

## 2.1 OUTCOMES-BASED FRAMEWORK TO GUIDE TRANSPORTATION PLANNING AND DECISION-MAKING

We know the transportation funding landscape is changing, and maintaining and growing our world-class transportation system to meet the region's needs requires steady, long-term investment and ongoing maintenance.

Planning creates opportunities for individuals and communities to define and articulate their collective desires and aspirations for enhancing the quality of life in our region and their communities. It allows the people and their elected leaders to take stock of the successes that have been achieved in their communities through years of hard work. It also requires us to think carefully about and be accountable for our future choices, ensuring we get the greatest possible return on public investments and that everyone benefits from those returns. Planning also allows us to identify where investments are most needed in order to deliver the vision a plan articulates.

As a major tool for ensuring stewardship of our public investments, the plan identifies needed next steps to achieve each of the six desired outcomes for the greater Portland region, and helps us understand whether we are on the right track.

### WHAT OUTCOMES ARE WE TRYING TO ACCOMPLISH?

**VIBRANT COMMUNITIES** – People live, work and play in vibrant communities where their everyday needs are easily accessible.

**ECONOMIC PROSPERITY** – Current and future residents benefit from the region's sustained economic competitiveness and prosperity.

**SAFE AND RELIABLE TRANSPORTATION** – People have safe and reliable transportation choices that enhance their quality of life.

**LEADERSHIP ON CLIMATE CHANGE** – The region is a leader in minimizing contributions to global warming.

**CLEAN AIR AND WATER** – Current and future generations enjoy clean air, clean water and healthy ecosystems.

**EQUITY** – The benefits and burdens of growth and change are distributed equitably.

*As adopted by the Metro Council and MPAC in 2008 by Resolution No. 08-3940.*

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This RTP continues to broaden the way that outcomes are used to measure success and define transportation system needs. The plan calls for making transportation investment decisions based on achieving the multiple outcomes to preserve and enhance the quality of life, our economy and the environment now and for future generations.

This plan updates the outcomes-based policy framework first adopted in 2010, to focus on five interconnected goals – equity, climate, safety, mobility and the economy. The region’s six desired outcomes are prominently interwoven into the RTP goals and objectives, and the policies in Chapter 3 that support those goals.

These goals were used to identify needs and prioritize and evaluate performance of the investments recommended in this plan. These updated goals and their supporting objectives (and related performance measures) will also be used to monitor how the transportation system is performing between scheduled plan updates.

## 2.2 SHARED VISION FOR THE REGIONAL TRANSPORTATION SYSTEM

Transportation planning and investment decisions and the region's desired land use, social, economic and environmental outcomes are so interconnected that success of the 2040 Growth Concept hinges significantly on achieving the plan's goals and objectives.

The Regional Transportation Plan vision statement below presents an aspirational view of the future of the region's transportation system that reflects the values and desired outcomes expressed by the public, policymakers and community and business leaders engaged in development of the plan.

**Figure 2.1 Vision for the regional transportation system**



This shared vision for the future provides a benchmark for building a transportation system that serves all people and businesses in the greater Portland region. This vision and supporting goals and objectives will serve as a foundation for identifying investment priorities and policies and measuring progress toward building a transportation system that delivers the outcomes we want.

### Outcomes-based goals to realize our vision

To realize our vision for a transportation system that serves all people and businesses, we need goals to keep us focused and moving forward. The RTP goals were first adopted in 2010 after significant engagement with communities, residents, businesses and stakeholders throughout the region. In 2014, the Metro Council and the Joint Policy Advisory Committee (JPACT) approved the addition of a goal to demonstrate climate

leadership and reduce greenhouse gas emissions. In 2018, the goals, objectives and related performance measures and targets were refined to address new policies and near-term investment priorities for transportation equity, safety, Climate Smart Strategy implementation and managing congestion. In 2023, the goals, objectives and related performance measures and targets were further updated to focus on five interconnected goals – equity, climate, safety, mobility and the economy.

The outcomes-based RTP goals guide the region's transportation planning and decision-making and include specific objectives and performance targets to help measure the progress we are making toward our vision for the transportation system. The goals, objectives, performance measures and performance targets are presented in the next section.

## 2.3 GOALS AND OBJECTIVES

While the vision and goals are vital components of the plan, equally important are measurable objectives and quantifiable performance targets to track the region's progress. Investments that achieve objectives and performance targets are critical for the region to be successful in realizing a fully integrated, multimodal transportation system that achieves the goals of the RTP.

Continuing the practice established with the RTP adopted in 2010, this plan includes transportation performance targets that support the outcomes-based framework reflected in the plan's goals and objectives. The goals, objectives and performance targets provided policy direction for developing the investment strategy recommended in Chapter 6. Chapter 7 reports findings on how well the RTP performs across a broad array of measures and relative to the plan's performance targets.

The performance targets are numerical benchmarks to assess the region's progress in carrying out the RTP vision. These targets draw from federal and state legislation and regional policies. Some targets are more aspirational than others, but they all can provide useful information on whether the region is making progress toward the RTP goals and support the region's performance-based planning and decision-making framework shown in **Figure 2.2**.

**Figure 2.2 RTP performance-based planning and decision-making framework**



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Each **goal area** that follows is arranged similarly:

- A statement of the **goal** that describes a desired outcome or end state toward which actions are focused to make progress toward the plan's vision.
- **Objectives** that identify a measureable desired outcome and means for achieving the goal to guide action within the plan period.
- Key **performance measures** that are used in three different ways to support the region's transportation planning and decision-making process:
  - System performance measures – These are performance measures that are used to predict the future as part of an evaluation process using forecasted data. They can be applied at a system-level, corridor-level and/or project level, and provide the planning process with a basis for evaluating alternatives and making decisions on future transportation investments.
  - Regional performance targets and thresholds – These are numerical goals or a stated direction of performance to be achieved within a specified time period, assigning a value to what the RTP is trying to achieve. Targets provided policy direction for developing the investment strategy recommended in Chapter 6, and address regional and state policies. Performance of the plan's investment relative to the targets is reported in Chapter 7 to track the region's progress toward the plan's vision and goals.
  - Monitoring and reporting measures and targets – These are measures used to monitor changes based on actual empirical or observed data between updates to the RTP. Decision-makers can use this information between updates to evaluate the need for refinements to policies, investments or other elements of the plan based on what is learned. Broad sets of multimodal monitoring measures have been identified in support of implementing the region's Climate Smart Strategy (Appendix J) and Congestion Management Process (see Appendix L). Some monitoring measures have targets for purposes of meeting federal performance-based planning requirements. See Section 7.2 in Chapter 7 for more information about the region's performance-based planning framework.

The individual RTP goals, objectives and key system performance measures for each goal area follows. Several measures relate to multiple goals.



## Goal 1: Mobility Options

*People and businesses can reach the jobs, goods, services and opportunities they need by well-connected, low-carbon travel options that are safe, affordable, convenient, reliable, efficient, accessible, and welcoming.*



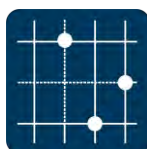
## Objectives

- **Objective 1.1 Travel Options** – Plan communities and design and manage the transportation system to increase the proportion of trips made by walking, bicycling, shared rides and use of transit, and reduce per capita vehicle miles traveled.
- **Objective 1.2 System Completion** – Complete all gaps in planned regional networks.
- **Objective 1.3 Access to Transit** – Increase household and job access to current and planned frequent transit service.
- **Objective 1.4 Regional Mobility** – Maintain reliable person-trip and freight mobility for all modes in the region’s mobility corridors, consistent with the designated modal functions of each facility and planned transit service within each corridor.

## Key performance measures



**Vehicle miles  
traveled**



**System  
completeness**



**Throughway  
reliability**



**Mode share**



**Multimodal  
travel times**

Performance of the plan for these measures is reported in Chapter 7.

## Goal 2: Safe System

*Traffic deaths and serious crashes are eliminated and all people are safe and secure when traveling in the region.*



## Objectives

- **Objective 2.1 Vision Zero** – Eliminate fatal and severe injury crashes for all modes of travel by 2035.
- **Objective 2.2 Transportation Security** – Reduce the vulnerability of travelers and critical passenger and freight transportation infrastructure to crime and terrorism.

## Key performance measure



**Safety**

Note: Metro has not developed the modeling tools to forecast crashes. Instead, the system evaluation identifies how much the region needs to reduce serious crashes in order to maintain progress toward its target of eliminating serious crashes by 2035, and compares the results to current data in order to assess whether the region is on track to meet its safety target.

## Goal 3: Equitable Transportation

*Transportation system disparities experienced by Black, Indigenous and people of color and people with low incomes, are eliminated. The disproportionate barriers people of color, people who speak limited English, people with low incomes, people with disabilities, older adults, youth and other marginalized communities face in meeting their travel needs are removed.*



### Objectives

- **Objective 3.1 Transportation Equity** – Eliminate disparities related to access, safety, affordability and health outcomes experienced by people of color and other marginalized communities.
- **Objective 3.2 Barrier Free Transportation** – Eliminate barriers that people of color, low income people, youth, older adults, people with disabilities and other marginalized communities face to meeting their travel needs.

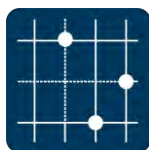
### Key performance measures\*



Access to transit



Access to jobs



System  
completion



Affordability\*\*

Performance of plan for these measures is reported in Chapter 7.

\* Key performance measures compare RTP equity focus areas with areas outside RTP equity focus areas.

\*\* A performance measure for affordability is not included in the RTP system evaluation but will be included in future updates to the plan as a method is developed. Observed data is reported in Chapter 7.

## Goal 4: Thriving Economy

*Centers, ports, industrial areas, employment areas, and other regional destinations are accessible through a variety of multimodal connections that help people, communities, and businesses thrive and prosper.*



### Objectives

- **Objective 4.1 Connected Region** – Focus growth and transportation investment in designated 2040 growth areas to build an integrated system of throughways, arterial streets, freight routes and intermodal facilities, transit services and bicycle and pedestrian facilities, with efficient connections between modes and communities that provide access to jobs, markets and community places within and beyond the region.
- **Objective 4.2 Access to Industry and Freight Intermodal Facilities** – Maintain access to industry and freight intermodal facilities by a reliable and seamless freight transportation system that includes air cargo, pipeline, trucking, rail, and marine services to facilitate efficient and competitive shipping choices for goods movement in, to and from the region.
- **Objective 4.3 Access to Jobs and Talent** – Attract new businesses and family-wage jobs and retain those that are already located in the region while increasing the number and variety of jobs that households can reach within a reasonable travel time.
- **Objective 4.4 Transportation and Housing Affordability** – Reduce the share of income that households in the region spend on transportation to lower overall household spending on transportation and housing.

### Key performance measures



Access to jobs



Access to  
industry and  
freight facilities



Multimodal  
Travel



Affordability\*

Performance of the plan for these measures is reported in Chapter 7.



## Goal 5: Climate Action and Resilience

*People, communities and ecosystems are protected, healthier and more resilient and carbon emissions and other pollution are substantially reduced as more people travel by transit, walking and bicycling and people travel shorter distances to get where they need to go.*



### Objectives

- **Objective 5.1 Climate Change Mitigation** – Meet adopted targets for reducing transportation-related greenhouse gas emissions and vehicle miles traveled per capita in order to slow climate change.
- **Objective 5.2 Climate-Friendly Communities** – Increase the share of jobs and households in walkable, mixed-use areas served by current and planned frequent transit service.
- **Objective 5.3 Resource Conservation** – Preserve and protect the region’s biological, water, historic, and culturally important plants, habitats and landscapes.
- **Objective 5.4 Green Infrastructure** – Integrate green infrastructure strategies to maintain habitat connectivity, reduce stormwater run-off, and reduce light pollution.
- **Objective 5.5 Adaptation and Resilience** – Increase the resilience of communities and regional transportation infrastructure to the effects of climate change and natural hazards, helping to minimize risks for communities.

### Key performance measures



**Greenhouse  
gas emissions**



**Vehicle miles  
traveled**



**Potential  
resources  
impact**

Performance of plan for these measures is reported in Chapter 7.

## 2.4 REGIONAL TRANSPORTATION PERFORMANCE TARGETS

Table 2.1 summarizes the performance measures and targets that are included in the RTP, organized by the five RTP goal areas. These targets come from a variety of sources, but all are founded in the policies described in Chapter 3. Some of the targets listed below come from state and federal agencies that oversee the RTP process, some have been formally adopted through the RTP process, and others are implicit in RTP policies that call for improving certain conditions or prioritizing specific investments. Some of the targets listed below are easier to achieve than others. But even the more aspirational targets help to clarify the region's goals and provide benchmarks against which to gauge the region's progress.

**Table 2.1: RTP performance measures, targets and thresholds at a glance**

Measure name	Description
<i>Mobility</i>	
Mode share	The RTP aims to triple transit, bike, and pedestrian mode shares relative to the base year.
Access to jobs	The RTP prioritizes improving access to jobs via driving and transit relative to the base year.
Multimodal access	The RTP aims to provide the same level of access to jobs via transit (or greater) as via driving so that transit offers the same efficiency and convenience as driving.
System completion	The RTP aims to complete the motor vehicle, transit, bicycle, trail and pedestrian networks by 2035.
System completion near transit	The RTP prioritizes completing the bicycle and pedestrian system near transit (relative to the regional average) in order to provide safe and convenient access to stations and stops.
Access to options	The RTP aims to increase the share of households that are located near transit and bicycle or pedestrian facilities relative to the base year.
Throughway reliability	The RTP aims to have no more than four hours in a day when average travel speeds fall below 35 miles per hour on the region's limited-access throughways and 20 miles per hour on other designated throughways so that the region's throughways are reliable.
<i>Safety</i>	
Serious crashes	The RTP aims to eliminate transportation related fatalities and serious injuries for all users of the region's transportation system by 2035, with a sixteen percent reduction by 2020 (compared to 2015), and a fifty percent reduction by 2025.
<i>Equity</i>	
Serious crashes and equity	The RTP aims to eliminate transportation related fatalities and serious injuries for all users of the region's transportation system in equity focus areas, with a sixteen percent reduction by 2020 (compared to 2015), and a fifty percent reduction by 2025.

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Measure name	Description
Safe system completion and equity	The RTP prioritizes completing the bicycle and pedestrian system in equity focus areas (relative to other communities) to provide safe streets for the most vulnerable travelers.
Access to jobs and equity	The RTP prioritizes improving access to jobs within equity focus areas (relative to other communities).
<i>Economy</i>	
Travel times	The RTP aims to maintain driving and transit travel times along regional mobility corridors relative to the base year.
System completion – job centers	The RTP prioritizes completing the bicycle and pedestrian system in job and activity centers (relative to the regional average) in order to provide safe and convenient options for short trips and connections to transit.
<i>Climate and environment</i>	
Climate	The RTP aims to reduce per capita greenhouse gas emissions from light-duty vehicles and per capita vehicle miles traveled in order to meet climate targets set by the State which are to reduce vehicle miles traveled per person by 35% by 2050, with a 30 percent reduction by 2045 and a 25% reduction by 2040, compared to 2005.
Climate	The RTP aims to help meet revised statewide goals identified in the Governor’s Executive Order 20-04 that require accelerated reductions in greenhouse gas emissions to levels at least 45 percent below 1990 emissions levels by 2035 and at least 80 percent below 1990 levels by the year 2050.
Air quality	The RTP aims to keep air pollution from mobile sources levels below thresholds set by the federal government.

All regional performance targets are for the year 2045, unless otherwise specified. The performance targets are the highest order evaluation measures in the performance-based policy framework – providing key criteria by which progress towards the plan goals can be assessed. The aspirational performance targets set quantifiable goals for the achieving the plan’s desired policy outcomes within a certain timeframe, though not all goals have targets and several targets address multiple goals.

In comparison, system performance measures are used to evaluate changes between current conditions (in 2020) and future conditions (in 2045) with implementation of the transportation investments identified in the plan. Performance of the plan is reported in Chapter 7.

Complementary performance measures identified in **Appendix J** and **Appendix L** have monitoring targets that will help monitor progress towards meeting the RTP goals and objectives in the shorter-term, between and during scheduled updates to the RTP.

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In accordance with federal regulations [23 CFR 450.320](#) and [23 CFR 450.324](#), **Appendix F** includes an environmental assessment that identifies natural, historic and culturally important resources that intersect with and may be affected by projects in the plan and mitigation activities to address the potential environmental impacts of future transportation projects.



## Chapter 3

# **System Policies to Achieve Our Vision**

## 2023 Regional Transportation Plan

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*This draft is subject to copy edits, technical corrections and or minor updates as it finalized for public review.*

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## INTRODUCTION

### Purpose

Transportation shapes our communities and our daily lives, giving access to opportunities and to meet daily needs. Chapter 3 includes overarching, network, and system management policies for the regional transportation system.

These policies support implementation of the vision, goals and objectives for the regional transportation system defined in Chapter 2.

Policies guide the development and implementation of the regional transportation system, informing transportation planning and investment decisions made by the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council as well as state and local partners.

### Chapter organization

This chapter is organized into three sections.

Regional partners have developed policies in this chapter over many decades. As a result, policy sections do not always follow the same format or include all the same elements. Some policies include actions for regional, state, and local agencies and other stakeholders. These policies, such as transportation equity, pricing, and mobility, were developed through the Regional Transportation Plan (RTP) update and do not exist in a separate plan. Implementing actions for policies that are derived from a separate plan, such as the safety and freight policies, are not included in this chapter. Instead, the separate plan is referenced in the text.

**3.1 Regional transportation system components:** This section defines the transportation facilities and areas that comprise the regional transportation system.

**3.2 Overarching system policies:** This section provides overarching policies for the regional transportation system. Overarching system policies correlate to regional goals and include policies for implementing the 2040 Growth Concept, advancing transportation equity, improving safety, climate leadership and resilience, using pricing, and supporting multimodal mobility.

**3.3 Regional network visions, concepts and policies:** This section provides the vision, network concepts, and policies and policy maps for regional street design and placemaking, the regional – motor vehicle, transit, freight, pedestrian and bicycling networks, and for transportation system management and operations, transportation demand management, and emerging technology.

## 3.1 REGIONAL TRANSPORTATION SYSTEM COMPONENTS

The policies in this chapter apply to the regional transportation system of the greater Portland region. A facility or service is part of the regional transportation system if it provides access to any activities crucial to the social or economic health of the greater Portland region, including connecting the region to other parts of the state and Pacific Northwest, or provides access to and within 2040 Growth Concept centers, main streets, corridors, and industrial and employment areas, as described in Section 3.2.1.

### Regional transportation system components

The following facilities and areas are the components that make up the regional transportation system.

1. Planned and existing throughways, highways and arterials shown on the regional motor vehicle network map shown in Figure 3-23, including: all state-owned transportation facilities: interstate, statewide, regional and district highways and their bridges, overcrossings, and ramps, and all city- or county-owned arterial roadways and their bridges.
2. All streets and transportation facilities, including bicycle and pedestrian facilities, within 2040 centers, corridors, industrial areas, employment areas, main streets and station communities shown on the 2040 Growth Concept map in Figure 3-1.
3. All high capacity transit and regional transit network facilities and their bridges shown on the regional transit network map in Figure 3-24.
4. All regional bicycle and pedestrian facilities and their bridges, including regional trails shown on the regional pedestrian and bicycle network maps in Figure 3-36 and Figure 3-38.
5. All bridges that cross the Willamette, Columbia, Clackamas, Tualatin, or Sandy rivers.
6. All freight and passenger intermodal facilities, airports, rail facilities and marine transportation facilities and their bridges shown on the regional freight network map in Figure 3-33.
7. Any other transportation facility, service or strategy that is determined by JPACT and the Metro Council to be of regional interest because it has a regional need or impact (e.g., transit-oriented development, transportation system management and demand management strategies, local street connectivity and culverts that serve as barriers to fish passage).

The Regional Transportation Plan (RTP) designates these facilities on the network maps in this chapter. Together, these facilities and services constitute an integrated and interconnected system that supports planned land uses and provides travel options to achieve the goals, objectives, and policies of the RTP. Typically, projects must be identified on or as part of the regional transportation system to be eligible for federal transportation funding.

DRAFT – May 26,2023

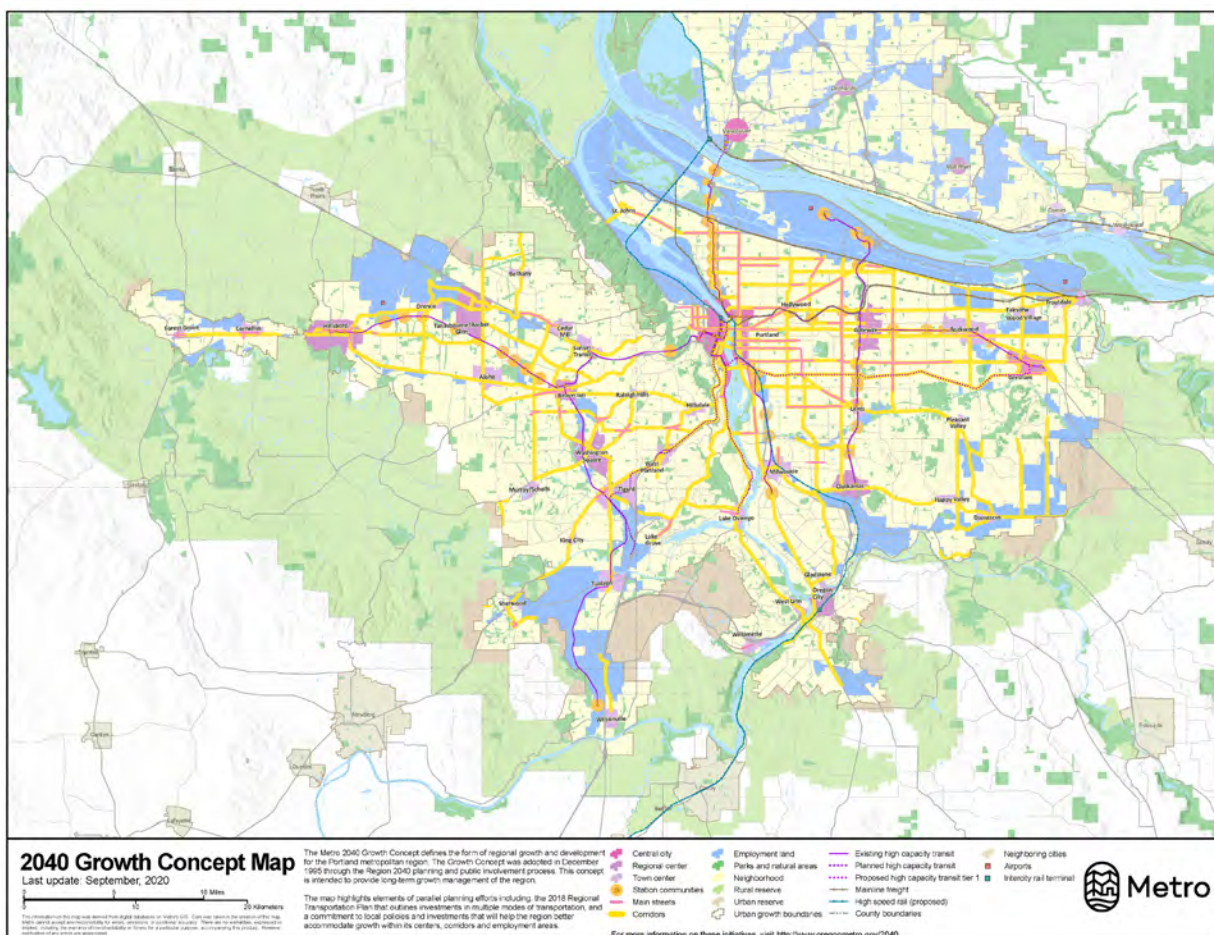
## 3.2 OVERARCHING SYSTEM POLICIES

This section defines regional transportation system policies related to land use, transportation equity, safety, climate action, resiliency, mobility, and pricing. These policies apply to the regional transportation system and the regional networks in Section 3.3.

### 3.2.1 2040 Growth Concept – an integrated land use and transportation vision and strategy

In 1995, the greater Portland region adopted the 2040 Growth Concept, the long-range strategy for managing growth that integrates land use and transportation system planning to preserve the region's economic health and livability in an equitable, environmentally sound, and fiscally responsible manner.

**Figure 3-1 Growth Concept – an integrated land use and transportation vision**





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Shown in Table 3-1, the 2040 Growth Concept includes land use and transportation building blocks that express the region’s aspiration to incorporate population growth within existing urban areas as much as possible and expand the urban growth boundary only if necessary. It concentrates mixed-use and higher density development in urban centers, station communities, corridors and main streets that are well served by transit, walking and bicycling. It envisions a well-connected street network that supports biking and walking for short trips. Employment lands serve as hubs for regional commerce and include industrial land and freight facilities for truck, marine, air, and rail cargo sites that enable goods to be generated and moved in and out of the greater Portland region. Freight access to industrial and employment lands is centered on rail, the freeway system and other road connections.

Implicit in the 2040 Growth Concept is the understanding that compact development is more affordable, sustainable, livable, and fiscally responsible than urban sprawl, and will help reduce the region’s carbon footprint. Increased pedestrian and bicycle access and new transit and road capacity are needed to achieve the 2040 Growth Concept vision and support the region’s economic vitality.

Transportation and the economy are closely linked and investments that serve certain land uses, or transportation facilities may have a greater economic return than others. This means ensuring reliable and efficient connections between intermodal facilities and destinations within and outside the region to promote the region's function as a gateway for trade and tourism.

## 3.2.1.1 2040 Growth Concept Land-use Design Types

The 2040 Growth Concept land uses, called 2040 Design Types, are arranged in a hierarchy. Regional Transportation Plan (RTP) investments are typically focused in the primary and secondary land uses, referred to as 2040 Target Areas. These are the areas expected to absorb a large share of the region’s future growth. The hierarchy also serves as a framework for prioritizing RTP investments. Table 3-1 lists the 2040 design types based on this hierarchy.

**Table 3-1 Growth concept and land use design**

2040 Target Areas		
Primary land uses	Secondary land uses	Other urban land uses
<ul style="list-style-type: none"><li>Portland central city</li><li>Regional centers</li><li>Industrial areas</li><li>Freight and passenger intermodal facilities</li></ul>	<ul style="list-style-type: none"><li>Employment areas</li><li>Town centers</li><li>Station communities</li><li>Corridors</li><li>Main streets</li></ul>	<ul style="list-style-type: none"><li>Neighborhoods</li></ul>
		Other land uses outside UGB
		<ul style="list-style-type: none"><li>Urban reserves</li><li>Rural reserves</li><li>Neighbor cities</li></ul>

Different parts of the region are at different stages of implementing the 2040 Growth Concept. As a result, different areas may have different transportation investment needs and priorities that will require substantial public and private investment over the long-term. Table 3-2 provides an



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example of the type of investments that might be applicable depending on how far along an area is in implementing the 2040 Growth Concept.

**Table 3-2 Priority infrastructure investment strategies**

Stage of Development	Developed Areas Built-out areas, with most new housing and jobs accommodated through infill, redevelopment, and brownfields development.	Developing Areas Redeveloping and developing areas, with most new housing and jobs being accommodated through infill, redevelopment, and greenfield development.	Undeveloped Areas More recent additions to the urban growth boundary, with most new housing and jobs accommodated through greenfield development.
Infrastructure Investment Strategies	Operations, maintenance, and preservation of existing transportation assets.	Operations, maintenance, and preservation of existing transportation assets.	Operations, maintenance, and preservation of existing transportation assets.
	Managing the existing transportation system to optimize performance for all modes of travel.	Preserving right-of-way for future transportation system.	Preserving right-of-way for future transportation system.
	Leveraging infill, redevelopment and use of brownfields.	Managing the existing transportation system to optimize performance for all modes of travel.	Providing a multimodal urban transportation system.
	Addressing bottlenecks and improving system connectivity to address barriers and safety deficiencies.	Leveraging infill, redevelopment and use of brownfields	Managing new transportation system investments to optimize performance for all modes of travel.
	Providing a multimodal urban transportation system.	Providing a multimodal urban transportation system.	Focusing on bottlenecks and improving system connectivity to address barriers and safety deficiencies.
	Completing local street connections needed to complement the arterial street network.	Focusing on bottlenecks and improving system connectivity to address barriers and safety deficiencies.	Completing local street connections needed to complement the arterial street network.
		Completing local street connections needed to complement the arterial network.	

## 3.2.2 Transportation Equity Policies

The Regional Transportation Plan (RTP) reflects a regional commitment to plan and invest in the region's transportation system to reduce transportation-related disparities and barriers faced by communities of color and other marginalized communities, regardless of race, language proficiency, income, age, or ability.

The greater Portland region's economic prosperity and quality of life depend on an equitable transportation system that provides every person and business in the region with access to safe, efficient, reliable, affordable, and healthy travel options and have the fair opportunity to thrive, regardless of their race or ethnicity. Investment in the region's transportation system is one important tool in reducing disparities and barriers experienced by communities of color. But the tool must be intentional and deployed with focus to be successful in reducing racial disparities rather than worsening disparities.

The policies in this section provide direction to Metro, working in partnership with marginalized communities, jurisdictions, and other partners, to prioritize racial and transportation equity in regional transportation planning and decision-making.

### Why is a focus on racial equity important?

A goal of racial equity is to reach a time when race is no longer a predictor of life outcomes, and outcomes for all groups are improved. In the transportation context, this means addressing and removing disparities for marginalized communities, especially for people of color, English language learners, and people with low incomes, in areas identified by these communities as priorities for the regional transportation system, including, but not limited to, accessibility, mobility, safety, affordability and environmental health.

Transportation mobility and accessibility plays a significant intersectional role in reducing disparities, but historically, its development and operation has contributed to unequal benefits. Using transportation infrastructure projects as an urban renewal mechanism led to the destruction of thriving communities, particularly Black communities in Portland.

Lessons learned from the generational impacts of displacement on marginalized communities teaches us that to achieve equitable transportation, government must embed equity considerations in each step of the transportation planning and implementation. Marginalized communities bear an unequal burden of environmental harms, such as urban heat islands, air pollution and traffic crashes. For the greater Portland region to be environmentally sustainable and economically prosperous, government and communities must proactively address racial disparities and tackle the most pervasive challenges.

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Focusing on racial disparities and barriers helps develop and maintain sustainable economic growth by fostering greater racial inclusion and reducing racial income gaps.<sup>1</sup> This, in turn allows communities facing the greatest barriers opportunities to flourish and build generational wealth. Policies, projects, and strategies that address these disparities can help other marginalized groups, including low-income households, elders, youth, and people with disabilities.

## **3.2.2.1 Metro’s Strategic Plan to Advance Racial Equity, Diversity, and Inclusion (2016)**

In 2010, the Metro Council adopted equity as one of the region’s six desired outcomes. Adopted by the Metro Council in June 2016, Metro’s [Strategic Plan to Advance Racial Equity, Diversity, and Inclusion](#) is a major milestone in the agency’s efforts to define, implement and measure equity in the greater Portland region.<sup>2</sup> The Plan’s purpose is to provide a strategic approach to incorporating equity into policy, decision-making, and programs. The Strategic Plan provides clarity and direction to Metro’s different lines of business related to integrating and approaching equity in planning, operations, and services.

The key aspect of the Strategic Plan is its focus and emphasis on deliberately tackling inequities based on race and ethnicity. The Strategic Plan is organized around five long-term goals that inform the RTP.

The goals are:

- A. Metro convenes and supports regional partners to advance racial equity;
- B. Metro meaningfully engages communities of color;
- C. Metro hires, trains, and promotes a racially diverse workforce;
- D. Metro creates safe and welcoming services, programs and destinations; and
- E. Metro’s resource allocation advances racial equity.

## **3.2.2.2 Regional Transportation Plan equity focus areas**

Metro and regional partners identified Equity Focus Areas using 2020 Census and 2016-20 American Community Survey data for the following groups:

- People of Color - People who do not identify as white
- English Language Learners - People who identify as unable “to speak English very well.”

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<sup>1</sup> Treuhaft, S., Blackwell, A.G., & Pastor, M. (2012). America’s Tomorrow: Equity is the Superior Growth Model. Retrieved January 2016: [www.policylink.org/sites/default/files/SUMMIT\\_FRAMING\\_WEB\\_20120110.PDF](http://www.policylink.org/sites/default/files/SUMMIT_FRAMING_WEB_20120110.PDF)

<sup>2</sup> Metro Strategic plan to advance racial equity, diversity and inclusion, Executive summary, June 2016, <https://www.oregonmetro.gov/sites/default/files/2016/11/15/Strategic-plan-advance-racial-equity-diversity-inclusion-exec-summary-17063-20160613.pdf>

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- People with Lower Incomes – People with incomes equal to or less than 200% of the Federal Poverty Level

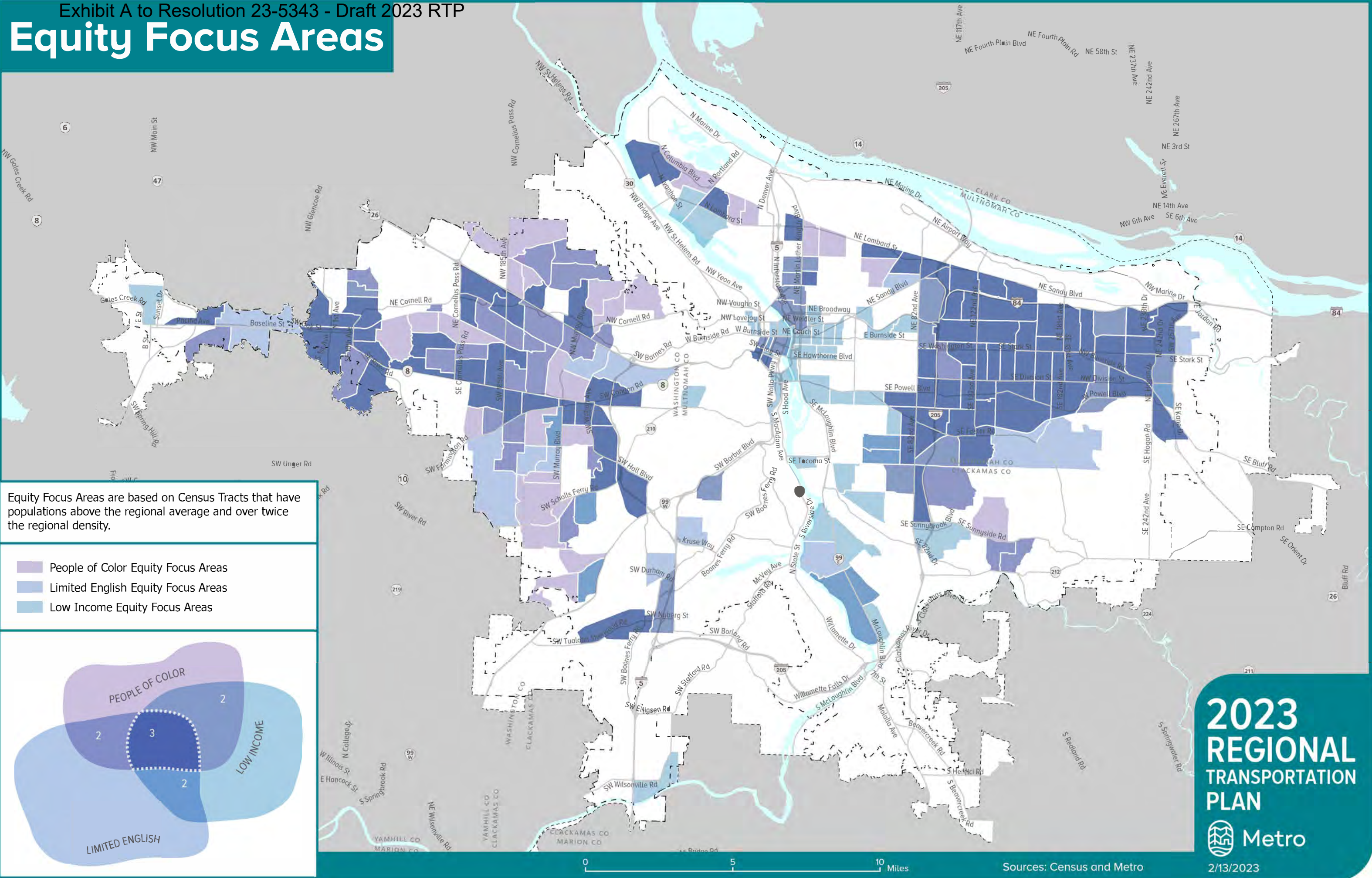
These three groups, as identified in Census data, are the emphasis and focus for the RTP, but not with exclusivity to the needs of other marginalized communities, including young people, older adults and people living with disabilities.

Figure 3-2 shows Equity Focus Areas, which are areas with double the regional average density of any one of the three groups listed above. The RTP directs certain investments toward these areas where they can benefit as many people as possible. More detail on how Metro created this map and on transportation equity in the region can be found in RTP Chapter 4.

## **Figure 3-2 Regional equity focus areas map**



# Equity Focus Areas



2023  
REGIONAL  
TRANSPORTATION  
PLAN



2/13/2023

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## 3.2.2.3 Transportation equity policies

The Transportation Equity policies in this section aim to eliminate transportation-related disparities and barriers<sup>3</sup> identified by marginalized communities as priorities to address through the Regional Transportation Plan (RTP) and regional transportation planning and decision-making processes.

<b>Policy 1</b>	<b>Embed equity into the planning and implementation of transportation projects, programs, policies, and strategies to achieve equitable outcomes for marginalized communities, particularly communities of color and people with low incomes.</b>
<b>Policy 2</b>	<b>Ensure investments in the transportation system support community stability by anticipating and minimizing the effects of displacement and other affordability impacts on marginalized communities, with a focus on communities of color and people with low income.</b>
<b>Policy 3</b>	<b>Prioritize transportation investments that eliminate transportation-related disparities and barriers for marginalized communities, with a focus on communities of color and people with low income.</b>
<b>Policy 4</b>	<b>Meaningfully engage federally recognized tribes, communities of color and other marginalized communities to participate in the development and implementation of transportation plans, projects and programs.</b>
<b>Policy 5</b>	<b>Collect and assess qualitative and quantitative data to understand the transportation-related disparities, barriers, needs and priorities of communities of color and other marginalized communities.</b>
<b>Policy 6</b>	<b>Evaluate transportation plans, policies, programs, and investments to understand how they address transportation-related disparities and barriers experienced by communities of color, people with low income and other marginalized communities and the extent disparities are being eliminated.</b>
<b>Policy 7</b>	<b>Create living-wage career pathways for people of color and women into the construction industry and support the growth and participation of women and people of color owned firms on capital projects throughout the transportation system.</b>

The policies provide direction as to how Metro, working in partnership with marginalized communities, jurisdictions, and other partners, will prioritize transportation equity in regional transportation planning and decision-making. These policies are consistent with Chapter 660

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<sup>3</sup> Transportation-related disparities and barriers identified by historically marginalized communities as priorities to address include safety, access, affordability and community health.



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Division 12 of Oregon Administrative Rules (OAR).<sup>4</sup> These rules include additional guidance for equitable transportation planning and decision-making.

Because the Transportation Equity Policies do not have a separate topical plan, specific implementing actions are included for each transportation equity policy.

## **Transportation Equity Policy 1. Embed equity into the planning and implementation of transportation projects, programs, policies, and strategies to achieve equitable outcomes for marginalized communities, particularly communities of color and people with low incomes.**

Equity considerations embedded in transportation projects, programs, policies, and strategies must reflect the transportation priorities identified by marginalized communities, including accessibility, safety, community health, and affordability. Embedding equity into planning and implementation requires a paradigm shift as to how transportation is currently planned, built and operated. This includes bringing in unheard voices from project or policy inception all the way through construction to understand the perspective of potential benefits or impacts.

Additionally, transportation agencies must consider how investments can advance equity. A transportation investment can provide greater access to opportunities for marginalized communities, such as access to education or jobs, but a transportation investment also offers contracting and hiring opportunities. By embedding equity into transportation comprehensively, a full view and consideration of the benefits and impacts of transportation can be understood and weighed.

Agencies can take a variety of actions to embed equity into transportation processes. Many transportation agencies have organizational level equity policies that can support the implementation and incorporation of these actions. For example, existing policies and structures can support participation mechanisms, such as creation of committees in ways that address power imbalances among groups and stipends for community participation in decision making processes.

### **To implement Transportation Equity Policy 1, regional partners should take the following actions:**

1. Examine the structure of decision-making processes, identify who participates (or doesn't) in decision making and how their input is linked to the outcomes of the decisions.
  - a. Change the design of decision-making processes to increase access and opportunity to those who have been previously excluded. This includes prioritizing representation from Black, Indigenous and People of Color communities and equity leaders.

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<sup>4</sup> See OAR 660-012-0130 (Decision-Making with Underserved Populations), OAR 660-012-0125 (Underserved Populations) and OAR 660-012-0135 (Equity Analysis). <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3062>

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- b. Provide opportunities for direct interaction with decision makers and shift power inequities.
2. Use specific methods, analysis and tools in transportation planning, and decision-making processes to eliminate exclusionary practices. This includes using tools, analysis, and methods to check implicit bias and assess power dynamics, providing distinct participation mechanisms for those most impacted, considering who benefits and who is most impacted by decisions, and ultimately shifting the way decisions are made.
  - a. **Data collection and analysis:** Assessment of current community conditions that may be impacted by the proposed decision with attention to demographics, historical, real estate market, workforce, and environmental conditions.
  - b. **Social and economic power analysis:** A social power analysis is a tool that can be used to determine who has the decision-making power or influence, historically and today, to inform this decision, as well as who has the power to change this decision. This analysis is supported by data collection that considers who is positively and negatively affected by the proposed decision.
  - c. **Appointed representation:** Appointed representation is a participation mechanism for appointing individuals from specific social groups who have the least influence and are most impacted by the proposed decision.
  - d. **Decision mapping:** This tool supports the design of a process to include individuals and groups that lack access and opportunity to participate in decision making. Conceptual mapping of a process is used to determine how and when individuals or a group may be included in decisions and how their input is linked to outcomes. A key aspect of this is identifying decision points to inform how to situate participants to influence decisions rather than serve as a review body.
  - e. **Reflective questions:** Incorporating specific questions into decision making processes help address implicit bias and shift the way we make decisions. These may include questions such as: Who benefits and who is burdened by this decision? In addition, more extensive and in-depth questions may be tailored to the specific policies and programs.

**Transportation Equity Policy 2. Ensure investments in the transportation system support community stability by anticipating and minimizing the effects of displacement and other affordability impacts on marginalized communities, with a focus on communities of color and people with low income.**

A trend observed across many western U.S. cities is that with a severe deficit of housing supply, particularly affordable units, the addition of certain transportation projects, such as a new rail line or a high-quality bicycle/pedestrian trail, can increase surrounding property values, contribute to displacement, and disrupt community stability. This has occurred in Portland, in particular this has been the Black communities experience in North and Northeast Portland. Over time, ethnic and new immigrant neighborhoods with good access to transportation have gentrified, displacing established communities. Dense centers are appealing and desirable and do not have enough



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affordable housing and are becoming more expensive as transportation investments are made. This creates a vicious cycle of increased transportation access to those who have the financial means to afford travel options and the benefits not born to the existing community.

The success, sustainability and prosperity of the region relies on how well government agencies and partners addresses displacement before infrastructure investments are made. Displacement is a pervasive challenge that requires ongoing collaboration between land use, housing and transportation agencies.

## **To implement Transportation Equity Policy 2, regional partners should take the following actions:**

1. Plan capital transportation investments to include a variety of strategies to avoid and minimize involuntary displacement, such as increasing rent burden.
2. Demonstrate how intersectional issues of housing affordability and displacement are being addressed proactively in plans and programs prior to capital investment in transportation infrastructure.
  - a. Look at land use solutions and survey what is necessary in land use policy to avoid and mitigate involuntary displacement.
  - b. Collect data and build analysis tools that can assess and monitor transportation and housing affordability issues and share the information to partners to help inform capital investment decisions.
3. Increase the number of units of regulated affordable housing in proximity to frequent transit service and in 2040 growth centers as well as communities with rich access to travel options, jobs, and community places.

## **Transportation Equity Policy 3. Prioritize transportation investments that eliminate transportation-related disparities and barriers for marginalized communities, with a focus on communities of color and people with low income.**

Eliminating transportation disparities is vital to achieving transportation equity. Marginalized communities have identified affordability, safety, access, and environmental health as transportation priorities. Focusing on eliminating disparities requires a shift in the current practices of transportation agencies, and developing transportation plans, programs, policies, and investments to achieve of fairness rather than equality.

While Federal law requires that benefits and burdens of transportation are distributed equally, transportation agencies should focus on eliminating disparities caused by systemic racism. By eliminating transportation disparities, not only will marginalized communities benefit, but all communities will benefit.

To focus on the disparities, it is imperative for transportation agencies to ask marginalized communities to provide direction and prioritization of which disparities to tackle first and the best methods to do so.

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This should also be done with continued engagement through implementation and future prioritization processes to reflect new priorities or other unforeseen issues. *Also see Transportation Equity Policies 4 through 6.*

## **To implement Transportation Equity Policy 3 regional partners should take the following actions:**

1. Seek opportunities to restore Black, Indigenous and people of color (BIPOC), federally recognized tribes, and other marginalized communities harmed by past transportation decisions through collaborative re-investment and removal of harmful infrastructure.
2. Commit to and focus on systematically addressing disparities for marginalized communities, and measure and track progress.
3. Actively question and engage federally recognized tribes and impacted communities to understand how the plan, program, policies, strategies, or action being undertaken contributes to reducing and eliminating disparities.
4. Actively recognize and put aside implicit partialities and biases.
5. More specifically for the outcomes of safety, access, affordability, and public health, prioritize the following:
  - a. Among the multiple priorities for the region's transportation system, prioritize and advance the equity elements of the priority. For example, in looking at a transportation investment focused on safety, advance the element that would benefit communities of color over a general safety benefit.
  - b. Prioritize building out the active transportation infrastructure network in areas where there are gaps and deficiencies. Focus on completing gaps in communities of color as a means of prioritizing equity. This includes advancing the completion of access to transit in marginalized communities.
  - c. Implement the Regional Travel Options Strategy, including the new Safe Routes to School program, with emphasis to support new partnerships with organizations that serve marginalized communities.
  - d. Prioritize the safety of the transportation system, especially in marginalized communities, but focus on addressing the systemic safety issues on high injury corridors which marginalized communities' traverse. Focus on increasing safety in high-risk locations and on high injury corridors that coincide with higher residential concentrations of marginalized communities.
  - e. Prioritize and focus on increasing active transportation and transit access to jobs and community places (e.g., libraries, pharmacies, grocery stores, schools, etc.) and services for marginalized communities. Place an emphasis on connecting marginalized communities to middle-wage employment opportunities.
6. Focus on transit solutions that serve marginalized communities.

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- a. This may include creative solutions such as community and job connector shuttle services.
  - b. Focus increase in service on transit routes that serve a significant portion of marginalized communities.
  - c. While not the most productive and efficient from a strict transit management view, consider coverage transit service routes to support marginalized communities as they navigate the shifting housing affordability dynamics.
  - d. Support special needs transportation providers.
7. Complement affordable housing and transit-oriented development to support the integration of land use and transportation where marginalized communities will benefit.
  - a. Ensure the long-term sustainability of programs that make transportation affordable, including the adult low-income fare and student pass programs on transit.
  - b. Complement and cross-implement the strategies in the *Coordinated Transportation Plan for Seniors and People with Disabilities* in Appendix G.
8. Document and address existing disparities in exposure to transportation related air pollutants, including PM2.5, Diesel PM, NO2 and air toxics, and evaluate whether projects reduce or exacerbate disparities.

## **Transportation Equity Policy 4. Meaningfully engage federally recognized tribes, communities of color and other marginalized communities to participate in the development and implementation of transportation plans, projects and programs.**

Meaningful engagement is critical to understand the perspectives and experiences of marginalized communities and to build plans, projects, and programs to address these perspectives and experiences.

Meaningful and inclusive engagement takes a significant effort and relies on building relationships and trust with members of marginalized communities and is a significant change from the conventional practices of public involvement in the transportation sector. Engagement and inclusion help embedding equity in the transportation planning process by allowing for marginalized communities to be seen, heard, and considered, and allow for their needs and priorities to influence the planning and decision-making process.

### **To implement Transportation Equity Policy 4 regional partners should take the following actions:**

1. Reduce the barriers to participation in public processes for these communities.
  - a. Transportation professionals should look to reduce the barriers for marginalized communities to participate (e.g., go out into the community, offer language translation and childcare services, provide food and incentives) and reach out to marginalized communities in meaningful ways (e.g., engaging through a

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community liaison, allowing communities to lead the discussion) and at opportunities to shape and influence transportation plans, policies and program (e.g., not at a perfunctory time).

2. Identify funding and contracting opportunities for community outreach liaisons and community based organizations who are trusted members of marginalized communities to facilitate relationship-building, conversations, and meaningful engagement.
3. Dedicate resources to meaningfully engage marginalized communities in planning and decision-making processes.
4. Bring in voices from marginalized communities to add perspective and help guide how equity can be embedded in the planning and decision-making process. .
5. Use the Climate Friendly Equitable Communities (CFEC) Program for guidance/rules on inclusive decision making.

## **Transportation Equity Policy 5. Collect and assess qualitative and quantitative data to understand the transportation-related disparities, barriers, needs and priorities of communities of color and other marginalized communities.**

Conventional data sources and analysis practices do not always capture disparities experienced by marginalized communities. While national datasets or statewide statistics provide a picture of disparities, gaps in local data and information makes it difficult to assess the performance of transportation plans, programs, and policies on the outcomes and priorities identified marginalized communities.

Collecting disaggregated data at a local scale gives the ability to look in-depth at local conditions on key transportation outcomes identified as priorities by marginalized communities – affordability, safety, access, and environmental health – and is necessary to understand the current level of disparities and establish appropriate baselines. Until such data can be collected, it is imperative to supplement data collection and assessment with engagement to gather the qualitative information directly from marginalized communities.

Additionally, in supplementing quantitative data with engagement and qualitative data, needs, gaps, and deficiencies which may have already been identified can be confirmed. By supporting data collection and assessment focused on the needs and priorities of marginalized communities, especially communities of color, transportation professionals will have better information to plan, program, and implement strategies or actions which can better address the priorities and needs.

### **To implement Transportation Equity Policy 5, regional partners should take the following actions:**

1. Collect data in a manner that facilitates looking at outcomes with an equity lens.
  - a. Collect localized disaggregated data.
  - b. Emphasize collecting as much qualitative data as quantitative data.
  - c. Collect data that is meaningful to marginalized communities.

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2. Appropriately resource data collection and assessment to focus on outcomes with an equity lens.
  - a. Acknowledge and recognize data collection and assessment methods will be unfamiliar and new for many project managers and likely to be a necessary but challenging to break convention.
3. Appropriately resource the development of a disparities baseline looking at measures of affordability, safety, access, and environmental health to understand disparities of marginalized communities, in particular people of color.
4. Conduct meaningful engagement with marginalized communities to supplement and ground truth data and technical analysis findings.

**Transportation Equity Policy 6. Evaluate transportation plans, policies, programs, and investments to understand how they address transportation-related disparities and barriers experienced by communities of color, people with low income and other marginalized communities and the extent disparities are being eliminated.**

To know and to be accountable to whether transportation plans, programs, policies and strategies are making progress towards eliminating disparities, particularly in access, safety, affordability, community health and any other transportation-related priority identified by marginalized communities, evaluation under the lens of what disparities the plans, policies, programs and strategies address is just as crucial as engagement, prioritization and mitigation. The assessment process helps to understand effectiveness, progression, monitoring and accountability in achieving the equitable transportation and other associations RTP goals and objectives. Evaluation also provides transparency towards what to expect as a result.

**To implement Transportation Equity Policy 6, regional partners should take the following actions:**

1. Resource evaluation methodology development appropriately.
  - a. Disaggregate and evaluate data system-wide, as well as by individual project, program or community.
  - b. Let the evaluation be led, guided and verified by marginalized communities and their lived experiences.
  - c. Ground truth evaluation results through engagement.
  - d. Utilize both qualitative and quantitative data in evaluation.
2. Be willing to use non-standard forms of evaluation. Clearly state assumptions and recognize what the method may be testing and the limitations of the evaluation.
3. Set up a long-term feedback loop of evaluation and monitoring; evaluate at each stage and monitor whether projected outcomes are coming to fruition and/or whether plans, policies, programs and strategies may need additional mitigations or a course correction.

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## **Transportation Equity Policy 7. Create living-wage career pathways for people of color and women into the construction industry and support the growth and participation of women and people of color owned firms on capital projects throughout the transportation system.**

The construction industry has seen tremendous growth in the last ten years and is one of the fastest-growing industries in recent years, outpacing the rest of the economy. The median wage for construction occupations is higher than the median wage across all sectors in the greater Portland region. It is one of the remaining sectors where workers can make a living-wage income without a higher education degree. At the same time the construction industry is grappling with costly workforce shortages driven by an aging workforce and reality that women and people of color face significant barriers in entering the industry and building their careers.

Construction has been a racially homogenous industry, yet labor market data indicates a shortage in skilled talent. Diversifying the construction workforce will not only help create a stronger supply of needed workers for the industry, but it will also directly address issues of poverty and economic mobility within communities of color and working families in the region.

Transportation infrastructure projects can have a big impact on promoting equitable growth in the region's economy by providing job opportunities for people of color in the construction trades. While federal and state laws have provisions which facilitate greater access for minority, women-owned and disadvantaged businesses (MWDDBE) to be part of these contracting and construction opportunities, the construction industry has a workforce which is not reflective of demographics. Yet it remains a sector that provides access to living-wage careers for marginalized communities, particularly communities of color.

The RTP is a long-range transportation blueprint for the capital investments needed to accommodate existing needs and future population and employment growth. An emphasis on the construction workforce is relevant to building out the transportation system equitably and making progress towards reducing the disparities seen among marginalized communities in terms of living-wage career opportunities and longer-term income stability and affordability. By focusing public investments to advance contracting and workforce equity in the construction trades, transportation infrastructure projects can help mitigate wealth disparity gaps experienced by marginalized communities.

Metro's [Construction Career Pathways](https://www.oregonmetro.gov/regional-leadership/diversity-equity-and-inclusion/construction-career-pathways) is a coordinated strategy for growing and diversifying the region's construction workforce.<sup>5</sup> This effort centers on a shared policy framework that provides a roadmap for public agencies to work with labor unions, workforce development organizations and contractors to create opportunities for women and people of color in the construction workforce. As more public agencies in the region join the effort, each agency's individual

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<sup>5</sup> Link to Metro webpage on Construction Career Pathways <https://www.oregonmetro.gov/regional-leadership/diversity-equity-and-inclusion/construction-career-pathways>

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workforce development efforts are better positioned to succeed in cultivating a labor pool that strengthens their community and reflects the populations they serve.

## **To implement Transportation Equity Policy 7 regional partners should take the following actions:**

1. Use inclusive hiring practices and contracting opportunities and formalize reporting of minority, women-owned and disadvantaged businesses construction contracts on all Metro-funded transportation projects.
2. For transportation investments programmed within the MTIP, particularly as part of the construction phases, request from partners information about minority, women-owned and disadvantaged business contracting and workforce diversity utilization.
3. Through partnership with Metro's Diversity, Equity and Inclusion program, provide information and resources to partners on ways to support and advance equity in contracting and workforce.
4. Develop mechanisms to incentivize partners to pursue recruitment and retention strategies on transportation projects that help grow and diversify the construction workforce.
5. Encourage workforce diversity utilization through apprenticeships with marginalized communities as part of contracts.
6. Partner with workforce development organizations to improve outreach, share information and leverage resources that support and grow a diverse construction workforce and contracting community.

### **3.2.3 Safety and Security Policies**

Eliminating traffic related deaths and life changing injuries (often defined as fatalities, and severe or serious crashes) and increasing the safety and security of the transportation system is a top priority of the Regional Transportation Plan (RTP), as is prioritizing safety for people of color, people with low incomes, people with disabilities, people walking, bicycling, and using motorcycles, youth and older adults.

Transportation safety is protection from death or bodily injury from a motor-vehicle crash while engaged in travel. Individual and public transportation security is protection from intentional criminal or antisocial acts while engaged in trip making.

#### **3.2.3.1 Regional Transportation Safety Strategy (2018)**

The [Regional Transportation Safety Strategy](#) ("Safety Strategy") identifies data-driven strategies and actions to address the most common types of crashes and contributing factors.<sup>6</sup> Key findings

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<sup>6</sup> The Regional Transportation Safety Strategy, adopted in December 2018, is a topical plan of the Regional Transportation Plan. Link to the Safety Strategy <https://www.oregonmetro.gov/regional-transportation-safety-plan>



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from the analysis of crash data from 2016-2020 can are in RTP Chapter 4. Additional analysis can be found in the 2018 Metro State of Safety Report and the Safety Strategy.<sup>7</sup>

The Safety Strategy recommends **six strategies** to support achieving the region’s adopted Vision Zero target for 2035, shown in Figure 3-3. Each strategy includes specific actions, which can be found in the [Safety Strategy](#). The strategies and actions are evidence-based and were identified by a regional safety work group in response to analysis of crash data in the [2018 Metro State of Safety Report](#) and other sources. Refer to the Regional Transportation Safety Strategy for detailed information on each of the strategies and specific actions.

**Figure 3-3 Regional transportation safety strategies**



## 3.2.3.2 Using the Safe System approach

The Safety Strategy employs a Safe System approach with the goal of zero fatal and severe injury traffic deaths. The Safe System approach originated in Sweden and now other countries and many U.S. cities are using the framework. Similar frameworks are Vision Zero (Sweden), Toward Zero Deaths (U.S.), Road to Zero Coalition (National Safety Council), Safe System (New Zealand), and Sustainable Safety (Denmark).

The Safe System approach involves a holistic view of the transportation system and the interactions among travel speeds, vehicles, road users and the road itself. It is an inclusive approach that prioritizes safety for all user groups of the transportation system - drivers, motorcyclists, passengers, pedestrians, bicyclists, and commercial and heavy vehicle drivers.

<sup>7</sup>The 2018 Metro State of Safety Report is an appendix of the Safety Strategy. Link to the State of Safety Report <https://www.oregonmetro.gov/sites/default/files/2018/05/25/2018-Metro-State-of-Safety-Report-05252018.pdf>

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Consistent with the region’s long-term safety vision, it acknowledges that people will make mistakes and may have road crashes—but the system should be designed so that those crashes should not result in death or serious injury. Design emphasizes separation – between people walking and bicycling and motor-vehicles, access management and median separation of traffic – and survivable speeds.

**Figure 3-4 Components of the Safe System approach**



Source: Metro. Graphic showing The Safe System Approach elements of safe roads, safe vehicles, safe speed, safe road users, and post-crash care.

Governments using the Safe System approach focus on preventing all fatal and severe injury crashes and recognize that the responsibility for crash prevention resides not only with roadway users but with transportation professionals and decision makers. Agencies using the Safe System approach have been more effective in reducing traffic deaths and severe injuries than more traditional approaches that focus on all crashes.<sup>8</sup> The Safe System approach focuses on the following key guiding principles that shape how stakeholders address transportation safety (Figure 3-5). Refer to the Regional Transportation Safety Strategy for detailed information on the Safe System approach.

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<sup>8</sup> Sustainable and Safe: A Vision and Guidance for Zero Road Deaths, World Resources Institute, Global Road Safety Facility (2017)

**Figure 3-5 Guiding principles of the Safe System approach**



Source: Metro. Graphic showing the guiding principles of the safe system approach

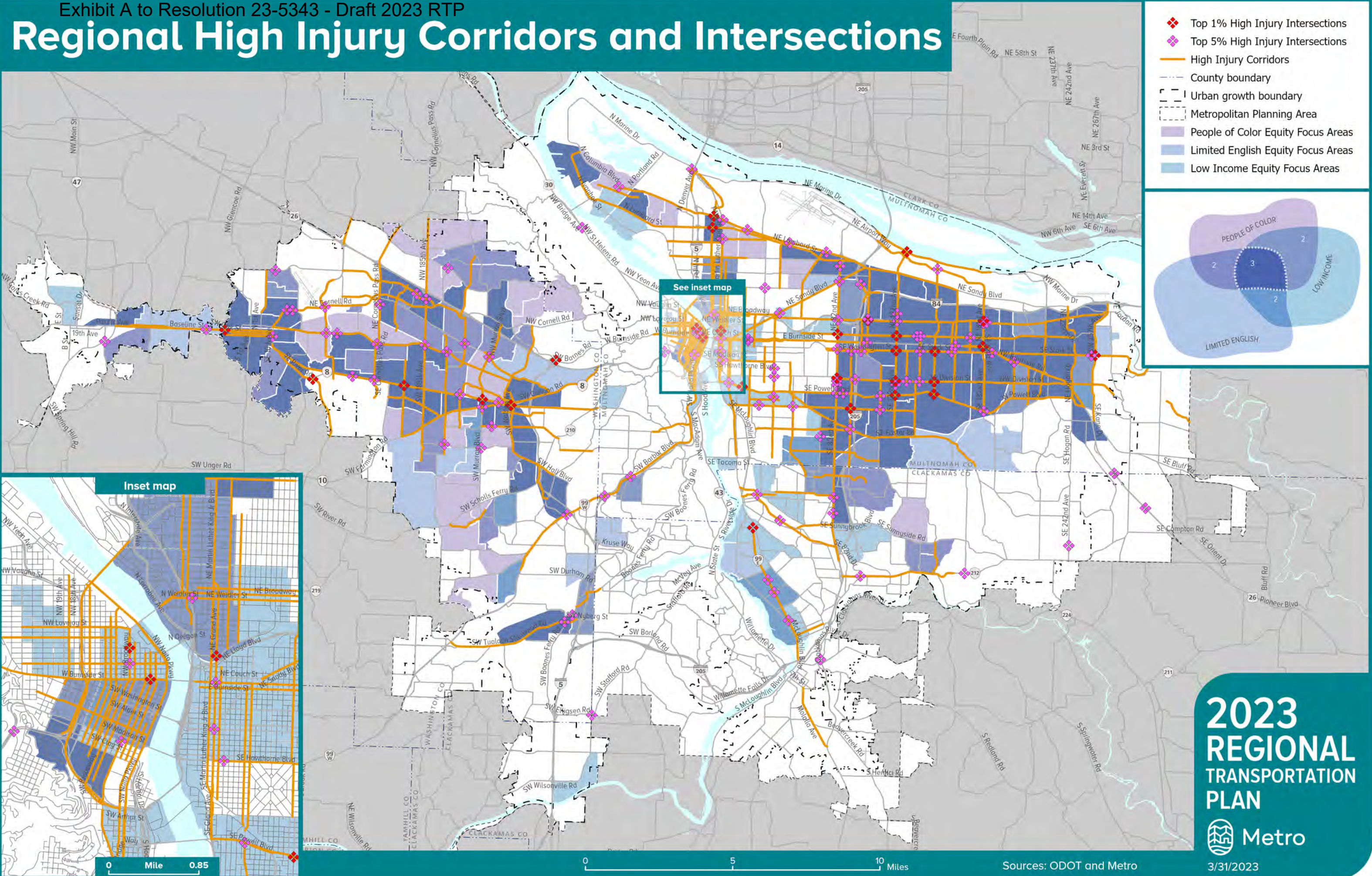
### 3.2.3.3 Regional high injury corridors and intersections

Figure 3-6 shows the map of regional high injury corridors overlapping with Equity Focus Areas. Metro and regional partners identify regional high injury corridors and intersections to help prioritize safety near term investments. Metro updates this map every five years. In the interim, transportation agencies and stakeholders may identify other safety investments that warrant priority based on other data and analysis. The needs assessment in Chapter 4 provides more detail on how this map was created, along with other safety data.

**Figure 3-6 Regional high injury corridors and intersections**



# Regional High Injury Corridors and Intersections



2023  
REGIONAL  
TRANSPORTATION  
PLAN



3/31/2023



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## 3.2.3.4 Safety and security policies

Regional Transportation Safety and Security Policies reflect the policy framework of the Regional Transportation Safety Strategy. Implementation of the policies supports achieving the regional Vision Zero target for 2035 and making travel in the region safer and more secure for all people.

<b>Policy 1</b>	<b>Focus safety efforts on eliminating traffic deaths and severe injury crashes to achieve Vision Zero.</b>
<b>Policy 2</b>	<b>Prioritize safety investments, education and equitable enforcement on high injury and high-risk corridors and intersections, with a focus on reducing speeds and speeding.</b>
<b>Policy 3</b>	<b>Prioritize investments that benefit people with higher risk of being involved in a serious crash, including people of color, people with low incomes, people with disabilities, people walking, bicycling, and using motorcycles, people working in the right-of-way, youth and older adults.</b>
<b>Policy 4</b>	<b>Increase safety for all modes of travel and for all people through the planning, design, construction, operation, and maintenance of the transportation system, with a focus on reducing vehicle speeds.</b>
<b>Policy 5</b>	<b>Make safety a key consideration in all transportation projects and avoid replicating or exacerbating a known safety problem with any project or program.</b>
<b>Policy 6</b>	<b>Employ a Safe System approach and use data and analysis tools and performance monitoring to support data-driven decision-making.</b>
<b>Policy 7</b>	<b>Utilize safety and engineering best practices to identify low-cost and effective treatments that can be implemented systematically in shorter timeframes than large capital projects.</b>
<b>Policy 8</b>	<b>Prioritize investments, education and enforcement that increase individual and public security while traveling by reducing intentional crime, such as harassment, targeting, and terrorist acts, and prioritize efforts that benefit people of color, people with low incomes, people with disabilities, women and people walking, bicycling, and taking transit.</b>
<b>Policy 9</b>	<b>Make safety a key consideration when defining system adequacy (or deficiency) for the purposes of planning or traffic impact analysis.</b>

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## **Safety Policy 1. Focus safety efforts on eliminating traffic deaths and severe injury crashes to achieve Vision Zero.**

To reach the goal of eliminating deaths and severe injuries from traffic crashes, this policy directs safety related efforts to focus on fatal and severe injury crashes, as opposed to all crashes.

Focusing on serious crashes is a key tenant of the Safe System approach. It entails identifying where serious crashes occur and focusing on those locations, identifying the risk factors involved in serious crashes and addressing and eliminating those risks, focusing enforcement and education on high-risk behaviors that lead to serious crashes and less or no enforcement or education on low-risk behaviors. When communities use enforcement, precautions must be implemented to ensure equitable actions and outcomes.

## **Safety Policy 2. Prioritize safety investments, education and equitable enforcement on high injury and high-risk corridors and intersections, with a focus on reducing speeds and speeding.**

This policy directs safety investments, education and equitable enforcement to be prioritized on the corridors where the most serious crashes have occurred or have a risk of occurring (due to identified risk factors such as lack of roadway separation or excessive speeding). This policy approach, prioritizing corridors where deadly crashes are or could occur, more effectively uses limited resources where the most serious issues are. Additionally, this policy emphasizes the systemic approach to safety to address known safety risk factors corridor wide to prevent serious crashes from occurring in the future.

## **Safety Policy 3. Prioritize investments that benefit people with higher risk of being involved in a serious crash, including people of color, people with low incomes, people with disabilities, people walking, bicycling, and using motorcycles, people working in the right-of-way, youth, and older adults.**

This policy is based on the Safe System approach of prioritizing safety efforts on people with the highest risk of dying in a traffic crash as a key strategy to eliminating serious crashes overall. This policy also helps implement Metro's Strategic Plan for Advancing Equity, Diversity and Inclusion.

## **Safety Policy 4. Increase safety for all modes of travel and for all people through the planning, design, construction, operation, and maintenance of the transportation system, with a focus on reducing vehicle speeds.**

This policy requires that stakeholders integrate transportation safety into every aspect of the transportation system. It is a key element of the Safe System approach which takes a systemic and holistic approach. Safe travel speeds are a core element of achieving Vision Zero. Speed limits in Safe System approach are based on aiding crash avoidance and a human body's limit for physical trauma. An unprotected pedestrian hit at over 20mph has a significant risk of death or life-changing injury. A car in a side-on collision can protect its occupants up to around 30mph; a car in a head-on collision up to around 40mph. Establishing survivable speeds on streets where people using different modes at variable speeds and with different levels of physical protection are essential. Additionally, a diversity of users must be taken into account as the system is developed.

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For example, people of color, older adults and children may have different needs that must be addressed at every phase.

## **Safety Policy 5. Make safety a key consideration in all transportation projects and avoid replicating or exacerbating a known safety problem with any project or program.**

While most policies are proactively focused on improving safety, this policy requires that transportation projects and programs clearly evaluate the impacts on all users of the transportation system and do not negatively impact any of those users by either replicating something which has been shown to increase safety problems for roadway users or making a current safety issue worse.

## **Safety Policy 6. Employ a Safe System approach and use data and analysis tools and performance monitoring to support data-driven decision-making.**

Transportation agencies have proven that the Safe System approach reduces serious crashes. The approach is based on data driven strategies and actions. Collecting, maintaining, and analyzing data on a regular basis is critical to focusing investments where they will be most effective. Additionally, monitoring progress and assessing the outcome of investments in safety is crucial to learning from the past and improving in the future.

## **Safety Policy 7. Utilize safety and engineering best practices to identify low-cost and effective treatments that can be implemented systematically in shorter timeframes than large capital projects.**

Many solutions to improve safety are inexpensive. This policy prioritizes addressing safety problems on a corridor level sooner rather than later to prevent serious crashes from occurring in the future. Rather than postponing safety interventions until a larger and more expensive project can be funded this policy directs that low-cost and effective treatments be implemented first.

## **Safety Policy 8. Prioritize investments, education and equitable enforcement that increase individual and public security while traveling by reducing intentional crime, such as harassment, targeting, and terrorist acts, and prioritize efforts that benefit people of color, people with low incomes, people with disabilities, women and people walking, bicycling, and taking transit.**

Individual and personal security while traveling has an important relationship to transportation safety, especially for people of color. Fear of harassment or being targeted can deter people of color from walking, bicycling or using transit and may increase the use of motor-vehicle transportation. Though individual and public security can be challenging to address, a variety of approaches are needed to create a safe and welcoming transportation system, including: collecting data, utilizing crime prevention through environmental design, taking into account a diversity of users when developing and operating the transportation system, educating people to look out for and care for one another, designing security into projects (such as street lighting, visibility, call boxes), equity training for public safety and transportation professionals, and including a wide range of groups in design and decision making.



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## **Safety Policy 9. Make safety a key consideration when defining system adequacy (or deficiency) for the purposes of planning or traffic impact analysis.**

This policy specifies that safety data (including disparities in crash-related injuries and level of physical activity impacted by lack of safe places to walk and bicycle), analytical tools and metrics must be part of the evaluation when defining the adequacy of capacity on the transportation system.

### **3.2.4 Climate Action Policies and Resilience Policies**

Climate change may be the defining challenge of this century. Global climate change poses a growing threat to our communities, our environment, and our economy, creating uncertainties for the agricultural, forestry and fishing industries as well as winter recreation. The planet is warming, and we have less and less time to act. Greater Portland's future climate is expected to include warmer winters with more intense rain events and hotter, drier summers with an increased frequency of high heat days. Other documented effects include rising sea levels, shrinking glaciers, and changes to growing seasons and the distribution of plants and animals. While addressing the primary cause of climate change – carbon emissions, remains a crucial component of the region's climate work, preparing for the impacts of a changing climate is also necessary.

Warmer temperatures will affect the service life of transportation infrastructure, and the more severe storms that are predicted will increase the frequency of landslides and flooding. Consequent damage to roads and rail infrastructure will compromise system safety, disrupt mobility, and hurt the region's economic competitiveness and quality of life. Our ability to respond will have unprecedented impacts on our lives and our survival.

Transportation sources account for 35 percent of greenhouse gas emissions in Oregon, largely made up of carbon dioxide (CO<sub>2</sub>). Since 2006, the state of Oregon has initiated a number of actions to respond including directing the greater Portland region to develop and implement a strategy for reducing greenhouse gas emissions from cars and small trucks.

#### **3.2.4.1 Climate Smart Strategy (2014)**

The Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy and achieve greenhouse gas emissions reduction targets adopted by the Land Conservation and Development Commission in 2012, 2017, and 2022.

As directed by the Oregon Legislature in 2009, the Metro Council and the Joint Policy Advisory Committee on Transportation (JPACT) developed and adopted a regional strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035 to meet state targets. Adopted in December 2014 with broad support from community, business and elected leaders, the Climate Smart Strategy relies on policies and investments that have already been identified as local priorities in communities across the greater Portland region. Adoption of the strategy affirmed the region's shared commitment to provide more transportation choices, keep our air

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clean, build healthy and equitable communities, and grow our economy – all while reducing greenhouse gas emissions.

The analysis of the adopted strategy demonstrated that with an increase in transportation funding for all modes, particularly transit operations, the region can provide more safe and reliable transportation choices, keep our air clean, build healthy and equitable communities and grow our economy while reducing greenhouse gas emissions from light-duty vehicles as directed by the Legislature. It also showed that a lack of investment in needed transportation infrastructure will result in falling short of our greenhouse gas emissions reduction goal and other desired outcomes. The Land Conservation and Development Commission approved the region’s strategy in May 2015.

## 3.2.4.2 Climate mitigation policies

The Climate Smart Strategy is built around nine policies to demonstrate climate leadership by reducing greenhouse gas emissions from cars and small trucks while making our transportation system safe, reliable, healthy, and affordable. The policies listed below complement other Regional Transportation (RTP) policies related to equity, safety, transit, biking and walking, use of technology and system and demand management strategies. These policies aim to slow the effects of climate change by reducing greenhouse gas emissions (also known as climate mitigation”) while also preparing for the impacts the region will likely experience.

<b>Policy 1</b>	<b>Implement adopted local and regional land use plans and strategies to reduce vehicle miles traveled per capita and related greenhouse gas emissions to meet regional targets.</b>
<b>Policy 2</b>	<b>Prioritize transportation investments that make transit convenient, frequent, accessible and affordable to significantly increase transit ridership.</b>
<b>Policy 3</b>	<b>Prioritize transportation investments that make biking and walking safe, accessible and convenient to achieve walking and bicycling system completion and mode share targets.</b>
<b>Policy 4</b>	<b>Make streets and highways safe, efficient, reliable and connected.</b>
<b>Policy 5</b>	<b>Prioritize use of technology to actively manage the transportation system and ensure that new and emerging technology affecting the region’s transportation system supports shared trips and other Climate Smart Strategy policies and strategies.</b>
<b>Policy 6</b>	<b>Provide information and financial incentives to expand the use of travel options and reduce vehicle miles traveled.</b>
<b>Policy 7</b>	<b>Manage parking in mixed-use centers and corridors to reduce the amount of land dedicated to parking, encourage parking turnover, increase shared trips, biking,</b>

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	walking and transit use, reduce vehicle miles traveled, increase housing and job production and generate revenue.
Policy 8	Support Oregon’s transition to cleaner fuels, more fuel-efficient vehicles and electric vehicles in recognition of the external impacts of carbon and other vehicle emissions.
Policy 9	Secure adequate funding for transportation system investments necessary to implement the Climate Smart Strategy and increase the region’s preparedness for and resilience to climate change and natural hazard impacts.

## 3.2.4.3 Climate Smart Strategy actions

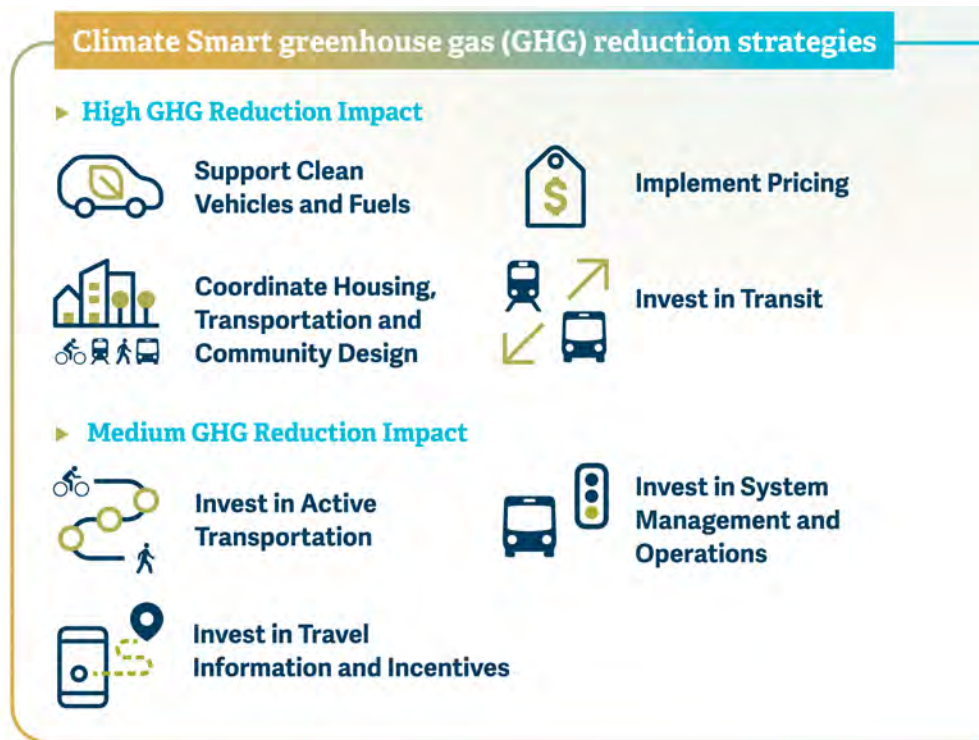
The Climate Smart Strategy includes a comprehensive toolbox of more than 200 specific actions that can be taken by the state of Oregon, Metro, cities, counties, transit providers and others to support implementation. These supporting actions are summarized in the [\*Toolbox of Possible Actions\* \(2015-2020\)](#) adopted as part of the Climate Smart Strategy.<sup>9</sup> The actions support implementation of adopted local and regional plans and, if taken, will reduce greenhouse gas emissions and minimize the region’s contribution to climate change in ways that support community and economic development goals. The Climate Smart Strategy’s *Toolbox of Possible Actions* was developed with the recognition that existing city and county plans for creating great communities are the foundation for reaching the state target and that some tools and actions may work better in some locations than others. As such, the toolbox does not mandate adoption of any policy or action. Instead, it emphasizes the need for many diverse partners to work together to begin implementation of the strategy while retaining the flexibility and discretion to pursue the actions most appropriate to local needs and conditions.

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<sup>9</sup> Climate Smart Strategy Toolbox of Possible Actions, 2014  
[https://www.oregonmetro.gov/sites/default/files/2015/05/27/CSC\\_toolbox-actions2014\\_12\\_09.pdf](https://www.oregonmetro.gov/sites/default/files/2015/05/27/CSC_toolbox-actions2014_12_09.pdf)

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Source: Metro. Graphic depicting Climate Smart seven high and medium impact greenhouse gas reduction strategies.

Local, state, and regional partners are encouraged to review the toolbox and identify actions they have already taken and any new actions they are willing to consider or commit to in the future. Updates to local comprehensive plans and development regulations, transit agency plans, port district plans, and regional growth management and transportation plans present ongoing opportunities to consider implementing the actions recommended in locally tailored ways.

## 3.2.4.4 Climate Smart Strategy monitoring

The Climate Smart Strategy has performance measures and performance monitoring targets for tracking implementation and progress. The purpose of the performance measures and targets is to monitor and assess whether key elements or actions that make up the strategy are being implemented, and whether the strategy is achieving expected outcomes. If an assessment finds the region is deviating significantly from the Climate Smart Strategy performance monitoring targets, then Metro will work with local, regional, and state partners to consider the revision or replacement of policies and actions to ensure the region remains on track with meeting adopted targets for reducing greenhouse gas emissions.

**Appendix J** provides a progress report on implementation. Performance outcomes are included in Appendix J and Chapter 7. More investment, actions and resources are needed to achieve mandated greenhouse gas emissions reductions defined in OAR 660-044-0060.

## 3.2.4.5 Transportation preparedness and resilience policies

Preparedness and resilience have broad implications across all sectors of the economy and communities in the region. Natural disasters can happen anytime, affecting multiple jurisdictions simultaneously. The region needs to be prepared to respond quickly, collaboratively, and equitably, and the transportation system needs to be prepared to withstand these events and to provide needed transport for evacuation, fuel, essential supplies and medical transport. Planning for post-disaster recovery is also critical to ensure that communities and the region recover and rebuild important physical structures, infrastructure and services, including transportation – it can make communities and the region stronger, healthier, safer and more equitable.

<b>Policy 1</b>	<b>Designate and maintain regional emergency transportation routes that, in the case of a major regional emergency or natural disaster, would be prioritized for rapid damage assessment and debris-removal.</b>
<b>Policy 2</b>	<b>Consider climate and other natural hazard-related risks during transportation planning, project development, design, and management processes.</b>
<b>Policy 3</b>	<b>Optimize operations and maintenance practices that can help lessen impacts on transportation from extreme weather events and natural disasters.<sup>10</sup></b>
<b>Policy 4</b>	<b>Integrate green infrastructure into the transportation network to avoid, minimize and mitigate negative environmental impacts of climate change, natural disasters, and extreme weather events.</b>
<b>Policy 5</b>	<b>Protect and avoid natural areas and high value natural resource sites, especially the urban tree canopy and other green infrastructure, to slow growth in carbon emissions from paved streets, parking lots and carbon sequestration and address the impacts of climate change and extreme weather events, such as urban heat island effects and increased flooding.</b>
<b>Policy 6</b>	<b>Avoid transportation-related development in hazard areas such as steep slopes and floodplains that provide landscape resiliency and which are also likely to increase in hazard potential as the impacts of climate change increase.</b>

Climate change, natural disasters, such as earthquakes, urban wildfires and hazardous incidents, and extreme weather events present significant and growing risks to the safety, reliability, effectiveness and sustainability of the region's transportation infrastructure and services. Flooding, extreme heat, wildfires and severe storm events endanger the long-term investments that federal, state, and local governments have made in transportation infrastructure. Changes in climate have intensified the magnitude, duration, and frequency of these events for many regions

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<sup>10</sup> Examples include more frequent cleaning of storm drains, improved plans for weather emergencies, closures and rerouting, traveler information systems, debris removal, early warning systems, damage repairs and performance monitoring.

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in the United States, a trend that is projected to continue. There is much work going on locally, regionally, statewide and across the country to address these risks.

## **Regional collaboration and disaster preparedness**

The Regional Disaster Preparedness Organization (RDPO) is a partnership of government agencies, non-governmental organizations, and private-sector stakeholders in the Portland metropolitan area collaborating to increase the region's resilience to disasters. RDPO's efforts span across Clackamas, Columbia, Multnomah, and Washington counties in Oregon and Clark County in Washington.

According to the 2013 Oregon Resilience Plan, Oregon's buildings, and lifelines (transportation, energy, telecommunications, and water/ wastewater systems) would be damaged so severely that it would take three months to a year to restore full service in areas such as the Portland region. More recently, a 2018 report from the Oregon Department of Geology and Mineral Industries (DOGAMI) on the Portland region describes significant casualties, economic losses, and disruption in the event of a large magnitude Cascadia subduction zone (CSZ) earthquake.

While transportation infrastructure is designed to handle a broad range of impacts based on historic climate patterns, more planning and preparation for climate change, earthquakes and other natural disasters and extreme weather events is critical to protecting the integrity of the transportation system and improving resilience for future hazards.

In 2021 the Oregon Transportation Systems project assessed the resilience of Oregon's roadway, airport, and maritime port transportation system to a Cascadia Subduction Zone (CSZ) earthquake, and the ability of those system to support post-disaster response and recovery. A key finding is that very few airports and marine ports have conducted seismic vulnerability analyses of their facilities. More analysis is needed to better understand and enhance the resilience of these facilities to more efficiently and effectively support incident response.

Between 2019 and 2021, Metro and RDPO partnered to update the Regional Emergency Transportation Routes (RETR) for the five-county Portland-Vancouver metropolitan region (last updated in 2006). Over 300 miles of new routes were added. Regional Emergency Transportation Routes are travel routes that, in the case of a major regional emergency or natural disaster, would be prioritized for rapid damage assessment and debris-removal. These routes would be used to move people, resources, and materials, such as first responders (e.g., police, fire and emergency medical services), patients, debris, fuel and essential supplies. These routes are also expected to have a key role in post-disaster recovery efforts.

The project developed a regionally accepted network that provides adequate connectivity to critical infrastructure and essential facilities, as well as the region's population centers and vulnerable communities. Over 75% of state and regional critical infrastructure and essential facilities are connected. Partners have established a comprehensive regional GIS database and online RETR viewer for current and future planning and operations. The data and on-line viewer provide valuable resources to support transportation resilience, recovery, and related initiatives

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in the region. Figure 3-7 shows a map of the RETRs and State Seismic Lifeline (SSL) routes. Regional partners identify these routes to help prioritize them for near term investment.

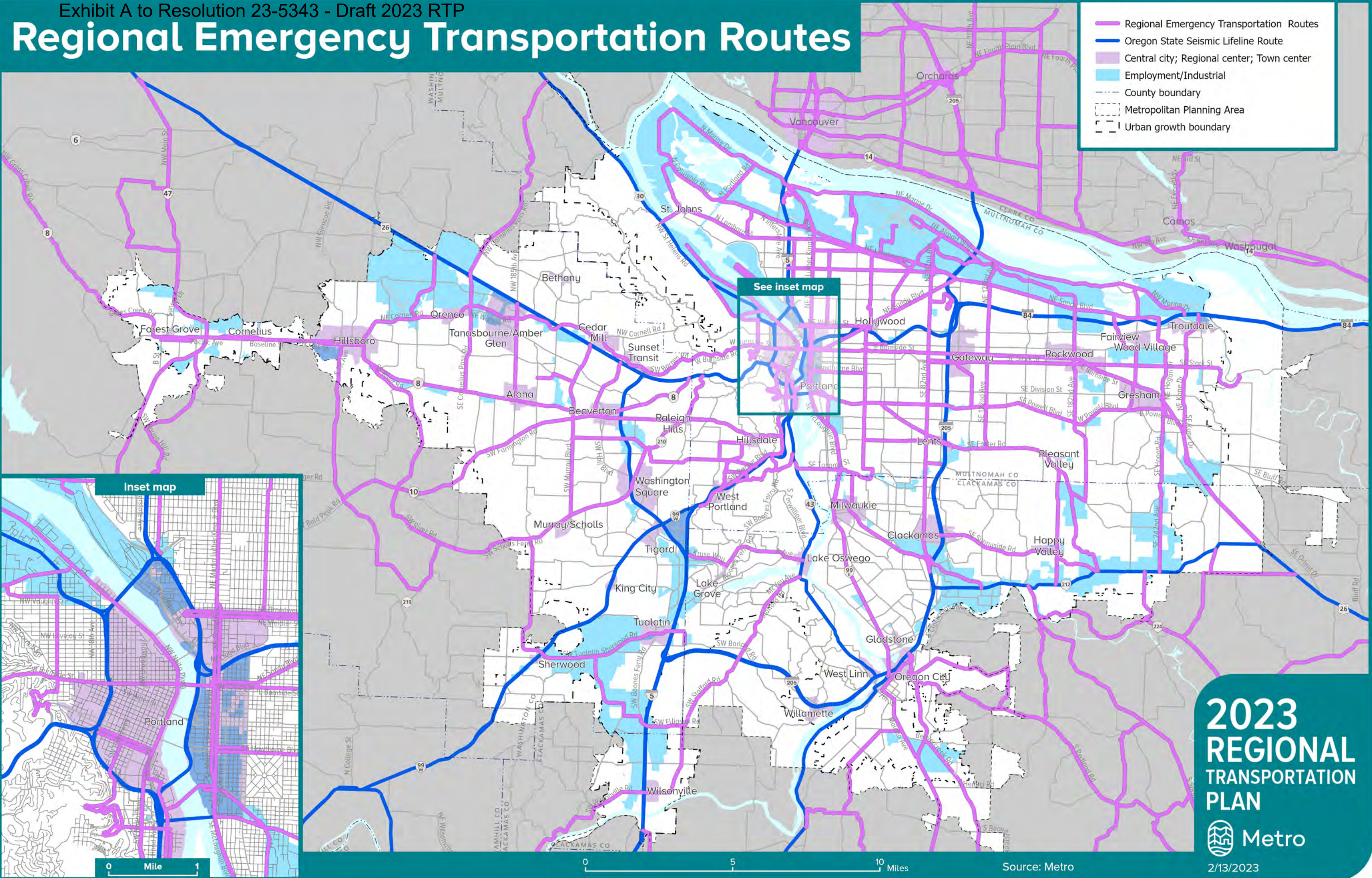
In addition to implementing the resilience policies, potential opportunities for future regional collaboration in support of transportation preparedness and resilience include:

- Partnering with the RDPO on a second phase of the Regional ETR update to prioritize routes and develop operational guidelines for owners and operators. See Chapter 8 for more information.
- Conducting a vulnerability assessment for the region, documenting climate and other natural hazard-related risks to the region’s transportation system and vulnerable populations, and potential investments, strategies, and actions that the region can implement to reduce the vulnerability of the existing transportation system and proactively increase the transportation system’s resiliency.

**Figure 3-7 Regional emergency transportation routes (ETR) map**



# Regional Emergency Transportation Routes





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## 3.2.5 Pricing Policies


Transportation pricing is a tool that can help our region reach its goals of better, faster transit, cleaner air, fewer hours sitting in traffic, and more equitable access to jobs and opportunities. To realize these outcomes, pricing programs will need to be carefully designed to ensure the process to develop them is equitable, revenue is reinvested equitably and to support regional goals, diversion on local streets is mitigated, and pricing strategies are interoperable throughout the region.

### What is transportation pricing?


Transportation pricing is the use of a pricing mechanism, such as tolls or parking fees, to reduce traffic congestion and greenhouse gas emissions, encourage a shift to travel via different modes, a different route, or a different time of day, and raise revenue for transportation investments and mitigation for impacts resulting from pricing. The policies in this section apply to vehicle miles traveled fees, cordon pricing, and roadway pricing; parking pricing is addressed in the Climate mitigation policies in Section 3.2.4.2.

### Pricing Strategies


Pricing could include a range of tools, including:




**VEHICLE MILES TRAVELED FEE**  
*Drivers pay a fee for every mile they travel*



**CORDON PRICING**  
*Drivers pay to enter an area, like downtown Portland (and sometimes pay to drive within that area)*



**ROADWAY PRICING**  
*Drivers pay a fee or toll to drive on a particular road, bridge, or highway*



**PARKING PRICING**  
*Drivers pay to park in certain area*

Each of these pricing strategies could vary by time of day, by area, by types of drivers on the road, and by income levels. Pricing strategies can also take the form of a “program” (i.e. parking pricing) or a “project” (i.e. the I-205 toll project).

While parking pricing has proven to be an effective strategy in the region for many years, cordons, roadway pricing, and other pricing strategies are only beginning to be discussed and implemented

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as a strategy in the greater Portland region. However, these strategies have been effective in cities around the world. For many leaders and government agencies in the Portland metro region recognized pricing as a needed, high-impact, tool in the 2018 Regional Transportation Plan (RTP) and other plans.<sup>11</sup>

Table 3-3 outlines which local, regional, and state agencies could potentially implement various types of pricing strategies based on Oregon state law. Other federal, state, or local laws may provide additional guidance or restrictions on the use of pricing and the use of pricing revenues.

**Table 3-3 Pricing and implementing agency**

Type of Pricing	Definition	Implementing Agency
Road Usage Charge / Vehicle Miles Traveled Fee	Drivers pay a fee for every mile they travel	State DOT, potentially local roadway authorities
Cordon Pricing	Drivers pay a fee to enter an area, like downtown Portland (and sometimes pay to drive within that area)	City, County
Roadway Pricing and Tolling	Drivers pay a fee or toll to drive on a particular road, bridge, or highway	Local Roads: City, County
		Highways and Freeways: State DOT

## Why is pricing an important strategy for our region?

Congestion is a problem in the Portland metro region as outlined in the Chapter 4 or the RTP. Changing travel patterns and a growing population mean more traffic and less freedom to travel reliably around the region. Congestion can also have significant economic, social, and environmental impacts.

- Growing single occupancy vehicle miles traveled (VMT) leads to congestion.
- Greenhouse gas emissions are on the rise.
- Congestion impacts Metro's Equity Focus Areas most significantly.
- Travel patterns for people and goods are unreliable due to congestion.
- Our region is growing.

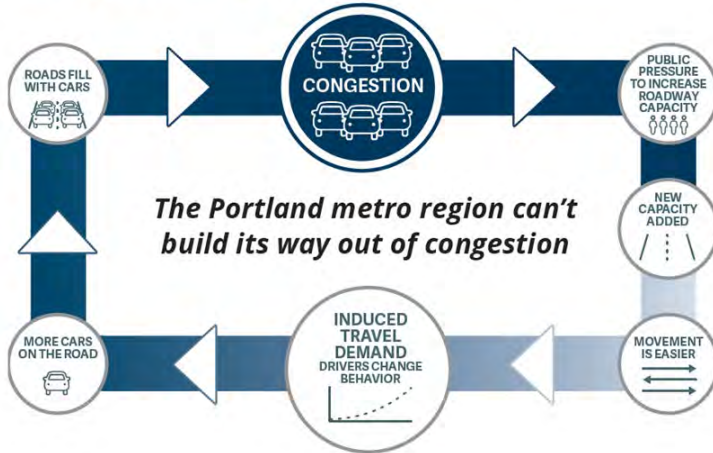
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<sup>11</sup> 2018 Regional Transportation Plan, TSMO Strategic Plan (2010), Climate Smart Strategy (2014), The Federal Congestion Management Process, 2021 City of Portland Pricing Options for Equitable Mobility Final Report, 2018 Oregon Department of Transportation Value Pricing Feasibility Analysis.

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## The Cycle of Congestion



## How can pricing help our region?

Transportation investments in the greater Portland region have a long history of contributing to racial inequity and neighborhood displacement. Decades ago, public agencies planned and built new highways that cut through Black communities, splitting neighborhoods, and contributing to poor air quality, noise pollution and safety issues. Transit investments have also been made without complementary affordable housing strategies, leading to gentrification and further displacement.

Today, while the region's residents all feel the impacts of congestion, historic inequities in the transportation system amplify impacts on people of color and low-income people:

- Housing costs are increasing faster than incomes, pushing those with lower incomes to seek housing further away from the center of the region and making travel distances longer for people of color and low-income people.
- Communities of color and low-income communities have longer commutes that are made slower and more unreliable when roadways are congested.
- Major roads and freeways often run through communities of color and low-income communities, resulting in disproportionately high rates of air pollution, chronic illnesses, and traffic-related injuries and fatalities.

Pricing can be a key tool for jurisdictions as they seek to meet state, regional, and local goals around mobility, climate, safety, equity, and a thriving economy.

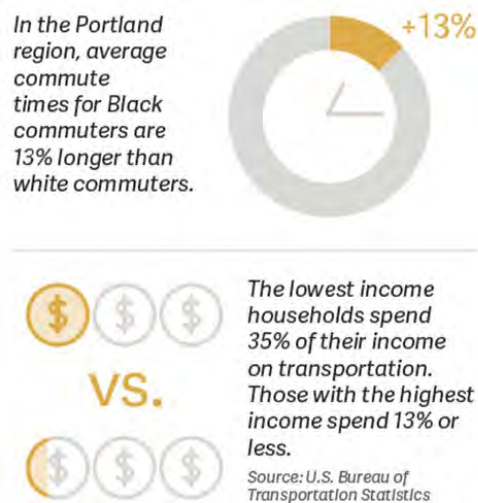
Pricing that is designed and implemented through an equity and climate change lens has the potential to transform transportation in our region in a variety of ways. While pricing programs introduce new costs to users, they also lead to more efficient use of streets and highways and can help address current and historic inequities borne by people of color and people with low incomes.

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Pricing has been shown to encourage use of transit or other modes and reduce overall vehicle miles traveled (VMT). Lower VMT results in decreased congestion, reduced travel times for personal vehicles, freight and buses, lower greenhouse gas emissions, and localized air quality impacts. Pricing is more likely to be successful in areas where transit service elements are already well established and is improved in conjunction with pricing.

Pricing can also have positive impacts on safety. A combination of lower VMT, as a result of pricing and reinvestment of pricing revenue in projects that increase safety, can, in the long term, lead to decreases in crashes and injuries in and around priced facilities or areas.



Additionally, for many jurisdictions, pricing may be identified as a tool to raise revenue for specific projects and be a key element of a funding plan. This could include, for example, replacement of an aging bridge, or investments in multimodal infrastructure and transit supportive elements or amenities. However, in addition to raising revenue for specific projects, a program can successfully meet state, regional, and local goals by:

- **Reinvesting revenue where it matters most.** If designed thoughtfully, pricing programs that have built equity into the program can introduce progressive fee structures and reinvest revenue in the people and places that have historically been, and continue to be, the most negatively impacted.
- **Reinvesting revenue to support our region's goals.** Revenue collected from pricing programs can be reinvested to enhance transit service elements and access, safety improvements, and walking and bicycling networks. It can also be used to provide incentives and subsidies to increase the number of people biking, walking, and taking transit for more trips. With properly designed pricing programs, our region can have better, faster transit, cleaner air, fewer hours sitting in traffic, and more equitable access to jobs and opportunities.

## Benefits to Freight and Businesses

- Pricing strategies can help freight and businesses succeed by reducing congestion on highways and local roads:
- Pricing can benefit freight, especially truck transportation, as it supports a more reliable system.
- Pricing can encourage people to use other forms of transportation to travel and leave highways open for people and businesses, like freight, who do not have other options.
- Pricing can support lowered cost of doing business – time is money.

### 3.2.5.1 Best practices for revenue reinvestment

Equitable revenue reinvestment is a critical consideration from the outset of a pricing program. Reinvestment strategies should be guided by the purpose of the program, the expected costs and benefits, and input from community members impacted by the program. Revenue reinvestment should be focused on neighborhoods that do not have or could lose access to the priced facility or area. Increasing access to the priced facility or area, especially for places with limited access today or places that would see reduced access without reinvested revenues, should be a focus. Part of the revenue from pricing may need to be spent on operations, maintenance, and facility investment.

Key considerations related to revenue reinvestment include:

- Reinvestment should be prioritized in areas designated as Metro’s Equity Focus Areas most affected by pricing programs.
- Revenues collected through the pricing program should be reinvested in a manner that helps meet state, regional, and local goals related to reductions in greenhouse gas emissions and congestion while improving mobility and safety.
- Revenue should not be reinvested in infrastructure solely for single occupancy vehicles but should be invested to improve the entire multimodal transportation system.
- Revenue should be reinvested in the region.

After paying for the administration and/or operating costs of a pricing program, revenue could be reinvested in several ways (Table 3-4). Implementing agencies will need to consider any state constitutional restrictions to revenue reinvestment, or other limitations based on federal or state funding or program approvals, based on the type of pricing program established. Agencies may use pricing to raise money for other things, like road improvements, seismic operations, and operations and maintenance.

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**Table 3-4 Potential Options for Revenue Reinvestment**

Category	Description	Target Area or Population
<b>Transit</b>		
Infrastructure & speed and reliability improvements	Improved facilities, stops, passenger amenities, transit priority treatments, express services, expanded routes, and similar improvements	Regional
		Local communities especially equity areas, for example, Metro's Equity Focus Areas
Operation and maintenance	Operation and maintenance of existing and future transit assets and services	Regional
<b>Active Transportation</b>		
Access to priced facility or area	Improved bike, pedestrian, or micromobility access to transit or priced facility or area directly	Regional
		From/to equity zones, for example, Metro's Equity Focus Areas
Neighborhood access	Improved bike, pedestrian, or micromobility access to transit or neighborhood activity centers such as shopping centers and employment hubs	From equity zones, for example Metro's Equity Focus Areas, to transit or neighborhood activity centers
First/last mile to key employment hubs	Improved bike, pedestrian, or micromobility access to employment hubs from transit	Regional
Diversion mitigation	Prioritize safety enhancements on the high crash network and transit service elements along areas impacted by diversion	Neighborhoods impacted by diversion
<b>Mode Shift and Single Occupancy Vehicle Alternative Programs</b>		
Commuter Credits	Benefit to users of the pricing system who swipe their transit card during peak hours rather than drive	Regional; higher subsidy for transit deprived communities and vulnerable populations
Transit subsidy	Free or discounted transit pass or cash on transit card, i.e., <a href="#">TriMet's Fare Relief Program</a>	Regional; higher subsidy for transit deprived communities and vulnerable populations
Other programs	Electric vehicle (EV) carshare subsidy, bikeshare subsidy, micromobility subsidy, carpool	Regional; higher subsidy for transit deprived communities and vulnerable populations



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Category	Description	Target Area or Population
	benefit, benefit to drivers of EV vehicles	
Priced Facility		
Operations and Maintenance	Operations and maintenance of priced road	Priced facility
Infrastructure investment	For tolled facilities, designed to be paid for by the pricing revenue	Priced facility

## Potential Revenue Opportunities and Limitations

Depending on the pricing model, the use of revenue generated from a pricing program may be subject to legal limits, Federal law and other requirements must be followed. For example, Oregon Constitution Article IX Section 3a limits the use of revenue from taxes on motor vehicle use and fuel. The principle underlying this language is that special taxes paid only by highway users should be used only for highway purposes. Whether a particular pricing model is subject to this constitutional restriction is determined by Oregon courts on a case-by-case basis. Recently, the Oregon Supreme Court concluded that Article IX section 3a's limit on use of tax revenue does not apply to a privilege tax imposed on vehicle dealers for the privilege of engaging in the business of selling taxable motor vehicles at retail. The Court found that the privilege tax was not based on the status of motor vehicle ownership, but rather on the activity of selling motor vehicles. Jurisdictions considering pricing should review all potential legal limits and structure the pricing model with these limits in mind.

### 3.2.5.2 Pricing policies

Pricing policies apply to the planning, implementation, monitoring and evaluation of pricing programs and projects in the region, as defined in Section 3.1.

<b>Policy 1</b>	<b>Use pricing to improve reliability and efficiency of the transportation network, reduce VMT per capita, and increase transportation options.</b>
<b>Policy 2</b>	<b>Center equity and affordability into pricing programs and projects from the outset.</b>
<b>Policy 3</b>	<b>Address traffic safety and the safety of users of all travel modes, both on the priced system and in areas affected by diversion.</b>
<b>Policy 4</b>	<b>Minimize diversion impacts created by pricing programs and projects prior to implementation and throughout the life of the pricing program or project.</b>
<b>Policy 5</b>	<b>Reduce greenhouse gas emissions and vehicle miles travelled per capita while increasing access to low-carbon travel options.</b>
<b>Policy 6</b>	<b>Coordinate technologies and pricing programs and projects to make pricing a low-barrier, seamless experience for everyone who uses the transportation system and to reduce administrative burdens.</b>

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## **Pricing Policy 1. Use pricing to improve reliability and efficiency of the transportation network, reduce VMT per capita, and increase transportation options.**

The Metro Regional Congestion Pricing Study found that pricing has the potential to help the greater Portland region improve mobility and manage congestion. Pricing programs should be designed and implemented to maximize benefits related to improved access to jobs and community places, shift to sustainable modes of travel, and overall affordability.

Investments in transit and transit-supportive elements have been shown to improve regional mobility, especially in terms of access to jobs. Future transit investments, and investments into other modal alternatives, should take into consideration the geographic distribution of low-income populations (who may have less automobile access), existing access to jobs via transit, people who commute outside of peak periods, and people who trip-chain (i.e.: making multiple stops during one trip, such as dropping children off at school on the way to work). Policymakers and future project owners and operators should consider how mobility improvements will be received by populations and areas that have been historically marginalized. Mobility improvements can be measured by reduced peak period travel times, reduced daily vehicle miles traveled (VMT), reduced percentage of total daily trips undertaken by drivers without passengers, increased number of total daily transit trips, and total vehicle hours of delay during peak PM periods.

### **To implement Pricing Policy 1, agencies developing pricing programs or projects should take the following actions:**

1. Set rates for pricing at a level that will manage congestion, reduce VMT per capita, and improve reliability on the priced facility and in areas affected by diversion. ORS 383 delegates authority to the Oregon Transportation Commission (OTC) to set pricing rates for state highways in accordance with state legislation.
2. Collaborate with relevant state, regional, and local agencies and communities when setting, evaluating, and adjusting program or project specific goals.
3. Reinvest a portion of revenues from pricing into modal alternatives both on and off the priced facility that encourage mode shift and VMT reduction per capita consistent with Federal and State law. Examples include, but are not limited to, transit improvements, bicycle and pedestrian improvements, and improvements to local circulation.
4. Identify opportunities to partner with other agencies to fund or construct transit, bike, and pedestrian improvements. Work with transit agencies and other jurisdictional partners, including consideration of opportunities identified in the High Capacity Transit Strategy and Regional Transit Strategy, to determine additional revenue needs and pursue funding needed to develop transit-supportive elements, expand access to transit, and to ensure equitable investments, particularly in cases where such improvements cannot be funded directly by pricing revenues due to revenue restrictions.
5. Consider non-infrastructure opportunities to encourage mode shift and reduce VMT per capita, including commuter credits, funding for transit passes, bikeshare and/or micromobility subsidies, partnerships with employer commuter programs, and carpooling /

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vanpooling. Consider higher benefits, subsidies, discounts or exemptions for people with low-income or other qualifying factors based on equity analysis.

## **Pricing Policy 2. Center equity and affordability into pricing programs and projects from the outset.**

The Metro Regional Congestion Pricing Study found that pricing strategies have the potential to help the greater Portland region improve racial equity and benefit marginalized communities. Our current transportation funding system is inequitable. Regressive funding sources such as fixed tax rates and fees disproportionately impact low-income motorists, and negative health impacts from high automobile reliance disproportionately harm Black, Indigenous, and other people of color (BIPOC), federally recognized tribes, and low-income communities.

Pricing programs with an equity framework should aim to increase access to opportunity, provide affordable options, create healthier and safer communities, and reduce income inequality and unemployment. Pricing has the potential to offer a suite of affordability programs, such as rebates, exemptions, or other investments. Reinvestment should be prioritized in areas designated as Metro's Equity Focus Areas most affected by pricing programs.

Policymakers and future project owners and operators should carefully consider how the benefits and costs of pricing impact different geographic and demographic groups. If not conducted thoughtfully, pricing could compound past injustices and harm Black, Indigenous, and other people of color (BIPOC), federally recognized tribes, and low-income communities. By focusing engagement at every step in the process on historically impacted residents, agencies can reduce harm and increase benefits. The policy illustrates how equity can be incorporated into pricing programs.

### **To implement Policy 2, agencies developing pricing programs or projects should take the following actions:**

1. Conduct public engagement in a variety of formats, including formats that accommodate all abilities, all levels of access to technology, and languages other than English. Begin engagement at an early stage and re-engage the public in a meaningful manner at multiple points throughout the process.
2. Engage equity groups, people with low-income, and people of color in a co-creation process, beginning at an early stage, to help shape goals, outcomes, performance metrics, and reinvestment of revenues.
3. Use a consistent methodology across implementing agencies for defining equity groups and equity areas for pricing programs and projects, including but not limited to the methodology used for establishing the Equity Focus Areas. A consistent methodology for documenting benefits and burdens of pricing for equity groups, people with low-income, people of color, and equity areas should also be established across agencies. The methodology should consider a variety of factors, such as implementing agency, costs to the user, travel options, travel time, transit reliability and access, diversion and safety, economic impacts to businesses, noise, access to opportunity, localized impacts to emissions, water and air quality, and visual impacts.

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4. Establish feedback mechanisms, a communication plan, and recurring regular engagement over time with the public, and with equity groups that were involved in the co-creation process.
5. Provide a progressive fee structure including elements such as exemptions, credits, or discounts for qualified users. Base eligibility on inclusion in one or more population categories, such as low-income, and minimize barriers to qualification by building on existing programs or partnerships where applicable. Target outreach for enrollment in a discounts, credits, or exemptions in equity areas and communities with higher-than-average shares of people with low income and people of color.
6. Create varied and accessible means of payment and enrollment, including options for people without access to the internet or banking services.
7. Reinvest a portion of revenues from pricing into communities with high proportions of people with low-income and people of color, and/or in Equity Focus Areas, consistent with Federal and State law. Use of these revenues should meet the transportation-related needs identified by the equity communities and people most impacted. Examples include commuter credits and free or discounted transit passes, or improved transit facilities, stops, passenger amenities, and transit priority treatments.
8. Enforcement of pricing and fine structures for non-payment should be designed to reduce the potential for enforcement bias and to minimize burdens on people with low incomes.
9. Create a process to measure how pricing programs achieve the actions items listed above to demonstrate accountability.

## **Pricing Policy 3. Address traffic safety and the safety of users of all travel modes, both on the priced system and in areas affected by diversion.**

The Metro Regional Congestion Pricing Study found that pricing has a strong potential to help the greater Portland region improve safety outcomes and meet the safety priorities outlined in the Regional Transportation Plan. Pricing programs can improve safety by reinvesting revenue into locally supported traffic safety improvements. The study recommends focusing safety improvements on eliminating traffic deaths and serious injuries on city streets, or a Vision Zero approach.

Safety challenges vary greatly across the region. Safety improvements should be assessed at a project scale and built into a pricing programs' definition to ensure that the core of the project addresses these community needs. Detailed project-scale analysis should provide insight into where safety investments are needed and should address any project-related safety concerns. Safety outcomes of a pricing program can be measured by the level of revenue reinvestment in improvements that address fatalities and serious injuries on high injury corridors or roadways.

## **To implement Pricing Policy 3, agencies developing pricing programs or projects should take the following actions:**

1. Collaborate with relevant state, regional, and local agencies and communities when identifying traffic safety impacts and selecting mitigations associated with pricing.

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2. Use a data-driven approach to identify potential traffic safety impacts on the priced system and in areas affected by diversion both during and after implementation of pricing programs and projects; monitor with real-time data after implementation.
3. Context-specific monitoring and evaluation programs should be conducted by implementing agencies in coordination with partner agencies and be on-going and transparent. Establish feedback mechanisms, incident resources, and a communication plan in advance for the community and decision makers.
4. Adjust safety strategies in coordination with partner agencies based on monitoring and evaluation findings.
5. Reinvest a portion of revenues on the priced system and in areas affected by diversion to address safety issues caused by pricing programs and projects, consistent with Federal and State law. For example, through investments in transit, bike, and pedestrian improvements, or other investments in known crash reduction factors.
6. Pricing programs and projects should strive to reduce fatalities and serious injuries by aligning with local, state and regional safety and security policies.

## **Pricing Policy 4. Minimize diversion impacts created by pricing programs and projects prior to implementation and throughout the life of the pricing program or project.**

Diversion is the movement of automobile trips from one facility to another because of pricing implementation. All trips that change their route in response to pricing are considered diversion, regardless of length or location of the trip, or whether they divert to or from the priced facility.

The Metro Regional Congestion Pricing Study found that pricing programs have the potential to lead to diversion impacts, as drivers shift from the freeway network to the arterials to avoid charges. Spillover/cut through traffic caused by a pricing program can exacerbate traffic safety concerns along other streets. Project designers should carefully consider the wide distribution of diversion impacts that may result from the program, particularly on regional high injury corridors. Implementing agencies can also look to high injury local streets and intersections for which to prioritize safety improvements. It is important for pricing programs to mitigate the negative impacts of diversion. Diversion onto nearby streets could be addressed with safety or transit improvements, for example. If pricing programs result in successful mode shift to transit, diversion impacts can be lessened.

## **To implement Pricing Policy 4, agencies developing pricing programs or projects should take the following actions:**

1. Collaborate with relevant state, regional, and local agencies and communities when identifying diversion impacts and selecting mitigations associated with pricing.
2. Use a data-driven approach to define and identify diversion impacts both during and after implementation of pricing programs and projects. Following implementation monitor with real-time data.
3. Evaluate localized impacts of diversion including factors such as VMT per capita, VMT per capita in defined equity areas, noise, economic impacts to businesses, and localized

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emissions, water quality, air quality, and the completeness of safety infrastructure and non-vehicular modal networks. This should include specific evaluation of diversion impacts in communities with people with low-income and people of color, and/or in Equity Focus Areas.

4. Context-specific monitoring and evaluation programs should be conducted by implementing agencies in coordination with partner agencies and be on-going and transparent. Establish feedback mechanisms and a communication plan in advance for the community and decision makers and ensure reinvestment is still applicable when impacted area changes.
5. Adjust mitigation strategies based on monitoring and evaluation findings. Areas impacted may change as the pricing program is implemented and diversion mitigation strategies are put into place.
6. Reinvest a portion of revenues into areas affected by diversion caused by pricing programs and projects consistent with Federal and State law.

## **Pricing Policy 5. Reduce greenhouse gas emissions and vehicle miles travelled per capita while increasing access to low-carbon travel options.**

The Metro Regional Congestion Pricing Study found that pricing has the potential to help the great Portland region reduce greenhouse gas emissions and achieve Metro's climate goals. All of the scenarios tested in the study showed reductions in greenhouse gas emissions through reducing overall VMT per capita. Pricing policies were found to be effective in encouraging drivers to change their travel behavior such as using more sustainable travel modes like transit, walking, or biking. These changes in behavior are key to reducing greenhouse gas emissions in the region.

Pricing programs should be designed to meet climate goals without adversely impacting safety or equity. Climate improvements can be measured by percent reduction of greenhouse gases per capita, percent reduction of criteria pollutants and transportation air toxics, percent reduction of vehicle miles traveled per capita, and shifts in travel behavior. Implementing agencies should consider the geographic and demographic distribution of targeted climate improvements, particularly taking into consideration the health impacts of pollutants and transportation air toxics that disproportionately harm Black, Indigenous, and other people of color and low-income communities.

## **To implement Pricing Policy 5, agencies developing pricing programs or projects should take the following actions:**

1. Identify localized air pollutants and greenhouse gas emission impacts due to pricing and identify strategies for mitigation.
2. Set rates for pricing at a level that will reduce greenhouse gas emissions and improve air quality by managing congestion and reducing overall VMT per capita on the priced system and in areas affected by diversion. ORS 383 delegates authority to the Oregon Transportation Commission (OTC) to set pricing rates for state highways in accordance with state legislation.



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3. Reinvest a portion of revenues from pricing into modal alternatives both on and off the priced facility consistent with Federal and State law, to reduce overall emissions by encouraging mode shift and VMT per capita reduction, including transit improvements as well as bicycle and pedestrian improvements and improvements to local circulation.
4. Develop and implement pricing so that it addresses and supports the Climate Smart Strategy and regional climate policies, including through the Congestion Management Process (CMP).

## **Pricing Policy 6. Coordinate technologies and pricing programs and projects to make pricing a low-barrier, seamless experience for everyone who uses the transportation system and to reduce administrative burdens.**

The Metro Regional Congestion Pricing Study describes a wide range of technologies available that can be used in pricing programs to create a seamless and low-barrier experience. Programs can use electronic toll collection systems, mobile applications, short-range communication systems embedded in new vehicles, OReGO technologies that wirelessly connect to a vehicle's diagnostic ports, or online portals for self-reporting. The type of technology used will vary depending on the type of pricing program. Metro's study recommends a pilot phase for the region to trial one or more technologies before implementing a region-wide system.

There are several considerations to be taken when using technology in the implementation of a pricing program. First, emerging technologies can be more expensive than existing ones, yet existing technologies run the risk of becoming obsolete sooner. Second, some technologies (such as tolling systems) require a physical footprint that can take up limited physical space and create a visual aesthetic impact that may need design commission approval in some parts of the city. Further, technologies such as mobile apps or online portals that require users to take an action will likely be less accurate and reliable than automatic technologies. These technologies may also unfairly burden low-income travelers that do not have access to a mobile phone, computer, internet, or banking system. Technologies that enhance user experience while limiting barriers to use should be prioritized. Project designers should also consider a program's compatibility with existing pricing technologies used in the region (such as the Hop regional transit fare program or existing parking payment systems).

## **To implement Policy 6, agencies developing pricing programs or projects should take the following actions:**

1. Coordinate technologies and user-friendly designs across pricing programs and projects to reduce burdens on the user and manage the system efficiently, including setting rates, identifying tolling technology and payment systems, and establishing discounts and exemptions.
2. Create varied and accessible means of payment and enrollment, including options for people without access to the internet or banking services.
3. Consider the upfront costs of technology investment balanced with long-term operational and replacement costs compared with expected revenue generation.



## 3.2.6 Mobility Policies

Within the greater Portland region, the State of Oregon and Metro have a shared goal of providing mobility such that people and businesses can safely, affordably, and efficiently reach the goods, services, places, and opportunities they need to thrive by a variety of seamless and well-connected travel options and services that are welcoming, convenient, comfortable, and reliable.

### 3.2.5.1 Mobility policy outcomes and policies

The mobility policy is intended to achieve the following outcomes identified by policymakers and stakeholders as critical to guide how transportation agencies plan for, manage, and operate the transportation system.



#### Policy outcomes

- **Equity – Black, Indigenous and people of color (BIPOC) community members, federally recognized tribes, and people with low incomes, youth, older adults, people living with disabilities and other marginalized and underserved communities experience equitable mobility.** BIPOC, federally recognized tribes, and other marginalized communities have often experienced disproportionately negative impacts from transportation infrastructure as well as disparities in access to safe multimodal travel options. Addressing these disparities is a priority for ODOT and Metro.

The regional transportation system should support access to opportunities for everyone, not just people in motor vehicles. Equity can be enhanced through providing strong multimodal networks with priority provided to improvements benefitting marginalized and underserved communities.

- **Efficiency - Land use and transportation decisions and investments contribute to more efficient use of the transportation system meaning that trips are shorter and can be completed by more travel modes, reducing space and resources dedicated to transportation.** Efficiency in this context means that transportation requires less space and resources. Efficiency can be improved by shortening travel distances between destinations. Shorter travel distances to destinations enhance the viability of using other and more efficient modes of transportation than the automobile and preserves roadway capacity for transit, freight and goods movement by truck and for longer trips. Efficiently using land and planning for key destinations in proximity to the where people live and work, contributes to shorter trip lengths. The transportation efficiency of existing and proposed land use patterns and transportation systems can be measured by looking at “vehicle miles traveled (VMT) per

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capita” for home-based trips or “VMT per employee” for commute trips to/from work of an area.

- **Access and Options - People and businesses can conveniently and affordably reach the goods, services, places, and opportunities they need to thrive. People and businesses can choose from a variety of seamless and well-connected travel modes and services that easily get them where they need to go.** The viability of trips made by modes other than automobiles can be increased by investing in a connected, multimodal transportation system. Multimodal systems serve all people, not just those who have access to vehicles or the ability to drive them, and provide more route choices, increase safety and efficiency, and increase reliability. Closing gaps in networks, particularly pedestrian and bicycle networks, and closing special and temporal gaps in transit networks, can change travel preferences, reducing VMT/capita. Progress towards well connected, multimodal networks can be measured by mode with “system completeness.”
- **Safety - People are able to travel safely and comfortably and feel welcome.** Unsafe transportation facilities can result in injury and loss of life and place a strain on emergency responders. Both unsafe conditions and perceived unsafe conditions can impact travel behavior, causing users to choose different routes or modes. Prioritizing investments that reduce the likelihood of future crashes and that improve safety and comfort for all users will increase mode choices and improve reliability. System completeness by travel mode is useful in identifying needs and investments that could enhance safety and comfort.
- **Reliability - People and businesses can count on the transportation system to travel where they need to go reliably and in a reasonable amount of time.** In a reliable transportation system, all users, including people in automobiles and using transit, can reasonably predict travel time to their destinations. Reliability is impacted by travel conditions, safety, street connectivity, congestion, and availability of travel options. Investments in safety, street connectivity, transit, transportation system management and operations (TSMO), and demand management can yield significant benefits for managing congestion and increasing reliability for all travelers. System completeness can be used as a measure of the availability of reliable travel options, including walking and biking. Average travel speed can be used as a measure to forecast areas of congestion including looking at the number of hours a facility is congested and the percentage of a facility that is congested for multiple hours per day. Average travel speed can also be used to look at total travel time between origin-destination pairs and identify bottlenecks that are most impacting reliability on key travel routes for vehicle modes, including freight and transit.

For Throughways, the essential function is throughput and mobility for motor vehicle travel, including transit and freight vehicles, to maximize movement of people and goods. Throughways serve interregional and interstate trips and travel times are an important factor in people and businesses being able to make long-distance trips to and through the region and access destinations of regional and statewide significance in a reasonable and reliable amount of time.

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For most Arterials, depending upon the street design classification and freight network classification, the essential functions are transit, bicycle and pedestrian travel and access, while balancing motor vehicle travel and the many other functions of arterials in intensely developed areas. Transit reliability on arterials can be improved with exclusive bus lanes, signal priority and other TSMO strategies. Improving automobile reliability through additional roadway capacity should follow the region’s congestion management process and not come at the expense of non-motorized modes and achieving system completeness consistent with modal or design classifications in the Regional Transportation Plan (RTP) or achieving the VMT/capita target for the region or the jurisdiction.

Within the greater Portland region, the State of Oregon and Metro have a shared goal of providing mobility such that people and businesses can safely, affordably, and efficiently reach the goods, services, places, and opportunities they need to thrive by a variety of seamless and well-connected travel options and services that are welcoming, convenient, comfortable, and reliable.

The following policies aim to achieve these outcomes.

<b>Mobility Policy 1</b>	<b>Ensure that land use decisions and investments in the transportation system enhance efficiency in how people and goods travel to where they need to go.</b>
<b>Mobility Policy 2</b>	<b>Provide people and businesses a variety of seamless and well-connected travel modes and services that increase connectivity, travel choices and access to low carbon transportation options so that people and businesses can conveniently and affordably reach the goods, services, places and opportunities they need to thrive.</b>
<b>Mobility Policy 3</b>	<b>Create a reliable transportation system that people, and businesses can count on to reach destinations in a predictable and reasonable amount of time.</b>
<b>Mobility Policy 4</b>	<b>Prioritize the safety and comfort of travelers by all travel modes when planning and implementing mobility solutions.</b>
<b>Mobility Policy 5</b>	<b>Prioritize investments that ensure that Black, Indigenous and people of color (BIPOC) community members, federally recognized tribes, and people with low incomes, youth, older adults, people living with disabilities and other marginalized and underserved populations have equitable access to safe, reliable, affordable, and convenient travel choices that connect to key destinations.</b>
<b>Mobility Policy 6</b>	<b>Use mobility performance targets and thresholds for system planning and evaluating the impacts of plan amendments including: Vehicle Miles Travelled (VMT) per capita for home-based trips, VMT/employee for commute trips to/from work, system completeness for all travel modes, and travel speed reliability on the throughways.</b>

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## The Regional Mobility Policies apply to:

- the state highway system within the greater Portland region for:
  - identifying state highway mobility needs and solutions during system planning and plan implementation; and
  - evaluating the impacts on state highways of amendments to transportation system plans, acknowledged comprehensive plans and land use regulations pursuant to the Transportation Planning Rule (OAR 660-12-0060).
- throughways and arterials designated in the Regional Transportation Plan (RTP), which include state and local jurisdiction facilities, for identifying mobility needs and solutions during system planning and plan implementation.

Under this policy, Oregon Highway Plan volume-to-capacity ratio targets still guide operations decisions such as managing access and traffic control systems and can be used to identify intersection improvements that would help reduce delay, improve the corridor average travel speed, and improve safety. Local jurisdiction standards for their facilities still apply for evaluating impacts of amendments to transportation system plans, acknowledged comprehensive plans and land use regulations pursuant to the Transportation Planning Rule (OAR 660-12-0060) and guiding operations decisions.

Three performance targets and thresholds as described in Table 3-5 will be used to assess the adequacy of mobility in the Portland metropolitan area for the regional networks based on the expectations for each facility type, location, and function. These measures will be the initial tools to identify mobility gaps and deficiencies (needs) and consider solutions to address identified mobility needs. The subsequent actions describe how to apply these measures to system planning consistent with OAR 660-012, Sections 3.08.220 and 3.08.510 of the Regional Transportation Functional Plan (RTFP) and OHP Policy 1.G and assessing plan amendment consistent with OAR 660-012-0060.

**Table 3-5 Mobility performance targets and thresholds**

Measure	Application	Target
VMT/Capita for home-based trips  and  VMT/Employee for commute trips to/from work	System Planning	OAR 660 Division 44 (Metropolitan Greenhouse Gas (GHG) Emissions Reduction rule)) and OAR 660 Division 12 set VMT/capita reduction targets with which the 2023 RTP update and local TSPs will need to comply. The VMT/capita targets are: 20% reduction by 2035, 25% reduction by 2040, 30% reduction by 2045 and 35% reduction by 2050 (from 2005 levels). (a)  The 2023 RTP and TSPs that meet this regional target will establish 2045 baseline VMT/capita and VMT/employee. All subsequent applications of this policy shall not increase VMT/capita or VMT/employee above the future baseline.
	Plan Amendments (b)	The plan amendment will have equal to or lower forecast VMT/capita for home-based trips and equal to or lower forecast

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Measure	Application	Target	
		VMT/employee for commute trips to/from work than the District target.(c)	
System Completeness	System Planning	Complete networks and systems for walking, biking, transit, vehicles, freight, and implement strategies for managing the transportation system and travel demand (See Table 3 for guidance and Table 4 for completeness elements by facility type). <sup>12</sup> (The planned system, Strategic and Financially Constrained, will be defined in local jurisdiction TSPs and may not achieve completeness for all modes to target levels but the local jurisdiction TSP should identify future intent for all facilities given constraints and tradeoffs.)	
	Plan Amendments	100% of planned system Or Reduced gaps and deficiencies (See Table 5 <sup>13</sup> for guidance)	
Travel Speed		RTP Motor Vehicle Designation	Thresholds (f)
	System Planning (d)	Throughways – Expressways (e) I-205 I-84 I-5 OR 217 US 26 (west of I-405) I-405 OR 213 from Beavercreek Road to I-205 OR 212-Sunrise Expressway	Average speed not below 35 mph for more than 4 hours per day
		Throughways – Non-Expressways (e) OR 99W west of Sherwood OR 99E Portland to OR 212 OR 99E from south of Oregon City OR 213 south of Beavercreek Rd US 30 OR 47 OR 224 OR 212 US 26 south of OR 212	Average speed not below 20 mph for more than 4 hours per day
	Plan Amendments	Same as system planning	Same as system planning

## Table notes:

<sup>12</sup> See Tables on pages 10-11 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

<sup>13</sup> See Table on page 19 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

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- (a) Meeting these targets sets the region on a trajectory to meet state goals adopted in 2007 to reduce total GHG emissions from all sources to 75% below 1990 levels by 2050.
- (b) Plan amendments that meet this target shall be found to not have a significant impact pursuant to the Transportation Planning Rule (OAR 660-12-0060).
- (c) Metro will develop maps and/or tables and analyses of how VMT per capita and VMT and per employee and how it is distributed throughout the region. Metro will establish VMT/capita “Districts” that identify TAZ groupings (subareas) with similar land use characteristics and forecast VMT/Capita. A spreadsheet or similar tool will be developed to help assess potential changes to VMT/capita and VMT/employee and potential mitigations to minimize the need for application of the regional travel demand model for all plan amendments.
- (d) Addressing motor vehicle congestion through additional throughway capacity should follow the RTP congestion management process, Sections 3.08.220 and 3.08.510 of the [Regional Transportation Functional Plan](#) and OHP Policy 1G, and should not come at the expense of achieving system completeness for non-motorized modes consistent with regional modal or design classifications or achieving the VMT/capita target for the region or jurisdiction.
- (e) Throughways are designated in the Regional Transportation Plan and generally correspond to Expressways designated in the Oregon Highway Plan. Some throughways designated in the RTP are not Expressways in the Oregon Highway Plan but serve an important statewide function.
- (f) The thresholds are used to identify areas of poor reliability where due to recurring congestion, average travel speeds drop below specified speed and duration thresholds. It will be used as a threshold to identify needs (deficiencies). It will not be applied as a standard that creates conflict with meeting OAR 660 Division 44 VMT per capita reduction targets. Solutions to address identified needs should follow the RTP congestion management process, Sections 3.08.220 and 3.08.510 of the [Regional Transportation Functional Plan](#) and OHP Policy 1G, and should not come at the expense of achieving system completeness for non-motorized modes consistent with regional modal or design classifications or achieving the VMT/capita target for the region or jurisdiction.

## How do the measures work together?

Vehicle miles traveled (VMT)/capita will be a controlling measure in both system planning and plan amendments to ensure that the planned transportation system and changes to the system support reduced VMT/capita by providing travel options that are complete and connected and that changes to land use reduce the overall need to drive from a regional perspective and are supportive of travel options.

- For system planning, the final planned system must support OAR 660 Division 44 (Metropolitan Greenhouse Gas (GHG) Emissions Reduction rule) and OAR 660 Division 12 VMT reduction targets.
- For plan amendments, VMT/capita will be used to determine if the proposed plan amendment has a significant impact on regional VMT/capita that needs to be mitigated or not.

System completeness and travel speed reliability on throughways are secondary measures that will be used to identify needs and inform the development of the planned system. The policy requires that TSPs define the planned system for each mode using a variety of guidance documents. Additional RTP and state policies also guide the development of individual modal systems. It is important to note that the Regional Mobility Policy is one of many policies that

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inform the development of the Regional Transportation Plan and local transportation system plans in the Portland region.

The regional and local “planned” system may not achieve completeness for all modes but should identify future needs and expectations for all facilities given constraints and tradeoffs. Similarly, reliability on throughways will inform state and regional needs of the throughway system as defined in in Table 3-5. . Identifying solutions for locations that do not meet the throughways travel speed reliability threshold shall follow the RTP congestion management process<sup>14</sup> and OHP Policy 1G<sup>15</sup>, and should not come at the expense of achieving the VMT/capita target.

## 3.2.5.2 Mobility policy system planning actions

A planned system that can be used to review system completeness is the primary outcome of system planning. VMT/capita and travel speed on throughways are applied to system planning to support the identification of the planned system and transportation needs. The Regional Mobility Policy does not dictate how Metro or local agencies conduct system planning. It is one tool to be used to identify needs and define the planned system. System planning includes updates to long-range transportation plans, including the Regional Transportation Plan and locally adopted transportation system plans. System planning also includes planning for the transportation system in smaller geographies through ODOT facility plans, corridor refinement plans as defined in the Regional Transportation Plan (RTP) and OAR 660-012, and area plans, including concept plans for designated urban reserve areas. The following actions describe how each of the performance targets shall be used in tandem in system planning, which is supported by the flow chart in Figure 3-8.

1. Division 44 GHG Emissions Reduction Rule) and OAR 660 Division 12 (Transportation Planning Rule) set a VMT/capita reduction target for the Portland metropolitan area.<sup>16</sup> The 2023 RTP will identify the strategies needed to achieve this target and result in 2045 baseline VMT/capita for the region. This future baseline shall be used to estimate future VMT/capita for home-based trips and VMT/employee for commute trips to/from work at the TAZ level. The TAZ data shall be aggregated to develop “Districts”<sup>17</sup> with similar land use and VMT characteristics by Metro through the 2023 RTP update and implementation process. The percent change in VMT/capita for the region must meet the reduction target

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<sup>14</sup> Section 3.3.4 of the RTP states that “The RTP calls for implementing system and demand management strategies and other strategies prior to building new motor vehicle capacity, consistent with the Federal Congestion Management Process (CMP) and Oregon Transportation Plan policies (including Oregon Highway Plan Policy 1G) . Appendix L to the RTP provides more detailed information. Sections 3.08.220 and 3.08.510 of the Regional Transportation Functional Plan (RTFP) further direct how Transportation System Plans implement the CMP.

<sup>15</sup> Policy 1G (Major Improvements) has the purpose of maintaining highway performance and improving highway safety by improving system efficiency and management before adding capacity.

<sup>16</sup> The Division 44 VMT reduction targets cannot currently be measured using Metro’s Regional Travel Demand Model (RTDM); however, baselines for VMT/capita for home-based trips and VMT/employee for commute trips to/from work can be established from the RTDM for the RTP scenario that meet the Division 44 VMT reduction targets as measured via a different tool.

<sup>17</sup> VMT/capita “Districts” will be established that identify TAZ groupings (subareas) with similar forecast VMT/capita, considering use of RTP mobility corridor geographies as a starting point.



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in Division 44 (GHG Emissions Reduction Rule), but the percent change in VMT/capita for each district will vary.

2. For system planning at the sub-regional, local jurisdiction (TSPs), or subarea levels, VMT/capita for home-based trips and VMT/employee for commute trips to/from work shall be measured for the “Districts” covering the plan area to ensure that land use and transportation plan changes are working in tandem to achieve the region’s VMT/capita reduction target, resulting in reduced need to drive, improved viability of using other and more efficient modes of transportation than the automobile, and preserving roadway capacity for transit, freight and movement of goods and services. At the first major TSP update after this policy is implemented, system plans shall demonstrate that the planned transportation system achieves the regional OAR 660 Division 44 (GHG Emissions Reduction Rule) and OAR 660 Division 12 (Transportation Planning Rule) targets and that future system plan updates maintain or reduce aggregate VMT/capita for home-based trips and VMT/employee for commute trips to/from work for the “Districts” in the plan area compared to the 2045 baseline set in the 2023 RTP. Projections of VMT/capita must incorporate the best available science on latent and induced travel of additional roadway capacity consistent with OAR 660-012-0160. If a TSP’s financially constrained list does not include any projects requiring review in OAR 660-012-0830, VMT per capita analysis work in OAR 660-012-0160(2)-(4) is not required.
3. System completeness definitions in guidance documents shall be used to identify needs and ensure that the planned transportation system is increasing connectivity and improving safety of the multimodal network. The planned system shall be established in local transportation system plans consistent with the RTP and Regional Transportation Functional Plan (RTFP) for each facility and will vary based on the modal functional classification and design classification. Table 3<sup>18</sup> provides guidance for defining the planned system and Table 4<sup>19</sup> identifies the elements that must be identified for each facility or service type.
4. Reliability for throughways based on average travel speed thresholds in Table 3-5 shall be used to assess performance of throughway facilities within the system planning study area for safe, efficient, and reliable speeds. Thresholds reflect a minimum average travel speed that shall be maintained for a specific number of hours per day, recognizing that the threshold average speed is not likely to be met during a number of peak hours, as described in Table 3-5. The percentage of the throughway system meeting the target may

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<sup>18</sup> See pg. 10 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

<sup>19</sup> See pg. 11 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

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also be considered. These thresholds shall inform identification of transportation needs and consideration of system and demand management strategies and other strategies<sup>20</sup> but shall not be used as standards at the expense of non-motorized modes and achieving system completeness for other modes consistent with regional modal or design classifications or achieving the VMT/capita target for the region or jurisdiction. Analysis segmentation of facilities within the study area will be determined based on the analysis software or modeling tool utilized.<sup>21</sup> Projections of VMT/capita must incorporate the best available science on latent and induced travel of additional roadway capacity.

5. Interchanges shall be managed to maintain safe, efficient, and reliable operation of the mainline for longer trips of regional or statewide purpose through the interchange area. The main objective is to avoid the formation of traffic queues on off-ramps which back up into the portions of the ramps needed for safe deceleration from mainline speeds or onto the mainline itself. This is a significant traffic safety and operational concern as queues impact mainline operations and crashes affecting reliability. Deceleration space for vehicles exiting throughway mainlines can be improved by managing throughways for longer trips resulting in reducing off-ramp traffic volumes and by increasing capacity at the off-ramp terminal. Throughway off-ramp terminal intersection and deceleration needs shall be evaluated through system plans such as Interchange Area Management Plans, Corridor Plans, and Sub-area Plans.
6. In system plans, when identifying transportation needs and prioritizing investments and strategies, projects that create greater equity and reduce disparities between “Equity Focus Areas” and “Non-Equity Focus Areas” shall be prioritized. This action aims to improve equitable outcomes by burdening underserved populations less than and benefiting underserved populations as much or more as the study area population as a whole. Because the Equity Focus Areas as defined by the RTP are based on a regional average comparison, local governments shall conduct a more specific equity analysis at the local TSP scale consistent with OAR 660-012-0135.

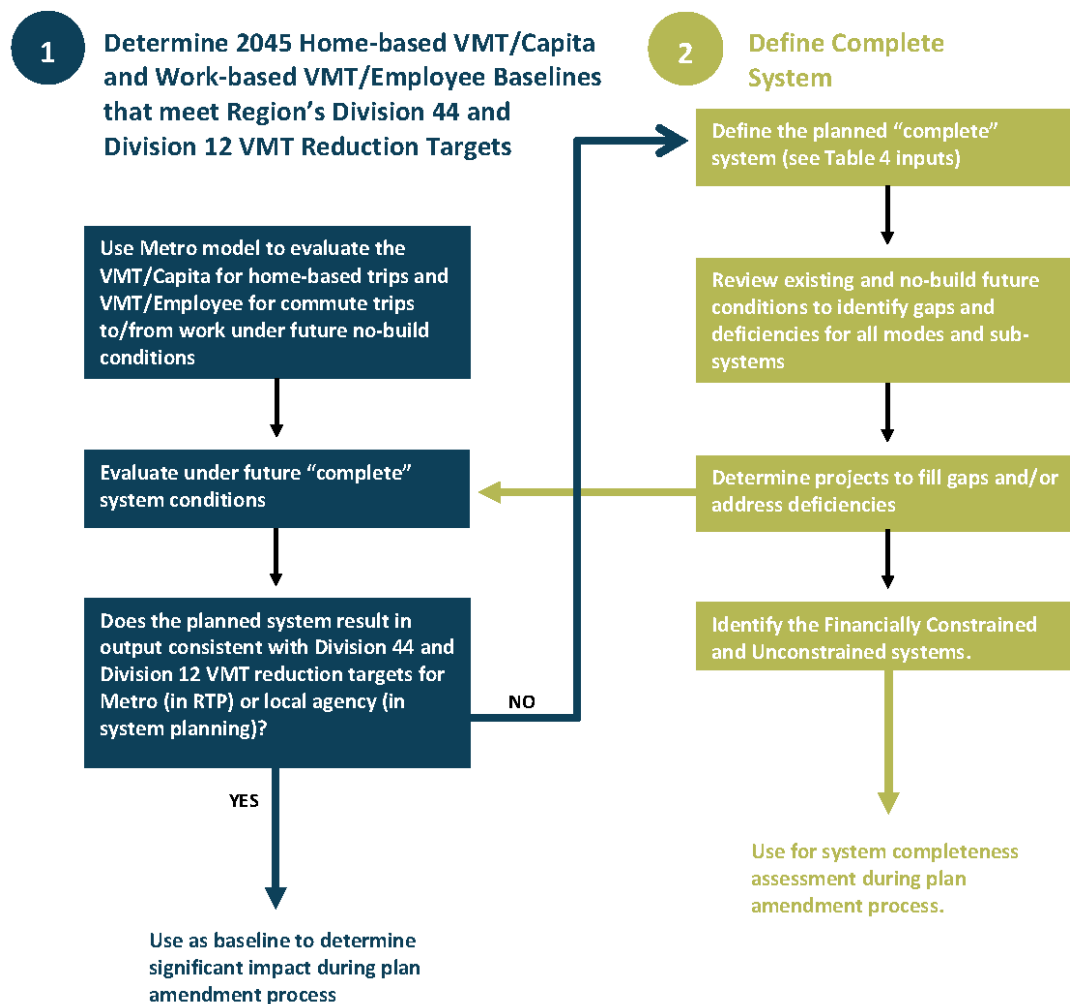
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<sup>20</sup> The RTP system sizing policies, regional congestion management process and OHP Policy 1F will be followed to determine mitigations that support meeting the throughway travel speed threshold.

<sup>21</sup> Supporting documentation will be needed as part of implementation of the policy to define the segmentation methodologies based on analysis options.

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**Figure 3-8 System Planning Process Utilizing the Mobility Policy Measures**



### 3.2.5.3 Mobility policy plan amendment evaluation actions

All three of the mobility policy measures are applied to the evaluation of plan amendments. The following actions describe how each of the mobility targets and thresholds shall be used in tandem in evaluating plan amendments consistent with the Transportation Planning Rule (OAR 660-012-0060) and is supported by the flowchart in Figure 3-9.

1. Comprehensive plan amendments that do not surpass the trip generation thresholds in the Oregon Highway Plan Policy 1F will be found to have no significant impact and are not required to further evaluate VMT/capita, hours of congestion travel speed on Throughways, or system completeness.

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2. In a jurisdiction with a TSP that has demonstrated compliance with achieving the region's Division 44 and Division 12 VMT reduction targets, comprehensive plan amendments that are forecast to maintain or lower VMT/capita for home-based trips and VMT/employee for commute trips to/from work compared to their 2045 baseline that achieve Division 44 targets, shall be found to have no significant impact consistent with the Transportation Planning Rule (OAR 660-12-0060)
3. Comprehensive plan amendments that have a significant impact because they a) increase VMT/capita for home-based trips or VMT/employee for commute trips to/from work or b) the jurisdiction has not demonstrated compliance with OAR 660 Division 44 and Division 12 VMT reduction targets shall mitigate that impact by adjusting their land use plan, supporting VMT/capita reduction through enhancing non-vehicular modes beyond what's in the financially constrained transportation system plan, and/or committing to transportation demand management. Enhancing non-vehicular modes means increasing system completeness for non-vehicular modes within the impact area of the plan amendment for those modes. Within the impact area, the system gaps will be identified based on the planned system in the TSP.
4. Large scale, typically legislative plan amendments will be obligated to develop a funding plan that will address the system gaps and bring additional projects that support VMT/capita reduction into the financially constrained transportation system plan and that help the district meet their VMT/capita target or mitigate the safety impacts of additional vehicle trips. In addition to addressing system completeness, a large plan amendment that is found have a significant impact on VMT/capita that cannot be mitigated will be required to review the impact of the plan amendment on meeting the travel speed on Throughways threshold and mitigate the impact. Addressing the impact of the plan amendment on throughways shall follow the RTP congestion management process, Sections 3.08.220 and 3.08.510 of the [Regional Transportation Functional Plan](#) and OHP Policy 1G and shall not come at the expense of achieving the VMT/capita target for the region.
5. Small scale, typically quasi-judicial plan amendments will need to demonstrate their proportionate impact on increased VMT/capita in the district and agree to conditions on the plan amendment or future conditions of development approval consistent with the local jurisdiction development code and project funding mechanisms to support reduced VMT/capita such as land use, transportation demand management, and/or off-site mitigations to support VMT reduction or mitigate safety impacts of additional trips.
6. System completeness assessment of comprehensive plan amendments shall identify the needs to meet the planned system for each mode, as established in regional and/or local system plans. For each mode, the completeness impact area will be defined based on routing from the comprehensive plan amendment site for the specified distances in Table

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- 5<sup>22</sup>. Table 5<sup>23</sup> provides guidance for identifying the needs within each modal completeness impact area. For the comprehensive plan amendment, a proportional share of additional projects in the unconstrained transportation system plan, not included financially constrained transportation system plan, will be established based on additional daily trips for the plan amendment for both multi-modal trips as well as the vehicular trips for which the increased VMT/capita is being mitigated, as described in Figure 3-9.
7. Comprehensive plan amendments that demonstrate either of the following for analysis segments within the vehicular impact area shall be found to require mitigation, and a proportional share of the identified needs will be established for the comprehensive plan amendment based on additional daily trips:
    - a. Degrades the travel speed of an existing or planned throughway such that it would not meet the performance target identified Table 3-5; or
    - b. Degrades the travel speed of an existing or planned throughway that is otherwise projected to not meet the performance standards identified in Table 3-5.
  8. Interchanges within the vehicular impact area shall be assessed for off-ramp queuing to maintain safe, efficient and reliable operation of the mainline for longer trips of regional or statewide purpose through the interchange area under the forecast comprehensive plan amendment.

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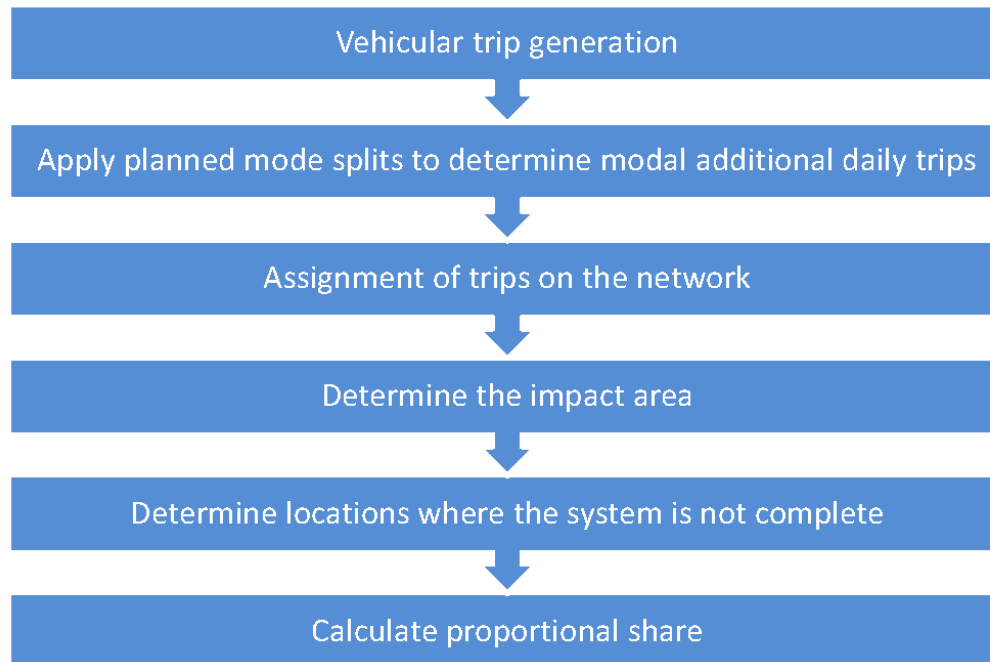
<sup>22</sup> See pg. 19 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

<sup>23</sup> See pg. 19 of the Memo “Draft Regional Mobility Policy for the 2023 Regional Transportation Plan (10/28/22)” <https://www.oregonmetro.gov/sites/default/files/2022/12/08/Draft-2023-Regional-mobility-policy-2023-RTP-10-28-2022.pdf> Tables will be added to Appendix V in the final RTP

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**Figure 3-9 Guidance for Assessing Plan Amendment Impacts**

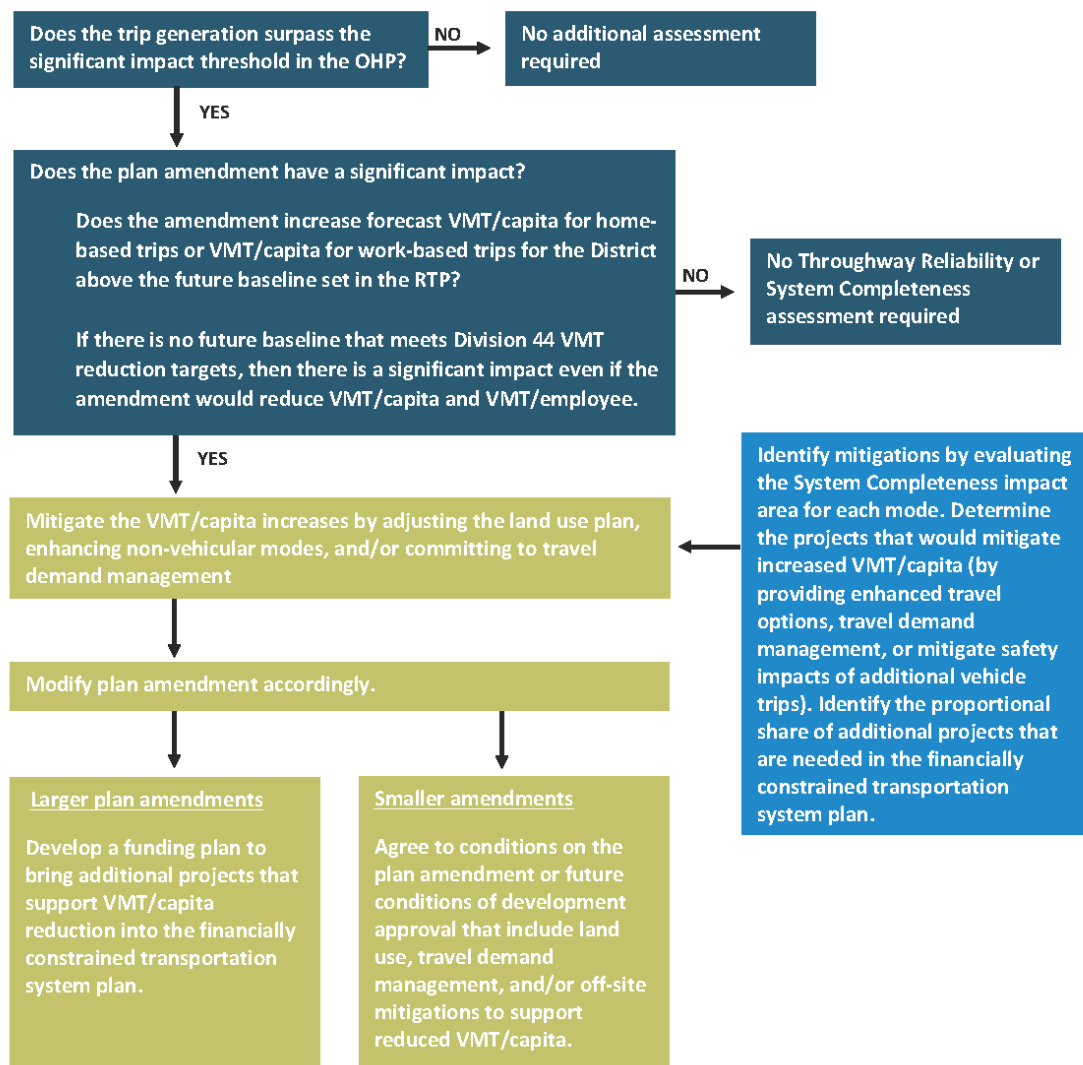


**Figure Note:** Vehicular trip generation with planned mode splits will be used until or unless mode specific trip generation resources become available.

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**Figure 3-10 Plan Amendment Process Utilizing the Mobility Policy Measures**





## 3.3 REGIONAL NETWORK VISIONS, CONCEPTS AND POLICIES

This section describes a network vision, concept and supporting policies for each component of the regional transportation system. The network vision, concepts and policies represent a complete urban transportation system that meets the plan goals and supports local aspirations for growth.



Rendering of a Regional Street showing a four-lane street with a planted median, crosswalks, and buildings. One lane in each direction is a bus only lane. There is a bus and four cars. A painted green bikeway and sidewalk are separated from the roadway by a planted median. People are walking and crossing the street. Source: Metro Designing Livable Streets and Trails Guide

The network visions, concepts and policies provide define a seamless and well-connected regional system of regional throughways and arterial streets, freight networks, transit networks and services and bicycle and pedestrian facilities. The network policies emphasize safety, access, mobility and reliability for people and goods and recognize the community-building and placemaking role of transportation. The network visions, concepts and supporting policies will guide the development, design, and management of different networks of the regional transportation system. The transportation system components are shown in Figure 3-11.

Click on 2023 RTP Network Maps for an online zoomable version of each map. [LINK TO BE ADDED]

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**Figure 3-11 Regional transportation system components**



### 3.3.1 Regional mobility corridor concept

The regional mobility corridor concept envisions regional travel corridors defined by a central throughway and high capacity transit well supported by a network of arterial streets, frequent bus routes, freight/passenger rail and bicycle parkways to provide for regional, statewide and interstate travel. The function of this system of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and connecting the region with the rest of the state and beyond. Mobility corridors also have a significant influence on the development and function of the land uses they serve. Mobility corridors are defined by the major centers of the 2040 Growth Concept. The regional mobility corridor concept calls for the consideration of parallel and interconnected facilities, different

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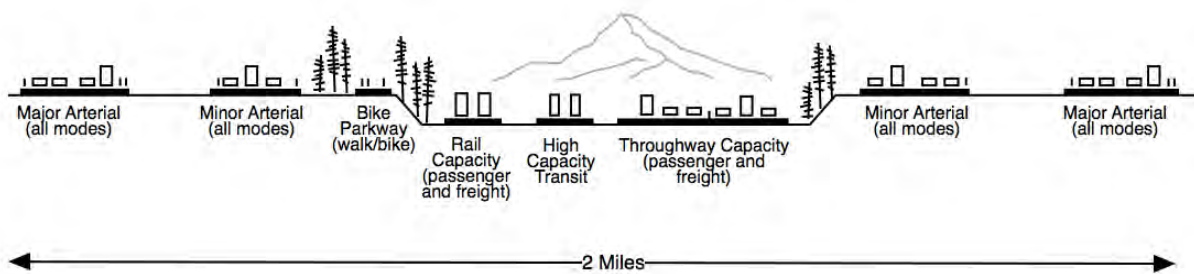
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travel modes, and land use when identifying needs and solutions to improve mobility within a corridor. The concept of a regional mobility corridor is shown in Figure 3-12.

Since the 1980s, regional mobility corridors have had throughway travel supplemented by high capacity transit service that provides an important passenger alternative. Parallel arterial streets, heavy rail, bus service, bicycle parkways and pedestrian/bicycle connections to transit also provide additional capacity in the regional mobility corridors. The full array of regional mobility corridor facilities should be considered in conjunction with the parallel throughways for system evaluation and monitoring, system and demand management and phasing of physical investments in the individual facilities. Bicycle and pedestrian travel and access to transit are also important as we plan and invest in regional throughways and arterial streets. New throughway and arterial facilities, such as freeway interchanges or widened arterial streets, should be designed and constructed in such a manner as to support bicycling, walking and access to transit.

The Mobility Corridor Strategies provided in the Appendix provides a summary of the 24 corridors, describing facilities, functions, land uses, and documenting transportation needs and strategies for addressing them. Updates to these strategies will be informed by the Regional Mobility Policy update described in Chapter 8.

**Figure 3-12 Regional mobility corridor concept**

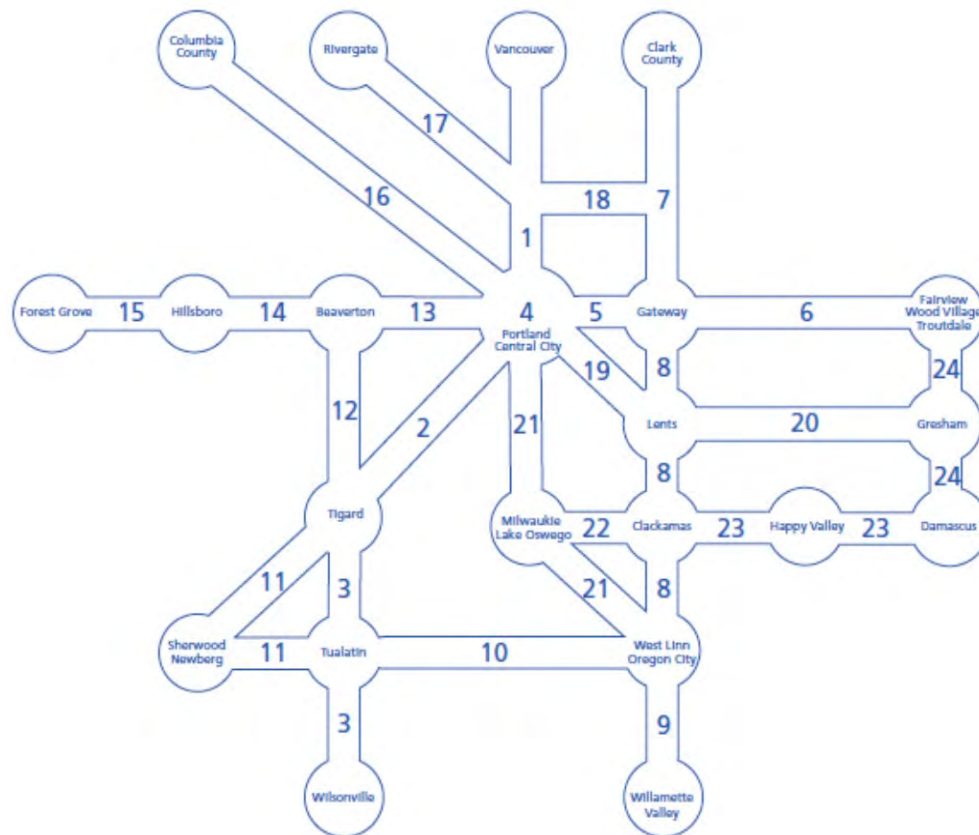


Note: Idealized concept for illustrative purposes showing recommended range of system analysis for the evaluation, monitoring, management and phasing of investments to throughways, arterial streets and transit service in the broader corridor. The illustration is modeled after the Banfield corridor that links the Portland central city to the Gateway regional center.

Figure 3-13 shows the general location of mobility corridors in the region.

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**Figure 3-13 Mobility corridors in the Portland metropolitan region**



### 3.3.2 Regional Design and Placemaking Vision and Policies

Over the next several decades, the challenges faced by communities in greater Portland and the burdens placed upon the transportation network will multiply in number and complexity. Greenhouse gas emissions from motor vehicles and serious traffic crashes are two of the most pressing transportation issues; addressing them will require a transportation system designed to serve multiple travel modes, especially public transit, walking, and bicycling. Additionally, streets and trails must function not only as corridors for moving people, goods and services, but also as stormwater management facilities, community gathering spots and public spaces to enhance community livability.

The regional transportation system design classifications and policies in this section address federal, state and regional transportation planning mandates and support implementation of the 2040 Growth Concept.



**Figure 3-14 Metro’s Designing Livable Streets and Trails Guide<sup>24</sup>**



Metro’s [Designing Livable Streets and Trails Guide](#) provides design guidance depending on the intended functions of the arterial or throughway, the land uses the facility serves and adopted policy. In the design guidance, consideration is given to various arterial designs, designs for freight, trails, pedestrians, bicyclists and transit and the link between street design and stormwater management.<sup>25</sup> Design decisions, especially trade-offs in situations of limited road right-of-way, should use performance-based design and flexibility in design to achieve desired outcomes.

The purpose of the Guide is to support implementation of the 2040 Growth Concept and the Regional Transportation Plan. Along with other local and regional plans and policies, this Guide is a resource for the agencies responsible for designing, constructing, and maintaining the region’s transportation system. Metro intends the design guidance to assist in designing new and reconstructed streets and trails but may also be applied to maintenance projects that preserve and extend the service life of existing streets and structures when minor retrofits are needed.

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<sup>24</sup> Metro’s Designing Livable Streets and Trails Guide complements existing national, state and local requirements and guidelines, and its recommendations are allowable under national guidance, including guidelines developed by the American Association of State Highway and Transportation Officials, the Federal Highway Administration and the National Association of City Transportation Officials. The Designing Livable Streets and Trails Guide has been developed based on current design guidance, case studies, best practices for urban environments, research and evaluation of existing designs, and professional review and input. It integrates design guidance for regional streets, regional trails, stormwater management and Greenstreet treatments into one guide to encourage a holistic and comprehensive approach to designing a complete transportation system.

<sup>25</sup> Find regional design guidelines and other resources here: <https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails>

## 3.3.1 Design and complete streets policies

<b>Policy 1</b>	<b>Design the transportation system to implement the planned land uses and regional urban form envisioned in the 2040 Growth Concept.</b>
<b>Policy 2</b>	<b>Design a well-connected transportation system that serves all modes of travel.</b>
<b>Policy 3</b>	<b>Use regional street design classifications to guide development of streets that balance the needs of all users and functions of streets according to planned land use and desired outcomes.</b>
<b>Policy 4</b>	<b>Use transportation network and street design to help achieve regional goals and desired outcomes, including environmental and human health, climate action and resilience, a safe system, equitable transportation, mobility options, vibrant communities, and a thriving economy.</b>
<b>Policy 5</b>	<b>Avoid, minimize, and mitigate environmental impacts of the transportation system using Green Infrastructure design, street trees, wildlife habitat or waterway crossing improvements and other approaches.</b>
<b>Policy 6</b>	<b>Use a performance-based approach and decision-making framework to plan and design transportation projects and networks.</b>

### **Design Policy 1. Design the transportation system to implement the planned land uses and regional urban form envisioned in the 2040 Growth Concept.**

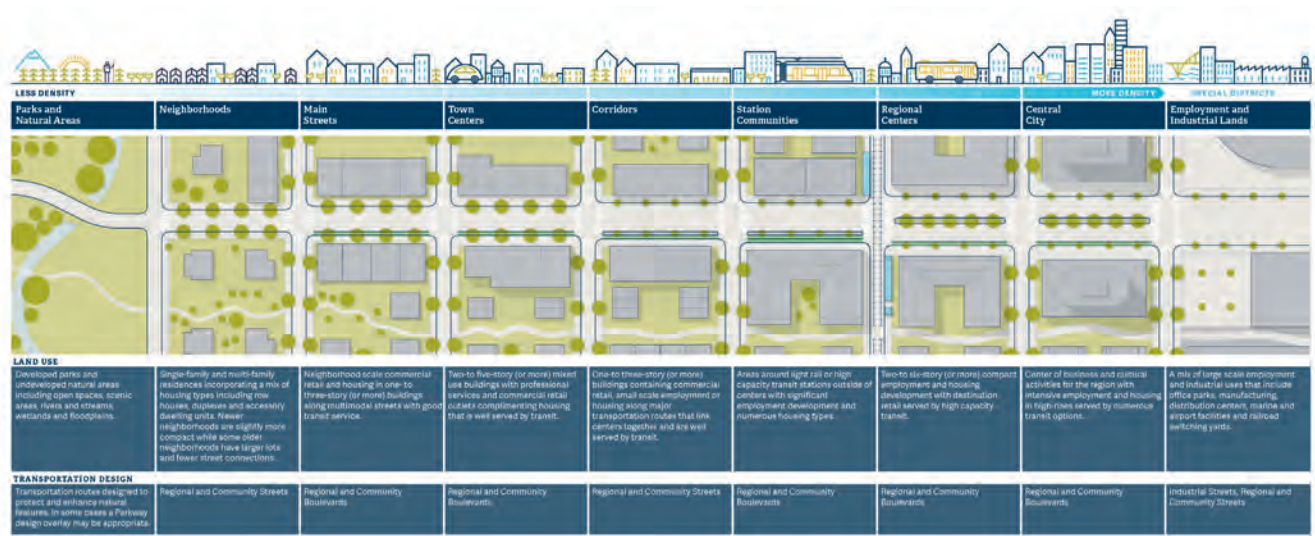
The 2040 Growth Concept directs most new development to mixed-use centers, corridors and main streets. Realization of the Concept relies on a balanced transportation system that adequately serves planned uses while reducing vehicle miles traveled. Regional street design classifications support building and operating streets that are sensitive to the adjacent land use context, the roadway's functional classifications and the different needs and abilities of people traveling.

Figure 3-15 illustrates how the design of transportation facilities should change in response to planned and surrounding land use.

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**Figure 3-15 Land use and transportation transect**

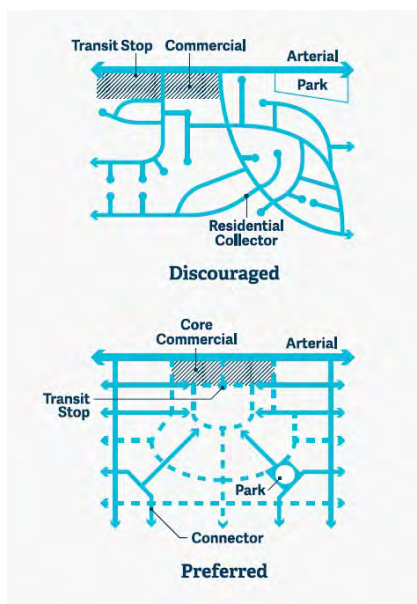


Graphic image of an illustrative road running through different types of land use. To view the full size illustration see the Designing Livable Streets and Trails at <https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails>

## Design Policy 2. Design a well-connected transportation system that serves all modes of travel.

Consistent with the mobility corridor concept, a well-connected network of complete streets provides multiple and direct routes between destinations. Figure 3-16 illustrates a well-connected street network.

**Figure 3-16 Street connectivity**





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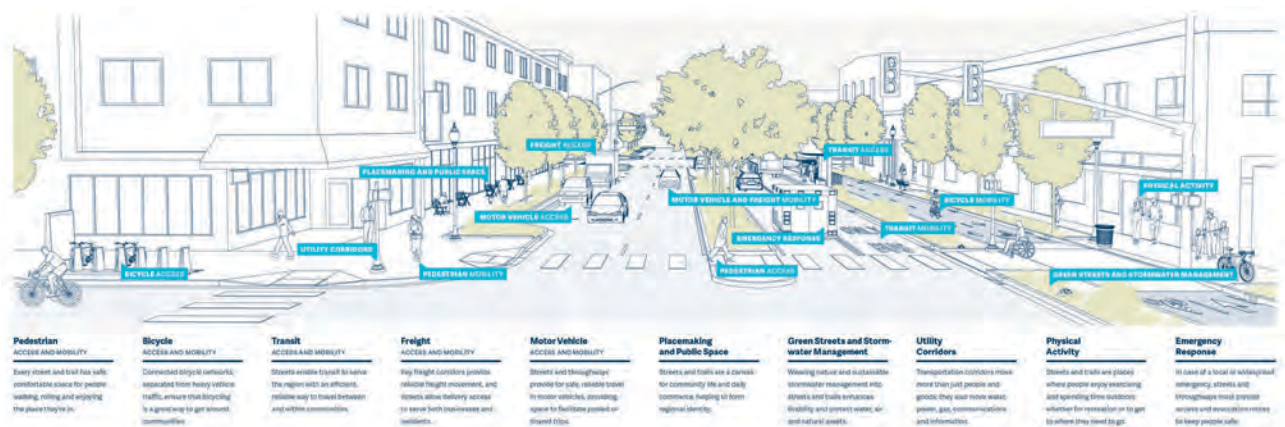
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Because walking and biking are easier on a connected street network, a connected street network supports the 20-minute neighborhood concept, where all daily necessities are within a 20-minute walk or bike ride. Even where less-connected street networks have been established by jurisdictions, trails, paths, bridges, and midblock street crossings increase connectivity for people walking and bicycling. Emergency response also benefits from a well-connected street system.

Section 3.3.3.1 of the regional motor vehicle network policies provides regional street spacing standards. Environmental factors may impact street connectivity in some locations. Outside of centers, agencies should design street networks around, rather than through, environmentally sensitive lands and should mitigate impacts when they cannot be avoided. Street networks should allow for the preservation of continuous natural areas and parks.

Complete streets are transportation facilities that agencies plan, design, operate, and maintain to enable safe, convenient, and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets serve many functions and allow for safe travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods. Figure 3-17 illustrates the multiple functions that streets serve.

**Figure 3-17 Livable streets and trails functions**



Graphic image of an illustrative street with call out boxes describing the different functions of the street. To view the full size illustration see the Designing Livable Streets and Trails at <https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails>

**Design Policy 3. Use regional street design classifications to guide development of streets that balance the needs of all users and functions of streets according to planned land use and desired outcomes.**

Regional street design classifications provide an overall approach to design regional roadways based on its functional classification, the planned land use context, and achieving desired outcomes and community needs.

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Table 3-6 summarizes typical design elements, including the planned number of motor vehicle travel lanes and target and design speed, for different travel modes for each of the regional street design classifications and illustrates how street design corresponds to 2040 land use design types and motor vehicle functional classifications.

**Table 3-6 Planned regional transportation system and typical design components of regional design classifications**

2040 Land Use Design Type	Design Classification	Street Connections	Prioritized Travel Modes	Motor vehicle Functional Classification	Target and Design Speed	Number of Lanes	Medians and Turn Lanes	Flex Zone Uses	Pedestrian Design	Bikeway Design	Transit Design	Freight Design	Green Streets/ Stormwater Management
Any	Freeways	Limited Grade-separated	Motor vehicle, freight, transit	Throughway	45 to 60 mph	Up to six with auxiliary lanes in some places	Center barrier, no turn lanes	Shoulder for emergency use, bus on shoulder or carpool	Parallel facility, crossings on over- or underpasses, crossings every 200 to 1,200 ft.	Multilane path, crossings on over- or underpasses	Bus on shoulder, express bus, light rail	Enhanced mobility	Vegetated landscaping and green streets treatments to manage stormwater
Any	Highways	Limited Some grade-separated, signalized	Motor vehicle, freight, transit	Throughway	35 to 50 mph	Up to six with auxiliary lanes in some places	Median, limited turn lanes in some locations	Shoulder for safety emergency use, bus on shoulder or carpool	Parallel facility or buffered sidewalks, crossings on over- or underpasses, crossings every 200 to 1,200 ft.	Multilane path or separated bikeway, crossings on over- or underpasses	Bus on shoulder, express bus, light rail	Enhanced mobility	Vegetated landscaping and green streets treatments to manage stormwater
Centers, station communities and some main streets	Regional and community boulevards	Many access management emphasized	Federated, transit, bicycle access for all modes	Major arterial (regional boulevard) Minor arterial (community boulevard)	20 to 25 mph	Two to four lanes	Median desired, some turn lanes, minimize additional crossing width at intersections	None, or separated bikeway, enhanced bus, parking, green streets	Buffered sidewalks, enhanced crossings and access to transit; crossings every 200 to 500 ft. (1 to 2 blocks)	Separated bikeway, enhanced crossings	Accessible stations, priority bus treatments as appropriate	Access loading and unloading	Vegetated landscaping and green streets treatments to manage stormwater
Corridors, neighborhoods, some main streets and employment and industrial areas	Regional and community streets	Some to many access management as possible	Balanced and modal network priorities	Major arterial (regional street) Minor arterial (community street)	20 to 30 mph	Two to four lanes	Median desired, some turn lanes, minimize additional crossing width at intersections	None, or separated bikeway, enhanced bus, parking, green streets	Buffered sidewalks, enhanced crossings and access to transit; crossings every 200 to 500 ft. (1 to 2 blocks)	Separated bikeway, enhanced crossings	Accessible stations, priority bus treatments as appropriate	Mobility on freight corridors; access loading and unloading	Vegetated landscaping and green streets treatments to manage stormwater
Employment and industrial areas	Industrial streets	Some access management emphasized	Freight, motor vehicle, transit	Major or minor arterial	30 to 40 mph	Two to four lanes	Median in some instances, some turn lanes	None, separated bikeway or multilane path, enhanced bus, parking, green streets	Sidewalk with buffer or multilane path; enhanced crossings and access to transit; crossings every 200 to 500 ft. (1 to 2 blocks)	Separated bikeway or multilane path, enhanced crossings	Accessible stations, priority bus treatments as appropriate	Priority freight treatments, wider lanes and intersections	Vegetated landscaping and green streets treatments to manage stormwater

To view the full size table see the Designing Livable Streets and Trails at <https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails>

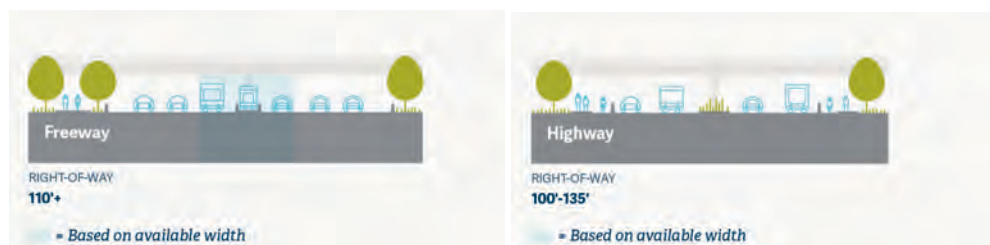
Regional design classifications apply to local transportation system plans throughout greater Portland. Cities or counties may adopt the classifications into their plans or provide a cross-reference if they use different terms. Regional street design classifications are assigned to all throughways and major and minor arterials in the regional transportation system as shown in Table 3-6 and Figure 3-20.

Regional street design concepts promote community livability and reliable travel by balancing all modes of travel and addressing the function and character of adjacent land uses. Linking land use and the physical design of transportation facilities is crucial to achieving state goals to limit reliance on any one mode of travel and to encourage increased walking, bicycling, carpooling, vanpooling and use of transit.

## Freeways and highways

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Freeways and highways connect major activity centers, including the central city, regional centers, industrial and employment areas, and intermodal facilities such as the Port of Portland. Freeways and highways provide intercity, interregional, and interstate connections. This design classification prioritizes long-distance and higher speed freight, motor vehicle and transit mobility. Freeways are grade separated; highways have a mix of grade-separated and at grade intersections. Freeways and highways cross all types of land uses, and buildings are typically not oriented to these facilities.

## Regional and community boulevards

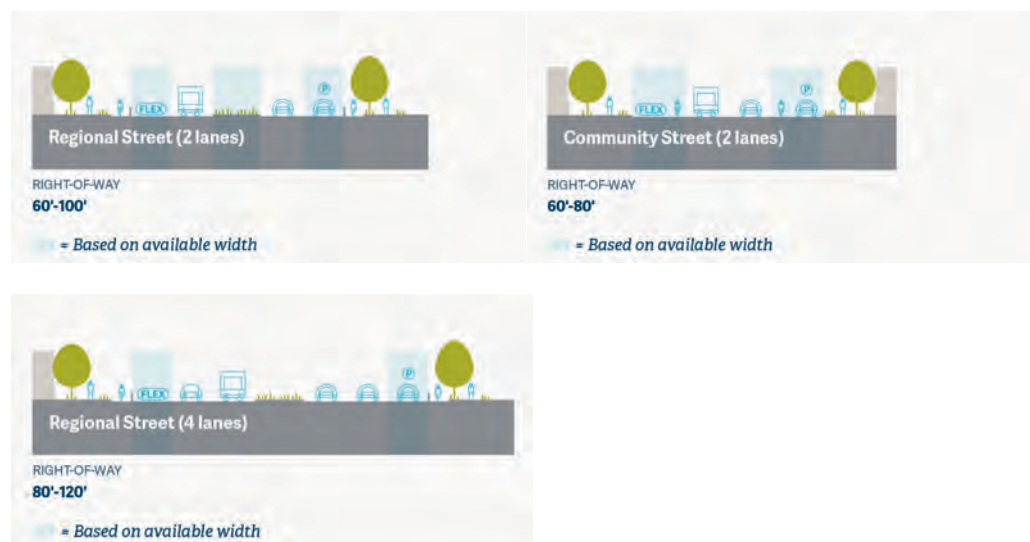


Regional and community boulevards serve the multimodal travel needs of the region's most intensely developed and developing activity centers, including the central city, regional centers, station communities, town centers and some main streets. Adjacent land uses and buildings should orient directly to the boulevard with ground-floor commercial activity, contributing to a pedestrian and bicycle-friendly environment. Buildings typically have designs, such as a storefront or arcade, which provide transition space from the street and support pedestrian access. Agencies design boulevards to prioritize pedestrian, bicycle, and transit travel.

## Regional and community streets

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Regional and community streets balance the multimodal travel and access needs of corridors, neighborhoods, and some main streets, along with employment and industrial areas. Regional and community streets can be located within residential neighborhoods as well as more densely developed corridors and employment centers. Development can be set back from the street. Regional and community streets can also serve as main streets with buildings oriented toward them at major intersections and transit stops.

Figure 3-20 shows design classifications for arterials and throughways.

**Design Policy 4. Use transportation network and street design to help achieve regional goals and desired outcomes, including environmental and human health, climate action and resilience, a safe system, equitable transportation, mobility options, vibrant communities, and a thriving economy.**

Transportation agencies can design facilities to achieve desired outcomes and support the health, safety, and economic and environmental sustainability of communities in the region. Practitioners refer to this approach as performance-based design. Table 3-7 illustrates how design characteristics of urban arterials can either promote or hinder desired outcomes.

**Table 3-7 Design characteristics of healthy urban arterials<sup>26</sup>**

Health Promoting Design	Unhealthy Design
Neighborhood asset for access and commerce	Physical barrier that divides neighborhoods
Supports neighborhood social and cultural connections	Exhibits neglect and physical decay
Safe travel speeds for all users	Traffic speeds too high to be safe for all users
Comfortable for all users to cross	Difficult to cross because of design and traffic
Link within pedestrian and bicycle networks	Barrier within pedestrian and bicycle networks

<sup>26</sup> Understanding and Improving Arterial Roads to Support Public Health and Transportation Goals, American Journal of Public Health, August 2017.



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Designed to mitigate noise	Source of noise
Designed to mitigate air pollution	Near-roadway air pollution
Accessible to users of all abilities	Inaccessible to users with disabilities
Supports green infrastructure systems	Impervious paving materials, lack of shade
Contributes to revitalization without displacement	Location of residential and business gentrification

## Design principles to achieve desired outcomes

- **Design with a safe system approach:** Use the safe systems approach in street design, managing speeds for safety, lowering speeds in areas where people are walking, bicycling, and accessing transit and separating users. Separation means creating physical barriers between people moving at different speeds. As speed differentials increase, so should the level of separation. Medians, access management treatments, protected bicycle lanes and other street design elements can minimize crashes.
- **Design for safe speeds:** Design streets to encourage safe speeds for all users – the safe target speed. Evaluating minimum sight distance, horizontal curvature, vertical curves and other design factors is based on the design speed. To achieve a safe target speed, the design speed should align with the target speed. Ultimately, posted speed should also align. Transportation agencies can achieve a desired target speed by street design elements. Wider, more open roadways encourage higher operating speeds. Conversely, a roadside with street-facing buildings, wide, buffered sidewalks, separated bikeways, on-street parking and street trees can lead to lower speeds.
- **Design for all users:** Design for people of all ages and abilities, as well as the design vehicle for a specific facility. Before developing a design, practitioners should consider each type of user and how they will navigate the street. Agencies should design streets keeping the green transportation hierarchy in mind. The hierarchy prioritizes functions for a typical street in this order: walking, bicycling, transit, freight, carshare/ taxi/commercial transport, and private automobiles. The selection of a design vehicle is an essential part of developing street and intersection designs. The design vehicle is the largest vehicle expected to use the street or intersection regularly. Because the selection of a design vehicle influences street dimensions such as turning radii, which in turn can impact safety and operating speeds, practitioners should choose the smallest possible design vehicle. Occasional larger vehicles can still be accommodated in the design by encroaching on opposing lanes or using multiple point turns. Likewise, agencies can use design features such as speed cushions or truck aprons to accommodate emergency vehicles and large trucks while providing speed management treatments that reduce overall traffic speeds.
- **Design for personal security and equity:** Use design to create streets where people of all races, genders, ages and abilities feel safe from crime and harassment. Because street design has been used to oppress and criminalize Black communities, communities must be engaged in the design process. Streets should be intuitive and easy to use regardless of race, income, age, ability, cultural background, or language.

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- **Design to protect the environment:** Use green infrastructure design to avoid, minimize and mitigate the harmful environmental impacts of transportation facilities and achieve a healthier, more resilient landscape.
- **Design for the future:** Factor in rapid technological change and innovation. Agencies should consider allocating street space to the functions that matter most, and not necessarily to the newest technology. Street designs should also be flexible enough to support piloting new innovations.
- **Design with fiscal stewardship in mind:** Use innovative and creative design approaches to reduce costs and conserve resources for construction and life cycle costs, including operation, maintenance, and replacement costs. Include external costs, such as climate change impacts, to capture the full cost of specific design treatments.

## **Design Policy 5. Avoid, minimize, and mitigate environmental impacts of the transportation system using Green Infrastructure design, street trees, wildlife habitat or waterway crossing improvements and other approaches.**

The effect that transportation infrastructure has on the health of the natural environment, particularly urban waterways, and habitat connectivity, is well documented. Transportation infrastructure has the potential to degrade water quality, create barriers to corridors for animal travel and increase air, noise and light pollution. Projects also have the potential to negatively impact cultural and historical resources if not planned and implemented carefully.

Projects should be designed to avoid or minimize impact or if avoidance is not possible, to maximize enhancement, protection, and improvement of natural, community and cultural resources through the application of Green Infrastructure design treatments.<sup>27</sup> The avoid, minimize, or mitigate approach is known as sequencing and involves understanding the affected environment and assessing transportation effects throughout the project development process.

The sequencing for projects follows this order:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action or project.

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<sup>27</sup> Refer to Appendix F for examples of mitigation strategies for different environmental resource areas. For example, street trees, vegetated swales and other green street treatments can intercept rainwater and convey stormwater in the public right-of-way, following best practices to minimize light pollution, installing appropriate wildlife crossings, screening sensitive habitats from noise and light, enhancing vegetation associated with wetlands and waterways for wildlife, limiting fill within wetlands, constructing bridges or open bottom culverts, creating new wetland areas, and restoring or rehabilitating damaged wetlands and waterways, using pervious materials and preserving, maintain or enhancing tree canopy. Refer to Metro's handbooks *Green Streets: Innovative Solutions for Stormwater and Stream Crossings* and *Wildlife Crossings: Providing safe passage for urban wildlife* for more information on these designs.

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- Compensating for the impact by replacing or providing substitute resources or environments.

All streets and trails must manage stormwater, treating runoff to reduce pollution and infiltrate water into the ground, limiting how much stormwater and pollutants eventually make their way into vulnerable natural waterways. By incorporating green infrastructure treatments such as vegetated medians, planters, curb extensions and street trees, streets and trails can function as urban green corridors that not only manage stormwater but mitigate the harmful impacts of transportation on air, water, and wildlife habitat and connectivity. This function of streets and trails is imperative to human and environmental health.

One of the distinct advantages of having streets and trails function as green streets over “grey infrastructure” for stormwater management is their superior treatment of pollutants running off from roadways. While grey infrastructure options may have smaller footprints, they are typically more expensive to maintain and fail if not maintained. In addition, separate grey infrastructure elements are almost always needed to manage runoff quality and quantity.

Street trees and other green streets infrastructure provide a wide array of benefits in addition to stormwater management, offering wildlife habitat, improving air quality, providing shade and reducing the urban heat island affect, beautifying the surroundings, promoting human well-being and calming traffic.

On streets with high levels of walking and bicycling, street trees provide buffers from traffic and air pollution. Green streets can be further supported by using dark skies approaches to minimize the impact of street lighting on wildlife, human health, and the natural environment. Designing streets and trails for stormwater management can also incorporate and enhance other functions, such as placemaking. Agencies can use green street elements to create a stronger sense of place and make walking and biking more enjoyable.

Transportation agencies typically consider the following types of environmental, tribal, cultural and historical data during development of projects:

- High value fish and wildlife habitat areas and biodiversity corridors
- Threatened and endangered species, including vertebrate species and plants
- Vegetation and wildlife
- Fisheries
- Wetlands and waterways
- Flood hazard areas/floodplains
- Historic resources
- Tribal lands and legacies
- Air quality and greenhouse gas emissions



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**Figure 3-18 Examples of how green infrastructure can help achieve regional goals**

RTP Goal	Examples of how Green Infrastructure can help achieve regional goals
<b>Thriving Economy</b>	<p>Green infrastructure can promote economic growth as a valued public amenity, create construction and maintenance jobs, add to property value, support walkable and bikeable communities, businesses, and commercial districts, and lower the costs associated with climate change.</p> <p>Protecting the environment and natural resources today can save money for the future and reduce infrastructure construction and maintenance costs.</p>
<b>Mobility Options</b>	<p>Green streets can promote active travel and access to transit by providing enjoyable routes that are shaded and buffered from traffic. Green infrastructure treatments, such as access management and medians with bioswales, can be designed to support reliability and efficiency by reducing crashes and conflicting movements.</p>
<b>Safe System</b>	<p>Street trees and other green infrastructure can help calm traffic to desired speeds, provide welcoming places that increase security, and improve resiliency and reduce impacts of major storm events.</p>
<b>Climate Action and Resilience</b>	<p>Trees and green infrastructure can support climate adaptation by cooling streets, parking lots and buildings, better managing stormwater and reducing the urban heat island effect. Trees and vegetation can be managed to sequester greenhouse gases to help mitigate climate change.</p> <p>Green infrastructure can enhance and protect the natural environment by supporting clean air and water, filtering stormwater runoff, reducing erosion, protecting, creating, and connecting habitat for birds, fish, and other wildlife.</p>
<b>Equitable Transportation</b>	<p>Clean air and water and access to nature can be improved and habitat can be preserved and enhanced when green infrastructure is provided in marginalized communities.</p> <p>Green infrastructure can reduce water, air, noise, and light pollution, encourage active lifestyles and link people to trails, parks and nature that enhance human health and well-being.</p> <p>All stakeholders can be represented, including those that cannot speak for themselves – wildlife and the natural environment. Performance-based planning includes considering environmental effects throughout the planning process.</p>

## **Design Policy 6. Use a performance-based approach and decision-making framework to plan and design transportation projects and networks.**

As the demands on the transportation system increase, so does the need for flexibility in how roadways are designed. Performance-based planning and design expands design parameters to be more flexible. Performance-based planning and design incorporates many performance measures to assess how well a project will achieve desired outcomes. Measures and related goals may be

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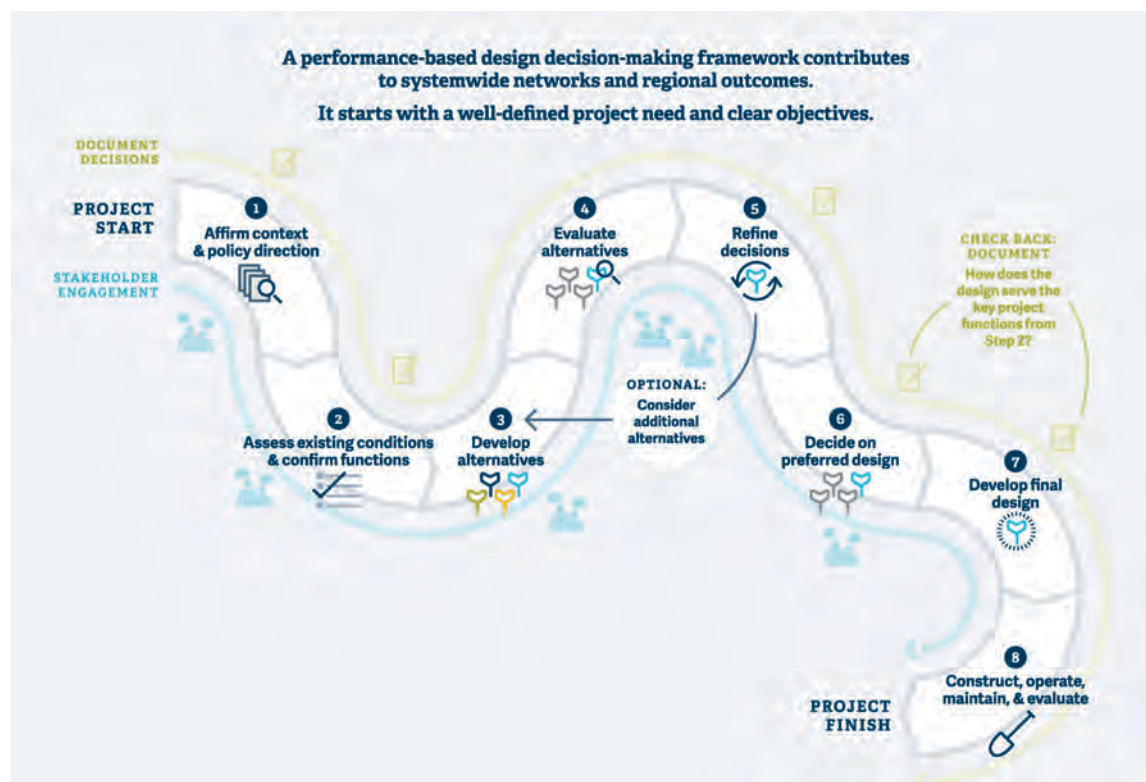
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weighted to ensure that a project supports priority outcomes, for example reducing serious traffic crashes, identified in adopted plans and policies and through community engagement.

A performance-based design decision-making framework helps practitioners and stakeholders track decisions throughout the life of a project, as illustrated in Figure 3-19. This documentation process provides flexibility to choose the best design for a given context, while providing an effective way to manage risk when designing new or reconstructed roadways. The framework includes documenting the design considerations, and alternatives that were evaluated, based on clearly outlined project goals and meaningful stakeholder engagement.

Performance-based planning and design starts with a well-defined project need, accompanied by goals and related objectives. It then works to align design decisions with the project objectives and desired systemwide outcomes. This approach relies on developing and comparing design alternatives, using performance measures and analysis to assess progress toward achieving project objectives, and applying engineering judgment, informed by a multidisciplinary team, to reach a preferred design. Refer to Chapter 6 of the Designing Livable Streets and Trails Guide for a step-by-step guide and tools to address trade-offs and constraints.

**Figure 3-19 The performance-based design decision-making framework**



**Figure 3-20 Regional design classifications map [To be added]**

## 3.3.3 Regional motor vehicle network vision and policies

While the greater Portland region has changed dramatically over the past century, the shape of the major road network has not. Most regional streets were once farm-to-market roads, established along Donation Land Claim boundaries at half-mile or one-mile spacing. The region's throughway system evolved from the mid-1930s, when the first highway was built from Portland to Milwaukie, to the completion of I-205 in the early 1980s. Most of the throughway system was built along the same Donation Land Claim grid that shapes the regional street network, with most throughways following older farm-to-market routes or replacing major streets.

This inherited network design has proven to be an adequate match for accommodating the changing travel demands of our growing region. The Regional Motor Vehicle Network Concept applies this proven network design to developing and undeveloped areas in the region, while seeking opportunities to bring existing urban areas closer to this ideal when possible.

### 3.3.3.1 Regional motor vehicle network concept

The Regional Motor Vehicle Network Concept shown in Figure 3-21 illustrates policies for developing a complete and well-connected motor vehicle network that is safe and reliable, provides adequate capacity and supports all modes of travel.

**Figure 3-21 Regional motor vehicle network concept**

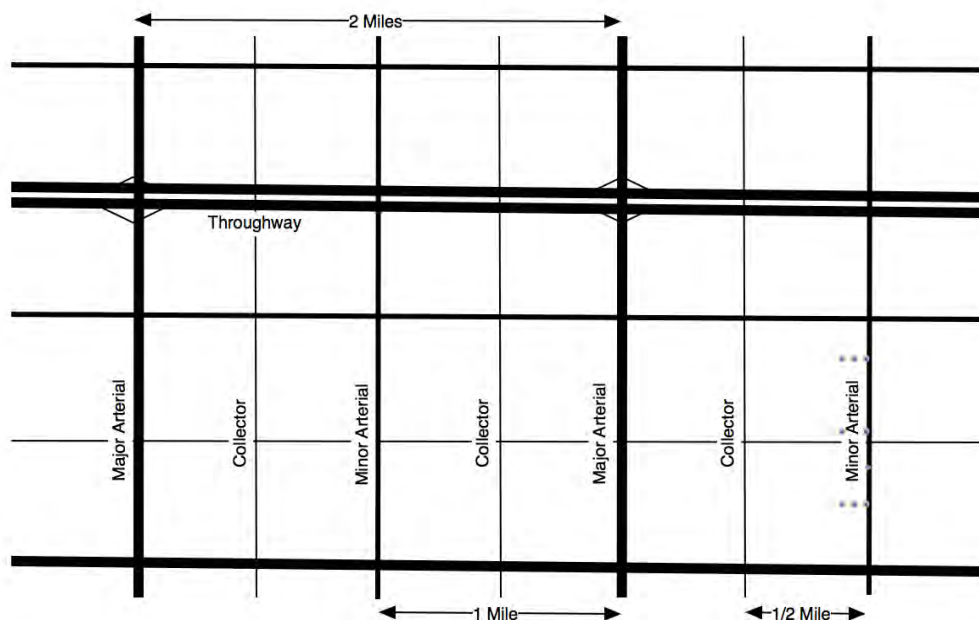


Image shows a conceptual network of streets, illustrating multimodal transportation corridors and showing ideal spacing of arterial streets. Most of the region's travel occurs off the throughway network, on a network of multimodal arterial streets that are further complemented by a well-connected network collector and local streets. The RTP policy places an emphasis on ensuring that arterial networks are fully developed as the region grows, providing both local circulation and preserving throughway capacity for regional and statewide travel.

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## 3.3.3.2 Regional motor vehicle network policies

The planned motor vehicle network is defined by the roadway capacity defined in Table 3-8 (also see Table 3-6 in Section 3.3.1). The planned motor-vehicle network, by functional classification, is shown in Figure 3-23. Adding motor vehicle capacity beyond the planned system is subject to the regional Congestion Management Process defined in Section 3.3.4.

**Table 3-8 Planned motor-vehicle network capacity**

Motor Vehicle Functional Classification	Typical Number of Planned Travel Lanes
Throughway	Up to 6 through lanes with auxiliary lanes in some places
Highway	Up to 6 through lanes with auxiliary lanes in some places
Major arterial	Up to 4 through lanes with turn lanes and median
Minor arterial	2 to 4 through lanes with turn lanes and median

The regional motor vehicle concept and policies call for adequately maintaining the motor vehicle network, applying the congestion management process (Section 3.3.4) and regional mobility policy (Section 3.2.6) and data to identify needs and solutions; managing and optimizing throughway capacity to serve regional, statewide and interstate travel; and implementing a well-connected network of local, collector and arterial streets that is tailored to fit local geography, respect existing communities and planned development, and protect the natural environment. Increased network connectivity improves travel reliability and increases travel options.

<b>Policy 1</b>	<b>Preserve and maintain the region’s motor vehicle network in a manner that improves safety, security and resiliency while minimizing life cycle cost and impact on the environment.</b>
<b>Policy 2</b>	<b>Use the Congestion Management Process, Regional Mobility Policy, safety and bike and pedestrian network completion data to identify motor vehicle network needs and solutions.</b>
<b>Policy 3</b>	<b>Actively manage and optimize capacity on the region’s throughway network to maintain mobility and accessibility and improve reliability for longer, regional, statewide, and interstate travel.</b>
<b>Policy 4</b>	<b>Complete the region’s planned throughway network up to six travel lanes (three lanes in each direction) as envisioned in the 2040 Growth Concept.</b>
<b>Policy 5</b>	<b>Prior to adding new throughway capacity beyond the planned system of motor vehicle through lanes, including adding or extending an auxiliary lane of more than one-half mile, demonstrate that system and demand management strategies, including access management, transit and freight priority, pricing, transit service and</b>

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	multimodal connectivity improvements cannot adequately address identified needs consistent with the Congestion Management Process and Regional Mobility Policy.
Policy 6	Prior to adding or extending an auxiliary lane of one-half mile or more, determine whether the new individual auxiliary lane alone or in combination with auxiliary lanes in the same corridor will collectively influence capacity, or alternatively whether each of the auxiliary lanes operate independently and address localized safety issues consistent with the Congestion Management Process and Regional Mobility Policy.
Policy7	Actively manage and optimize arterials according to their planned functions to improve reliability and safety and maintain mobility and accessibility for all modes of travel.
Policy8	Complete a well-connected network of arterial streets ideally spaced at approximately 1-mile apart and planned for up to four travel lanes to maintain transit and freight mobility and accessibility and prioritize safe pedestrian, bicycle and transit access for all ages and abilities using Complete Street design approaches. <sup>28</sup>
Policy 9	Complete a well-connected network of collector and local streets that provide for local circulation and direct vehicle, bicycle and pedestrian access to adjacent land uses and to transit for all ages and abilities.
Policy 10	Prior to adding new arterial street capacity beyond the planned system of motor vehicle through lanes, demonstrate that system and demand management strategies, including access management, transit and freight priority, transit service, and multimodal connectivity improvements cannot adequately address identified needs consistent with the Congestion Management Process and Regional Mobility Policy.

## Motor Vehicle Network connectivity

A well-connected network of complete streets is critical to achieving the 2040 Growth Concept vision. In general, the roadway network should be designed to provide for trips through or across the region on throughways, shorter trips through portions of the region on arterial streets and the shortest trips on collector and local streets.

This approach results in a **street hierarchy** of:

- throughways (for example, limited-access facilities such as I-84, US 26, I-5, I-205 and I-405)

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<sup>28</sup> The number of through lanes may vary based on right-of-way constraints or other factors. Some places in the region may require additional lanes due to a lack of network connectivity. Major and minor arterial streets can either be 2 or 4 lanes with turn lanes as appropriate.

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- arterial streets (for example, Cornell Road in Washington County, 82<sup>nd</sup> Avenue in the City of Portland and Sunnyside Road in Clackamas County)
- collector streets
- local streets

The traditional street classifications for throughways, arterial streets and other streets are a good starting point for distributing traffic in communities to avoid bottlenecks on overburdened routes or avoid the need to build overly wide streets as a community grows.

Throughways serve as longer-distance mobility routes, with limited access, and an emphasis on connecting major destinations. Arterial streets provide both mobility, moving traffic, goods, and people within the region, and access to property along the street. .

Building a regional motor vehicle network to accommodate all motor vehicle traffic during peak travel periods is not feasible or practical nor would it be desirable considering the environmental, climate, and community impacts.

By developing a well-connected network, the region can spread traffic across the entire network, reducing the need to overburden a few facilities. This will help reduce bottlenecks and congestion hotspots, decreasing the need to widen roads and intersections beyond their typical design. Connectivity also supports transit, biking and walking by making trip distances shorter and more direct and convenient. Improved travel reliability is a key overall outcome of all connectivity-oriented strategies. Refer to Section 3.3.2 for street design policies and principles.

## **Typical spacing and planned capacity for arterial streets**

The regional motor vehicle network concept calls for one-mile spacing of major arterial streets, with minor arterial streets or collector streets at half-mile spacing, recognizing that existing development, streams and other natural features may interfere with this spacing. Major and minor arterial streets can be either 2 or 4 lanes with turn lanes as appropriate. Streets with 4 or more lanes should include medians, where possible, with appropriate median openings for turning movements and turn lanes. Access management strategies should be used on arterial streets and all streets with 4 or more lanes.

Shown in Figure 3-21, the illustrative arterial street network is complemented by a well-connected network of collector streets. This network of arterial and collector streets is multi-modal in design, serving automobiles, motorcycles, trucks, transit, bicycles and pedestrians. The regional arterial street design with a median reflects an accepted design that can support safe travel by all modes, accommodating urban levels of traffic, while also providing for bicycle and pedestrian travel and safe crossings at major intersections.

Traffic speeds, access and level of street connectivity vary depending on the function of the street. The design of transportation facilities should consider the facility's traffic function, all modes of travel, and community development goals. As identified in the Regional Active Transportation



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Plan and Metro's livable street design guidelines, traffic speeds, traffic volumes and the volume of heavy trucks should be considered in the design of pedestrian and bicycle facilities on streets on the regional network.

Research and experience have shown that there are optimal street designs for various types of roadways. Street design, combined with connectivity help reduce congested hot spots and improve reliability. Local streets and collectors are planned to consist of 2-lanes with turn lanes where needed, major arterials are planned to consist of up to 4-lanes with medians and with turn lanes and access management strategies. Therefore, before adding additional through lanes beyond the planned system, plans and studies must demonstrate that the additional lanes beyond the planned system do not compromise the function of the roadway for all modes and that the planned system of through lanes, transit service, bike, pedestrian and other parallel arterial, operational, system and demand management solutions do not adequately address transportation needs first, prior to considering widening arterial beyond the planned system to address identified needs.

## Throughways and auxiliary lanes

Throughways generally span several jurisdictions and often are of statewide importance linking the greater Portland area with neighboring cities, other parts of the state, other states, and Canada. Throughways are planned to consist of six through lanes (three lanes in each direction) with grade-separated interchanges or intersections, and serve as the workhorse for regional, statewide, and interstate travel. Additional through travel lanes may be needed in some places based on the importance of a facility to regional and state economic performance, excessive demand and limitations or constraints that prevent creation of a well-connected street network due to topography, existing neighborhoods, or natural resource areas.

Throughways carry between 50,000 to 100,000 vehicles per day, providing higher-speed travel for longer motor vehicle trips and serving as primary freight routes, with an emphasis on mobility. Throughways help serve the need to move both freight trucks and autos through the region. Throughways connect major activity centers within the region, including the central city, regional centers, industrial areas and intermodal facilities.

The Throughway functional classification generally corresponds to the Expressways functional classification in the Oregon Highway Plan. There are two types of Throughway designs as described in Table 3-8. Freeways, which are limited-access and completely grade separated interchanges and Highways, which include a mix of separate and at-grade access points. Throughway interchanges that are designated as Freeways in the OHP should be spaced no less than one mile apart in urban areas.<sup>29</sup>

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<sup>29</sup> One mile is the minimum interchange spacing distance identified for Freeways in urban areas in Oregon. See <https://secure.sos.state.or.us/oard/viewAttachment.action?ruleVrsnRsn=183660> for more information.



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An auxiliary lane is the portion of the roadway adjoining the through lanes for speed change, turning, weaving, truck climbing, maneuvering of entering and leaving traffic, and other purposes supplementary to through-traffic. An auxiliary lane provides a direct connection from one interchange ramp to the next. The lane separates slower traffic movements from the mainline, helping smooth the flow of traffic and reduce the potential for crashes and is not intended to function as a general purpose travel lane. Auxiliary lanes add additional motor vehicle capacity.

## **Analysis of throughway and auxiliary lanes**

Prior to adding new throughway capacity beyond the planned system of motor vehicle through lanes, or adding or extending an auxiliary lane of more than one-half mile in length, or re-striping an auxiliary lane to serve as a general purpose through lane, transportation agencies must demonstrate that system and demand management strategies, including access management, transit and freight priority, pricing, transit service, and multimodal connectivity improvements cannot adequately address identified needs consistent with the Congestion Management Process and Regional Mobility Policy.

When a series of auxiliary lanes are added in the same corridor or one or more existing auxiliary lanes are extended through one or more interchanges, the auxiliary lanes may begin to function more like a general purpose travel lane. Therefore, prior to adding or extending an auxiliary lane of more than one-half mile, transportation agencies must whether the new individual auxiliary lane alone or in combination with auxiliary lanes in the same corridor will collectively influence capacity and measurably increase vehicle miles traveled, or alternatively whether each of the auxiliary lanes are operate independently and only address localized safety issues. Chapter 8 defines the parameters for future corridor refinement planning work specific to each regional mobility corridor, consistent with the Congestion Management Process and Regional Mobility Policy.

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## Arterial streets

Arterial streets are intended to provide general mobility for travel within the region and provide important connections to the throughway network. Arterial streets connect major commercial, residential, industrial and institutional centers with each other and link these areas to the throughway network. Arterial streets are usually spaced about one mile apart and are designed to accommodate motor vehicle, truck, bicycle, pedestrian and transit travel.

Arterial streets carry between 10,000 and 40,000 vehicles per day. Desired travel speeds vary depending on the surrounding and planned land use. Major arterial streets accommodate longer-distance trips and serve a regional traffic function. Minor arterial streets serve shorter trips that are localized within a community. As a result, major arterial streets usually carry more traffic than minor arterial streets. Research has highlighted the important role of major arterial streets in achieving regional goals for equity, safety, land use/economic development and mobility (especially for transit).<sup>30</sup> Many funding, design and policy challenges to improving them.

Streets designated with an arterial functional classification are shown in Figure 3-23 and include Boulevard and Streets described in Table 3-6.

## Safety on arterial streets

Safety is a primary concern on the regional arterial system, where approximately 60 percent of the region's fatal and severe injury crashes occur. For this reason, much of the focus for achieving the region's Vision Zero target will fall upon improving safety on arterial streets. More attention to designs and operational strategies that have been demonstrated to improve the safety of the arterial system could reduce the number of people killed and injured, using national best practices as a guide. Efforts to substantively improve transportation safety in the region must give arterial roadways high priority, with a focus on the region's high injury corridors, and may include:

- proven designs and strategies such as medians, speed management, access management, improved pedestrian crossings and street lighting, replacing intersections with roundabouts, reducing speeds to levels which are safe for pedestrians, and road diets; and
- enforcement actions targeting high-risk behaviors, such as speeding, aggressive driving, driving under the influence, red-light running, and failure-to-yield at bike and pedestrian crossings; and
- education initiatives intended to promote safer behavior among all users of the transportation system.

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<sup>30</sup> Metro "Safe and healthy urban arterials 2023 RTP policy brief", September 8, 2022

<https://www.oregonmetro.gov/sites/default/files/2022/10/24/Safe%20and%20healthy%20urban%20arterials%20policy%20brief.pdf>

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Meeting regional safety targets requires ongoing, concerted efforts to continue to make the region's arterial roadways (also referred to as urban arterials) substantially safer, especially for pedestrians. Serious injury crash rates are used to prioritize corridor safety efforts.

## **Collector and local street connectivity**

Collector and local streets are general access facilities that provide community and neighborhood circulation. They are not usually part of the regional transportation system except when located within designated 2040 areas or when they are part of the Regional Bicycle Network or Regional Pedestrian Network. Collector and local streets play an important role to the design and optimization of the regional transportation system. When local travel is restricted by a lack of connecting routes, local trips are forced onto the arterial and/or throughway networks, in some cases causing congestion on the regional system.

Local jurisdictions are responsible for defining the network of local and collector streets within the one-mile spacing grid of arterial streets. The [Regional Transportation Functional Plan](#) (RTFP) which implements the Regional Transportation Plan (RTP) and establishes the requirements for Transportation System Plans requires local street spacing of no more than 530 feet in new residential and mixed-use areas, and cul-de-sacs are limited to 200 feet in length to distribute vehicle movements and provide direct bicycle and pedestrian routes.<sup>31</sup> More frequent bike and pedestrian connections are required where collector and local streets cannot be constructed due to existing development or other topographic or environmental constraints.

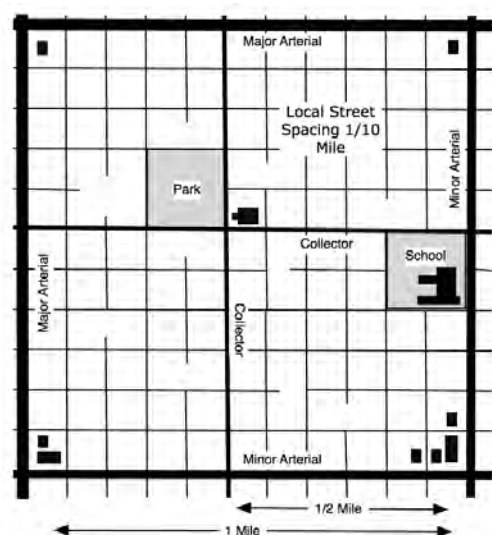
A goal of the requirements is to encourage local traffic to use local and collector streets to minimize local traffic on regional arterial streets. Local street connectivity also benefits emergency response and access to schools and transit stops. Designs should retain the neighborhood character and livability along these local routes.

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<sup>31</sup> Regional Transportation Functional Plan <https://www.oregonmetro.gov/regional-transportation-functional-plan>

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**Figure 3-22 Collector and local street network concept**



*Note: Idealized concept for illustrative purposes showing desired spacing for collectors and local streets in residential and mixed-use areas to serve local circulation, walking/rolling and bicycling. The illustration is modeled after neighborhoods in Southeast Portland.*

Shown in Figure 3-22, the collector and local street network concept provides for bicycle and pedestrian travel and provides for direct access from local street networks to community destinations and transit on regional arterial streets.

## Collector streets

Collector streets provide both access and circulation. As such, collectors tend to carry fewer motor vehicles at lower travel speeds than arterial streets. Collectors may serve as freight access routes, providing connections from industrial or commercial areas to the arterial network. Collector streets serve neighborhood traffic. Collectors provide local circulation alternatives to arterial streets. Collectors provide both circulation and access within residential and commercial areas, helping to disperse traffic that might otherwise use the arterial network for local travel.

Collectors may also serve as local bike, pedestrian and freight access routes, providing connections to the arterial and transit network. Collectors usually carry between 1,000 and 10,000 vehicles per day, with volumes varying by jurisdiction. Collector streets are ideally spaced at half-mile intervals, or midway between arterial streets. Auto speeds and volumes on collector streets are moderate.

## Local streets

Local streets primarily provide direct access to adjacent land uses, and usually between 200-2,000 vehicles per day, with volumes varying by jurisdiction. Vehicle speeds on local streets are relatively low, which makes them good candidates for people biking, walking/rolling traveling to and within centers, to schools and to transit stops and stations.

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While local streets are not intended to serve through traffic, the local street network serves an important role for supporting bicycle and pedestrian travel. As a result, regional local street connectivity policies require communities to develop a connected network of local streets to increase access to designated centers, to schools and to transit stops and stations on the regional transit network by people biking and walking/rolling.

### **3.3.3.3 Regional motor vehicle network classifications and map**

The Regional Motor Vehicle Network is shown in Figure 3-23. Click on 2023 RTP Regional Network Maps for online zoomable version of map. [NOTE: Link to Be ADDED]

### **Figure 3-23 Regional motor vehicle network map**







## 3.3.4 Congestion management process

This section outlines the policy for implementing system and demand management strategies and other strategies prior to building new motor vehicle capacity, consistent with the Federal Congestion Management Process (CMP) and Oregon Transportation Plan (OTP) policies (including Oregon Highway Plan Policy 1G). Section 3.08.220 of the [Regional Transportation Functional Plan](#) (RTFP) implements the Regional Transportation (RTP) and establishes the requirements for Transportation System Plan.<sup>32</sup> In some parts of the greater Portland region the transportation system is generally complete, while in other parts of the region, especially those where new development is planned, significant amounts of infrastructure will be added. In both contexts, management strategies have great value. Where the system is already built out, such strategies may be the only ways to manage congestion and achieve other goals. Where growth is occurring, system and demand management strategies can be integrated before and during development to efficiently balance capacity with demand. New technologies are reducing the cost of demand management and new possibilities are emerging with autonomous and connected vehicles.

One component of the Congestion Management Process (CMP) is a toolbox of congestion reduction and mobility strategies, as shown in Table 3-8. This toolbox identifies a suite of strategies to manage congestion and address mobility needs prior to utilizing traditional roadway widening and other capacity projects. Prior to adding single occupant vehicle (SOV) capacity, agencies and jurisdictions should give consideration to the various strategies identified in this section, consistent with FHWA direction and RTP and OTP policies. Usually, multiple strategies are applicable within a corridor, while other strategies are intended to be applied region wide.

The CMP toolbox strategies were assembled to provide a wide range of strategies that could be used to manage congestion region-wide or within congested mobility corridors. They are arranged so that the strategies are considered in order from first to last. Even with the addition of capacity, many of the strategies can be implemented with the project to ensure the long-term management of a capacity project.

The CMP toolbox of strategies is shown in Table 3-9.

**Table 3-9 Toolbox of strategies to address congestion in the region**

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<sup>32</sup> Regional Transportation Functional Plan <https://www.oregonmetro.gov/regional-transportation-functional-plan>



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<b>1</b>		<b>Community design strategies</b> <ul style="list-style-type: none"><li>• Walkable communities and job centers facilitated by compact land use in combination with walking, biking and transit connections</li><li>• Mixed-used areas and transit-oriented development</li><li>• Parking management and pricing</li></ul>
<b>2</b>		<b>Travel Information and Incentives strategies</b> <ul style="list-style-type: none"><li>• Commuter travel options programs</li><li>• Household individualized marketing programs</li><li>• Car-sharing and eco-driving techniques</li><li>• Safe Routes to School programs</li><li>• Ridesharing (carpool, vanpool) services</li></ul>
<b>3</b>		<b>System management and operations strategies</b> <ul style="list-style-type: none"><li>• Real-time variable message signs and speed limits</li><li>• Signal timing and ramp metering</li><li>• Transit signal priority, bus-only lanes, bus pull-outs</li><li>• Incident response detection and clearance</li><li>• Access management (e.g., turn restrictions, medians)</li></ul>
<b>Emerging</b>		<b>Congestion pricing strategies</b> <ul style="list-style-type: none"><li>• Peak period pricing</li><li>• Managed lanes</li><li>• High occupancy toll (HOT) lanes</li></ul>
<b>4</b>		<b>Active Transportation strategies</b> <ul style="list-style-type: none"><li>• New biking and walking connections to schools, jobs, downtowns and other community places</li><li>• Bicycle infrastructure (e.g., bicycle racks, lockers and other bicycle amenities at transit stations and other destinations)</li><li>• Separated pathways and trails</li></ul>
<b>5</b>		<b>Transit strategies</b> <ul style="list-style-type: none"><li>• High capacity transit</li><li>• Expanded transit coverage</li><li>• Expanded frequency of service</li><li>• Improvements in right-of-way to increase speed and reliability of buses and MAX</li><li>• Community and job connector shuttles</li><li>• Park-and-ride lots in combination with transit service</li></ul>
<b>6</b>		<b>Street and throughway capacity strategies</b> <ul style="list-style-type: none"><li>• Local and arterial street connectivity to spread out travel</li><li>• Addition of turn lanes at intersections, driveway restrictions and other geometric designs such as roundabouts</li><li>• Road widening to add new lane miles of capacity (e.g., adding auxiliary lanes, additional general-purpose lanes); pricing is considered when adding new throughway capacity in the region</li></ul>

The intent of the CMP Toolbox follows FHWA's direction to consider all available solutions before recommending additional roadway capacity in transportation system planning, corridor

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refinement planning and subarea studies. **Appendix L** describes how this information is used in the region's process and RTP updates to identify needs and inform consideration and prioritization of multimodal strategies and investments to address congestion in the region.

## 3.3.5 Regional transit network vision and policies

With continued regional growth, come challenges including more congestion, higher housing prices, and constrained access to employment and daily needs. Increased transit service is a critical part of the overall solution to regional challenges. But the COVID-19 pandemic disrupted both transit use and service in the region. To achieve the regional vision in the 2040 Growth Concept and Climate Smart Strategy, transportation agencies and partners must meet the needs of people using transit today, while continuing to realize the Regional Transit Vision<sup>33</sup> to increase transit use and make transit more convenient, accessible, affordable, and frequent for everyone, especially those who rely on it.

**Make transit more frequent** by aligning frequency and type of transit service to meet existing and projected demand in support of local and regional land use and transportation visions. Frequent transit service is defined as service that operates at a maximum of 15 minutes intervals, but this isn't the only type of service. Regional and local transit service provides basic service and ensures that most the region's population has transit service available to them; service span and frequencies vary based on the level of demand for the service. Because of limited resources, it is important to ensure that service meets demand. Frequency therefore means aligning the frequency and type of service to meet existing and/or projected demand for an area.

**Make transit more convenient**, and competitive with driving, by improving transit speed and reliability using transit priority treatments and other strategies. Improve transit rider experience with seamless connections between transit providers, including transfers, information, and payment. Additionally, road authorities can partner with the transit agencies to implement transit priority treatments.

**Make transit more accessible** by promoting transit-oriented development of station areas and ensuring safe and direct biking and walking routes and crossings that connect to stops, as well as improve accessibility for seniors and persons with disabilities to ensure transit is accessible for everyone. Accessibility could also include park and ride facilities and drop off/pick up areas. Expand the system to improve access to jobs and essential destinations and daily needs.

**Making transit affordable** is the cornerstone of the other components of our vision. Frequency, convenience, and accessibility are meaningless if transit is not affordable. Additionally, affordability ensures that the transit system is equitable for low-income populations, communities of color and those who rely on transit services rather than private automobiles to meet their daily transportation needs.

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<sup>33</sup> Link to 2018 Regional transit strategy <https://www.oregonmetro.gov/regional-transit-strategy>

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## **3.3.5.1 Regional transit network concept**

The regional street system has carried public transit for more than a century, beginning with the streetcars of the late 1800s and evolving into a combination of vans, buses, streetcars, and light rail trains today. The Tri-County Metropolitan Transportation District of Oregon (TriMet) is the primary public transportation provider for the greater Portland region. The South Metro Area Regional Transit (SMART) in Wilsonville provides regional transit service connecting Wilsonville to Portland and communities in Washington and Clackamas counties. In 2017, the state legislature, through HB 2017, designated Clackamas, Multnomah and Washington Counties as Public Transit Service Providers. The counties receive funding from the Statewide Transportation Improvement Fund to implement transit services to meet goals established by HB 2017, including providing services in areas not well-served by fixed route transit.

Bus service in other surrounding areas, all with connections to the regional network, is also provided by C-TRAN (Clark County, WA), Ride Connection, South Clackamas Transit District (SCTD), Cherriots (Salem, OR), Tillamook County Transportation District (Tillamook, OR), and Yamhill County Transit Area (Yamhill County, OR). Just outside of the greater Portland region, Sandy Area Metro (SAM) and Canby Area Transit (CAT) provide transit service for Sandy and Canby.

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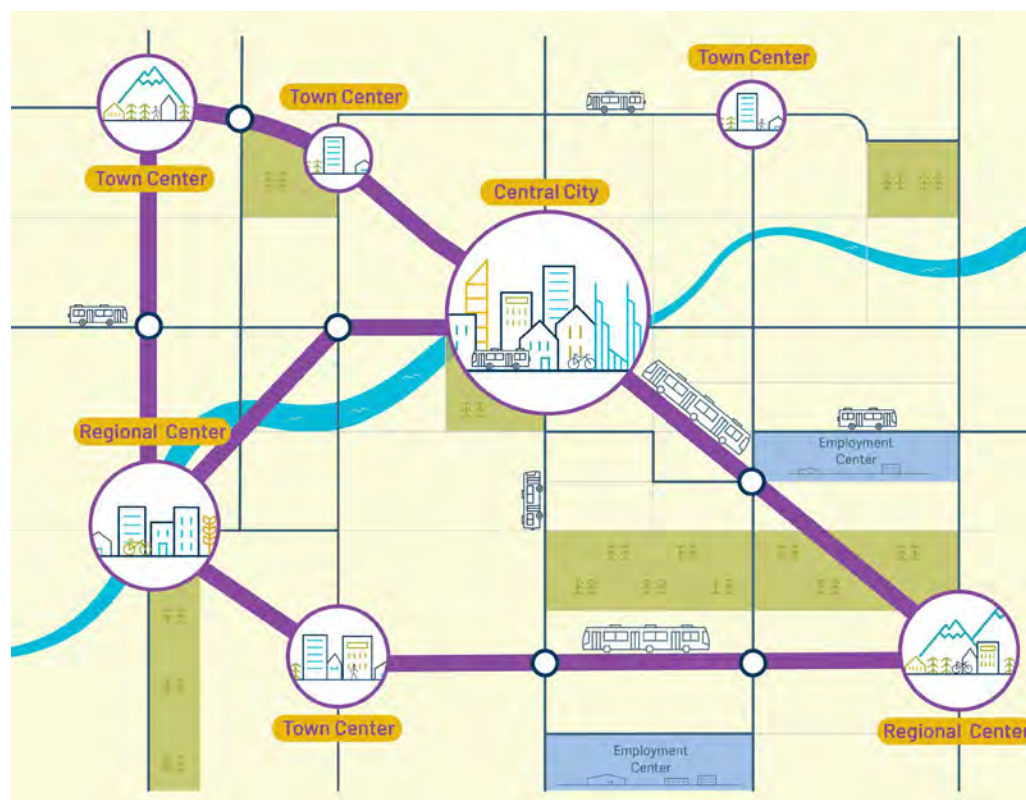
Transit is key to supporting the region's 2040 Growth Concept, which calls for focusing future growth in regional and town centers, station communities and 2040 corridors. A regional transit network, coupled with transit-supportive development patterns and policies that support taking transit, biking, and walking, will be necessary to help the region:

- be less dependent on automobiles
- more equitably serve communities of color and other marginalized communities
- reduce overall transportation and housing costs
- lead healthier lives
- reduce greenhouse gas emissions

As part of the 2040 Growth Concept, transit is critical to connecting centers.

Figure 3-24 shows how the regional transit system concept would connect the 2040 centers.

**Figure 3-24 Regional transit network concept**



*The 2040 Growth Concept set forth a vision for connecting the central city to regional centers like Gresham, Clackamas and Hillsboro with high capacity transit. The High Capacity Transit Strategy expands this vision to include town centers like Milwaukie, Troutdale, and Sherwood along corridors to build onto that vision. The RTP goes further to include a complete network of regional transit along most arterial streets to better serve existing and growing communities. Existing land use mixes and future transit-oriented development potential should be considered and incorporated into service and station location decisions.*

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To leverage transit investments, it is important for cities and counties to ensure land uses are transit-supportive and support local and regional land use and transportation plans and visions to leverage and protect transit investments.

Adjacent land uses, block size, street connectivity, and parking management affect the success of transit service. Policies and investments that support transit best can be found in Table 3-9.

**Table 3-10 Effects of land use on transit service**

Characteristic	Supportive	Not Supportive
Density	High	Low
Street layout	Small blocks Grid system	Long, winding streets Cul-de-sacs, dead-end
Mix of uses	Mixed use (e.g., commercial, residential, and office uses)	Single use (e.g., all residential, all industrial)
Pedestrian and bicycle environment	Wide sidewalks Slow moving traffic Street elements (e.g., benches, street trees, pedestrian-scale lighting) Well-marked intersections with signalized crossings Bicycle parking	Narrow or no sidewalks Fast moving traffic Poor lighting No intersection markings and long pedestrian wait times
Site design	Buildings front the street and entrances	Buildings set back from the street and surrounded by surface parking
Parking	Limited Fee-based parking	Abundant Free

Source: TriMet

Transit-supportive development patterns include:

- A compact urban form that places destinations near transit.
- A mix of uses, and a balance of jobs and housing, which creates a place where activity occurs at least 18 hours a day.
- Locating a mix of services near transit, including grocery stores and medical clinics.
- Locating affordable housing options, particularly for older adults, seniors and people with disabilities, near frequent transit.
- Well-designed streets and buildings that encourage pedestrian travel.
- Streets that can accommodate 40-foot buses.
- Safe and efficient multi-modal interactions at transit stops and stations.

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- Safe, direct and convenient pedestrian and bicycle access, within communities and to transit stops and stations.
- Street connectivity with good pedestrian and bike connections to extend the effective coverage of bus and rail service.
- Managed on-street and off-street parking.

Areas with low population and/or employment densities, abundant free parking, and with difficult access to transit stops generate fewer riders than areas with transit-supportive development. When fewer riders are generated, it costs more per ride to provide transit service than it does in transit-supportive areas. Ridership productivity is a key criterion in assessing the benefits of service improvements and new transit investments.

## **3.3.5.2 Regional transit network functional classifications and map**

The Regional Transit Network includes future regional and local bus, better bus corridors, high capacity transit and intercity rail, reflecting the region’s future transit vision as identified by Portland Streetcar System Concept Plan, TriMet’s Service Enhancement Plans, SMART’s 2017 Transit Master Plan (update currently underway), as well as local Transportation System Plans. Shown in Figure 3-26, the Regional Transit Network map has been updated to include new connections envisioned in the 2023 High Capacity Transit Strategy update and future transit service. The map also highlights areas planned to be served by community-job connector shuttles, including current and planned routes identified in Clackamas and Washington County’s transit development plans. Click on RTP Regional Network Maps for online zoomable version of map. [NOTE: LINK TO BE ADDED]

Our existing and planned system includes a variety of transit modes, each with a special function in the overall system. Local, regional, and frequent service bus lines are the workhorses of our transit system. The transit providers plan for improving and expanding transit service through service enhancement plans, master plans and through annual service planning.

Our bus system operates in mixed traffic and provides service across the region. Alongside our bus system, we have implemented streetcar and corridor-based rapid bus. These services, along with frequent bus service, can and do include a variety of transit priority treatments. These tend to be more frequent and carry more transit riders than the regional and local bus system. The better bus program, new to our region, provides that transit priority to help improve transit speed and reliability above traditional transit service.

The region’s high capacity transit system operates with the majority or all of the service in exclusive guideway. The high capacity transit system is the backbone of the broader transportation network, meant to connect to regional centers and carry more transit riders than the local, regional and frequent service transit lines.

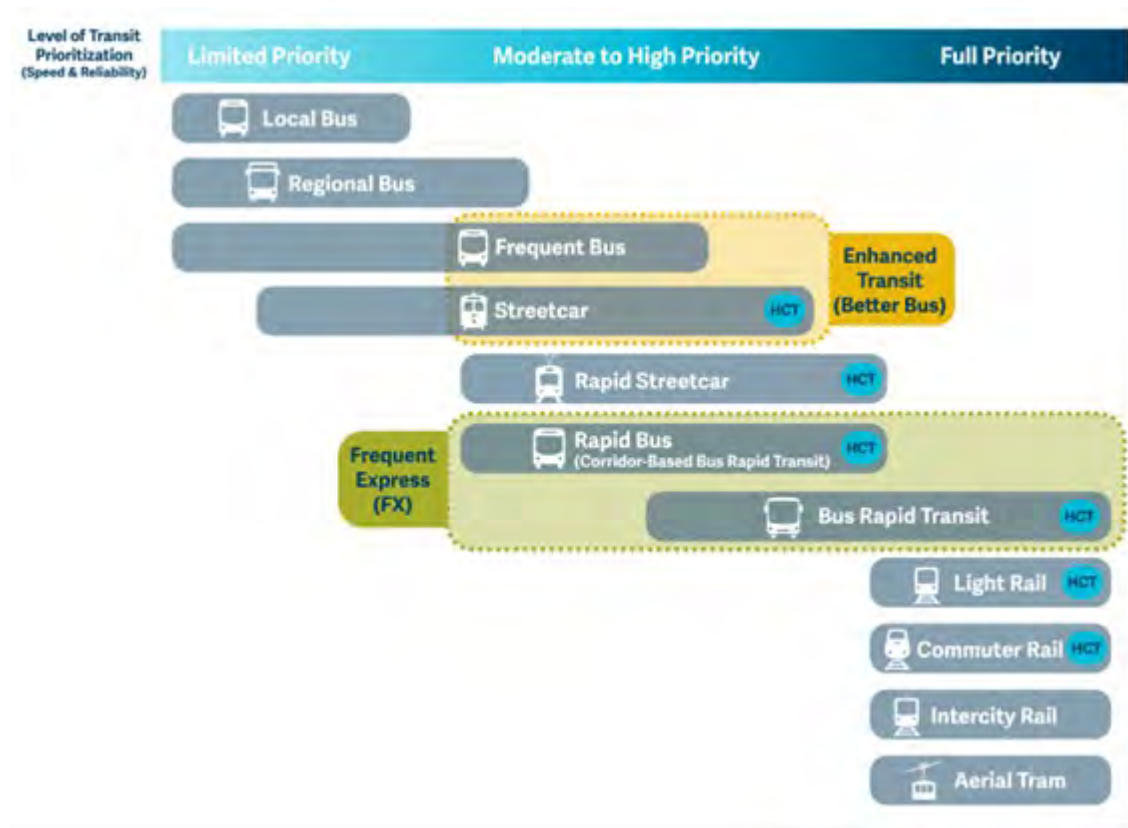
The region’s high capacity transit system operates with the majority of all of the service in exclusive right-of-way, consisting of six lines over a 75-mile network that serves more than 130

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stations in the city of Portland, and the communities of Beaverton, Clackamas, Gresham, Hillsboro, and Milwaukie; and Portland International Airport. Figure 3-25 shows the broad transit spectrum that exists or is planned for regional transit system.

**Figure 3-25 Regional transit spectrum**



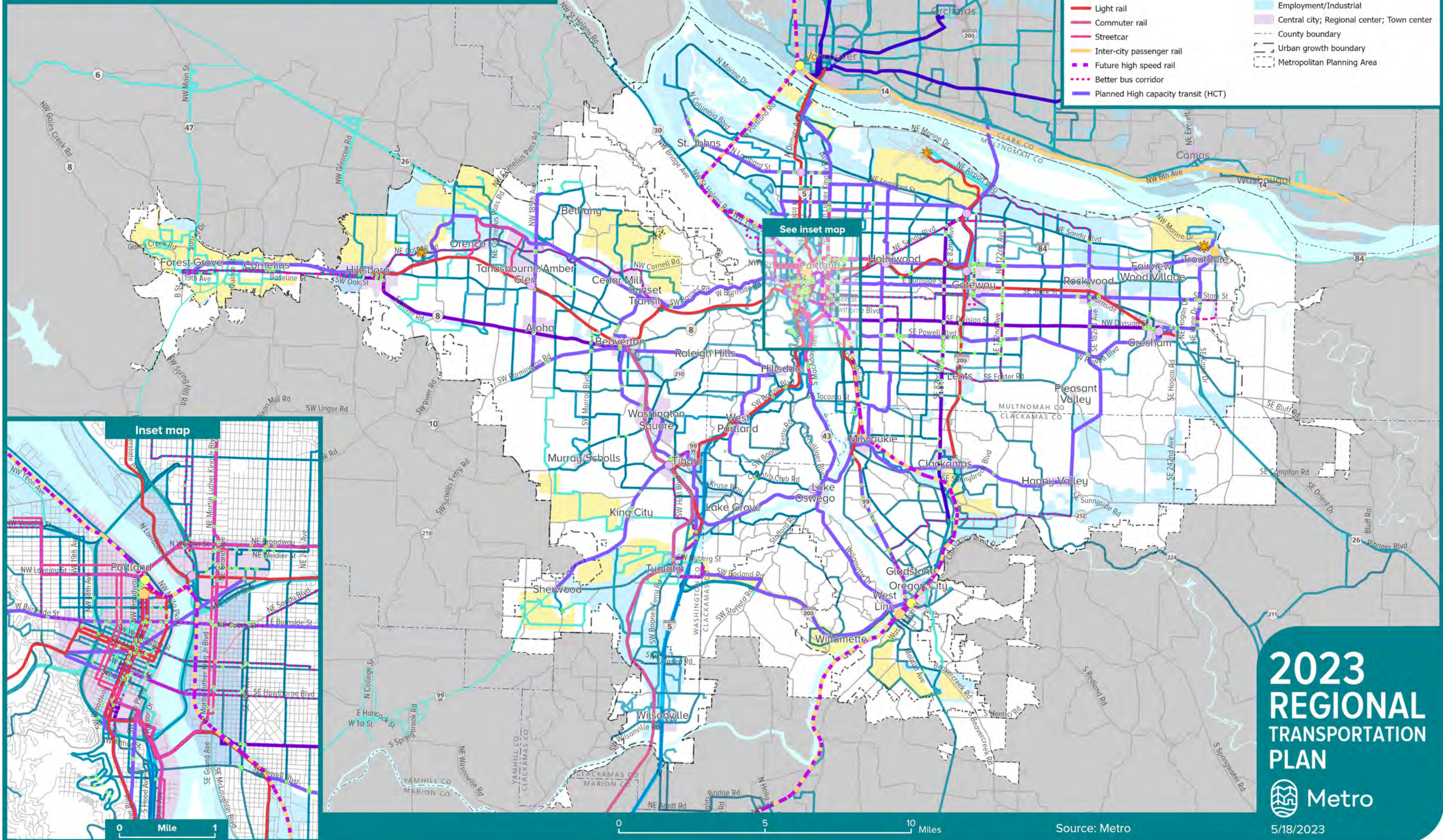
Many variables impact decisions about what type of transit mode and frequencies are most appropriate, including existing and future land uses, transit demand and opportunities and constraints.

**Figure 3-26 Regional transit network map**



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# Regional Transit Network





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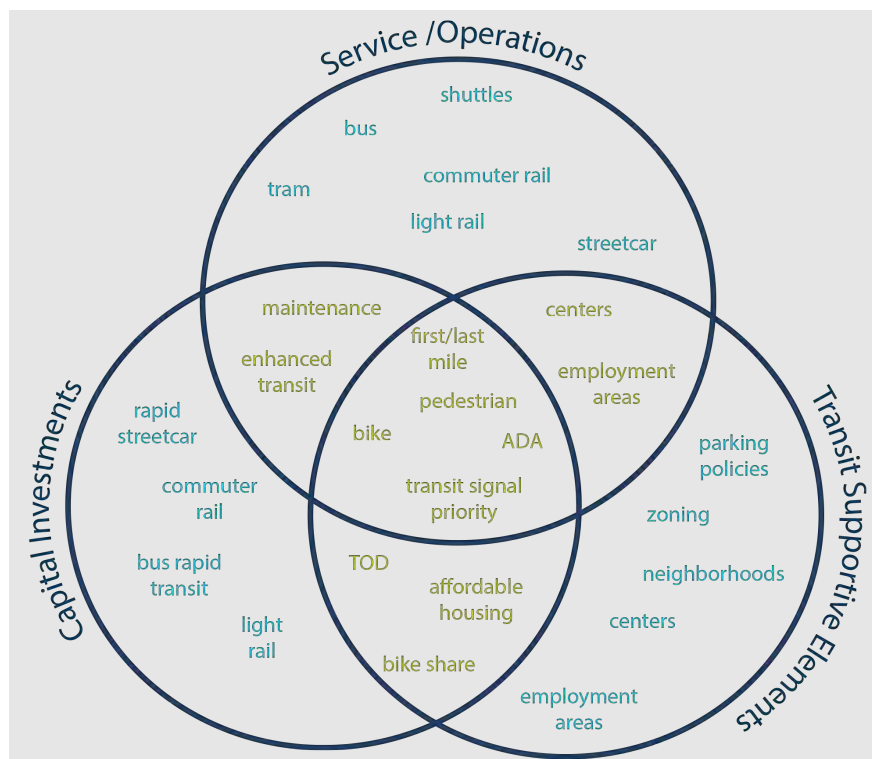
## Implementation of the regional transit vision

The Regional Transit Vision will be implemented through improving service, investing in infrastructure, collaborating between transit providers and local jurisdictions and expanding transit supportive elements:

- **Transit service improvements:** local and regional transit service improvements designed to meet current and projected demand in line with local and regional visions and plans.
- **Capital investments in transit:** enhanced transit strategies that make Better Bus such as signal priority and/or dedicated lanes, or high capacity transit options such as bus rapid transit, light rail, commuter rail or high speed rail.
- **Transit supportive elements:** including programs, policies, capital investments and incentives such as Travel Demand Management and physical improvements such as sidewalks, crossings, and complementary land uses.

Figure 3-27 shows the relationships between these different types of investments.

**Figure 3-27 Service improvements, capital investments and transit supportive elements**



Public agencies and transit providers must collaborate in prioritizing transit investments throughout the region. With the passing of House Bill 2017, the Oregon Legislature identified transit improvements and service expansion as a priority for the state. With this additional

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funding, the region will be able to significantly increase and expand transit service. This only highlights the need to collaborate between transit providers.

## 3.3.5.3 Regional transit network policies

Regional transit priorities are informed by the following policies which aim to provide transit as an attractive, convenient, accessible and affordable travel option for all people in the greater Portland region, optimize existing transit system operations and ensure transit-supportive land uses are implemented to leverage the region’s current and future transit investments. Together, these policies regional goals.

<b>Policy 1</b>	<b>Provide a high-quality, safe and accessible transit network that makes transit a convenient and comfortable transportation choice for everyone to use.</b>
<b>Policy 2</b>	<b>Ensure that the regional transit network equitably prioritizes service to those who rely on transit or lack travel options; makes service, amenities, and access safe and secure; improves quality of life (e.g., air quality); and proactively supports stability of vulnerable communities, particularly communities of color and other marginalized communities.</b>
<b>Policy 3</b>	<b>Create a transit system that encourages more people to ride transit rather than drive alone, and supports transitioning to a clean fleet that aspires for net zero greenhouse gas emissions to meet state, regional, and local climate goals.</b>
<b>Policy 4</b>	<b>Maintain the region’s transit infrastructure in a manner that improves safety, reliability and resiliency while minimizing life-cycle cost and impact on the environment.</b>
<b>Policy 5</b>	<b>Complete a well-connected network of local and regional transit on most arterial streets – prioritizing expanding all-day frequent service along corridors and main streets linking town centers to each other and neighborhoods to centers.</b>
<b>Policy 6</b>	<b>Complete and strengthen a well-connected high capacity transit network to serve as the backbone of the transportation system. Prioritize transit speed and reliability to connect regional centers with the Central City, link regional centers with each other, and link regional centers to major town centers.</b>
<b>Policy 7</b>	<b>Make capital and traffic operational treatments in key locations and/or corridors to improve transit speed and reliability for frequent service.</b>
<b>Policy 8</b>	<b>Support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.</b>
<b>Policy 9</b>	<b>Increase access to transit by improving pedestrian and bicycle access to and bicycle parking at transit stops and stations. Use new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.</b>

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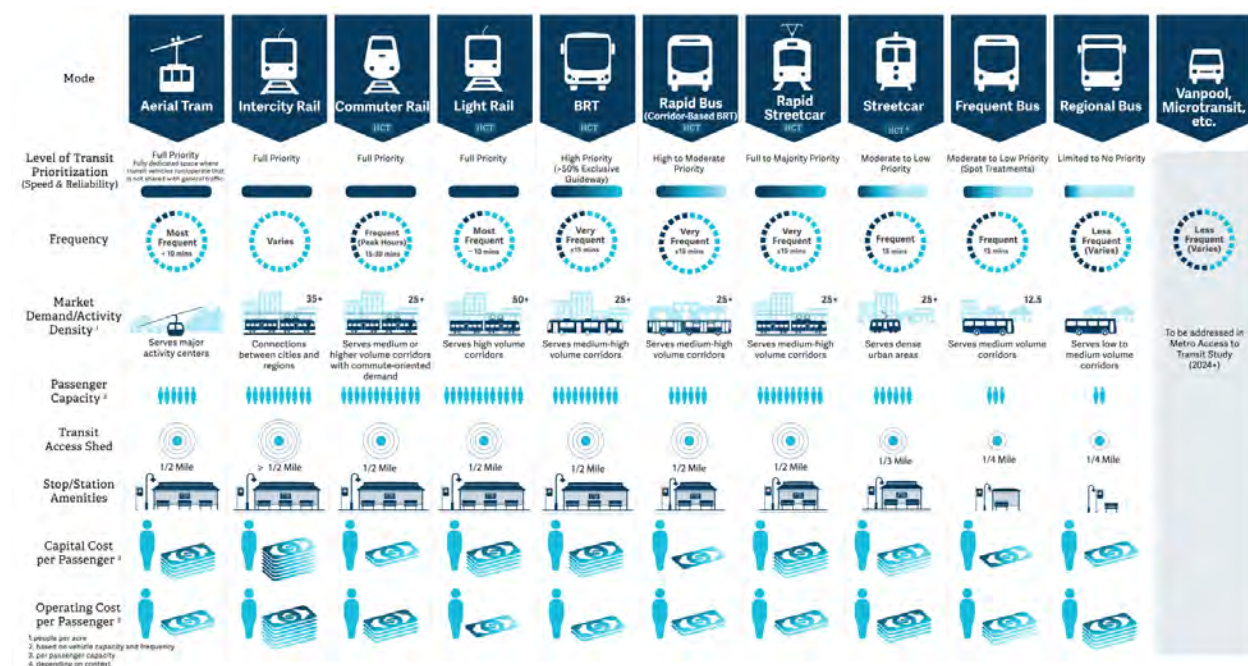
**Policy 10** Use technology to provide better, more efficient transit service, including meeting the needs of people for whom conventional transit is not an option.

**Policy 11** Make transit affordable, especially for people with low incomes.

**Transit Policy 1. Provide a high quality, safe and accessible system that makes transit a convenient and comfortable transportation choice for everyone to use.**

The region's economic prosperity and quality of life depend on a transportation system that provides every person and business in the region with access to safe, efficient, reliable, affordable and healthy travel options. 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.

**Figure 3-28 Tools for building a high-quality transit system**



*Rapid streetcar has less stops and more street priority for regional mobility between centers. Streetcar extends the reach of the high capacity transit network by facilitating mobility as a circulator within major centers.*

A complete and seamless transit system is based on providing frequent and reliable bus and rail transit service during all times of the day, every day of the week. This goes far beyond the responsibility of the transit agencies; it requires actions on behalf of the region and all the jurisdictions. Preferential treatments, such as transit signal priority, covered bus shelters, curb extensions, special lighting, enhanced sidewalks, protected crosswalks and bikeways, are all fundamental to making the transit network, especially frequent bus and high capacity transit, function at its highest level. In order to provide frequent and reliable service, the region needs to partner together to commit to investing in transit priority treatments and high capacity transit to ensure that transit can take people where they need to go on time.

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. Safe and comfortable access to the stations is critical to the rider's experience and convenience, but also makes transit fully accessible to people of all ages and abilities. Similarly, typical fixed route transit service may not make sense for everyone throughout the region. people often rely on demand-response transit as well . New shared mobility models like microtransit could provide better service at lower cost in these situations and in increasing access to high-demand corridors. Technology is another tool. Intelligent transportation systems and services help improve the speed and reliability of transit. It also means taking advantage of the growth in personal technology to efficiently communicate information about transit options and leverage electronic, integrated ticketing systems. As tolling and congestion pricing moves forward in the region, discounts or exemptions should be considered to incentivize multimodal travel behavior and reduce impacts, including exemptions for public transit and reduced pricing for higher occupancy vehicles such as shuttles, vanpools, and carpools (Oregon Highway Plan Policy 6.10).

**Transit Policy 2. Ensure that the regional transit network equitably prioritizes service to those who rely on transit or lack travel options; makes service, amenities, and access safe and secure; improves quality of life (e.g., air quality); and proactively supports stability of vulnerable communities, particularly communities of color and other marginalized communities.**

The region's transit and broader transportation system should provide every person and business with equitable access to have the same opportunity to thrive, regardless of their race or ethnicity. Ridership during the pandemic 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. Making these trips more convenient and reliable means that people who are more likely rely on transit today will have better travel options. A regional transit system focused on mobility and access that addresses the transportation disparities faced by communities of color has the ability to open opportunities which can dramatically improve outcomes for people of color. By addressing the barriers faced by communities of color, outcomes for other disadvantaged communities will improve as well.

Using equity as a lens to guide decisions more broadly will ensure that the transit system benefits those who rely on it the most. An equity lens can also address disparities in:

- **Access:** New development and gentrification can lead to displacement, of which people of color and low-income are disproportionately affected by. As housing and transportation costs increase, households are being forced to move to areas with less transit service. To address this, projects should be prioritized in equity focus areas.
- **Safety and security:** People with low-income and people of color across the country disproportionately suffer from well-documented racial bias in and bear the burden of policing. Racial disparities exist in enforcing transportation laws and rules and issuing penalties for violations. Further, fines are not based on an individual's ability to pay, meaning that the penalty has greater impact for people with low-income and could lead to compounding consequences such as debt. At the same time, people of color are increasingly likely to be concerned for their safety when traveling due to fear of harassment and discrimination. Agencies should continue to pursue alternatives to

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policing (e.g., TriMet's Safety Response Team) that discourage harassment without enforcement.

- **Technology:** As more transit fare collection systems embrace contactless payment, accessibility challenges can arise for people, especially people with low incomes or who are undocumented, underbanked or unbanked. Agencies should continue to monitor and pursue strategies to reduce barriers to accessing digital fare systems.

Offering ample opportunities for meaningful public engagement and input is critical to hearing diverse perspectives on goals, policies and projects. Continuing to strengthen existing partnerships with local community organizations can provide more individuals with voices that may not have had the platform to be heard. Any transit planning effort should directly incorporate community in the decision-making process.

Further, major infrastructure investments have implications within the communities they are located. Historic data shows that high capacity transit investments such as light rail contribute to both positive and negative outcomes for the communities they serve. Their potential displacement from the economic pressures that the investment brings ultimately undermines its long-term effectiveness. It is critical during planning for a new major transit investment that a strategy be developed that considers both the positive and negative impacts, particularly as it applies to the most at-risk populations who also tend to be the most transit dependent. Key focus areas should include affordable transit-oriented housing opportunities and contracting and job training benefits and opportunities for displaced and marginalized populations.

**Transit Policy 3. Create a transit system that encourages people to ride transit rather than drive alone and supports transitioning to a clean fleet that aspires for net zero GHG emissions, enabling us to meet our state, regional, and local climate goals.**

Transit is a critical part of meeting regional goals for climate leadership and clean air, and an integral part of implementing the Climate Smart Strategy. Improving and expanding the transit system and use of transit in greater Portland will continue to play a significant role in reducing transportation-related air pollutants, including greenhouse emissions. For people to choose transit over driving, transit must be at least as convenient and reliable. A transit trip needs to get people to their destination at the scheduled time, consistently, and it must be easy to use. The route would ideally be a one-seat ride or have seamless connections and fares between trains, buses, shuttles or streetcar, regardless of the provider. It should be just a short walk or bicycle ride away via a safe, comfortable connection that is easy to find and navigate. Information about schedules, transfers and real time arrivals would be readily available and easy to access both on-board and at stops and stations. Most importantly, it needs to be a viable option in regard to travel times. The region should continue to pursue strategies that prioritize transit and make the bus run better (e.g., signal priority and bus lanes), integrate service, information, trip planning, and payment platforms across transit agencies, improve sidewalk, crossing and bicycle facilities, and adopt technology to make transit more predictable and user-friendly (e.g., electronic fare and real-time monitoring systems). By providing both more and better transit connections between



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where people live and where they need to go, more people who drive today will be more likely to choose to use transit to travel instead.

Ongoing efforts to convert bus fleets to low and zero-emissions vehicles will further reduce emissions in the region. Electric trains and hybrid diesel/electric buses have been part of the regional fleet for many years and battery-electric buses have been added more recently. Both House Bill 2017 and the Low or No Emissions Buses and the federal Bus Facilities Grant Program funded by the 2021 Bipartisan Infrastructure Law have provided an opportunity to further invest in clean vehicles. As transit agencies in the region move toward a fleet without emissions, many are switching to renewable biodiesel fuel to reduce emissions in the interim. Further, renewable electricity from natural resources like sun and wind can be used to power both transit vehicles and facilities. Cleaner alternative fuels are the future of transit, and the region should continue to support the transition to a clean transit fleet and facilities. As more people are encouraged to ride on an improved and expanded transit network using clean vehicles, greater Portland will see emissions reduced for the transportation system more broadly as well.

## **Transit Policy 4. Maintain the region’s transit infrastructure in a manner that improves safety, reliability and resiliency while minimizing life-cycle cost and impact on the environment.**

While our transit system is still relatively new, it is starting to need more repairs and/or replacements to buses, streetcars, trains and their infrastructure as they age. It will become increasingly important to invest in upkeep as elements of the system begin to reach the end of their useful life to maintain a state of good repair. It is critical to ensure that it is well-maintained and to replace or improve outdated parts of our transit system to preserve its efficiency. The Federal Transit Administration’s State of Good Repair program for rail and bus rapid transit systems that are at least seven years old includes incorporating industry best practices and recommendations related to reliability and safety to help transit agencies maintain bus and rail systems as part of the federal transportation performance management implementation.

It is also important to plan for future capacity needs of the transit system. As our region grows and ridership on our public transportation system is ever increasing, the region is starting to push the limits of what our existing infrastructure can handle. This creates more transit bottlenecks throughout the region, increasing congestion and decreasing the reliability of our transit system. Some lines already have many buses running behind schedule due to heavy traffic, which leads to unpredictable service. Other lines suffer from overcrowding. Popular lines will always have standees, but some trips have such high ridership that at times, riders are unable to board and must wait for another vehicle. To make transit more reliable and convenient, these factors must also be addressed.

## **Transit Policy 5. Complete a well-connected network of local and regional transit on most arterial streets – prioritizing expanding all-day frequent service along corridors and main streets linking town centers to each other and neighborhoods to centers.**

### **Improve local service transit**



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The local transit network provides basic service and access to local destinations and the frequent and high capacity transit network. It is designed to provide full transit service coverage to the region, ensuring that the majority of the region’s population has transit service available to them – varying in type, frequency, and span based on needs and demand. It . Transit preferential treatments and passenger facilities are appropriate at higher ridership locations.

Providing community and job connector shuttles increases the convenience of transit, particularly for areas without frequent service transit or where traditional transit service is not viable. Community and job connector shuttles also expand the reach of transit service across the region, which improves access to jobs and community places and can help facilitate first/last mile connections where business and or homes are spread out and regional fixed-route bus service is not cost effective.

One foundational support of the regional transportation system is the availability of demand-response services. These services provide access to transportation that “fills in the gaps” where fixed-route transit, complementary paratransit, or deviated fixed-route “last mile” shuttle services are not the appropriate or most cost-effective tool to meet the need of low-income individuals, seniors or people with disabilities. They provide a lifeline of service to people who experience barriers to accessing the transportation system. Current service is still not enough to meet the existing demand or projected growth in demand concurrent with the region’s growing population.

## **Expand regional and local frequent service transit**

Providing regional transit along most arterial streets is another key piece of a high-quality network better serving existing and growing communities. Frequent service transit is defined as wait times of 15 minutes or less from the early morning to late in the evening, seven days a week. Frequency is especially important for making transit more competitive with driving for riders who take short, local trips, because the time riders spend waiting for a bus to take a short trip is a proportionately larger component of the total travel time than it is for longer trips. Frequent bus service is appropriate when high ridership demand is demonstrated or projected, the streets are pedestrian-friendly, there are high proportions of transit-dependent residents, the lines connect to existing or proposed HCT corridors, and/or it serves multiple centers and major employers.

## **Transit Policy 6. Make capital and operational improvements in key locations and/or corridors to improve transit speed and reliability for frequent service.**

In order to meet the region’s environmental, economic, livability and equity goals as we grow over the next several decades, we need to invest more to improve the efficiency of our system, particularly the more congested corridors in the frequent service bus network, to better support transit riders. More reliable, higher quality transit connections would better connect low-income and transit-dependent riders to jobs, school and services. A more fine-grained network of higher-quality transit service complements high capacity transit investments to help relieve transit congestion and grow ridership throughout the region.

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There are many ways to increase transit speed and reliability throughout our system to make the bus better and reduce time spent traveling by transit for people riding. Improving the speed and reliability of our frequent service network could be implemented at the regional scale, along corridors or at “hot spot” locations. Table 3-10 describes the different types of treatments that have the potential to improve reliability that are part of the enhanced transit toolbox. Providing transit priority on the roadway and/or at signals that help buses avoid delay and/or bypass traffic mean trips on these routes stay on schedule and/or are faster. These features, combined with other preferential treatments, such as covered bus shelters, special lighting, enhanced sidewalks and bicycle facilities, and protected crosswalks, are fundamental to making the frequent bus network function at its highest level. The region should pursue these opportunities as they arise.

**Table 3-11 Better Bus treatments to enhance frequent transit service**

Regional	Hotspot
Bus on shoulder	Dedicated bus lane
Transit signal priority and signal improvements	Business access and transit (BAT) lane
Headway management	Intersection queue jump/right turn except bus lane
Corridor	Transit-only aperture
Level boarding	Pro-time (peak period only) transit lane
All door boarding	Multi-modal interactions
Bus stop consolidation	Curb extension at stops/stations
Rolling stock modification	Far-side bus stop placement
Transit signal priority and signal improvements	Street design traffic flow modifications

The Better Bus program employs public partnerships to implement treatments that increase capacity and reliability, yet are relatively low-cost to construct, context-sensitive, and able to be deployed quickly throughout the region where needed. Coordinated investments by multiple partners have the potential to provide major improvement over existing frequent service while being less capital-intensive and quick to implement than large-scale high capacity transit. Investments could serve our many growing mixed-use centers, corridors, and employment areas that demand a higher level of transit service but are not seen as short-term candidates for light-rail or rapid bus (those identified as Developing or Future corridors in the 2023 High Capacity Transit Strategy). This creates a potential path for growing better bus into high capacity transit over time – starting with incremental, smaller-scale improvements that can be leveraged later when implementing a large-scale capital infrastructure investment.

**Transit Policy 7. Complete and strengthen a well-connected high capacity transit network to serve as the backbone of the transportation system. Prioritize transit speed and reliability to connect regional centers with the Central City, link regional centers with each other, and link regional centers to major town centers.**

High Capacity Transit (HCT) investments help the region concentrate development and growth in its centers and corridors. It is the backbone of the transportation network, connecting people to the central city, regional centers and major town centers with high-quality service (i.e., fast, frequent, safe and reliable). Linking these activity centers and station communities better

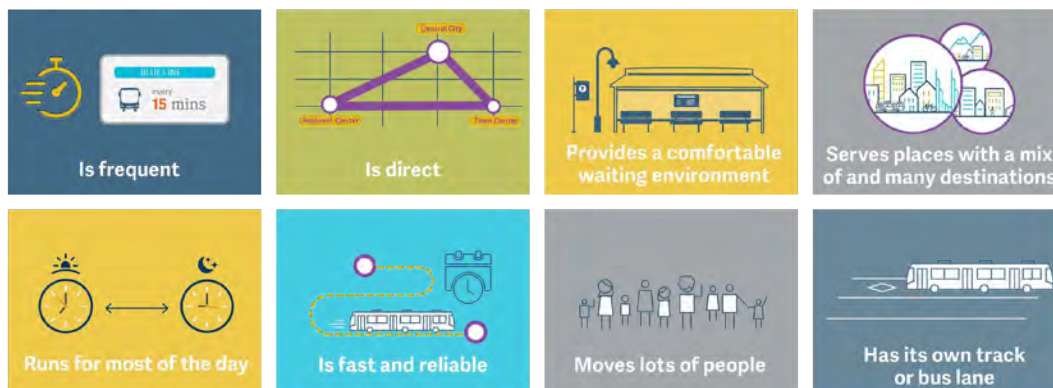
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connects people with essential jobs, services, commerce and other major destinations (e.g., colleges, hospitals, affordable housing). High capacity transit serves regional routes where the most people need to travel to get where they need to go, often with relatively long trip lengths, to provide a viable alternative to the automobile in terms of convenience and travel time. Generally, these corridors make more broad connections across the region where the bus or other types of transit make connections and provide complementary services to fill in the network.

High capacity transit investments take existing strong transit connections to the next level in accessibility and priority on the roadway and at the signal – while shining a light on the corridor in which it travels to improve safety, access and livability for current and future riders. This type of service carries more transit riders more quickly, efficiently and comfortably than local, regional and frequent service transit lines through both a level of enhanced amenities and transit priority. Enhanced amenities refer to features that make high capacity transit more efficient, convenient, and comfortable: vehicles that are larger and allow boarding from all doors, transit centers and stations with near-level boarding, and frequent service (striving for frequencies of 10 minutes or better during the peak hours and 15 minutes during off peak hours). It also refers to transit centers and stations with covered waiting shelters, benches, schedule and real-time bus and train arrival information and special lighting. Other amenities could include ticket machines, restroom facilities, bicycle parking (e.g., bicycle stations or bike & rides), civic art and commercial services. Enhanced priority investments refer to dedicated tracks or lanes in the street that improve speed and/or reliability, getting people to destinations faster and on-time. High capacity transit operates on a fixed guideway or within an exclusive right-of-way on tracks or in the street, to the greatest extent possible.

## High Capacity Transit...



The region should continue to pursue coordinated partnerships in planning for and investing in these major capital improvements that prioritize transit over other modes, construct features that improve speed, reliability, and access to transit, and address community needs and gaps. Adopted transit-supportive land use and transportation policies and strategies, such as high-density and mixed-use zoning, reduced parking requirements, and affordable housing incentives are critical to

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ensuring a corridor is ready for high capacity transit investment. To optimize and leverage transit supportive land uses, alignments and station locations should be oriented towards existing and future high density, mixed-use development and connect intermodal passenger facilities. To this end, urban form and connectivity, redevelopment potential, market readiness, public incentives and infrastructure financing should all be considered during the corridor refinement and alternatives analysis phases of project development.

## **Transit Policy 8. Support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.**

Intercity passenger rail and bus service to communities outside of the region provides an important connection to the regional transit network. Current travel patterns are showing a rising demand for intercity transit service solutions for improving passenger rail in the future in response to rising demand, while also balancing similarly increasing freight service needs. The following corridors have a high likelihood to support intercity or commuter rail service in the future: Portland-Newberg, Portland-Astoria, Portland-California and Chicago to Seattle via Salt Lake City and Portland (formerly Amtrak Pioneer). Metro, regional partners and corridor communities should consider right-of-way preservation for these corridors and consider land use planning activities that focus on transit-supportive development around potential future station areas.

Portland-Salem/Keizer-Eugene is the most promising corridor for expanding commuter rail and intercity transit service travel times, reliability, frequency and connectivity with and accessibility of regional and local transit, bicycle and pedestrian networks. There is existing Amtrak passenger rail service on a more highly used freight corridor (Union Pacific Mainline) and there is the potential for an alignment either extending or tying into WES commuter rail service on a lightly used freight corridor (Oregon Electric Line) from to Wilsonville to Salem, currently served by Wilsonville's SMART and Salem's Cherriots today. All were evaluated in the 2010 Oregon Rail study as potential solutions for improving intercity rail service on the corridor, but the alignment tying into WES attracted more riders (by one to four percent). When developing inter-regional rail service, this corridor alignment should take priority for improving passenger rail service between Eugene and Portland in the nearer-term future.

In the future, a fast, frequent, reliable and environmentally responsible high-speed transit connection could serve as a catalyst to transform the Pacific Northwest. The Pacific Northwest Corridor is an important intercity rail connection between Eugene, Oregon and Vancouver, British Columbia. It is one of eleven corridors shown in Figure 3-30 identified for improved inter-city rail connections and potential high-speed rail investments to better connect communities across the U.S. Ultra-high-speed rail on the corridor should complement and bolster the broader intercity passenger rail system – for instance, Amtrak Cascades could connect smaller cities (including Salem and Eugene nearer-term) to the corridor and the regional hubs connected by it.

## **Figure 3-29 U.S. High speed intercity passenger rail network**

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Source: U.S. Department of Transportation (April 2016)

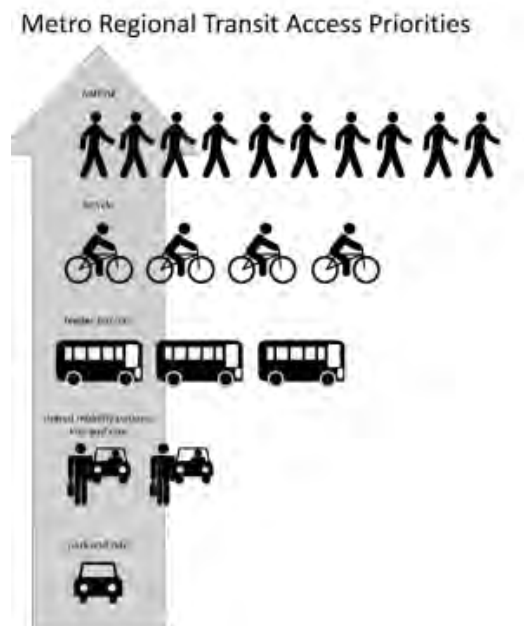
More work is needed to determine what partnerships, infrastructure investments and finance strategies are needed to support improved intercity passenger service to communities outside the region more broadly. Additional collaboration and funding are needed to support the development of this level of service.

**Transit Policy 9. Increase access to transit by improving pedestrian and bicycle connections to and bicycle parking at transit stops and stations. Use new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.**



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**Figure 3-30 Regional transit access priorities**



## **Improve pedestrian and bicycle access to and bicycle parking at transit stops and stations**

People access transit via walking, bicycling, bus, rail, carpools, shared mobility (like Uber and Lyft or Biketown) and private automobiles. In 2040 corridors, main streets and centers, transit is supported by providing transit-supportive development and well-connected street systems to allow convenient bicycle and pedestrian access. Providing safe and direct walking and biking routes and crossings that connect to transit stops ensures that transit services are fully accessible to people of all ages and abilities and helps the transit network function at its highest level. At some point in their trip, all transit riders are pedestrians first whether it is walking to the station, parking their bike and walking to vehicle or walking from the park and ride to the bus or rail. The environment where people walk to and from transit facilities is a significant part of the overall transit experience. An unattractive or unsafe walking environment discourages people from using transit, while a safer and more appealing pedestrian environment may increase ridership. Likewise, high quality local and regional bicycle infrastructure extends the reach of the transit network, allowing more people to access transit from longer distances. Further, transit, pedestrian and bicycle travel benefit as improvements are made to each of the modes.

Figure 3-30 depicts the region's priorities for providing multi-modal access to the region's transit system. It prioritizes walking and biking to transit and deemphasizes driving to transit. In select locations, park-and-ride facilities may provide vehicular access to the high capacity or even frequent service network for areas that cannot be well-served by local transit due to topography, street configuration, or lack of density.

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- Improving pedestrian and bicycle access to transit stops and stations is accomplished through filling sidewalk gaps within a mile and bicycle and trail network gaps within three miles, integrating trail connections and shade trees, and providing pedestrian and bicycle protected crossings. Additionally, amenities at stops and stations further support people walking and bicycling to transit, including shelters, shade trees and seating; bicycle repair stations, lockers, secured, covered bicycle parking and/or Bike and Rides; and co-located bike and scooter sharing facilities. Allowing bicycles on board transit also helps expand active transportation connections, particularly the use of apps to let bicycle riders know if a bus or train has bicycle space available.

Additionally, managing or pricing parking spaces and reducing the number of spaces that developments near transit provide a safer, more active transportation-oriented environment near stations. The Climate Friendly and Equitable Communities (CFEC) rules require many cities in the region to reduce or eliminate parking requirements and manage or price parking in areas with high levels of transit service).

## Explore new ways to improve connections to high frequency transit

Advances in technology have given rise to new transportation services that make it easier for people to share vehicles and have the potential to work alongside transit to significantly extend the range and convenience of car-free trips in the region. Many of these options, including ride-hailing and bike, e-bike, scooter, and car sharing, are available and widely used in certain parts of the region. These new services can help bridge the gap to first and last-mile high frequency and, particularly, high capacity transit access. Improving connections and interactions between shared mobility and transit can be accomplished by:

- Ensuring designated transit streets are designed and managed to prioritize transit and shared travel. Ride-hailing and e-commerce delivery vehicles are using an increasing amount of curb space in some congested areas. Agencies can manage the curbside to prioritize ride-hailing services carrying more than one passenger and avoid conflicts with transit vehicles.
- Dedicating space for shared mobility at transit stations. Accommodating bike share stations or pods of car share vehicles at transit stops makes it easy for transit riders to use these options. Setting aside space for pickups and drop-offs near stations can make it more convenient for people to access options to transit, as well as improve safety by reducing conflicts between modes. At stations with parking, reserving premium spaces for carpools or shared vehicles can provide an incentive for travelers to share trips instead of driving alone.
- Coordinating with shared mobility companies to support shared connections to transit stations. Several communities already fund vanpools or operate shuttles to and from transit stations. Similarly, public agencies can partner with microtransit or carsharing, pooled ride-hailing services or dockless bike/scooter sharing companies to subsidize or promote trips via these modes to transit stations. The City of Portland's Transportation Wallet, which offers credits that people can use to pay for transit and a variety of new mobility services to residents in Parking Districts, affordable housing sites, and new multi-family buildings. These



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programs allow people access to a suite of options that can complement existing options or connect them to transit when the bus or train only covers part of their journey.

## **Transit Policy 10. Use technologies to provide better, more convenient and efficient transit service, including meeting the needs of people for whom conventional transit is not an option.**

Typical fixed route transit service may not make sense for everyone throughout the region. People commuting to employment centers in more suburban areas rely on slower, often infrequent buses or may not be served by existing bus service. Similarly, our region is home to many people with disabilities who require specialized vehicles and point-to-point service, as well as people who depend on transit but live in communities where fixed-route service does not make sense. These people often rely on demand-response transit or infrequent buses that provide slow service and are costly to operate.

New shared mobility models like microtransit could provide better service at lower cost where we need to enhance service on high-ridership lines while piloting new ways to provide transit (like microtransit or using new mobility services to connect to stations) in communities that are challenging to serve with large buses traveling on fixed routes. As these options continue to mature, agencies should look for opportunities to supplement demand response and underperforming service with shared mobility. This could provide better service for underserved and transit-dependent residents and increase resources available to serve high-demand corridors. The growth in new mobility technologies also includes new real-time fleet management and route optimization tools as well as trip planning services and ride matching services that can help people identify a transportation service that meets their needs or someone with whom they can share a ride. These technologies can be used to increase the quality and/or productivity of infrequent or high-cost services, or to help people find a service that meets their needs when conventional transit isn't available to them.

Making it easy to plan, book, and pay for trips, including across agency and even shared mobility platforms, is one way to make transit more convenient for people riding. Smartphone apps are now the most common way for people in the Portland region to access information about their transportation options and are well-suited to provide the type of real-time information that people need to coordinate trips while accounting for potential transit delays. This is especially true for people accessing transit through amidst the changing landscape of new mobility services in the region. TriMet's Open Trip Planner integrates data on transit routes, schedules and real-time arrivals and tracking; bicycling and walking travel times; and shared mobility options to make it easy to plan multimodal trips on an interactive map platform optimized for smartphones.

Other private travel information apps offer similar services; transit agencies can make schedule and route information available in the format that these tools use to allow their services to show up in these apps. There are two important issues to consider when integrating transit and shared mobility data:

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- Ensuring that third-party apps use that data in a way that supports transit. The companies that develop these apps often monetize transit data by showing advertisements for ride-hailing services that show how much quicker a rider could reach a destination by paying extra for those services. These advertisements can draw people away from taking transit, and agencies should consider whether they want to place conditions on the use of transit data by third parties.
- Maintaining access for the many people who can't or don't access apps or make online payments, which can include many of the same travelers who rely on transit. These travelers often need to overcome both cultural barriers (for example, limited English proficiency and concerns about personal safety when traveling in public) and technological ones (such as a lack of access to smart phones or data plans that allow for easy online access to information from anywhere) in order to access the increasing number of online travel information and services.

## **Transit Policy 11. Make transit is affordable, especially for people with low incomes.**

Ensuring that transit is affordable alleviates the cost of and encourages alternatives to owning automobiles. It is therefore important to ensure that transit is affordable, particularly for the riders that rely on it the most. The cost of transportation burdens many households in the metropolitan region and is usually the second largest share of household costs (after housing).

People of color, with limited English proficiency, with low-income, with disabilities, age 65 or older and 18 or younger are those most affected by transportation costs. C-TRAN and TriMet offer reduced fares for youth, seniors, people on Medicare, and people with low incomes. Most SMART buses are free – there is a fee for Dial-a-Ride service and for the 1X to Salem which also offers a reduced fare. Broadening these programs to further reduce or even eliminate some fares or offering other financial assistance that could be applied to costs of fees would help alleviate cost-burden for those who rely on transit. One way to do that is by making transit free for youth – a clear community priority identified during the Get Moving 2020 transportation funding measure process.

Research has shown that people form opinions about transit early on, with early use being a key indicator of ridership in the future. Removing barriers to acquiring reduced or free transit fares can make it possible for individuals with limited access to documents, identification, or internet to receive these benefits. Fare capping, an approach utilized by TriMet's Hop Fastpass, allows people to pay for a reduced monthly pass by the ticket rather than all at once up front. Programs like TriMet's Access Transit, which provide fares to non-profit and community-based organizations at lower to no cost to distribute to clients, help to further increase the reach and accessibility of reduced fare programs. The region should build partnerships with non-profit and human service providers to support expanding these types of programs, disseminate more information about reduced fare programs and work through ways in which these programs can be more effective. The City of Portland's BIKETOWN for All program is one example of how to increase integration of free or reduced fare programs by including students receiving federal aid (FAFSA) and people

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receiving food assistance (Oregon Trail Card, SNAP). This should also include advocating in the state legislature and to the voters to increase, deepen, and sustain long-term funding for programs which support keeping transit affordable for riders.

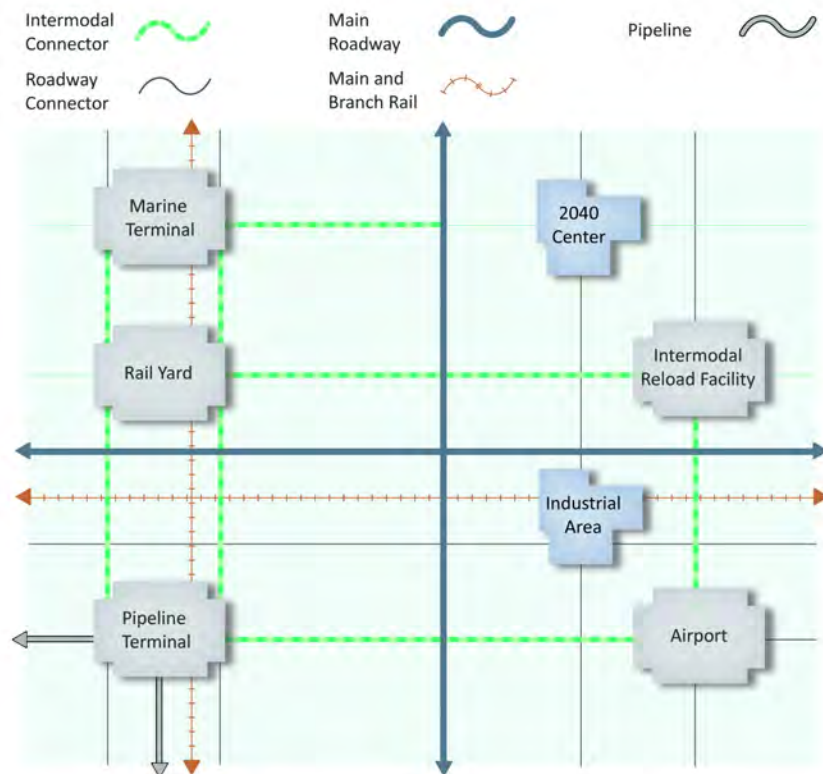
### **3.3.6 Regional freight network vision and policies**

Informing the regional framework for freight policy is the understanding that the Portland – Vancouver region is a globally competitive international gateway and domestic hub for commerce. The multimodal freight transportation network is a foundation for economic activities, and we must strategically maintain, operate and expand it in a timely manner to ensure a vital and healthy economy.

The Regional Freight Strategy addresses the needs for freight through-traffic as well as regional freight movements, and access to employment and industrial areas, and commercial districts. The Regional Freight Network Concept contains policy and strategy provisions to develop and implement a coordinated and integrated freight network that helps the region’s businesses attract new jobs and remain competitive in the global economy. The transport and distribution of freight occurs via the regional freight network, a combination of interconnected publicly and privately owned networks and terminal facilities. The concept in Figure 3-31 shows the components of the regional freight system and their relationships.

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**Figure 3-31 Regional freight network concept**



Rivers, mainline rail, pipeline, air and truck routes and arterial streets and throughways connect the region to international and domestic markets and suppliers beyond local boundaries. Inside the region, throughways and arterial streets distribute freight moved by truck to air, marine and pipeline terminal facilities, rail yards, industrial areas and commercial centers. Rail branch lines and heavy vehicle corridors connect industrial areas, marine terminals and pipeline terminals to rail yards and truck terminals. Pipelines transport petroleum products to and from terminal facilities.

### 3.3.6.2 Regional freight network policies

The Regional Freight Network Policies reflect the policy framework of the Regional Freight Strategy. Specific actions that Metro, in partnership with cities, counties, agencies and other stakeholders can take to implement the policies are identified in Chapter 8 of the Regional Freight Strategy.

<b>Policy 1</b>	<b>Plan and manage our multimodal freight transportation infrastructure using a systems approach, coordinating regional and local decisions to maintain seamless freight movement and access to industrial areas and intermodal facilities.</b>
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<b>Policy 2</b>	<b>Manage the region’s multimodal freight network to reduce delay, increase reliability and efficiency, improve safety and provide shipping choices.</b>
<b>Policy 3</b>	<b>Better integrate freight issues in regional and local planning and communication to inform the public and decision-makers on the importance of freight and goods movement issues.</b>
<b>Policy 4</b>	<b>Pursue a sustainable multimodal freight transportation system that supports the health of the economy, communities and the environment through clean, green and smart technologies and practices.</b>
<b>Policy 5</b>	<b>Protect critical freight corridors and access to industrial lands by integrating freight mobility and access needs into land use and transportation plans and street design.</b>
<b>Policy 6</b>	<b>Invest in the region’s multimodal freight transportation system, including road, air, marine and rail facilities, to ensure that the region and its businesses stay economically competitive.</b>
<b>Policy 7</b>	<b>Eliminate fatalities and serious injuries caused by freight vehicle crashes with passenger vehicles, bicycles and pedestrians, by improving roadway and freight operational safety.</b>
<b>Policy 8</b>	<b>Adapt future freight system investments to emerging technologies and shifts in goods movement, including the emergence of e-commerce and automated delivery systems.</b>

**Freight Policy 1. Plan and manage our multimodal freight transportation infrastructure systems approach, coordinating regional and local decisions to maintain seamless freight movement and access to industrial areas and intermodal facilities.**

A comprehensive, systems approach is central to planning, managing, and using the region’s multimodal freight transportation infrastructure. This approach provides a strong foundation for addressing core throughway network bottlenecks, recognizing and coordinating both regional and local decisions to maintain the flow and access for freight movement that benefits all.

The transport and distribution of freight occurs via a combination of interconnected publicly and privately-owned networks and terminal facilities.

**Freight Policy 2. Manage the region’s multimodal freight network to reduce delay and increase reliability and efficiency, improve safety and provide shipping choices.**

The 2005 Cost of Congestion to the Economy of the Portland Region Study reported that our region has a higher-than-average dependency on traded sector industries, particularly computer/electronic products, wholesale distribution services, metals, forestry/wood/paper products, and publishing; business sectors that serve broader regional, national, and international markets and bring outside dollars into the region’s economy.

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These industries depend on a well-integrated and well-functioning international and domestic transportation system to stay competitive in a global economy.

As an international gateway and domestic freight hub, the region is particularly influenced by the dynamic trends affecting distribution and logistics. As a result of these global trends, U.S. international and domestic trade volumes are expected to grow at an accelerated rate. The value of trade in Oregon is expected to double by 2040, to \$730 billion.<sup>34</sup> The region's forecasted population and job growth – an additional 917,000 residents and 597,000 jobs to be added between 2010 and 2040<sup>35</sup> – along with the associated boost in the consumption of goods and services are significant drivers of projected increases in local freight volume.

This policy is the first step to improved freight and goods movement operations on the existing system and includes preservation, maintenance and operations-focused projects and associated planning and coordinating activities. It focuses on using the system we have more effectively.

It is critical to maximize system operations and create first-rate multimodal freight networks that reduce delay, increase reliability, maintain and improve safety and provide cost-effective choices to shippers. In industrial and employment areas, the policy emphasizes providing critical freight access to the interstate highway system to help the region's businesses and industry in these areas remain competitive. Providing access and new street connections to support industrial area access and commercial delivery activities and upgrading main line and rail yard infrastructure in these areas are also emphasized.

In order to carry out an overall policy of reducing delay and increasing reliability, it will be necessary to expand the types of programs and amounts of funding for freight transportation infrastructure to adequately fund and sustain investment in our multimodal freight transportation network in order to ensure that the region and its businesses stay economically competitive.

### **Freight Policy 3. Better integrate freight issues in regional and local planning and communication to inform the public and decision-makers on the importance of freight and goods movement issues.**

To gain public support for projects and funding of freight initiatives, and to better inform elected officials when making land use and transportation decisions, a program that informs the public is required.

Potential freight impacts should be considered in all modal planning and funding, policy and project development and implementation and monitoring. This also means better informing the region's residents and decision makers about the importance of freight movement on our daily lives and economic well-being. Metro will work with its transportation partners to improve the level of freight information available to decision-makers, the business community and the public.

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<sup>34</sup> Federal Highway Administration, Freight Analysis Framework version 3.4, 2013

<sup>35</sup> Metro 2040 growth forecast. Represents forecasted population and jobs within 4-county area (Multnomah, Clackamas, Washington and Clark counties).



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## **Freight Policy 4. Pursue a sustainable multimodal freight transportation system that supports the health of the economy, communities and the environment through clean, green and smart technologies and practices.**

This policy deals with traditional nuisance and hot spot issues associated with “smokestack and tailpipe” problems, but it also recognizes the many current contributions and new opportunities for the evolving green freight community to be part of the larger environmental and economic solution set required in these times, including reducing greenhouse gas emissions.

It is important to ensure that the multimodal freight transportation network supports the health of the economy and the environment by pursuing clean, green and smart technologies and practices. Details of the most promising innovations and technologies have been developed as part of the Regional Freight Strategy’s Technology for Sustainable Freight Transport, as identified in Chapter 6 of the strategy.

## **Freight Policy 5. Protect critical freight corridors and access to industrial lands by integrating freight mobility and access needs into land use and transportation plans and street design.**

This policy targets land use planning and design issues that can affect the ability of freight, goods movement and industrial uses to live harmoniously with their neighbors. Freight-sensitive land use planning includes everything from long-range aspirations for freight and industrial lands to short-term and smaller scale design and access issues.

It is important to integrate freight mobility and access needs in land use decisions to ensure the efficient use of prime industrial lands, protection of critical freight corridors and access for commercial delivery activities. This includes improving and protecting the throughway interchanges that provide access to major industrial areas, as well as the last-mile arterial connections to both current and emerging industrial areas and terminals.

## **Freight Policy 6. Invest in the region’s multimodal freight transportation system, including road, air, marine and rail facilities, to ensure that the region and its businesses stay economically competitive.**

This policy focuses on planning and building capital projects and developing the funding sources, partnerships, and coordination to implement them.

It is important to look beyond the roadway network to address needs of the multi-modal and intermodal system that supports our regional economy. As described in the Regional Freight Strategy, freight rail capacity is adequate to meet today’s needs but as rail traffic increases additional investment will be needed in rail mainline, yard and siding capacity.<sup>36</sup> Whenever right-of-way is considered for multiple uses such as freight rail, passenger rail and trails, analysis must include long-term needs for existing freight and freight rail expansion to ensure that necessary future capacity is not compromised.

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<sup>36</sup> Port of Portland, Port of Portland Rail Plan, 2013.

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In addition, navigation channel depth on the Columbia River continues to be the limiting factor on the size, and therefore the number, of ships that call on the Portland-Vancouver Harbor.

## **Freight Policy 7. Eliminate fatalities and serious injuries caused by freight vehicle crashes with passenger vehicles, bicycles and pedestrians, by improving roadway and freight operational safety.**

This policy and the potential design solutions focuses on addressing the issue of eliminating fatalities and serious injuries due to freight vehicle crashes with passenger vehicles, bicycles and pedestrians.

## **Freight Policy 8. Adapt future freight system investments to emerging technologies and shifts in goods movement, including the emergence of e-commerce and automated delivery systems.**

This policy is focused on addressing the continued growth in e-commerce and delivery trips and the need for industrial land that provides for an increase in distribution centers and fulfillment centers.

### **3.3.6.3 Regional freight network classifications and map**

The Regional Freight Network map, shown in Figure 3-32 applies the regional freight network concept on the ground to identify the transportation networks and facilities that serve the region and the state's freight mobility needs. Click on RTP Regional Network Maps for online zoomable version of map. [NOTE: LINK TO BE ADDED]

The regional freight network has a functional hierarchy like that of the regional motor vehicle network. To show the continuity of the freight system in both Oregon and Washington state, the map shows the freight routes in Clark County, north of the Columbia River and rural freight routes designated by Clackamas and Washington counties that connect to the regional freight network designated within the metropolitan planning area boundary. The Regional Freight Network map also includes six inset maps (brown dotted line boxes) that focus on the key intermodal facilities (marine terminals, rail yards and pipeline facilities) and rail lines to highlight the importance of the rail network and have better visibility for the rail lines.

The different functional elements of the regional freight network are:

- **Main line rail** – Class I rail lines (e.g., Union Pacific and Burlington Northern/Santa Fe).
- **Branch line rail** – Non-Class 1 rail lines, including short lines (e.g., Portland and Western Railroad).
- **Main roadway routes** – Designated freight routes that are freeways and highways that connect major activity centers in the region to other areas in Oregon or other states throughout the U.S., Mexico and Canada.
- **Regional Intermodal Connectors** – Roads that provide connections between major rail yards, marine terminals, airports, and other freight intermodal facilities, and the freeway and highway system. Marine terminals, truck to rail facilities, rail yards, pipeline terminals, and air freight facilities are the primary types of intermodal terminals and businesses that the tier 1 and NHS intermodal connectors are serving in the Portland region. An example of a NHS

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intermodal connector is Marine Drive between the marine terminals (Terminal 5 and 6) and I-5, which in 2014 had over 4,100 average daily trucks. Another NHS intermodal connector is Columbia Boulevard between I-5 and OR 213 (82nd Avenue) which had over 3,500 average daily trucks and is a vital freight connection between the air-freight terminal at Portland International Airport and both I-5 and I-205. These Regional Intermodal Connectors are carrying many more trucks than the typical road connectors on the Regional Freight Network map. They are also of critical importance for carrying commodities that are being exported from and imported into the state and across the country.

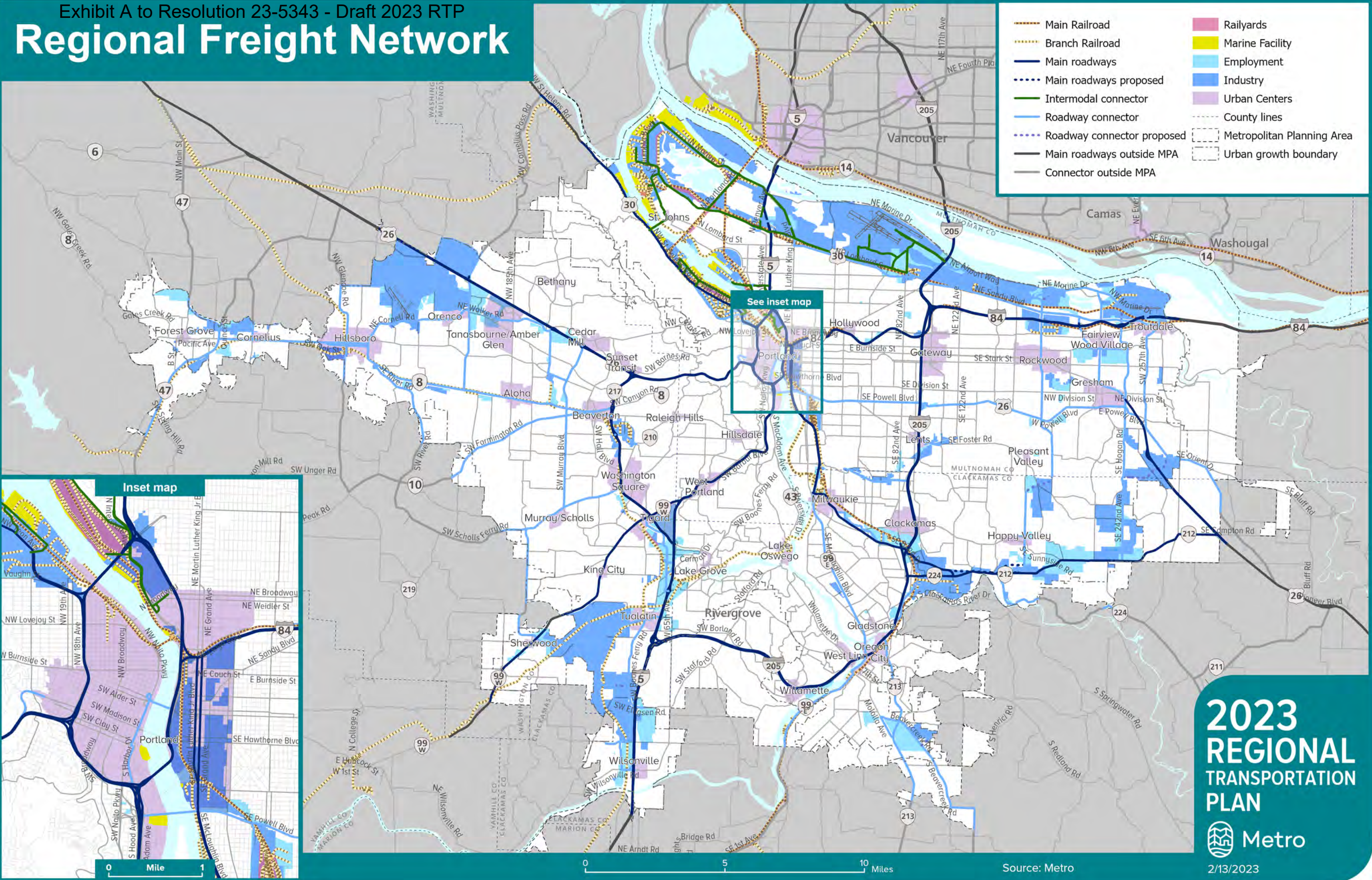
- **Roadway connectors** – Roads that connect other freight facilities, industrial areas, and 2040 centers to a main roadway route.
- **Marine facilities** – A facility where freight is transferred between water-based and land-based modes.
- **Rail yards** – A rail yard, railway yard or railroad yard is a complex series of railroad tracks for storing, sorting, or loading and unloading, railroad cars and locomotives. Railroad yards have many tracks in parallel for keeping rolling stock stored off the mainline, so that they do not obstruct the flow of traffic.

**Figure 3-32 Regional freight network map**

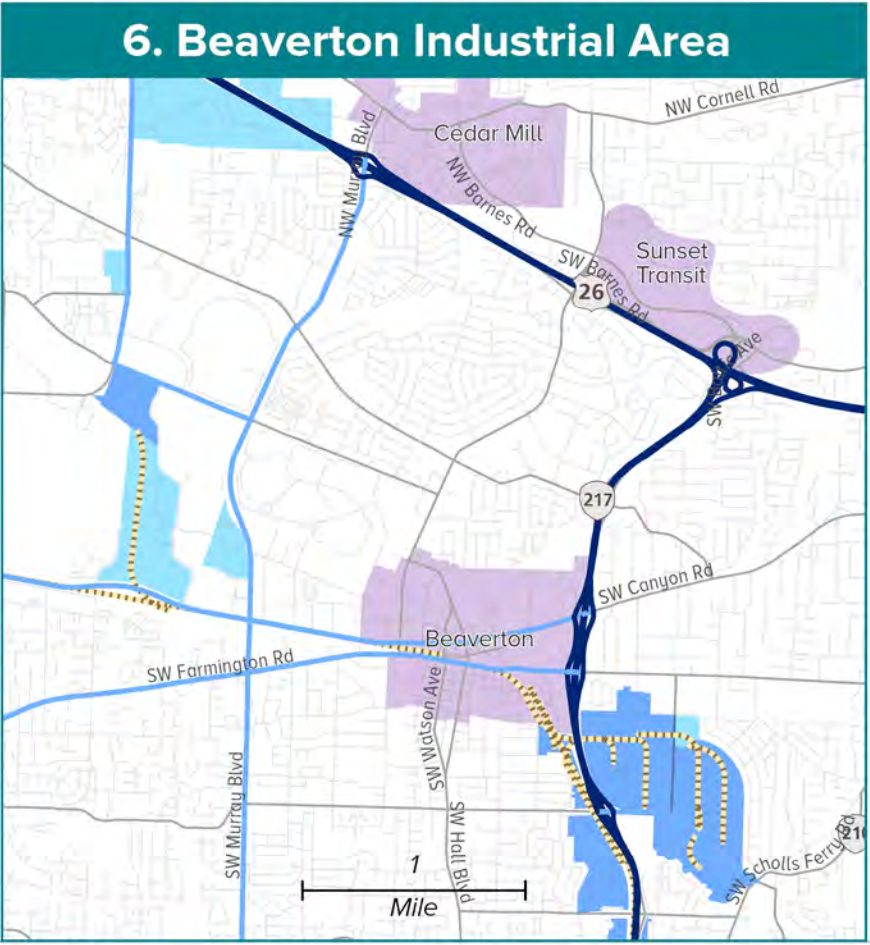
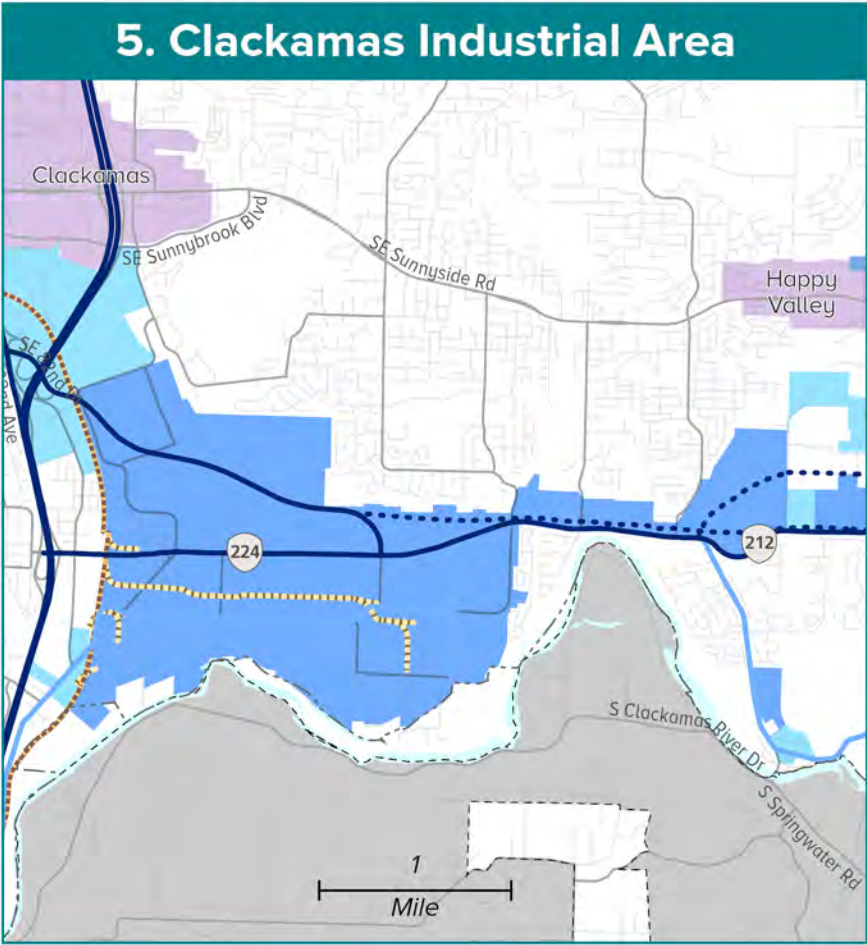
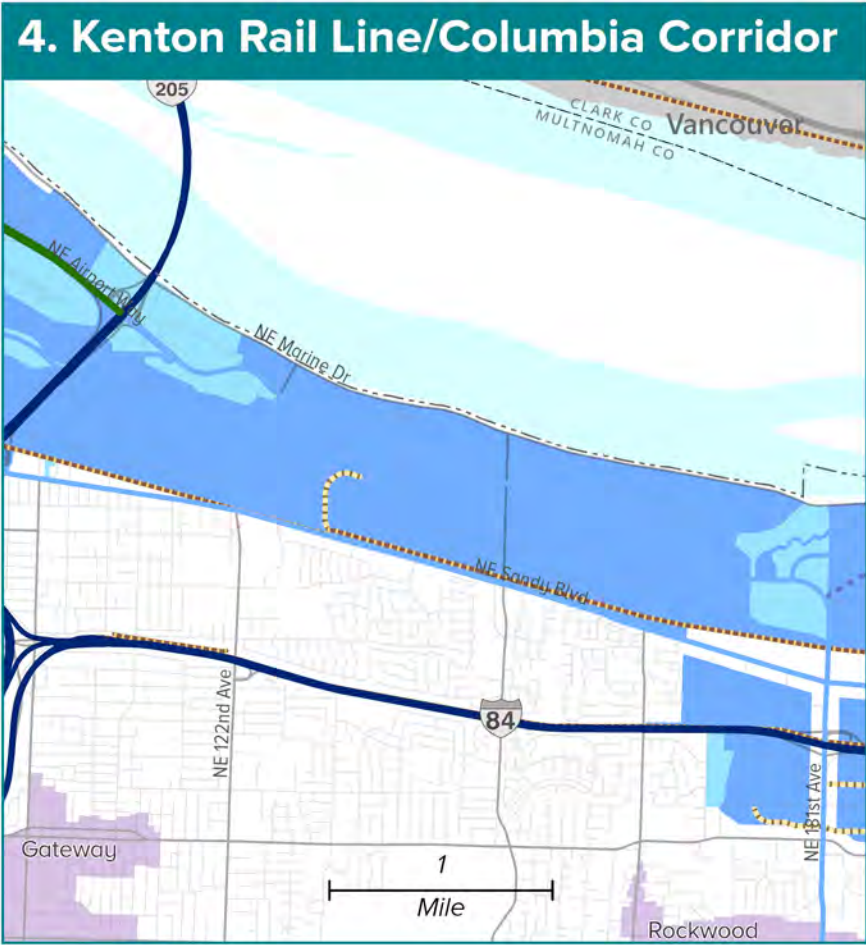
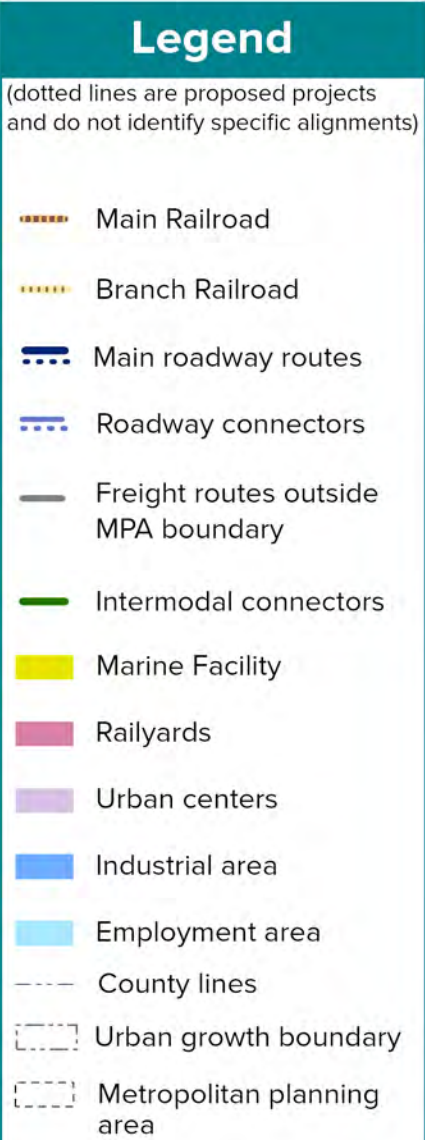
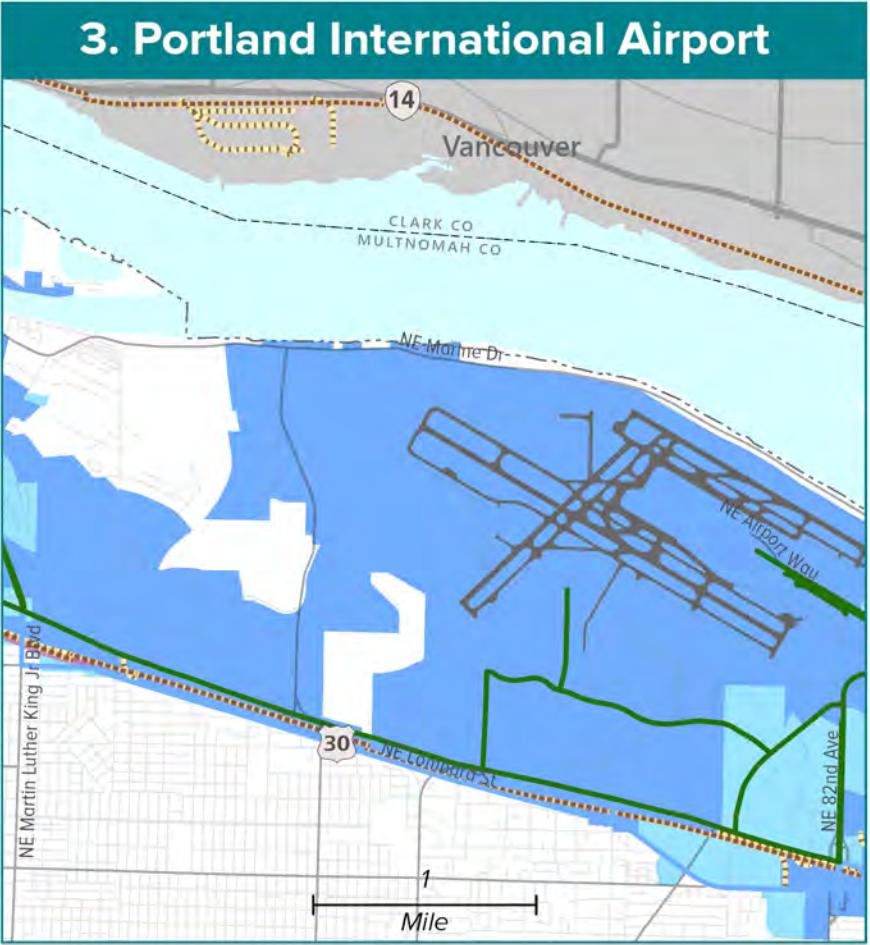
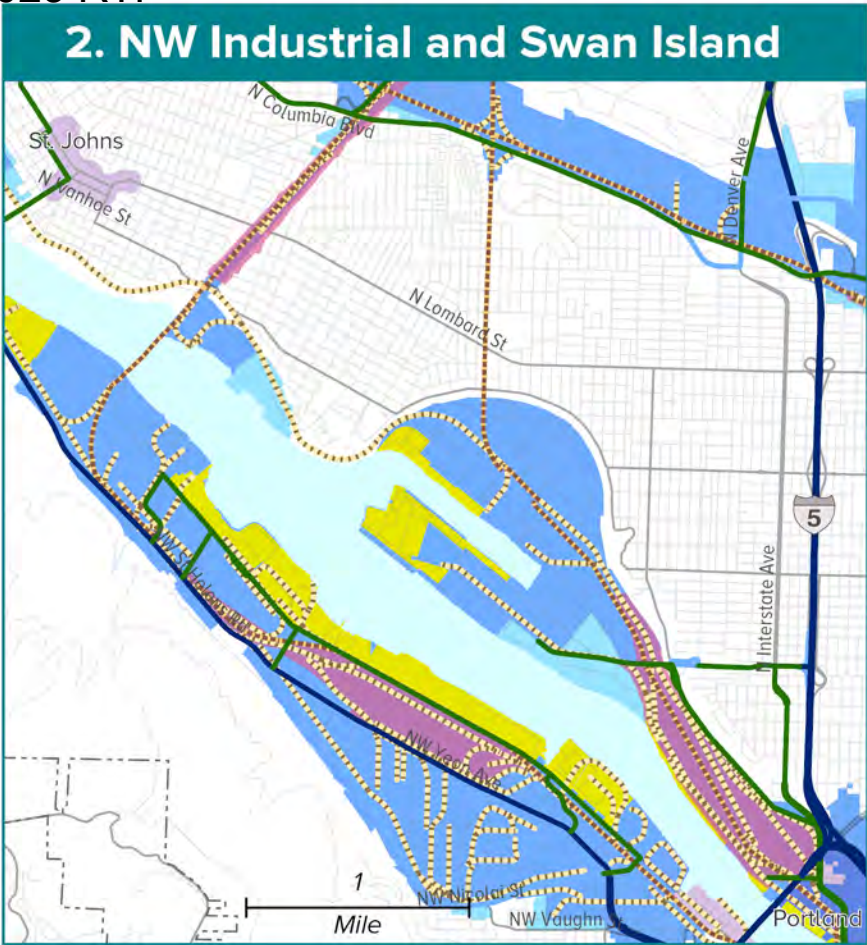
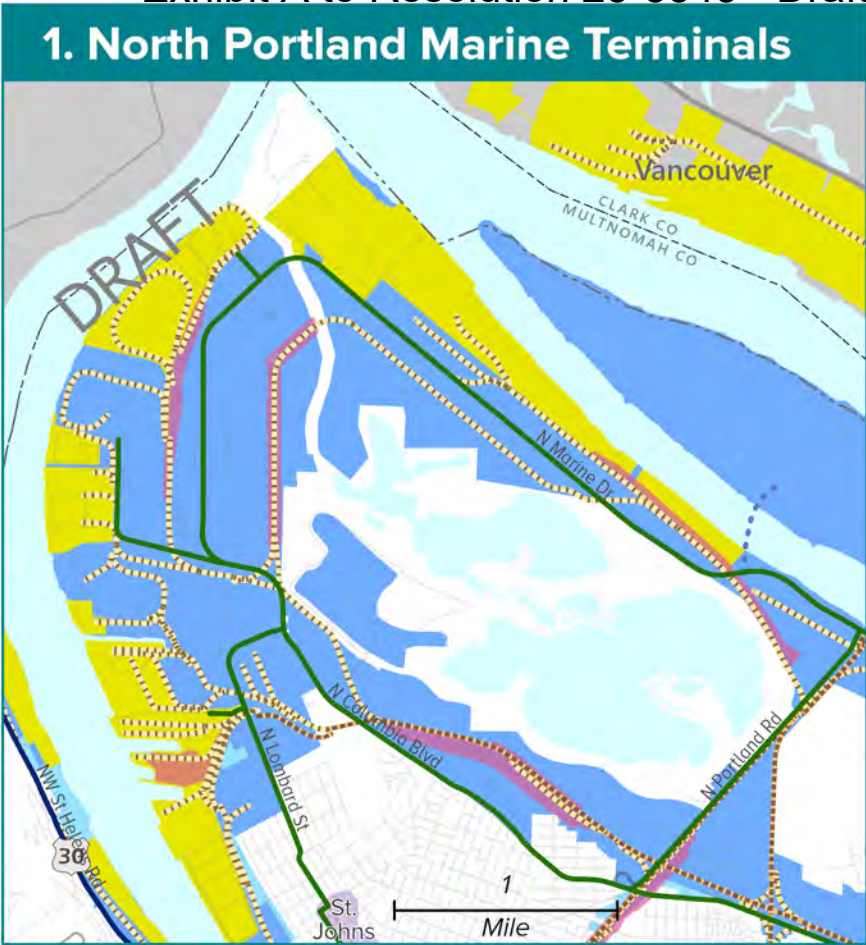


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# Regional Freight Network









## 3.3.7 Regional active transportation network vision

A complete and welcoming active transportation network allows people of all ages, abilities, income levels and backgrounds to access transit, walk and bike easily and safely for many of their daily needs. The Regional Active Transportation Network vision was developed in the Regional Active Transportation Plan and starts with the understanding that integrated, complete and seamless regional pedestrian, bicycle and transit networks are necessary to achieve local and regional transportation goals, aspirations and targets.

**Active transportation** is human-powered transportation that engages people in healthy physical activity while they travel from place to place. People walking, bicycling, the use of strollers, wheelchairs /mobility devices, skateboarding, and rollerblading are active transportation.

Active transportation supports public transportation because most trips on public transportation include walking or bicycling. Many people in the region incorporate walking, transit and riding a bicycle into daily travel. The regional active transportation network concept focuses on the integration of bicycle, pedestrian and transit travel and connecting local pedestrian and bicycle networks into a coordinated and complete regional network.

The regional active transportation network is composed of pedestrian-bicycle districts and regional bikeways and walkways that connect to and serve high capacity and frequent transit. Pedestrian-bicycle districts are urban centers and station communities. The following ten guiding principles were developed in the Regional Active Transportation Plan to guide development of the regional active transportation network.

1. Bicycling, walking, and transit routes are integrated and connections to regional centers and regional destinations are seamless.
2. Routes are direct, form a complete network, are intuitive and easy-to-use and are accessible at all times.
3. Routes are safe and comfortable for people of all ages and abilities and welcoming to people of all income levels and backgrounds.
4. Routes are attractive and travel is enjoyable.
5. Routes are integrated with nature and designed in a habitat and environmentally sensitive manner.
6. Facility designs are context sensitive and seek to improve safety and balance the needs of all transportation modes.
7. Increases corridor capacity and relieves strain on other transportation systems.
8. Ensures access to regional destinations for people with low incomes, people of color, people living with disabilities, people with low-English-proficiency, youth and older adults.
9. Measurable data and analyses inform the development of the network and active transportation policies, including metrics for air quality and safety.



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10. Implements regional and local land use and transportation goals and plans to achieve regional active transportation modal targets.

Developing the regional active transportation network according to the guiding principles will provide a well-connected network of complete streets and off-street paths integrated with transit and prioritizing safe, convenient and comfortable pedestrian and bicycle access for all ages and abilities. This will help make walking and bicycling the most convenient and enjoyable transportation choices for short trips and provide access to regional destinations, jobs, regional and town centers, schools, parks and essential daily services. It will also increase walking and bicycling access for underserved populations and ensures that the regional active transportation network equitably serves all people.<sup>37</sup>

### **3.3.7.1 Regional Active Transportation Plan (2014)**

The Regional Active Transportation Plan (ATP) and the Designing Livable Streets and Trails Guide provides recommended design guidance for trails/multi-use paths, and low volume and high-volume streets. The appropriateness of each design is based on adjacent motor vehicle speeds and volumes. While it may be difficult for transportation agencies to provide a comfortable facility on some arterial streets these routes should be improved over time, through better designs and lower auto speeds accompanying a more compact urban form. In the short-term providing low-volume routes for bicycle travel will help increase the number of people riding bicycles.

Arterial streets typically provide direct routes that connect to centers and daily destinations. Cyclists tend to travel on arterial streets when they want to minimize travel time or access destinations along them. Oregon State statutes and administrative rules establish that bicycle facilities are required on all collector and higher classification arterial streets when those roads are constructed or reconstructed.

Low-volume streets often provide access to centers and daily destinations as well as residential neighborhoods, complementing bicycle facilities located on arterial streets. Though these routes are often less direct than arterials, attributes such as slower speeds and less noise, exhaust and interaction with vehicles, including trucks and buses, can make them more comfortable and appealing to many cyclists. Recent research suggests that providing facilities on low-volume streets may be a particularly effective strategy for encouraging new bicyclists, which helps increase bicycle mode share in the region.

Regional trails typically provide an environment removed from vehicle traffic and function as an important part of the larger park and open space system in a community and in the region. Trails often take advantage of opportunities for users to experience natural features such as creeks, rivers, forests, open spaces and wildlife habitats, as well as historic and cultural features, with

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<sup>37</sup> Underserved populations include low income, low-English proficiency, minority, older adults (over 65) and youth (under 18).

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viewpoints and interpretive opportunities. In the highest use areas, regional trails should be designed to provide separation between bicyclists and pedestrians.

Off-street facilities also complement on-street bikeways, providing access to 2040 Target Areas while providing a travel environment with fewer intersecting streets than on-street bikeways, thereby allowing for faster travel times. This makes off-street facilities especially attractive for serving long distance bicycle trips. Similar to low-volume streets, off-street facilities provide an environment more removed from vehicle traffic, which is appealing to families and new or less confident cyclists.

## **3.3.8 Regional bicycle network concept and policies**

Residents in the region have long recognized bicycling as an important form of transportation. The RTP elevates the importance of supporting bicycle travel because of the mobility, economic, environmental, health, and land use benefits it provides.

Sidewalks, trails, bicycle facilities and transit cannot achieve their full potential if they are treated as stand-alone facilities – they must be planned and developed as part of a complete network.

Section 3.08.140 of the Regional Transportation Functional Plan (RTFP), the implementing plan of the Regional Transportation Plan (RTP), requires that local jurisdictions include a bicycle plan to achieve the following:

- an inventory of existing facilities that identifies gaps and deficiencies in the bicycle system;
- an evaluation of needs for bicycle access to transit and essential destinations, including direct, comfortable and safe bicycle routes and secure bicycle parking;
- a list of improvements to the bicycle system;
- provision for bikeways along arterials, collectors and local streets, and bicycle parking in centers, at major transit stops, park-and-ride lots and institutional uses; and
- provision for safe crossing of streets and controlled bicycle crossing on major arterials.

### **3.3.8.1 Regional bicycle network concept**

The regional bicycle network concept includes:

- A bicycle parkway in each of the region's Mobility Corridors within the MPA boundary to provide transportation options in these corridors.
- A network of bicycle parkways spaced approximately every two miles, that connect to and/or through every town and regional center, many regional destinations and to most employment and industrial land areas and regional parks and natural areas (all areas are connected by regional bikeways, the next functional class of bicycle routes).

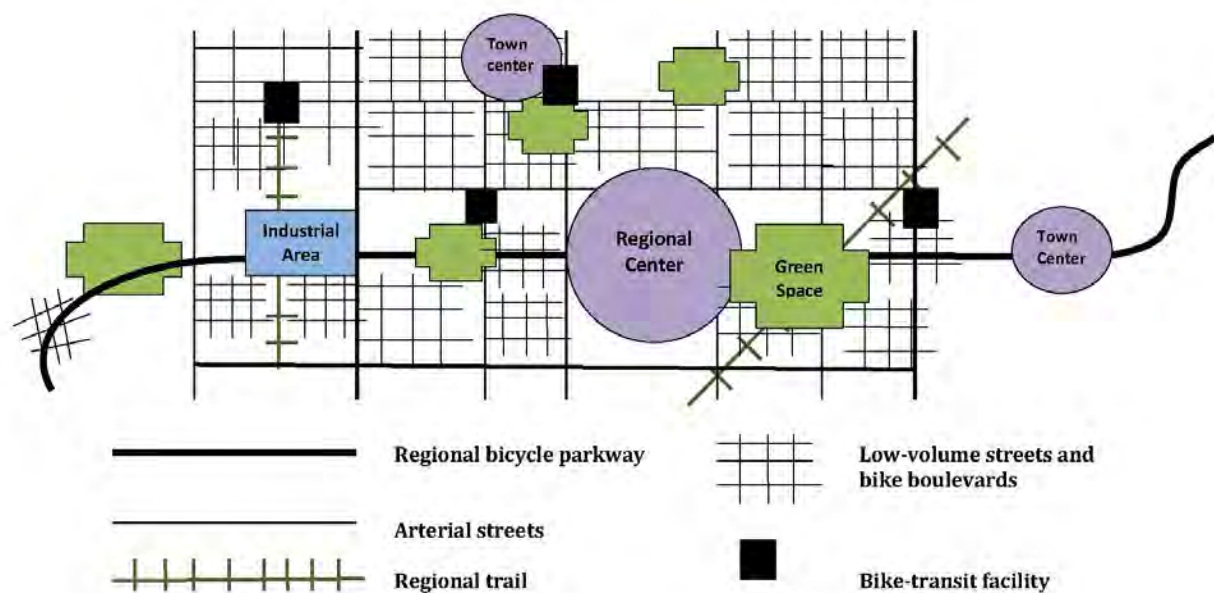
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- A network of regional bikeways that connect to the bicycle parkways, providing an interconnected regional network. Local bikeways connect to bicycle parkways and regional bikeways.
- Regional bicycle districts. Regional and town centers and station communities were identified as bicycle districts, as well as pedestrian districts.

Figure 3-33 shows the components of the regional bicycle network concept and their relationship to adjacent land uses. A region-wide bicycle network would be made up of on-street and off-street routes with connections to transit and other destinations.

**Figure 3-33 Regional bicycle network concept**



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## 3.3.8.2 Regional bicycle network policies

This section describes the policy framework of the Regional Bicycle Network Concept. Specific actions that Metro, in partnership with cities, counties, agencies and other stakeholders can take to implement the policies are identified in the Regional Active Transportation Plan.

<b>Policy 1</b>	<b>Make bicycling the most convenient, safe and enjoyable transportation choice for short trips of less than three miles</b>
<b>Policy 2</b>	<b>Complete an interconnected regional network of bicycle routes and districts that is integrated with transit and nature and prioritizes seamless, safe, convenient and comfortable access to urban centers and community places, including schools and jobs, for all ages and abilities.</b>
<b>Policy 3</b>	<b>Complete a green ribbon of bicycle parkways as part of the region’s integrated mobility strategy.</b>
<b>Policy 4</b>	<b>Improve bike access to transit and community places for people of all ages and abilities.</b>
<b>Policy 5</b>	<b>Ensure that the regional bicycle network equitably serves all people.</b>

### **Bicycle Policy 1. Make bicycling the most convenient, safe and enjoyable transportation choice for short trips of less than three miles.**

The average length of a bicycle trip in the region is about three miles.<sup>38</sup> Nearly 45 percent of all trips made by car in the region are less than three miles, and 15 percent are less than one mile.<sup>39</sup> With complete networks, education, encouragement and other programs, many short trips made by car could be replaced with bicycle or pedestrian trips, increasing road capacity and reducing the need to expand the road system. Technologies such as bike-sharing provide a new toolkit to make bicycling even easier for short trips.

In 2011, the Federal Transit Administration (FTA) established a formal policy on the eligibility of pedestrian and bicycle improvements for FTA funding and defined the catchment area for pedestrians and bicyclists in relation to public transportation stops and stations. The policy recognized that bicycle and pedestrian access to transit is critical and defined a three mile catchment area for bicycle improvements and a half mile catchment area for pedestrian improvements.<sup>40</sup>

Bicycle travel holds huge potential for providing transportation options that can replace trips made by auto, especially for short trips. Bicycle trips made in the region for all purposes grew by

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<sup>38</sup> 2011 Oregon Household Activity Survey.

<sup>39</sup> 2011 Oregon Household Activity Survey. Vehicle trips by length for trips wholly within Clackamas, Multnomah, Washington and Clark Counties.

<sup>40</sup> Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law

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190 percent since 1995.<sup>41</sup> When bicycling is safe, comfortable, convenient and enjoyable, people have the option of making some of those short trips by bicycle.

Actions to implement this policy can be found in Chapter 12 of the 2014 Regional Active Transportation Plan.

**Bicycle Policy 2. Complete an interconnected regional network of bicycle routes and districts that is integrated with transit and nature and prioritizes seamless, safe, convenient and comfortable access to urban centers and community places, including schools and jobs for all ages and abilities.**

A well-connected bicycle network does not have gaps and is comfortable and safe for people of all ages and abilities. Regional bicycle routes connect to and through urban centers increasing access to transit, businesses, schools, and other destinations. Regional trails and transit function better when they are integrated with on-street bicycle routes. Wherever possible, routes should connect to and through nature and include trees and other green elements. Designing the network for universal access will make the regional bicycle network accessible and comfortable for all ages and abilities. The Regional Transportation Functional (RTFP) plan requires local Transportation System Plans include an interconnected network of bicycle routes.

**Bicycle Policy 3. Complete a green ribbon of bicycle parkways as part of the region's mobility strategy.**

Regional bicycle parkways form the backbone of the regional bicycle system, connecting to 2040 activity centers, downtowns, institutions and greenspaces within the urban area while providing an opportunity for bicyclists to travel efficiently with minimal delays. In effect, the bicycle parkway concept mainstreams bicycle travel as an important part of the region's integrated mobility strategy. This concept emerged from work by the Metro Blue Ribbon Committee for Trails as part of the broader Connecting Green Initiative in 2007-09 and further developed in the Regional Active Transportation Plan adopted in 2014.

Key experiential aspects that bike parkways embody:

- A green environment with natural features such as trees or plantings (some will already be green, while others will be made greener as part of bike parkway development)
- Comfort and safety provided by protection from motorized traffic
- Large volumes of cyclists traveling efficiently with minimal delays

The bicycle parkway also connects the region to neighboring communities, other statewide trails and natural destinations such as Mt Hood, the Columbia River Gorge, and the Pacific Ocean.

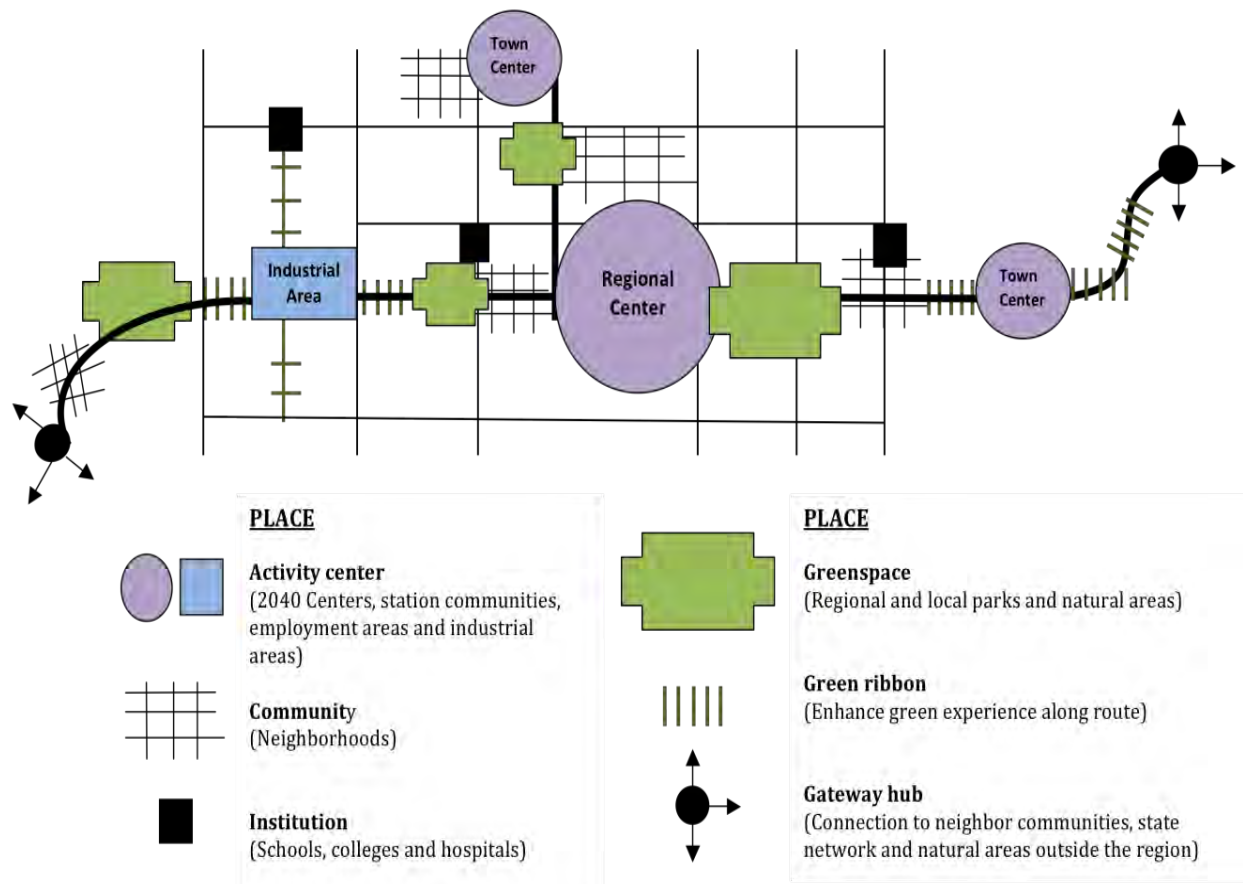
Figure 3-34 illustrates this policy concept in the context of the regional bicycle parkway concept.

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<sup>41</sup> 2011 Oregon Household Activity Survey.

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**Figure 3-34 Bicycle parkway concept**



A bicycle parkway serves as a green ribbon connecting 2040 activity centers, downtowns, institutions and greenspaces within the urban area.

The experience of the cyclist will be optimized to such a high level that people will clearly know when they are riding on a bicycle parkway. The specific design of a bike parkway will vary depending on the land use context within which it passes through. The facility could be designed as an off-street trail along a stream or rail corridor, a cycle track / protected / physically separated bicycle lane along a main street or town center, or a bicycle boulevard through a residential neighborhood. Priority treatments will be given to cyclists (e.g., signal timing) using the bike parkway when they intersect other transportation facilities, and connections to/from other types of bicycle routes will be intuitive. The Regional Active Transportation Plan provides design guidance on the development of bicycle parkways.

**Bicycle Policy 4. Improve bike access to transit and to community places for people of all ages and abilities.**



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Public transit and bicycling are complementary travel modes. Effectively linking bicycling with transit increases the reach of both modes. It allows longer trips to be made without driving and reduces the need to provide auto park-and-ride lots at transit stations.

Transit provides a fast and comfortable travel environment between regional destinations that overcomes barriers to bicycling (hills, distance, and streets without bikeways); while bicycling provides access from the front door to a transit station, is faster than walking and can sometimes eliminate the need to transfer between transit vehicles.

A key component of the bike-transit connection is bicycle parking at transit stations and stops. Bike-transit facilities provide connections between modes by creating a “bicycle park and ride.” Both TriMet and SMART currently provide bicycle parking and storage at many transit stations and stops. TriMet, with input from regional stakeholders, has developed Bicycle Parking Guidelines. The guidelines consider station context and regional travel patterns and are focused on three major factors for parking: location, amount and design. The guidelines will help TriMet, and local jurisdictions determine the appropriate location, size and design of large-scale bike-parking facilities, including Bike-Transit Facilities. The Regional Transportation Functional Plan (RTFP) requires that local transportation system plans evaluate the needs for bicycle access to transit, including secure bicycle parking.

## **Bicycle Policy 5. Ensure that the regional bicycle network equitably serves all people.**

All people in the region, regardless of race, income level, age or ability should enjoy access to complete and safe walking, bicycling and transit networks and the access they provide to essential destinations, including schools and jobs. Currently the regional active transportation network is incomplete in many areas of the region, including areas with low-income, minority and low-English proficiency populations. Transportation is the second highest household expense for the average American; providing transportation options in areas with low-income populations helps address transportation inequities. Future planning, design and construction of the networks must include consideration of the benefits and burdens of transportation investments to underserved and environmental justice populations. In addition to infrastructure, technologies such as bike sharing increase opportunities for all residents to bicycle. In Portland, the “Biketown for All” program provides discounted memberships, free helmets and bike safety education to low-income people.

### **3.3.8.3 Regional bicycle network functional classifications and map**

This section describes the regional bicycle network functional classifications shown on Figure 3-35, the Regional Bicycle Network. Click on 2023 for online zoomable version of map.

The regional bicycle network is composed of on street and off-street bikeways that serve the central city, regional centers, town centers, and other 2040 Target Areas, providing a continuous network that spans jurisdictional boundaries. Figure 3-35 is a functional classification map

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illustrating how regional bicycle routes and districts work together to form a comprehensive network that would allow people to bike to transit, schools, employment centers, parks, natural areas and shopping.

The regional bicycle network has a functional hierarchy like that of the regional motor vehicle network. Figure 3-35 provides a vision for a future bicycle network; for a map of current bicycle facilities in the region, refer to Chapter 4.

The different functional elements of the regional bicycle network are:

- **Regional Bicycle Parkways** are spaced approximately every two miles in a spiderweb-grid pattern, and connect to and through every urban center, many regional destinations and to most employment and industrial land areas, regional parks and natural areas. Each Mobility Corridor within the urban area has an identified bicycle parkway. Bicycle parkways were identified as routes that currently serve or will serve higher volumes of bicyclists and provide important connections to destinations.
- **Regional Bikeways** provide for travel to and within the Central City, Regional Centers, and Town Centers. Regional bikeways can be any type of facility, including off-street trails/multi-use paths, separated in-street bikeways (such as buffered bicycle lanes) and bicycle boulevards. On-street Regional Bikeways located on arterial and collector streets are designed to provide separation from traffic.
- **Local Bikeways** are not identified as regional routes. However, they are very important to a fully functioning network. They are typically shorter routes with less bicycle demand and use than regional routes. They provide for door-to-door bicycle travel.
- **Bicycle Districts (and Pedestrian Districts)** include the Portland Central City, Regional and Town Centers and Station Communities. A bicycle district is an area with a concentration of transit, commercial, cultural, educational, institutional and/or recreational destinations where bicycle travel is intended to be attractive, comfortable and safe. Bicycle districts are also areas with current or planned high levels of bicycle activity. All bicycle routes within bicycle districts are considered regional and are eligible for federal funding. Bicycle facilities in bicycle districts should strive to be developed consistent with the design guidance described in Chapter 9.

Which areas are designated as bicycle districts should be considered further in future Regional Transportation Plan and ATP updates. For example, areas around bus stops with high ridership should be evaluated as potential bicycle districts (light rail station areas are currently identified as bicycle districts); some Main Streets on the regional network may be considered for expansion as bicycle districts, as well as other areas.

- **Bike-Transit Facilities** are often referred to as Bike & Rides and are generally located at transit centers and stations and provide secure, protected large-scale bike parking facilities. Some facilities may include additional features such as showers, lockers, trip planning and

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bicycle repair. These facilities have been built at transit centers and MAX stations throughout the region– including in Wilsonville, Hillsboro, Beaverton, Portland and Clackamas County.

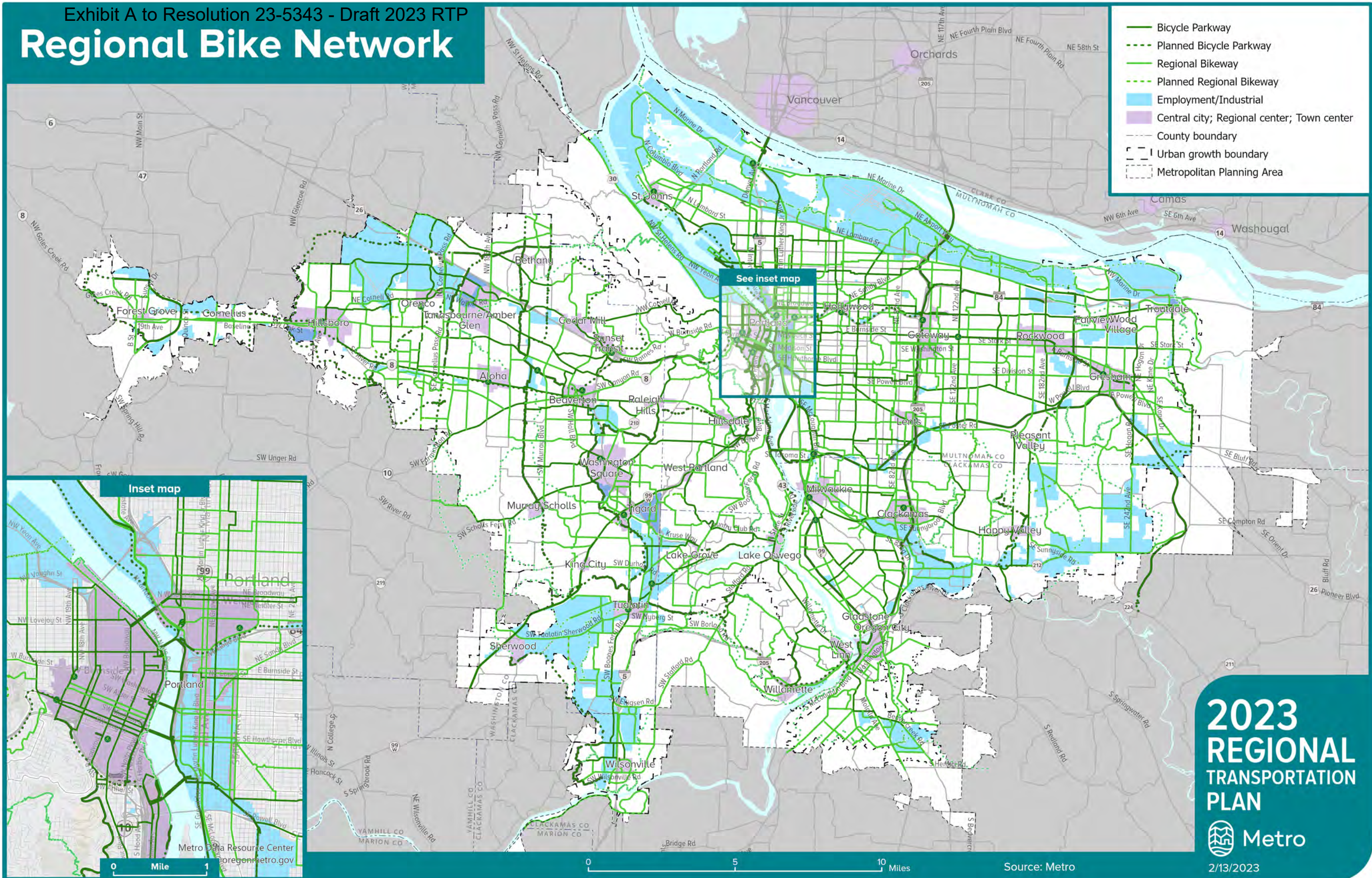
Bicycle Parkways and Regional Bikeways typically follow arterial streets but may also be located on collector and low-volume streets. On-street bikeways should be designed using a flexible “toolbox” of bikeway designs, including bike lanes, cycle tracks /protected/physically separated bicycle lanes, shoulder bikeways, shared roadway/wide outside lanes and bicycle priority treatments (e.g., bicycle boulevards).

## **Figure 3-35 Regional bicycle network map**



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# Regional Bike Network





## 3.3.9 Regional pedestrian network concept and policies

Walking contributes to a healthy lifestyle and supports vibrant local economies. Every trip begins or ends with at least a short walk. Transit in particular is integrated with walking. However, while everyone walks, walking is not a safe or convenient option for everyone in the region. Traffic crashes involving people walking often end in a death or severe injury and pedestrian deaths are rising.

Many streets are not ADA-compliant, sidewalk gaps remain on busy arterial roadways and along bus routes, safe places to cross the street can be few and far between, and lack of street lighting and other gaps make it dangerous and difficult to walk, especially for older adults, children and people with disabilities. In marginalized communities, lack of safe walking routes can be worse.

In the Regional Pedestrian Network Vision, walking is safe and convenient. Section 3.08.130 of the Regional Transportation Functional Plan (RTFP) requires that local jurisdictions include a pedestrian plan to achieve the following:

- Sidewalks along all arterials, collectors and most local streets.
- Direct and safe pedestrian routes to transit and other essential destinations.
- Provision of safe crossings of streets and controlled pedestrian crossings on major arterials.
- Safe, direct and logical pedestrian crossings at all transit stops where practicable.
- Crossings over barriers such as throughways, active rail-lines and rivers provided at regular intervals following regional connectivity standards.
- Regional multi-use trails and walking paths are completed.

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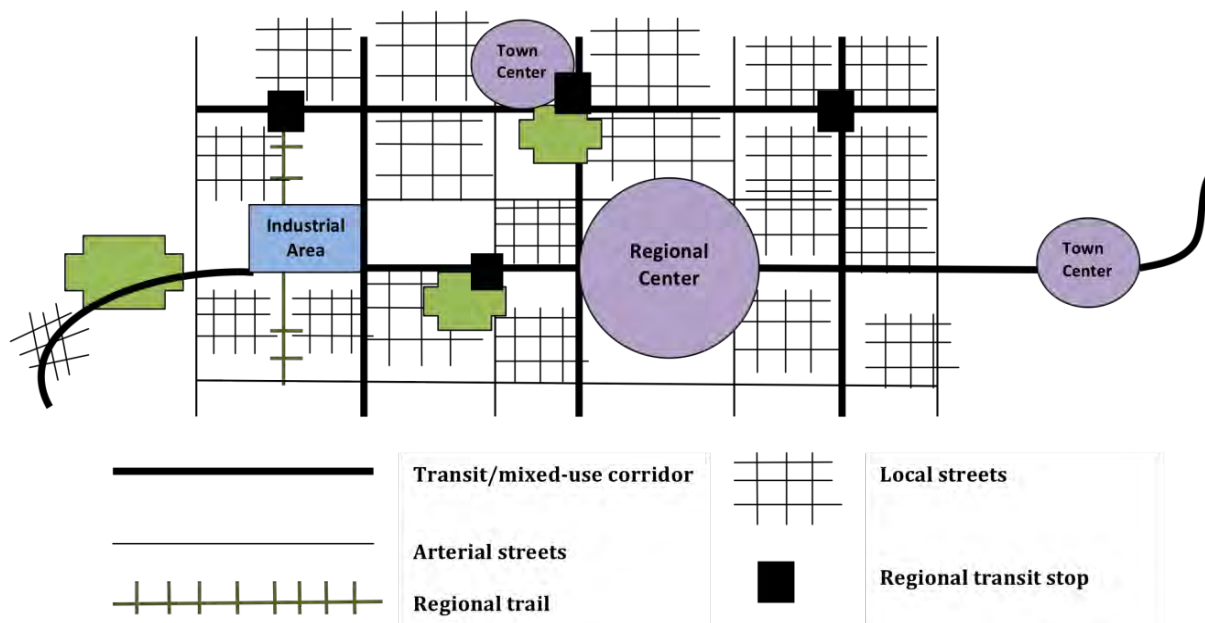
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## 3.3.9.1 Regional pedestrian network concept

The Regional Pedestrian Network Concept describes a well-connected grid of streets and multi-use paths connecting to and intersecting through regional and town centers, employment areas, station communities, parks and natural areas and connecting to transit and essential destinations.

Figure 3-36 shows the components of the regional pedestrian network and their relationship to adjacent land uses.

**Figure 3-36 Regional pedestrian network concept**



The 2040 Growth Concept sets forth a vision for making walking safe, convenient and enjoyable to support walking as a legitimate travel choice for all people in the region. The Regional Transportation Plan supports this vision with a region-wide network of on-street and off-street pedestrian facilities integrated with transit and regional destinations.



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## 3.3.9.2 Regional pedestrian network policies

Regional pedestrian policies help achieve the Regional Pedestrian Network Vision. Specific actions that Metro, in partnership with cities, counties, agencies and other stakeholders, can take to implement the policies are identified in the Regional Active Transportation Plan.

<b>Policy 1</b>	<b>Make walking the most convenient, safe and enjoyable transportation choice for short trips of less than one mile.</b>
<b>Policy 2</b>	<b>Complete a well-connected network of pedestrian routes and safe street crossings that is integrated with transit and nature that prioritize seamless, safe, convenient and comfortable access to urban centers and community places, including schools and jobs, for all ages and abilities.</b>
<b>Policy 3</b>	<b>Create walkable downtowns, centers, main streets and station communities that prioritize safe, convenient and comfortable pedestrian access for all ages and abilities.</b>
<b>Policy 4</b>	<b>Improve pedestrian access to transit and community places for people of all ages and abilities.</b>

### **Pedestrian Policy 1. Make walking the most convenient, safe and enjoyable transportation choice for short trips of less than one mile.**

In addition to being the most basic form of transportation, walking is an important form of exercise and is the most popular recreational activity in Oregon.<sup>42</sup> The average length of a walking trip in the region is about half a mile. Today 15 percent of trips made in an auto are less than one mile.<sup>43</sup> Many of these trips could be made by walking if it were convenient, safe and enjoyable. Fully implementing regional and local plans will help make this possible.

In 2011, the Federal Transit Administration (FTA) established a formal policy on the eligibility of pedestrian and bicycle improvements for FTA funding and defined the catchment area for pedestrians and bicyclists in relation to public transportation stops and stations. The policy recognized that bicycle and pedestrian access to transit is critical and defined a three-mile catchment area for bicycle improvements and a half mile catchment area for pedestrian improvements.<sup>44</sup>

Ensuring all gaps and deficiencies on the regional pedestrian network have projects identified in the Regional Transportation Plan and including wayfinding, street markings, lighting and other elements that enhance connections and make the pedestrian network consistent, integrated, and easy to navigate are key elements to implementing this policy. The Regional Transportation

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<sup>42</sup> Oregon's 2017 Statewide Outdoor Recreation Survey shows that 83 percent of Oregonians walk on local streets and sidewalks for recreation, making this the most popular recreational activity in the state.

<sup>43</sup> 2011 Oregon Household Activity Survey.

<sup>44</sup> Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law

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Functional Plan (RTFP) includes specific requirements in the Pedestrian and Transit System Design sections.

Actions to implement this policy can be found in Chapter 12 of the 2014 Regional Active Transportation Plan.

**Pedestrian Policy 2. Complete a well-connected network of pedestrian routes, including safe street crossings, integrated with transit and nature that prioritize seamless, safe, convenient and comfortable access to urban centers and community places, including schools and jobs, for all ages and abilities.**

A well-connected high-quality pedestrian environment facilitates walking trips by providing safe and convenient access to essential destinations. The Regional Pedestrian Network provides the plan for well-connected pedestrian routes and safe street crossings to provide access to transit and essential daily needs. The Regional Transportation Functional Plan (RTFP) requires that local Transportation System Plans include an interconnected network of pedestrian routes.

Section 3.08.130 of the Regional Transportation Functional Plan (RTFP) includes the requirements to provide a well-connected pedestrian system, and Oregon State statutes and administrative rules establish that pedestrian facilities are required on all collector and higher classification streets when those roads are built or reconstructed. Exceptions are provided where cost is excessively disproportionate to need or where there is an absence of need due to sparse population or other factors.

Priority should be given to filling gaps and providing safe crossings of the busiest streets with transit and other essential destinations. Deficient facilities in areas of high walking demand are considered gaps.

**Pedestrian Policy 3. Create walkable downtowns, centers, main streets and station communities that prioritize safe, convenient and comfortable pedestrian access for all ages and abilities.**

All centers and station areas are Regional Pedestrian Districts. The central city, regional and town centers, main streets and light rail station communities are areas where high levels of pedestrian activity are prioritized. In these areas, sidewalks, plazas and other public spaces are integrated with civic, commercial and residential development. They are often characterized by compact mixed-use development served by transit. These areas are defined as pedestrian districts in the RTP.

Walkable areas should be designed to reflect an urban development and design pattern where walking is safe, convenient and enjoyable. These areas are characterized by buildings oriented to the street and boulevard-type street design features, such as wide sidewalks with buffering from adjacent motor vehicle traffic, marked street crossings at all intersections with special crossing amenities at some locations, special lighting, benches, bus shelters, awnings and street trees. All streets within these areas are important pedestrian connections. Sections 3.08.120 (B) (2) and 3.08.130 (B) list requirements for pedestrian districts and new development near transit.

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## **Pedestrian Policy 4. Improve pedestrian access to transit and community places for people of all ages and abilities.**

Public transportation use is fully realized only with safe and convenient pedestrian and bicycle connections, especially safe crossings and facilities that connect stations or bus stops to surrounding areas or that provide safe and attractive waiting areas. Improving walkway connections between office and commercial districts and surrounding neighborhoods provides opportunities for residents to walk to work, shopping or to run personal errands. Buildings need to be oriented to the street and be well connected to sidewalks. Safe routes across parking lots need to be provided. This reduces the need to bring an automobile to work and enhances public transportation and carpooling as commute options. The Regional Transportation Functional Plan (RTFP) requires that local Transportation System Plans include an evaluation of needs for pedestrian access to transit for all mobility levels, including direct, comfortable and safe pedestrian routes.

Pedestrian access along transit-mixed use corridors is improved with features such as wide sidewalks, reasonably spaced marked crossings and buffering from adjacent motor vehicle traffic.

## **Pedestrian Policy 5. Ensure that the regional pedestrian network equitably serves all people.**

All people in the region, regardless of race, income level, age or ability should enjoy access to the region's walking and transit networks and the access they provide to essential destinations, including schools and jobs. Currently the regional pedestrian network is incomplete in many areas of the region, including areas where people with low-incomes, people of color and people with language isolation live. Transportation is the second highest household expense for the average American; providing transportation options in areas with low-income populations helps address transportation inequities.

Section 3.08.120[C] of the Regional Transportation Functional Plan (RTFP) specifies that the needs of youth, seniors, people with disabilities and environmental justice populations including people of color and people with low incomes must be considered when planning transit.

Regional and local planning, design and construction of the networks must include consideration of the benefits and burdens of transportation investments to underserved and environmental justice populations and continue to collect data and monitor performance in accordance with section 3.08.010 of the Regional Transportation Functional Plan.

Investment programs should set priorities for sidewalk improvements to and along major transit routes and communities where physically or economically disadvantaged populations live.

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## 3.10.3 Regional pedestrian network classifications and map

This section describes the regional pedestrian network functional classifications shown on Figure 3-37, the Regional Pedestrian Network. The regional pedestrian network mirrors the regional transit network reflecting the important relationship of a complete walking network and transit. Frequent transit routes and regional arterials comprise regional pedestrian streets. Regional trails are also part of the regional pedestrian network. Centers and station areas are regional pedestrian districts and include all streets of all functional classifications and paths within their boundaries.

The regional pedestrian network has a functional hierarchy like that of the regional motor vehicle network. Figure 3-37 provides a vision for a future pedestrian network; for a map of existing pedestrian facilities in the region, refer to Chapter 4.

The different functional elements of the regional pedestrian network are:

- **Pedestrian Parkways** are generally major urban streets that provide frequent and almost frequent transit service (existing and planned). They can also be regional trails.
- **Regional Pedestrian Corridors** are any major or minor arterial on the regional urban arterial network that is not a Pedestrian Parkway. Regional trails that are not Pedestrian Parkways are classified as Regional Pedestrian Corridors.
- **Local Pedestrian Connectors** are all streets and trails not included on the Regional Pedestrian Network.
- **Pedestrian Districts** are the Central City, Regional and Town Centers and Station Communities shown on the Regional Pedestrian Network Map. A pedestrian district is an area with a concentration of transit, commercial, cultural, institutional and/or recreational destinations where pedestrian travel is attractive, comfortable and safe. Pedestrian Districts are areas where high levels of walking exist or are planned. All streets and trails within the Pedestrian District are part of the regional system.

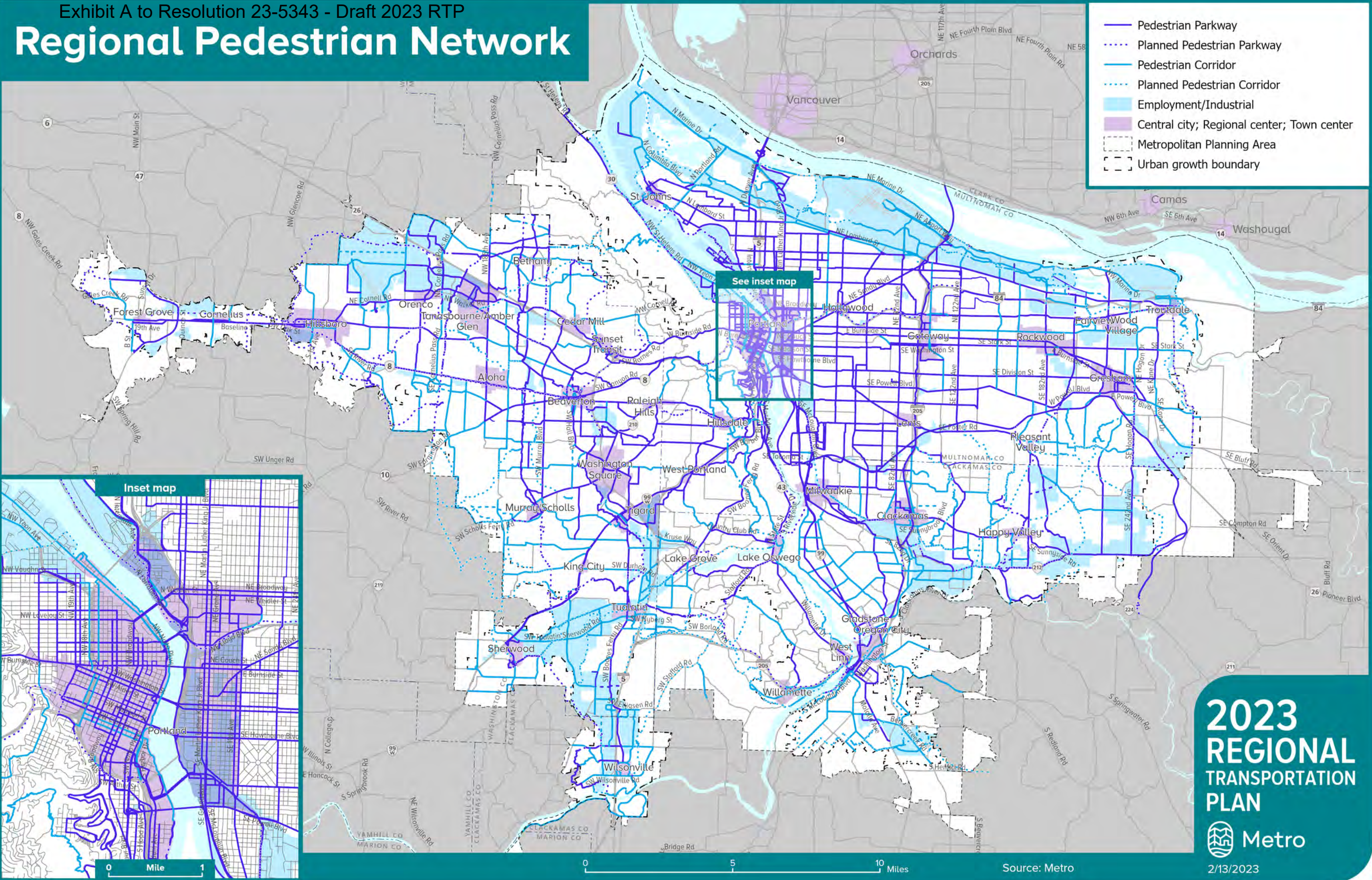
Figure 3-37 applies the regional pedestrian network concept on the ground, illustrating how different regional pedestrian facilities work together to form a comprehensive network that allows people to walk to transit, schools, employment centers, parks, natural areas and shopping. Click on RTP Regional Network Maps for online zoomable version of map. [LINK TO BE ADDED]

### Figure 3-37 Regional pedestrian network map



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# Regional Pedestrian Network





## 3.3.10 Transportation System Management and Operations Vision and Policies

The region's Transportation System Management and Operations (TSMO) vision, concept and policies address the management of the significant public investment in capital infrastructure. Taking a "manage first" approach addressed concerns about the social, environmental, and financial costs of large capital projects, such as building new lanes. System management can restore reliable travel and provide flexibility for travelers to use a variety of travel options. OAR 660.012, Oregon's Transportation Planning Rule (TPR), stipulates that coordinated land use and transportation plans should increase transportation choices and make more efficient use of the existing transportation system through transportation system management and demand management.

The 2021 TSMO Strategy updated the region's ten-year strategy, continuing an innovative, holistic, multimodal, and cost-effective approach to managing the transportation system. The TSMO Strategy prioritizes optimization of the existing transportation system by improving business practices and collaboration, encouraging behavior changes through transportation demand management and using technology to understand and manage how the system operates.

### 3.3.10.1 Transportation system management and operations vision

Regional stakeholders share a vision for TSMO: Collaborate to provide reliable, agile, and connected travel choices so that all users are free from harm, and to eliminate the disparities experienced by Black, Indigenous, people of color and people with low incomes.

This vision reflects broad participation in planning for operations. TSMO participation is multidisciplinary, and requires collaboration across several disciplines, including planners, engineers, emergency responders, demand management specialists, operators, and maintenance professionals. The region leads by aligning efforts with six TSMO Strategy goals:

1. Provide a transportation system that is reliable for all users.
2. Connect all people to the goods, services, and destinations they need through a variety of travel choices.
3. Collaborate as effective stewards for the transportation system.
4. Eliminate the disparities in the transportation system experienced by Black, Indigenous, people of color and people with low incomes.
5. Create a transportation system where all users are free from harm.
6. Manage the system to be agile in the face of growth, disruptions and changing technology.



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## 3.3.10.2 Transportation system management and operations concept

The concept for TSMO was further refined by stakeholders to establish objectives, performance measures and actions. The 21 actions in Table 3-11 show the range of regional work that connects TSMO work to achieving outcomes aligned with the RTP.

**Table 3-12 Examples of TSMO and investments in four strategic areas**

<b>Concepts, Capabilities, and Infrastructure</b> <ul style="list-style-type: none"><li>• Inventory and manage regional signal and Intelligent Transportation System Communications Infrastructure</li><li>• Manage transportation assets to secure the network</li><li>• Continue freight technology and Intelligent Transportation Systems deployment</li><li>• Facilitate ground truthing of emerging technologies</li><li>• Establish a Regional Transit Operators TSMO Group</li><li>• Unify and standardize fare subsidies for transit and Mobility on Demand</li><li>• Develop an Intelligent Transportation System travel time information data collection and distribution plan for Regional Disaster Preparedness Organization regional emergency routes</li><li>• Create continuous improvement process for existing and new signal systems and related performance</li><li>• Deploy regional traveler information systems</li><li>• Implement integrated corridor management and mainstream into corridor planning</li><li>• Create a TSMO safety toolbox</li><li>• Build and use a TSMO Toolbox to connect gaps in bicycle and pedestrian infrastructure</li><li>• </li></ul>
<b>Planning</b> <ul style="list-style-type: none"><li>• Develop a Mobility on Demand strategy and policy</li><li>• Pilot Origin-Destination data to prioritize TSMO investments</li><li>• Participate in regional public outreach to assist in guiding, listening and learning through TSMO focused conversations</li><li>• Update the regional ITS Architecture</li></ul>
<b>Listening &amp; Accountability</b> <ul style="list-style-type: none"><li>• Track and prioritize TSMO investments for and with Black, Indigenous, people of color and people with low incomes</li><li>• Create a community listening program</li><li>• Improve TSMO data availability to aid in traveler decisions and behavior</li></ul>
<b>Data Needs</b> <ul style="list-style-type: none"><li>• Establish TSMO performance measures baseline.</li><li>• Explore new TSMO data sources</li></ul>

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## 3.3.10.3 Transportation system management and operations (TSMO) policies

<b>Policy 1</b>	<b>Manage the transportation system for the effective and efficient use of publicly funded transportation assets while supporting mobility, multi-modal reliability, racial equity, safety, and reductions in carbon emissions.</b>
<b>Policy 2</b>	<b>Take actions from the regional TSMO Strategy by supporting a program that conducts planning for operations, develops new operational concepts, assesses future needs for capabilities, identifies gaps in data and establishes a process for listening and accountability.</b>
<b>Policy 3</b>	<b>Optimize operations for reliability and mobility by coordinating and advancing operator capabilities with shared tools and interoperable technologies.</b>
<b>Policy 4</b>	<b>Provide real-time traveler information data across devices and at physical locations that is comprehensive in serving the needs of people, businesses and freight movement.</b>
<b>Policy 5</b>	<b>Improve incident detection and clearance times on the region’s transit and motor vehicle networks to reduce the impact of crashes on the transportation system.</b>

**TSMO Policy 1. Manage the transportation system for the effective and efficient use of publicly funded transportation assets while supporting mobility, multi-modal reliability, racial equity, safety, and reductions in carbon emissions.**

Consistent with regional policy dating back to the 1990s, transportation agencies use system management to make the best use of existing infrastructure to delay or avoid large, higher-cost and potentially disruptive construction projects. This policy is applied using regional values and desired outcomes for mobility, reliability, racial equity, safety, and reduction in greenhouse gas emissions.

Transportation agencies collaborate to identify and scale up practices and technologies to a regional scale that are effective at reducing vehicle miles traveled and crashes while increasing reliability, connectivity, traveler information and investments that support racial equity. These technologies also record data from the transportation system that supports effective operations, planning and investments. Performance measures and targets for system management support the Congestion Management Process (CMP), Climate Smart Strategy and the 2021 TSMO Strategy.

Each step of implementing the strategy will use the TSMO Equity Tree (a branching diagram), working up through a series of equity-focused questions. The last step is to evaluate the plan or action for accountability. Each evaluation asks “Did the outcomes help or hurt communities of color?” and suggests next steps depending on the answer.

**TSMO Policy 2. Take actions from the regional TSMO Strategy by supporting a program that conducts planning for operations, develops new operational concepts, assesses future needs for capabilities, identifies gaps in data and establishes a process for listening and accountability.**

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In 2010, the region completed a planning process to adopt the first ten-year strategy for implementing TSMO. This formalized a regional TSMO Program to convene stakeholders and support priorities with resources and partnerships. Metro convenes TransPort, the subcommittee of Transportation Policy Alternatives Committee (TPAC). TransPort advances the TSMO Strategy through monthly meetings for cooperative planning and deployment of technologies and related procedures. Broad TransPort participation is encouraged. This regional forum supports operators of greater Portland's roads, highways, transit, shared-use mobility services, transportation demand management, congestion pricing, parking management, freight, active transportation facilities and digital infrastructure. Metro and TransPort form additional work groups as needed.

Figure 3-38 shows where some of these actions and investments are envisioned to be applied in the region to improve mobility, safety, efficiency, and reliability of the system.

## **TSMO Policy 3. Optimize operations for reliability and mobility by coordinating and advancing operator capabilities with shared tools and interoperable technologies.**

Transportation operators meet to share perspective on their “capability maturity” with regard to their agency performance in operations and an overall performance of regional partners working together. By reaching agreement on standards and procedures, transportation operators share and advance capabilities. The end goal is to reach optimization across multiple categories such as actively managing the transportation system, responding to incidents, participating in planning, measuring performance, building a workforce with a culture of technical understanding and leadership, and engaging in broad collaboration. In many cases, optimization requires formal agreements, such as data sharing, that stem from regional policies. In other cases, the conversations prepare for emerging technologies as well as retiring outmoded technology.

## **TSMO Policy 4. Provide real-time traveler information data across devices and at physical locations that is comprehensive in serving the needs of people, businesses and freight movement.**

TSMO responds to the barriers that can be overcome with traveler information, aiding people to find and use the most sustainable affordable and safest option. The 2021 TSMO Strategy includes actions to ensure investments and the creation of traveler information is done with community involvement supportive of racial equity.

## **TSMO Policy 5. Improve incident detection and clearance times on the region's transit and motor vehicle networks to reduce the impact of crashes on the transportation system.**

TSMO Strategy is aligned with the region's Safety Strategy to eliminate severe crashes (crashes with major injuries or fatalities) by 2035. Crashes on the transportation network cause non-recurring congestion, and fatal crashes result in longer clearance and recovery times with

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sustained impacts. The 2021 TSMO Strategy aims to reduce harm, and reduce the non-recurring congestion created by incidents, by improving the safety of the system overall. <sup>45</sup>

## **3.11.4 Transportation system management and operations map**

The map for regional TSMO reflects Policy 1. Actively managing the transportation system requires Intelligent Transportation Systems (ITS) equipment, such as variable message signs, along throughways and arterials to alert travelers with information or advise safe speeds. A variety of sensors help automate this process, but operators also utilize cameras to solve problems remotely or deploy responders to an incident. A digital infrastructure transmits data to and from transit and road operators who use central, shared software to improve multimodal movement and safety at intersections with traffic signals. In partnership with Portland State University, regional partners share data that can then be accessed by academic researchers, planners, consultants and the public. In partnership with Oregon DOT and the private sector, the region's operators also use crowdsourced data. Crowdsourced data helps evaluate reliability and also can inform current travel conditions and report crashes. Not all of this can fit into one map.

Another map will be created in a parallel effort with the 2023 RTP update. TSMO stakeholders will define system completeness as part of the Regional Mobility Policy. Stakeholders will map key corridors, referring to existing conditions and gaps that need to be addressed. This map will be used in Transportation System Plan updates and amendments.

## **Figure 3-38 Transportation system management and operations map**

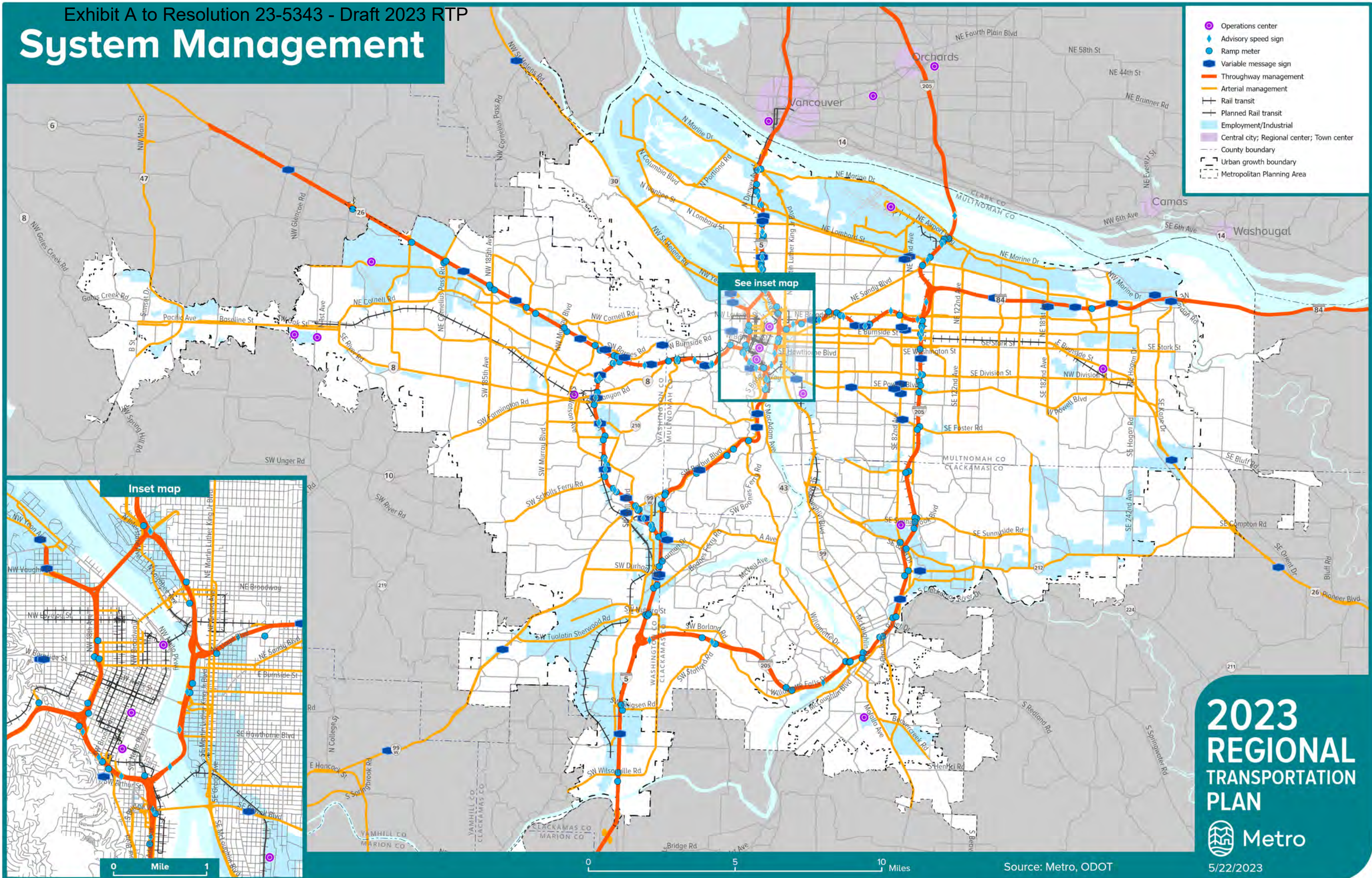
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<sup>45</sup> "Ridesharing" in this context means traditional not-for-profit carpooling or vanpooling, not Transportation Network Companies such as Uber or Lyft.



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# System Management





## **3.3.11 Transportation Demand Management Concept and Policies**

The Regional Travel Options (RTO) program is led by Metro and supports TDM work in the region primarily through awarding grants to partners leading outreach and engagement programs. This methodology has led to successful program implementation in the places and instances where it has been used. But there remain significant gaps in where TDM is used in the region and limits on expanding TDM efforts.

The RTO Strategy has established a goal of expanding the number of partners and programs to support the region's goals, but clearer policy direction is needed to better define how TDM is to be implemented in the region and move TDM efforts beyond their current levels.

### **3.3.11.1 Transportation demand management concept**

Transportation Demand Management (TDM) is a series of activities aimed at ensuring people are aware of, understand and have access to the full variety of travel options available within the region. Though the region has already done much and continues to work to improve and expand travel options through capital investments in non-auto modes, the potential exists to increase the public's use of these non-SOV modes through TDM investments.

TDM complements and enhances other RTP policy areas by helping ensure our transportation system is used in a balanced way to maximize our investments. TDM provides information, encouragement, and incentives to help people make more of their trips safely and comfortably without driving alone. TDM programs are developed and staffed by professionals trained in understanding the travel needs of various groups, such as commuters or school children, and creating methods of helping them make those trips without the need for an SOV trip.

A typical TDM program involves working with a defined group of people that have similar travel needs or live in a specific place. Trained staff discuss the transportation needs and interests of the group and provide information and incentives to encourage people to try a new travel mode. This work can take many forms, from participation in [GetThereOregon.org](https://getthereoregon.org), a statewide website provided by ODOT and dedicated to facilitating travel options use, to a localized outreach effort specific to a single housing development.

Active involvement in delivering TDM programming is needed at the state, regional and local levels. Certain programs are most effective when developed and led by local governments, school districts, Transportation Management Associations (TMA), employers or community organizations. Others are better suited to be conducted on a state or regional scale.

TDM is particularly effective when paired with other policies or capital investments. Building new or improved active transportation infrastructure provides an opportunity for TDM efforts to help people be aware of and use the new travel options available to them. Complementary TDM activities should be planned and budgeted for in capital system improvement projects to ensure



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people are aware of the new travel options available to them, and to help them create new travel patterns and habits.

As the region considers roadway pricing and parking management as strategies for reducing auto trips, TDM is an important component in ensuring that people’s mobility is maintained when these strategies are implemented. Making people aware of the existent options to paying a toll or fee can reduce the public’s financial burden and help improve reliability and efficiency of the transportation network.

A significant portion of the region’s current TDM activities are coordinated through the Regional Travel Options (RTO) program. This program, led by Metro on behalf of the entire region, currently coordinates partner activities and provides grant funds for TDM activities throughout the region. Through the RTO Strategy, the region’s TDM vision, goals, objectives, and needs are defined. Roles for regional partners are defined, as is the grant funding methodology and criteria.

## 3.3.11.2 Transportation demand management policies

<b>Policy 1</b>	<b>Develop and refine regional and local TDM policies and implementation plans to help reach climate, mobility and modal targets.</b>
<b>Policy 2</b>	<b>Provide adequate TDM resources and programming to meet the public’s specific mobility needs for employment, education and essential services.</b>
<b>Policy 3</b>	<b>Provide and deliver TDM programming at a variety of scales: state, regional and local.</b>
<b>Policy 4</b>	<b>Improve access to travel choices and eliminating barriers for marginalized communities, with a focus on communities of color and people with low incomes.</b>

**TDM Policy 1. Develop and refine regional and local TDM policies and implementation plans to help reach climate, mobility and modal targets.**

TDM is a component of numerous federal, state and regional plans, including:

- Climate Friendly and Equitable Communities Rules
- ODOT Transportation Options Plan
- DEQ Employee Commute Options Rule
- Metro Climate Smart Strategies
- Metro Regional Travel Options Strategy
- Metro Transportation System Management & Operations Strategy
- Congestion Management Process

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These plans identify implementation of TDM programs as a part of the actions required for objectives to be met. Sufficient policy development and planning must be in place so that the roles and responsibilities of various entities are established and understood. Current local planning is insufficient in defining how TDM is to be implemented at a local level. And regional TDM planning is focused primarily on delivering grant funding through the RTO program.

Planning for TDM programs should be expanded and coordinated at the state, regional and local levels to ensure programs exist and are effective at helping people drive less. For some TDM programs, implementation at a regional scale is the most cost effective and efficient means of delivery. Other TDM programming functions best at a local, county or school district scale. A comprehensive regional TDM effort involves multiple levels of effort coordinated between government and non-government partners.

## **TDM Policy 2. Ensure adequate TDM resources and programming are deployed to meet the public's specific mobility needs for employment, education and essential services.**

TDM programs are most effective when they are tailored to the specific travel needs of a group or community. The region has moved from a broad-based, one-size-fits all approach to TDM messaging and outreach, to implementing specific approaches for different travel needs. For example, helping commuters find other ways to get to work often involves working with employers to establish programs of information and incentives at worksites. But for Safe Routes to School programs, an entirely different approach is needed in working with parents and children to help them see the fun and benefits of being able to safely walk, bike or roll to school. The region should provide adequate funding, coordination and resources to effectively implement TDM.

Often, TDM efforts are compromised by a lack of first/last mile connections to transit, or by a lack of 24-hour transit service and vanpools. Many commuters live outside the region and have no option other than driving to work. Improvements to the regional transit system, as outlined in the transit policy section, are needed to improve TDM program effectiveness.

Regional funding for a portion of the region's TDM actions is provided through the RTO program. In its current form, the RTO program funds grants to partners conducting TDM activities. A portion of grant funds are reserved for partners with defined TDM plans and programs to ensure on-going funding is available. Other grant funds are aimed at pilot or one-time TDM projects, or to develop partner capacity to plan for and deliver TDM programs on an on-going basis.

ODOT also provides funding to the RTO program to promote and expand use of the GetThereOregon.org website.

Current funding levels are not sufficient to support an expanded TDM effort throughout the region. Additional state, regional and local funding will be needed to support these efforts.

## **TDM Policy 3. Provide and deliver TDM programming at a variety of scales: state, regional and local.**

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A thorough regional TDM effort entails a variety of programs, at different scales and targeted towards a spectrum of travel needs. Delivery of these programs is most effective when it is led by the appropriate organization or government, depending on the program and its purpose.

Creation of TDM policy and ordinances through local TSPs is a successful approach to defining how TDM programs can be tailored to fit local needs and infrastructure and be coordinated with regional-scale efforts.

Providing a robust variety of successful TDM programs around the region comes from harnessing the efforts and expertise of cities, counties, regional and state agencies, as well as non-governmental organizations (NGO).

Government partners have oversight authority and responsibilities for managing parking and roadway pricing. Their role in these initiatives put them in a position to also lead complementary TDM efforts to help the public understand the travel alternatives available and ensure pricing strategies are implemented to their fullest potential.

Non-governmental organizations (NGOs) have insights and relationships with communities that, when combined with the capabilities and responsibilities of governments, can lead to more effective and impactful TDM programming.

## **TDM Policy 4. Improve access to travel choices and eliminating barriers for marginalized communities, with a focus on communities of color and people with low incomes.**

The negative impacts of auto-centric transportation investments in the region have fallen particularly hard on marginalized communities, especially communities of color and people with low incomes. TDM investments made through a racial equity focus begin to correct these impacts and improve multiple regional priorities by addressing known burdens on marginalized communities in accessing travel options, which includes cost, personal safety from harassment/bias, and physical access to travel options. TDM efforts should focus on working with partners to learn together how to adapt and develop programming that is inclusive of and meets the needs of marginalized communities.

Implementing meaningful TDM programming in many areas of the region is constrained by the lack of sidewalks, safe bicycling infrastructure or low levels of transit service. These same areas are often those with high percentages of Black, Indigenous, people of color and low-income residents. Continued focus and prioritization of improvements in these areas is a key part of ensuring that TDM programs can benefit everyone in the region.

### **3.3.12 Emerging Technology Policies**

Over the past several decades, new developments in technology have begun to reshape the way that people travel. Over three-quarters of adults now own a smartphone, often including apps that provide instant access to information on travel choices. Some new services combine smartphones with social networking, online payment, and global positioning systems to connect people with

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vehicles and rides. Most auto manufacturers now offer hybrid or electric vehicles, and the cost of these vehicles has been falling, giving more people access to clean transportation options. Other automakers have been working to develop vehicles that drive themselves, which could dramatically transform our relationship with cars.

The Regional Transportation Plan (RTP) uses the blanket term **emerging technology** to encompass all new developments and establishes a set of terms to describe and categorize them, including:

- Advances in vehicle technology, such as automated vehicles (AVs) that operate independently of any input from a human driver, connected vehicles (CVs) that communicate with each other or with traffic signals and other infrastructure, and electric vehicles (EVs) that use electric motors instead of or in addition to gasoline-powered motors.
- New mobility services that use smartphones and other new technologies to connect people with vehicles and rides. These services include ride hailing companies that connect passengers with drivers who provide rides in their personal vehicles; car, scooter, or bike share that allow people to rent a nearby vehicle for short trips; and microtransit services that operate vans or small buses, often tailoring schedules and routes to customers' travel needs. Traveler information and payment services that help people plan trips and compare different ways of getting around, get detailed information on their mode of choice, track and share their trips, and pay for trips.

## 3.3.12.1 Emerging technology principles

Unlike other aspects of the transportation system, which are largely built and operated by the public sector, many emerging technology services are currently developed and operated by private companies. Transportation agencies can work with private companies in a variety of different ways – including contracting directly with companies and creating regulations that govern how companies operate – to bring emerging technology services to their communities in a way that benefits people. This work often happens more in the realm of partnerships and pilot projects than in the realm of policy and regulation. The principles summarized in Table 3-12, guide Metro and its partners in identifying companies that share common goals when developing partnerships and pilot projects.

**Table 3-13 RTP goals and corresponding emerging technology principles**

RTP goal	Emerging technology principle
<b>Economy</b>	Emerging technology should create more efficient ways to meet the transportation needs of local businesses and workers.
	Emerging technology companies and users should contribute their fair share of the cost of operating, maintaining and building the transportation system.
<b>Climate</b>	Emerging technology should improve transit service or provide shared travel options and support transit, bicycling and walking.

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<b>Mobility</b>	Emerging technology should promote shared trips, decrease vehicle miles traveled and minimize conflicts between modes.
<b>Safety</b>	Emerging technology should reduce the risk of crashes for everyone and protect users from data breaches and cyberattacks.
<b>Equity</b>	New mobility services should be accessible, affordable and available for all and meet the transportation needs of communities of color and marginalized communities.  Companies and public agencies should collaborate and share data to help make the transportation system better for everyone.

## 3.3.12.2 Emerging technology policies

<b>Policy 1</b>	<b>Make emerging technology accessible, available and affordable to all, and use technology to create more equitable communities.</b>
<b>Policy 2</b>	<b>Use emerging technology to improve transit service, provide shared travel options throughout the region and support transit, bicycling and walking.</b>
<b>Policy 3</b>	<b>Use the best available data to empower travelers to make travel choices and to plan and manage the transportation system.</b>
<b>Policy 4</b>	<b>Advance the public interest by anticipating, learning from and adapting to new developments in technology.</b>

### **Emerging Technology Policy 1. Make emerging technology accessible, available and affordable to all, and use technology to create more equitable communities.**

Metro and its partners are responsible for ensuring that the transportation system serves all people, particularly those in the greatest need. New mobility services have the potential to bring more flexible transportation options to marginalized communities, but not everyone can access these services. Communities of color face the threat of discrimination from drivers or companies, some older adults and people who speak limited English are not able to use apps, many low-income people cannot afford costly data plans or lack access to bank accounts and people in wheelchairs often struggle to find accessible shared vehicles. Removing these barriers can help to bring better transportation choices to communities of color, night shift workers, people with disabilities, people living in areas that lack frequent transit service and others.

### **Emerging Technology Policy 2. Use emerging technology to improve transit service, provide shared travel options throughout the region and support transit, bicycling and walking.**

Emerging technology has already given people in our region new ways to get around, whether by taking car, scooter, or bike share, hailing a ride, or simply making it easier for people to learn about and pay for public transportation. However, new mobility services are often concentrated in communities where it is already easy to take transit, walk or bike, which can create more congestion and pollution by attracting people away from more efficient modes and clogging streets with vehicles looking for passengers. To make the most of emerging technology's potential to reduce congestion and pollution, the region's transportation agencies need to prioritize and invest

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in the modes that move people most efficiently; improve convenience and safety for transit riders, pedestrians, and bicyclists; and direct new mobility services to provide options in places that currently lack them in addition to adding options to communities that are already rich in travel choices.

## **Emerging Technology Policy 3. Use the best data available to empower people to make travel choices and to plan and manage the transportation system.**

In today's transportation system, data is almost as important as infrastructure. Smartphones enable people to instantly book a transit trip or find a new route when they run into traffic, and new mobility companies use real-time data to balance supply and demand. Metro and its agency partners work to ensure that high-quality information is available for all transportation options in the region, and that this information is presented in a way that allows travelers to seamlessly plan and book trips. Transportation agencies also work to collect data on how travel patterns are changing to plan the transportation system. This requires collecting data from companies that operate emerging technologies in a way that helps agencies understand trip making without risking users' privacy, it also requires agencies to improve data on transit, bicycling and walking as well as on new mobility options and create systems that allow us to share this data among public agencies.

## **Emerging Technology Policy 4. Advance the public interest by anticipating, learning from and adapting to new developments in technology.**

Our current planning process is designed around infrastructure projects designed to last for 50 years and an unchanging set of transportation services. It can take decades to plan and build a project, and once it is built there is little room for change. This time-intensive, risk-averse approach continues to make sense for major infrastructure projects, but to effectively plan for emerging technology agencies need to test new services and approaches and learn from their experience. Agencies in the region have used approaches like pilot testing and phased implementation of regulations so that they can test new approaches to working with technology in a small-scale, low-risk manner before applying what they learn to larger-scale efforts.



## Chapter 4

# **Our Growing and Changing Region**

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This draft is subject to design and copy edits, technical corrections and minor updates as it is finalized for public review.*

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## INTRODUCTION

### Purpose

The greater Portland region is an extraordinary place to call home. It is known for its unique communities, a diverse and growing economy and a world-class transportation system. The region is surrounded by stunning natural landscapes and crisscrossed with a network of parks, trails and natural areas within a walk, bike ride or transit stop from home. It also serves as a freight gateway to domestic and international markets for businesses located throughout the state of Oregon, southwest Washington, the mountain states and the Midwest.

The region did not get this way by accident. Over the years, communities throughout the region have taken a collaborative approach to planning that has helped make the region one of the most livable in the country. Every day, the region's 2.4 million people have places to go – to work or school, to doctors and grocery stores and parks and back home again. All these trips, along with our transportation system, knit the region together – from Forest Grove to Troutdale, Vancouver and Portland to Wilsonville and every community in between.

Through our dedication to planning and working together to make local and regional plans a reality, we have set a wise course for managing growth, but new challenges continue to emerge. Our success in creating a livable region has attracted new residents and employers, but our housing supply hasn't kept up with population growth, and it has become prohibitively expensive for many people to afford homes, particularly in neighborhoods where it is easy to walk, bike or take transit. This may be one of the reasons why some recent investments in transit and trails haven't drawn as many users as they have in past decades. And even the best-laid plans couldn't have anticipated the impact of the COVID-19 pandemic, which dramatically reshaped how people travel and continues to affect the region even as the public health emergency recedes.

This chapter provides a snapshot of current conditions and trends within the Greater Portland region and highlights key regional transportation challenges and needs for the plan to address.

### Chapter organization

The RTP Needs Assessment is organized around the five 2023 RTP goals: mobility, safety, equity, economy, and climate. Each section of this chapter is dedicated to one of these priorities, and contains research, maps and data describing transportation needs with respect to each priority. Because these goals are often aligned – for example, increasing transit service often benefits mobility, climate, and equity – some sections contain similar information, or refer to relevant information in other sections.

## 4.1 MOBILITY

The updated Regional Mobility Policy included in the 2023 RTP update redefines how the region defines and measures mobility throughout the plan, establishing three performance measures for transportation agencies to use in plans and projects:

- System completeness
- Vehicle miles traveled (VMT)
- Travel time reliability on the region's throughways

This section provides a general update on how travel patterns have evolved since the last RTP update in 2018 as well as baseline information on the three measures above. Key findings include:

- Travel declined during the COVID pandemic. Between October 2019 and October 2021, daily throughway trips on a sample of regional mobility corridors decreased by five percent, daily arterial trips decreased by 14 percent, and daily transit ridership decreased by 41 percent.
- Overall, the planned motor vehicle network is much more complete than the bicycle, pedestrian and transit networks.
- Active transportation networks are mostly complete near transit. However, there are plenty of small gaps that hinder people's ability to walk and bike to transit stations and other important destinations. There are larger gaps on the regional bicycle and pedestrian networks between urban centers and at the edges of the region, many of which are on the regional trail system.
- Per capita VMT in the greater Portland region has been significantly lower than the national average since 1997 and has mostly been flat or declining. In order to meet ambitious state-mandated VMT per capita reduction targets, the region will likely need to take new approaches.
- During rush hour, the average traveler can reach 43% of jobs in the region by driving, and 7% by transit. Metro and partner agencies are working to increase ridership by better connecting activity centers – potentially including many developing suburban centers – with frequent transit.

### 4.1.2 Evolving travel patterns

Between 2015 (the base year for the 2018 RTP update) and 2020 (the base year for the 2023 RTP update, the region grew significantly – by 135,000 people (an 8.4% increase), 57,000 households (8.9%) and 90,000 jobs (10.1%).<sup>1</sup> This growth is projected to continue, though not necessarily at the same rapid rate as the region saw during the previous decade. As greater Portland continues to evolve into a major metropolitan area, with increasing housing prices and a more specialized economy, commute patterns are becoming more complex. Figure 4.26 in the Thriving Economy section provides a window into this growing complexity; it shows how workers commute within

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<sup>1</sup> Metro Regional Travel Model.



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and between counties in and around the region. Over 45 percent of workers in Clackamas, Multnomah and Washington counties work in a different county than where they live.

Though the number of jobs and homes in the region is growing, the way that people commute hasn't changed much. Table 4-1 shows commute mode shares for 2010 and 2019 (the base year for the 2023 RTP update, and the last year of available data that does not reflect the impacts of the COVID-19 pandemic). The table shows both absolute change in mode shares between 2010 and 2019 (which better captures which modes are dominant in the region, but can understate change for modes other than driving because they are less widely-used to begin with) and relative change (which better captures the extent to which usage of different modes is growing or declining relative to current levels, but can also amplify small variations that are due to margins of error or other reporting issues). This data is built up from Census tract-level estimates for all tracts within the MPA boundary, weighted according to the population in each tract.

**Table 4-1 Commute mode shares in the Greater Portland region, 2010-2019 (American Community Survey five-year estimates, 2006-10 and 2015-19 data)**

Mode	2010 mode shares	2019 mode shares	Absolute change 2010-2019	Relative change 2010-2019
Drive alone	69.5%	67.8%	-1.7%	-2.4%
Carpool	9.9%	9.2%	-0.7%	-6.6%
Transit	7.7%	8.1%	0.4%	5.3%
Walk	3.7%	3.6%	-0.1%	-2.4%
Bike	2.3%	2.6%	0.2%	10.4%
Work from home	6.0%	7.6%	1.6%	26.4%

Between 2010 and 2019, vehicle commute shares fell slightly, the share of people biking or taking public transportation to work rose slightly, and there were very small changes in how many people walk to work. This reflects the challenges inherent in achieving the RTP's goal of supporting a shift from driving to other modes. Though the region has prioritized investments in transit and active transportation over the past several decades, the motor vehicle network is far more built-out than other networks and people's daily travel habits are deeply ingrained, so even major multimodal investments only produce incremental changes. The rising cost of housing, especially in walkable neighborhoods near transit stations, may also play a role since it makes it harder for people with lower incomes – who tend to be more likely to use modes other than driving, particularly transit – to afford a home that offers access to options.

The biggest change captured in Table 4-1 is the growth of working from home. The share of people working from home increased by a relative 25% between 2010 and 2019 – double the growth in transit, which is the next-fastest-growing mode in the region – and as of 2019 there were almost as many people in the region working from home as there were taking transit to work. Furthermore, the data shown above only captures people who work from home full time; if it accounted for people who work from home a few days per week it would show an even larger percentage of people teleworking.

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It is important to note that the data shown above only capture commute trips. These trips make up less than 30 percent of all trips in the region, but since commutes are often time-sensitive, longer-distance trips they account for a significant share of congestion and vehicle miles traveled. Metro’s travel surveys find that people are significantly more likely to walk and carpool and less likely to drive alone or take transit when taking non-commute trips than they are when commuting.

## Impacts of the COVID-19 pandemic on travel

The data discussed above highlights how slowly transportation behavior often changes. However, major events like recessions and natural disasters can have immediate and drastic impacts on how people travel, and it can take a while for conditions to stabilize afterward. The COVID-19 pandemic that began in March 2020 was just such an event. Even though the federal government has now declared the COVID-19 public health emergency over, offices and hotels are still emptier than they were before the pandemic, and the impacts of the pandemic are still rippling through the economy and the transportation system.

The RTP is a plan for the next 20 years. Using pre-pandemic data to assess needs allows the RTP to focus on the long-term demographic and economic changes that shaped the region’s growth over the past several decades, and that are likely to continue to determine how the region grows in the future. Most of the data in this chapter is from 2020 or before. 2020 is the base year for the 2023 RTP update, is often the most recent year for which data are available.

Many aspects of life and travel have already returned to their “normal” pre-pandemic state, while others are trending that way. It’s possible that some of the impacts of the pandemic will be so long-lasting that they lead to a “new normal” somewhere between conditions at the peak of the pandemic and those beforehand. Considering this possibility – which begins with understanding how transportation patterns have continued to evolve since the pandemic<sup>2</sup> – helps the RTP be more resilient under different potential futures. Figure 4.1 below shows how travel demand changed for transit and on different types of streets during the year following the pandemic.

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<sup>2</sup> Most data in this section comes from Metro’s Emerging Transportation Trends Study, which can be found at: <https://www.oregonmetro.gov/public-projects/2023-regional-transportation-plan/research>

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**Figure 4.1 Trip volumes by mode and by facility type, indexed to February 2020 levels, February 2020-2021 (PBOT freight route and arterial count data; ODOT throughway count data; TriMet transit ridership performance reports; data were compiled in April 2021<sup>3</sup>)**



All different types of travel shown fell during the initial months of the pandemic, but some fell more steeply and/or recovered more slowly than others. Trips on freight routes fell the least and recovered most quickly, potentially because goods kept moving during the pandemic and many freight routes also connect workers to jobs that remained in-person during the pandemic. Throughway trips recovered to 80 percent of pre-pandemic levels by May 2020, and then continued to fluctuate, which could reflect normal seasonal changes in travel demand, extreme weather events, and/or the spread of new COVID variants. Arterial travel appeared to be recovering less slowly, but the data shown only covers the first half-year of the pandemic.

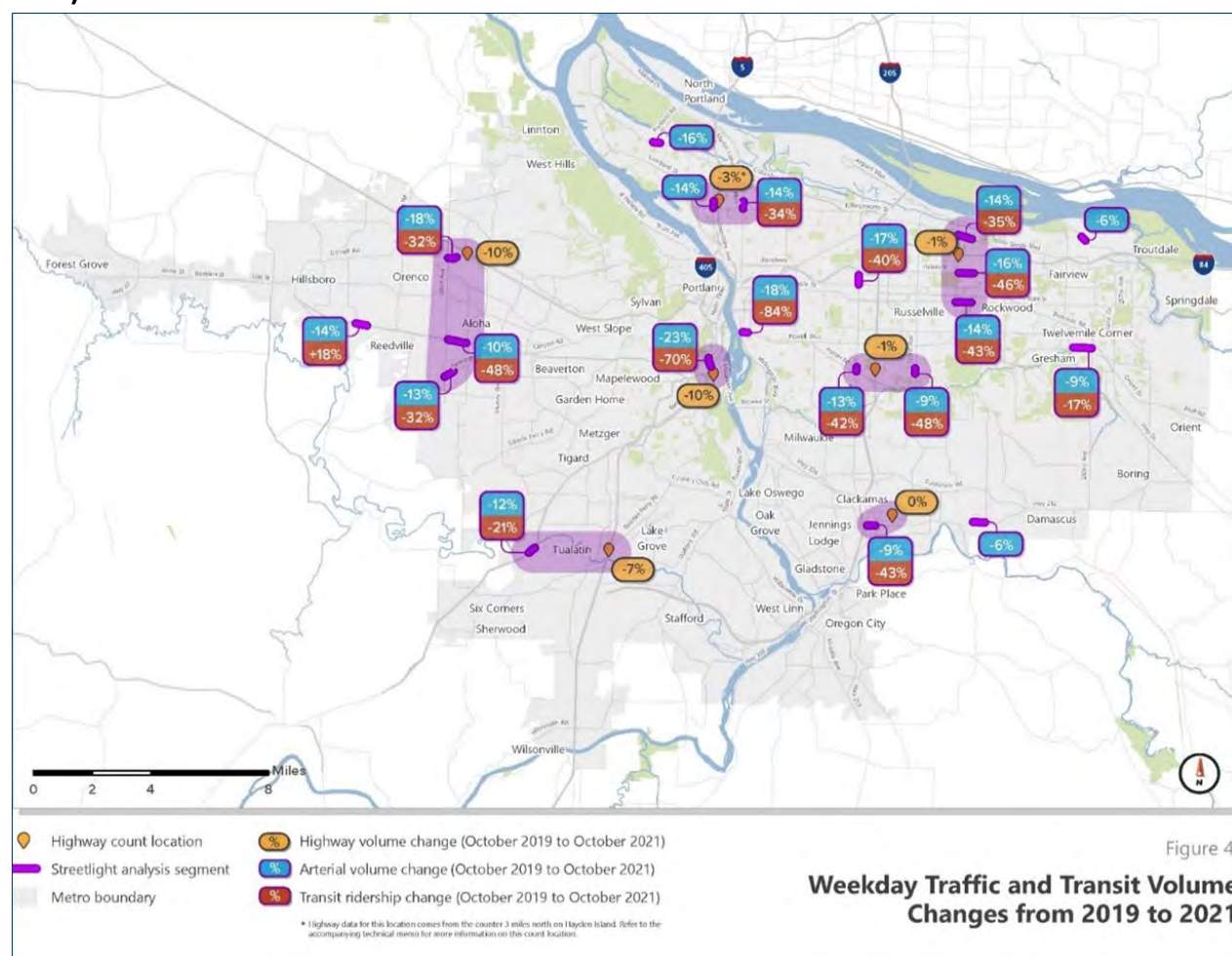
Metro collected data for a set of throughways, arterials and transit routes that reflect key corridors in the region. Figure 4.2 below shows the results. Changes in throughway volumes are shown in yellow, changes in arterial volumes are shown in blue, and changes in transit ridership are shown in red.

<sup>3</sup> This figure, as well as some of the other data in this section, reflects the underlying availability of source data at the time of compilation. Some of this data comes from limited-duration collection and reporting efforts that agencies undertook when the pandemic began to understand its impact.

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**Figure 4.2 Weekday vehicle and transit volume changes, October 2019-October 2021 (ODOT throughway count data; Streetlight arterial volume data; TriMet transit ridership by route data)**



Average daily throughway trips across the study locations decreased by five percent between October 2019 and October 2021, while arterial trips declined by 14 percent and transit ridership fell by 41 percent. In almost every location studied, arterial volumes decreased more significantly than throughway volumes. Transit volumes fell particularly significantly in locations closer to the center of the region.

These findings are consistent with research about the pandemic's broader impacts on transportation, which has found that teleworking reduces vehicle trips and miles traveled, as well as transit ridership, particularly near job centers. Transportation agencies in the region are already responding to these dynamics – for example, TriMet's recent Forward Together concept<sup>4</sup> realigns transit service to focus on routes that have maintained ridership through the pandemic and that serve people with low incomes, who were more likely to continue to rely on transit over

<sup>4</sup> <https://trimet.org/forward/>

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the past several years. If teleworking rates remain high, it would likely lead to slightly lower levels of VMT per capita and transit use than the region would otherwise experience, all other things being equal.

## 4.1.2 System completeness

Meeting Mobility goals depends on providing a variety of seamless and well-connected travel modes so that people have multiple options for making trips.

Table 4-2 below summarizes the completeness of different regional modal networks, using the planned networks developed during the 2018 RTP. These planned networks are based on extensive analyses of network conditions and deficiencies as of July 2022, as well as relevant policies and performance/design standards that apply across the region.<sup>5</sup> This table also reports on the completeness of the bicycle and pedestrian networks<sup>6</sup> near transit stations and along the arterials, which helps people make safe multimodal trips. Completing active transportation networks in EFAs is a priority under the RTP's Equity policies, and completing networks in 2040 centers and employment/industrial areas is important to supporting the Thriving Economy goal – see those sections for a discussion of bike/pedestrian network completeness in those specific communities.

**Table 4-2 System completeness by modal network and location within the region (2018 RTP networks and 2022 partner agency data)**

Network	Total planned miles	Number of miles completed	Percent of miles completed
Region-wide			
Transit network <sup>7</sup>	1,460	788	54%
Pedestrian network	1,040	597	57%
Bicycle network	1,149	626	55%
Trail network	560	245	44%
Motor vehicle network	1,171	1,146	98%
Near transit			
Pedestrian network	837	539	64%
Bicycle network	881	538	61%
Along arterials			
Pedestrian network	725	414	57%
Bicycle network	619	412	66%

<sup>5</sup> For further information, see the [Regional Transit Strategy](#), the [Regional Active Transportation Plan](#), the [Regional Trail System Plan](#), and forthcoming updates to the Regional Mobility Policy.

<sup>6</sup> Metro distinguishes between on-street bicycle and pedestrian gaps in facilities like bike lanes and sidewalks and off-street bike/ped gaps in facilities like trails. On-street facilities are generally needed to provide good active transportation connections in centers, near transit, and along arterials, whereas off-street facilities provide longer-distance connections between these areas. Table 4-2 focuses on the on-street bike/ped network.

<sup>7</sup> Consistent with how completeness is analyzed for other modal networks, the assessment of transit system completeness is based on the financially constrained RTP, and excludes the strategic investments shown in Figure 4.3.



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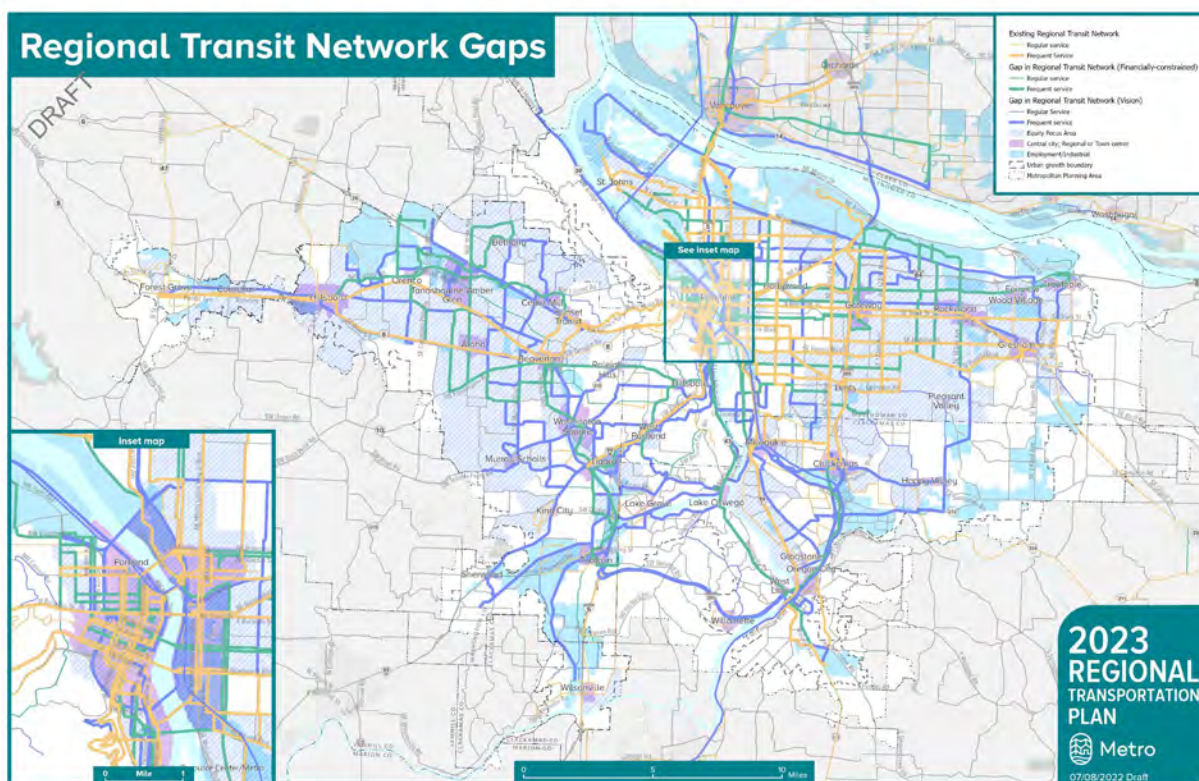
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Overall, the planned motor vehicle network is much more complete than the other modal networks. Consistent with the 2040 Growth Concept, the active transportation networks are generally more complete near transit. However, the fact that the pedestrian network along arterials is not significantly more complete than it is in the rest of the region is a concern given that 77 percent of pedestrian crashes occur on arterials.

However, several important gaps remain in these areas. The maps below identify these gaps by comparing the regional visions (i.e., planned systems) for these networks – which are based in extensive coordination with stakeholders and analysis of transportation and land use data – to the facilities that are on the ground today in order to identify gaps in the system.

Figure 4.3 below shows gaps in the transit network where planned transit has not yet been built. The map differentiates between gaps in frequent (thick lines) and regular (thin lines) transit service, and between gaps in the financially constrained network, which the region has identified funding to complete (green), and gaps in the strategic network, which the region has not yet identified funding to complete (purple). It also shows the location of existing regular and frequent service (orange lines). All of this information is overlaid with Equity Focus Areas (violet cross-hatching) to highlight how the current and planned network serves these communities that particularly need improved transit service (see the Equity section for more details on transit-related Equity needs).

**Figure 4.3 Regional transit network gaps (2018 RTP networks and 2022 partner agency data)**





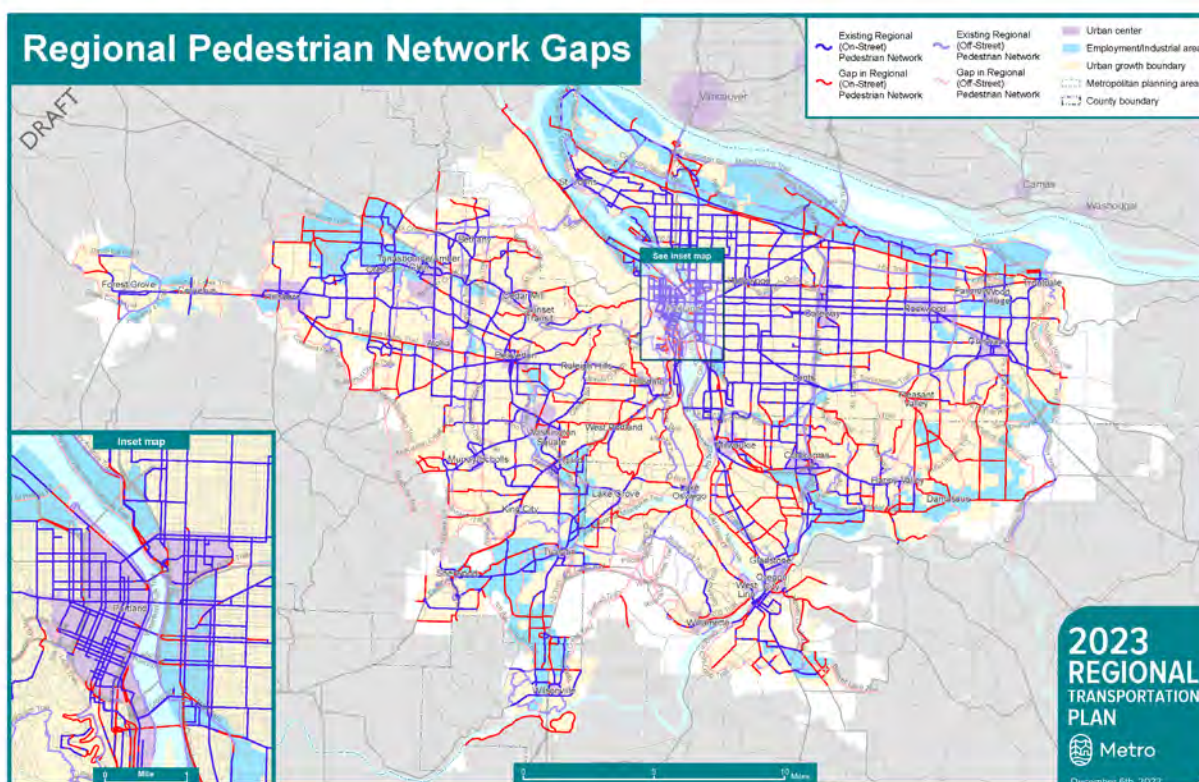
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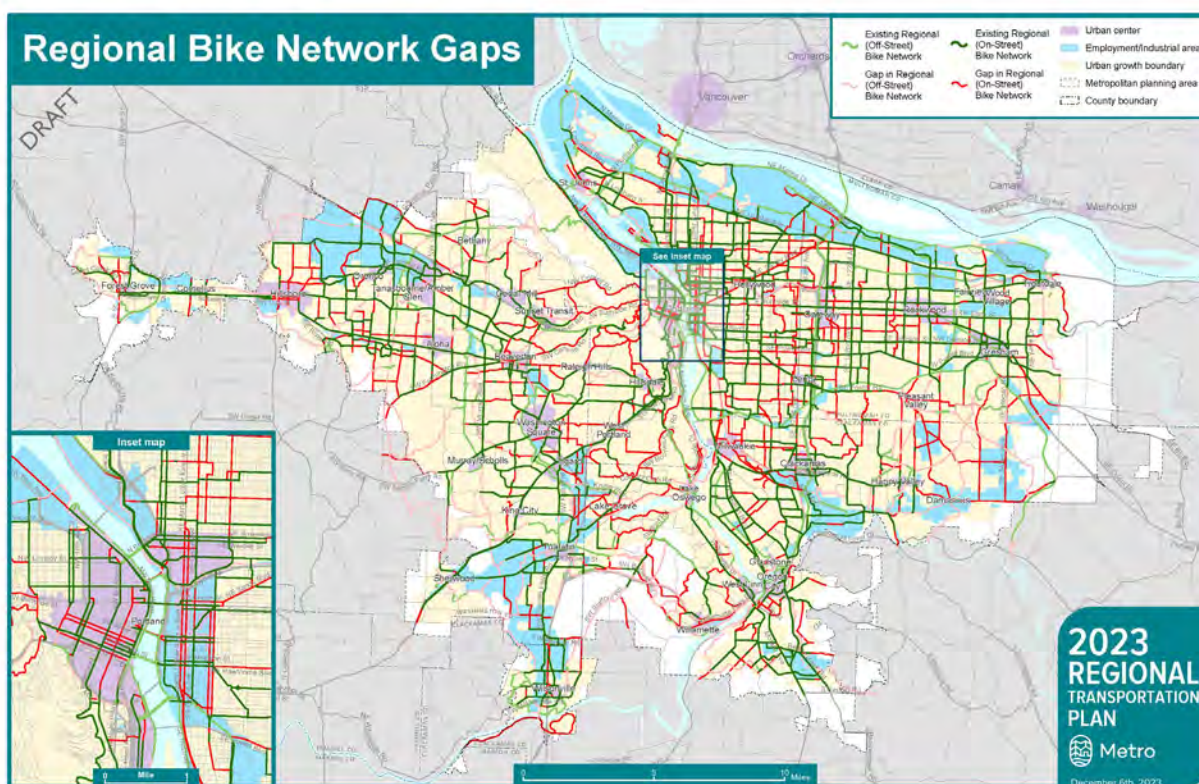
Filling the gaps in the frequent transit system (thick green lines) are particularly important to meeting the region's Climate goals. The 2018 RTP relied on a planned increase in frequent transit service to meet GHG reduction targets, and the thick green lines indicate routes where this transit has yet to be implemented. These gaps are distributed over most of the more populated parts of the region, and there are large concentrations of them in East Portland and the Orenco/Bethany/Aloha area.

Figure 4.4 and Figure 4.5 show gaps in the regional pedestrian and bicycle systems. Completed facilities are shown in purple or green; gaps are shown in red. The maps distinguish between gaps in on-street facilities like sidewalks and bike lanes (darker shades) and gaps in off-street facilities like trails (lighter shades). Both the pedestrian and bicycle networks are overlaid with urban centers identified in the 2040 growth concept since RTP policies direct pedestrian and bicycle investments toward centers of activity where short distances between destinations make it easy to travel on foot. Pedestrians and bicyclists are vulnerable users of the transportation system, and even a small gap in the network can make an entire trip feel unsafe and/or inconvenient.

**Figure 4.4 Regional pedestrian network gaps (2018 RTP networks and 2022 partner agency data)**



**Figure 4.5 Regional bicycle network gaps (2018 RTP networks and 2022 partner agency data)**



Both the bicycle and pedestrian networks are generally more complete in the region’s urban centers, which is consistent with RTP policies that direct transportation investments to support implementation of the 2040 growth concept. But even within those centers there are plenty of small gaps that hinder people’s ability to walk and bike – and that can also impact transit use and the economy. Walking is the most primary form of transportation. Whether an entire trip is done on foot or using a wheelchair or similar mobility device, people must walk for at least a part of every trip, even when the rest of the trip takes place on transit, in a vehicle or on a bicycle. Pedestrian activity thrives where the pedestrian facilities are well connected, safe and attractive—meaning well lit, free of debris and in good repair—and where there are frequent protected crossings. A 2022 PSU-Metro study found that pedestrian facilities also had a positive economic effect on surrounding communities.<sup>8</sup>

Closing the gaps shown above can be a relatively low-cost way to complete critical connections in areas that are already generally well-suited for walking and bicycling. There are larger bicycle and pedestrian gaps between urban centers and at the edges of the region, many of which are on the trail system. Closing these gaps has the potential to transform how people travel in communities where most trips are by car, especially when pedestrian projects are accompanied by complimentary investments in transit and community development.

<sup>8</sup> <https://www.oregonmetro.gov/active-transportation-return-investment-study>

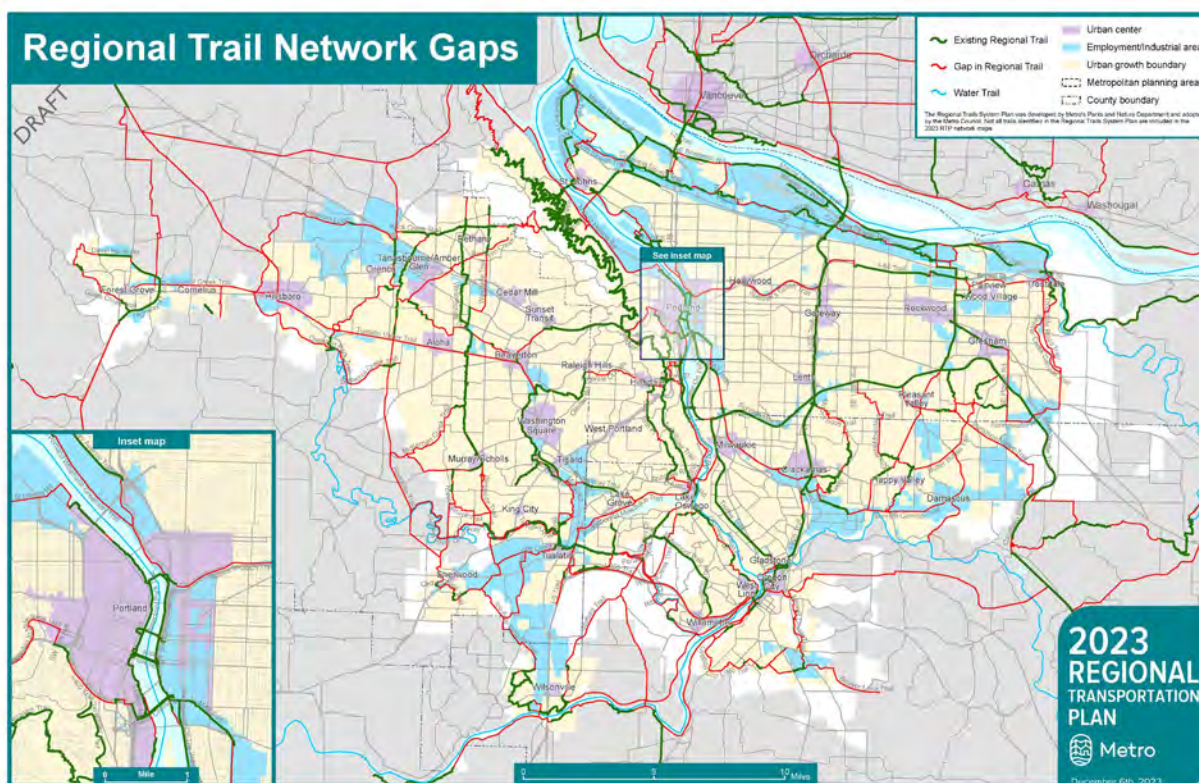


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Figure 4.6 below shows gaps in the regional trail network in red and completed trail segments in green, as well as the same urban centers that are included as overlays in the bicycle and pedestrian maps above. Trails are long-distance, high-quality bicycle and pedestrian facilities that provide connect regional centers, and they often pass through natural areas and/or include landscaping and natural features.

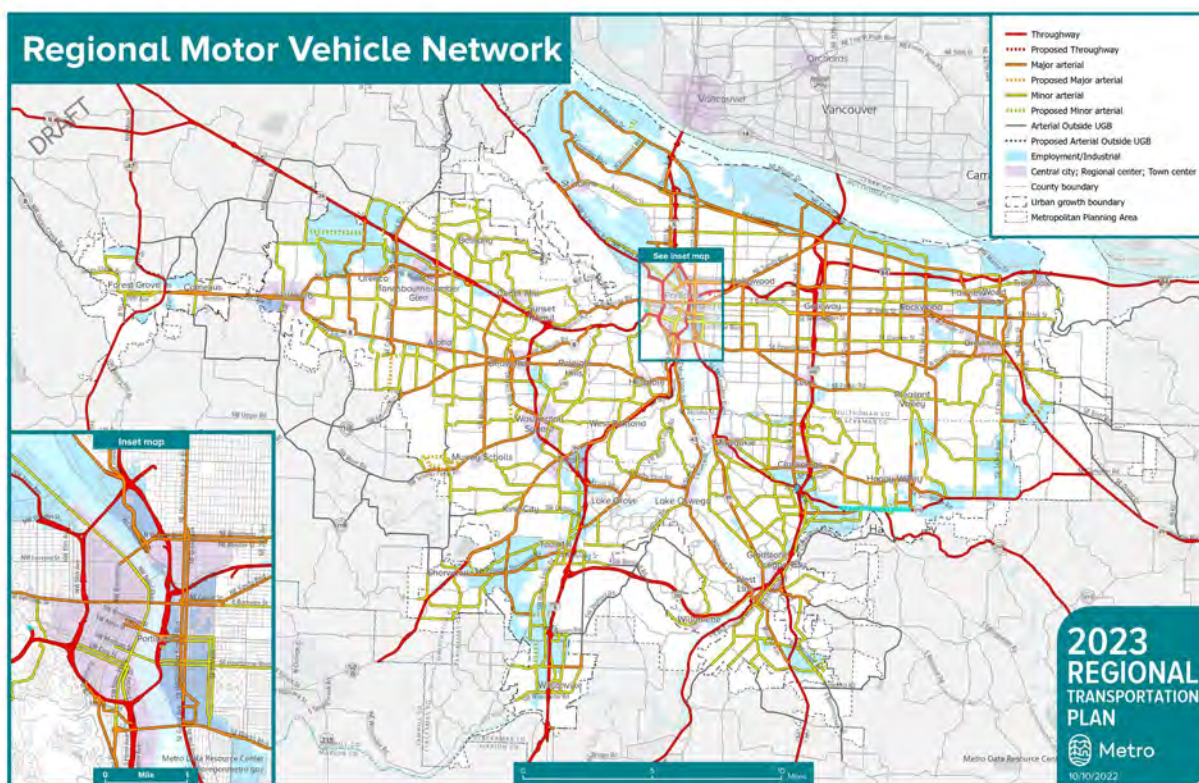
**Figure 4.6 Regional trail network gaps (2018 RTP networks and 2022 partner agency data)**



Trails are also part of the bicycle and pedestrian networks shown above, and this map underscores how filling many of the longer-distance gaps shown above depends upon completing the regional trail system.

Figure 4.7 shows the planned motor vehicle network by facility type, including planned facilities that have not yet been built, which are shown in dashed lines. As the map below shows, the network is largely built out.

**Figure 4.7 2018 RTP regional motor vehicle network map ((2018 RTP networks and current partner agency data)**



## 4.1.3 VMT per capita

Vehicle miles traveled (VMT) per capita measures much the average person in the Portland region drives each day. Many transportation agencies in the region use VMT per capita to measure progress toward creating vibrant communities and providing multimodal travel options. All other things being equal, VMT per capita tends to be lower in compact communities with a mix of destinations and good access to transit and other options.<sup>9</sup> As discussed at the beginning of this section, the Regional Mobility Policy establishes VMT per capita as a critical performance measure for Mobility, and the State has also established VMT per capita as the key metric used in determining whether the RTP meets its climate targets. See the Climate section for information on historical, current, and projected future levels of VMT in the region.

## 4.1.4 Transit frequency

Completing a high-quality transit network is critical to meeting regional Mobility goals. Half of all trips are over three miles, and these trips account for the majority of VMT.<sup>10</sup> Transit is the mode that is best-suited to provide a climate-friendly and affordable alternative to driving for these

<sup>9</sup> <https://nap.nationalacademies.org/catalog/12747/driving-and-the-built-environment-the-effects-of-compact-development>

<sup>10</sup> <https://www.bikeleague.org/content/national-household-travel-survey-short-trips-analysis>

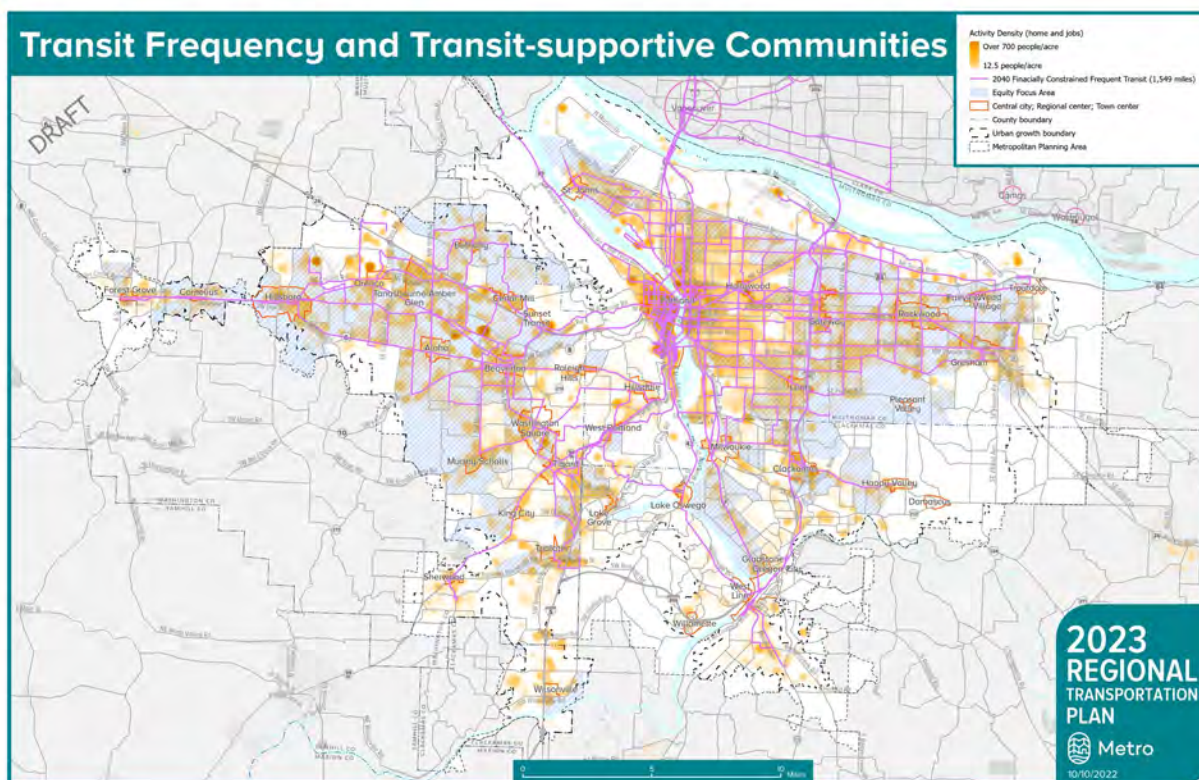


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longer-distance trips. And transit is the most useful when it provides fast, convenient, and accessible transit connections between activity centers. Figure 4.8 below highlights communities that have the densities necessary to support frequent transit<sup>11</sup> (orange) and compares their location with current frequent transit service (i.e., lines with peak headways of 15 minutes, shown in purple). It also shows EFAs in light blue cross-hatching (see the Equity section for additional discussion of this map).

**Figure 4.8 Map of high-frequency transit (headways of less than 15 minutes) and transit-supportive communities (12.5 or more people and/or jobs per acre), 2020 (Metro regional travel model and distributed growth forecast)**



If transit service is well-coordinated with land use, this map should show purple lines connecting most of the orange/red clusters of high density. This is the case in much, but not all, of the region, particularly in the south and west and on north/south corridors in the east side of the region.

## 4.1.5 Access to destinations

Measuring how many destinations people can access via transit and automobile within a given travel time is a common way of understanding the overall utility of transit and driving. The RTP

<sup>11</sup> The High Capacity Transit and Regional Transit Strategies specify a threshold of 5 households or 15 jobs per acre for communities served by frequent transit. In order to map both jobs and housing at the same scale, Figure 4.8 combines jobs and housing into a single measure of activity density (jobs plus residents per acre) and uses a threshold of 12.5 jobs and/or residents per acre to identify communities that support frequent transit. The average household in the region includes 2.5 people, so 5 households per acre is equivalent to 12.5 residents per acre.

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aims to increase access to destinations, particularly for transit. A truly multimodal transportation system is one in which people who travel by transit can reach the same number of jobs via transit within a given travel time as they can via automobile. Table 4-3 below compares accessibility via transit and automobile during peak hours and other times of the day. This analysis uses a 45-minute travel time to measure transit access and 30-minute travel times to measure automobile access,<sup>12</sup> which accounts for the time needed for people to walk between their origins/destination and their car/transit stop and transfer between different transit routes, etc.

**Table 4-3 Percent of jobs accessible by driving and by transit, by community type and time of day, 2020 (Metro travel model and land use data)**

	Percent of jobs accessible within...	
	... a 30-minute drive	...a 45-minute transit trip
During rush hour	43%	7%
Outside of rush hour	50%	6%

The good news is that driving offers good access to jobs throughout the region – the average resident can reach almost half of the region’s job within a 30-minute commute. The challenge to creating a multimodal system is that driving offers much better access than taking transit does. Across all times of day, people can reach five to ten times as many destinations by auto as they can by driving.

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<sup>12</sup> These travel times were recommended by the 2018 Transportation Equity Working Group to account for the fact that transit trips are typically longer than automobile trips.



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## 4.2 SAFETY

The RTP establishes a Vision Zero goal for the Portland region to eliminate traffic-related deaths and severe injuries by 2035. Safety analysis for the draft needs assessment is based on the most recently available data. To track trends over time, most of the analysis uses a five-year average of crash data because of the random nature of crashes.

Key findings from the draft Safety needs assessment include:

- From 2016 through 2020, 2,814 people were killed or experienced a life-changing severe injury from a traffic crash in the greater Portland region, an average of 563 people per year.
- Traffic fatalities in the Portland region have been increasing for users of all modes, except for people bicycling. Severe injury crashes are also increasing, though not as dramatically as fatal crashes.
- Pedestrians experience a disproportionately high number of traffic deaths.
- Fatal and severe crashes are concentrated at a small number of corridors and intersections, which the RTP refers to as High Injury Corridors and High Injury Intersections.
- There is a high level of overlap between the updated 2023 High Injury Corridors and those identified in the 2018 RTP.
- About 40% of traffic fatalities occur on state owned highways.
- Black, American Indian and Alaska Native people experience a disproportionate number of traffic deaths.
- Three quarters of serious pedestrian and bicycle crashes, and 65% of all serious crashes, occur in areas identified as Equity Focus Areas.
- Safety issues are a concern for children walking and bicycling to school.

Since the 2018 RTP was adopted, city, county, regional and state partners been developing and implementing safety action plans. Metro's 2-Year Progress Report on the Regional Transportation Safety Strategy<sup>13</sup> highlighted this work and identified actions for the next two years, including in the update of the 2023 RTP. While it is discouraging to see traffic fatalities and severe injuries increase as agencies and community partners work to address safety, it often takes a while for the impact of Vision Zero policies to become apparent. Countries and cities that have adopted the Safe System Approach and committed to achieving zero serious crashes typically begin to see substantial results in about 10 years, reducing traffic fatalities upwards of 40-60%.<sup>14</sup>

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<sup>13</sup> June 2021. <https://www.oregonmetro.gov/sites/default/files/2021/08/03/RTSS-progress-report-20210603.pdf>

<sup>14</sup> Road Safety Annual Report 2020, International Transport Forum: [https://www.itf-oecd.org/sites/default/files/docs/irtad-road-safety-annual-report-2020\\_0.pdf](https://www.itf-oecd.org/sites/default/files/docs/irtad-road-safety-annual-report-2020_0.pdf)

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## 4.2.1 Historical crash analysis

The RTP includes ambitious targets to reduce fatal and serious injury crashes by 16 percent by 2020, by 50 percent by 2025, and to zero by 2035, and identifies a trajectory for the intervening years that allows the region to meet these targets. Table 4-4 summarizes regional progress toward these performance measures.

**Table 4-4 Federal Safety Performance Measures for Traffic Fatalities and Serious Injuries, 2016-2020 (Oregon Department of Transportation crash data analyzed by Metro)**

Performance Measure	5-year rolling averages		
	2011-2015 Baseline	2016- 2020 Target	2016- 2020 Actual
Number of fatalities	62	52	93
Fatalities per 100 million vehicle miles traveled	0.6	0.5	0.9
Number of serious injuries	458	384	512
Serious injuries per 100 million vehicle miles traveled	4.5	3.6	4.8
Number of non-motorized fatalities and serious injuries	113	95	129

The region is not on track to meet its targets. In fact, across all the measures summarized in Table 4-4, the region's streets have gotten less safe since JPACT and the Metro Council established this goal and began collecting baseline data. These findings are consistent with an interim Safety Performance report that Metro published in 2021,<sup>15</sup> which was based on 2019 data.

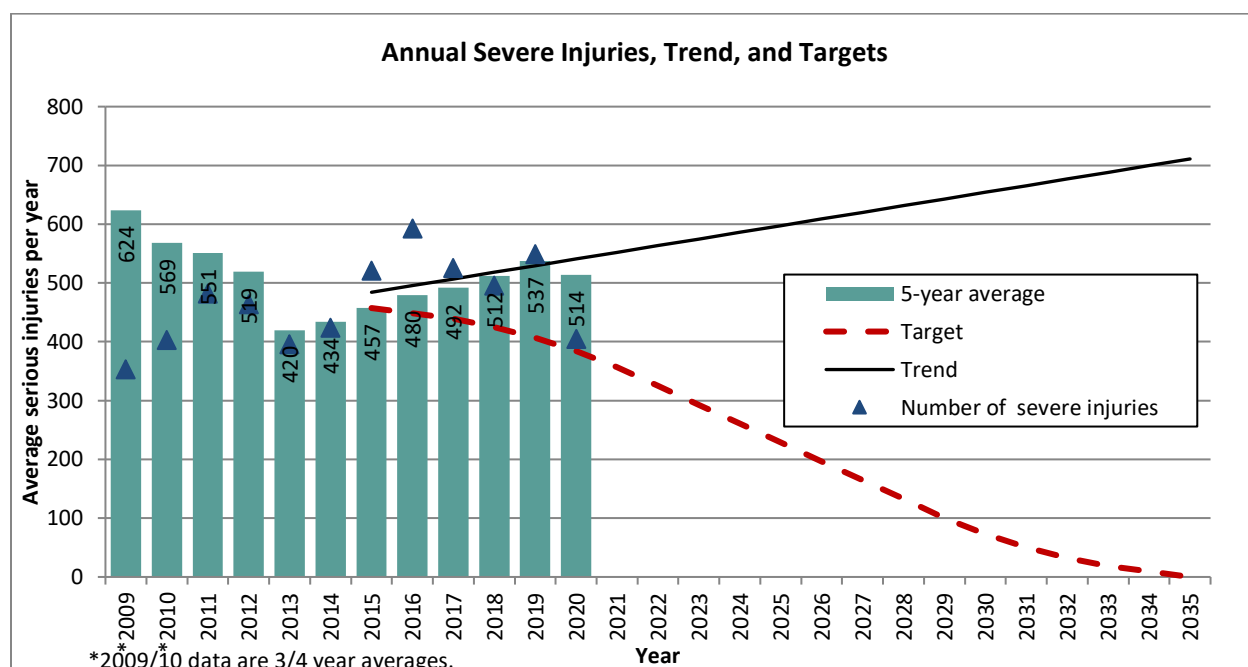
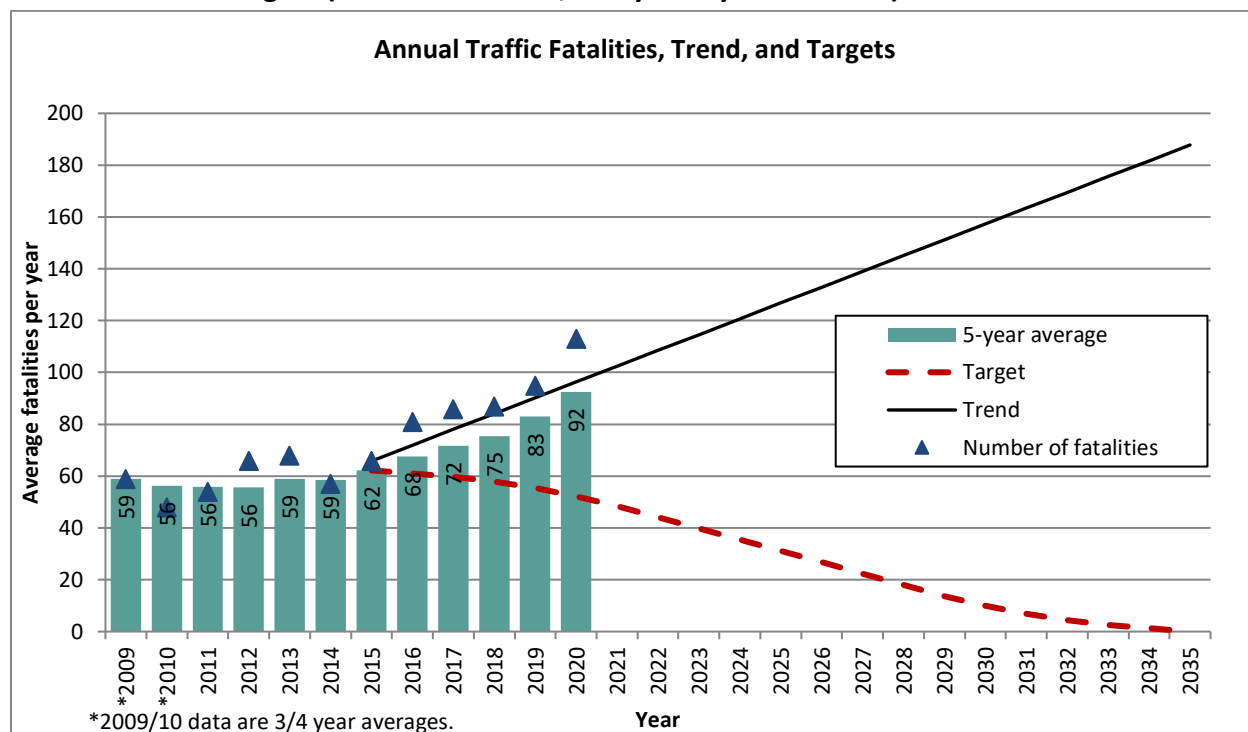
Figure 4.9 shows more detail on safety trends in the region, providing data by crash type (fatal vs. serious injury) and mode.

<sup>15</sup> <https://www.oregonmetro.gov/sites/default/files/2021/03/04/Metro-safety-annual-performance-report-2015-2019.pdf>

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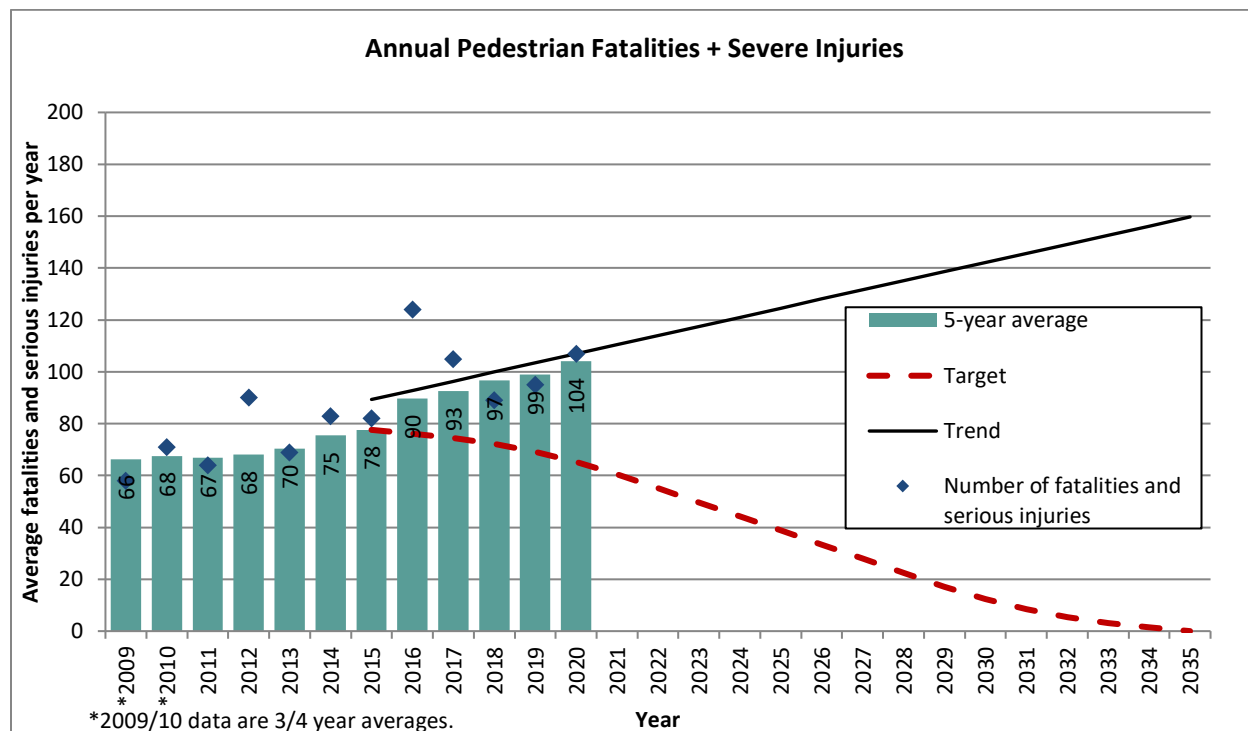
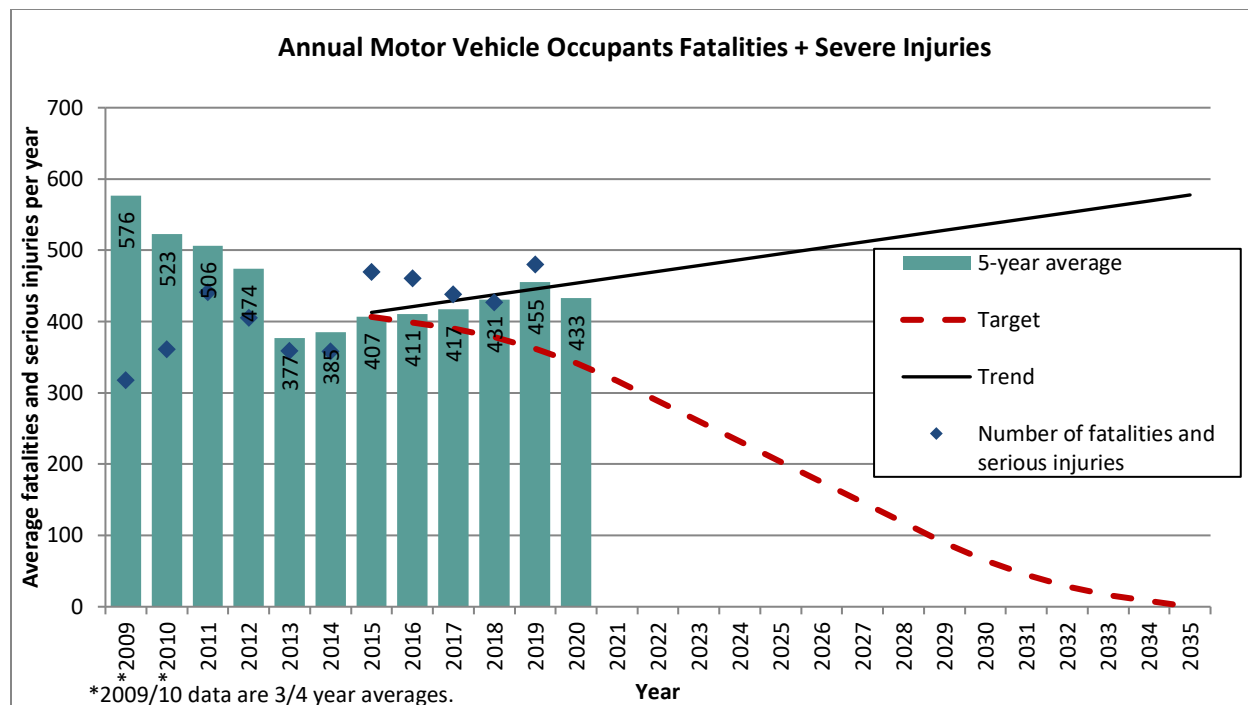
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**Figure 4.9 Five-year average rates of crashes by type and mode, 2007-2020, with trendlines and Vision Zero targets (ODOT crash data, analyzed by Metro staff)**



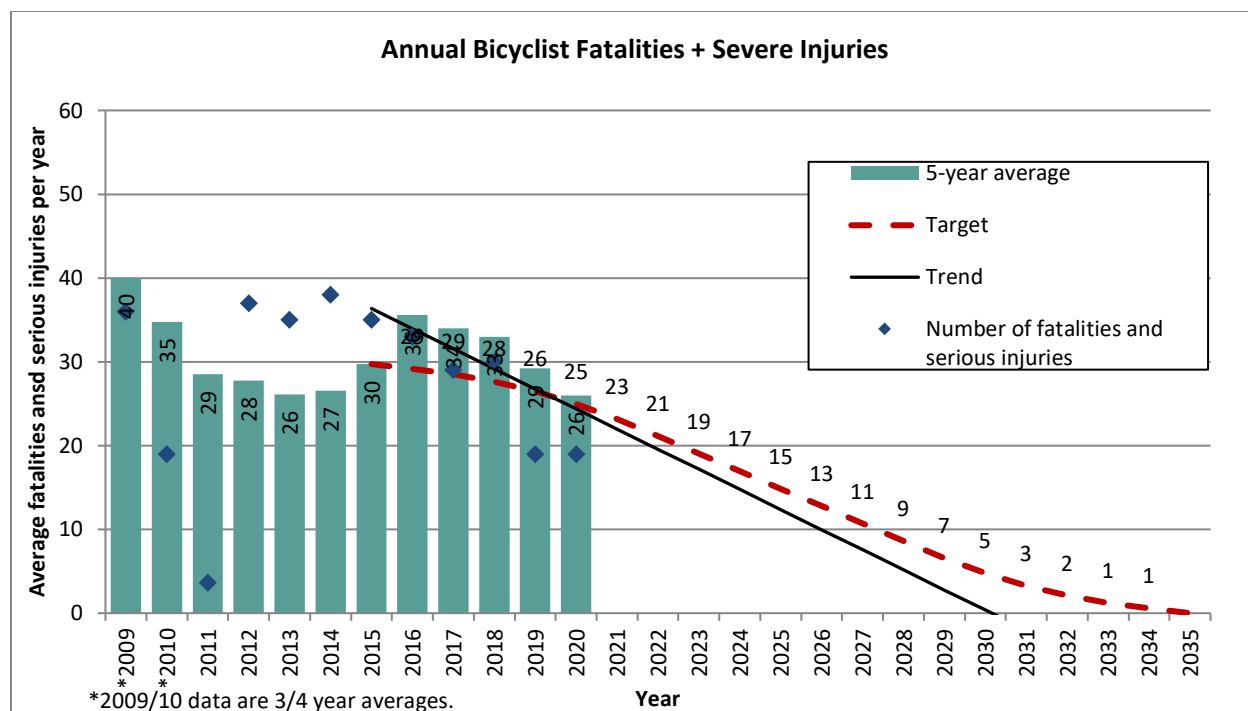
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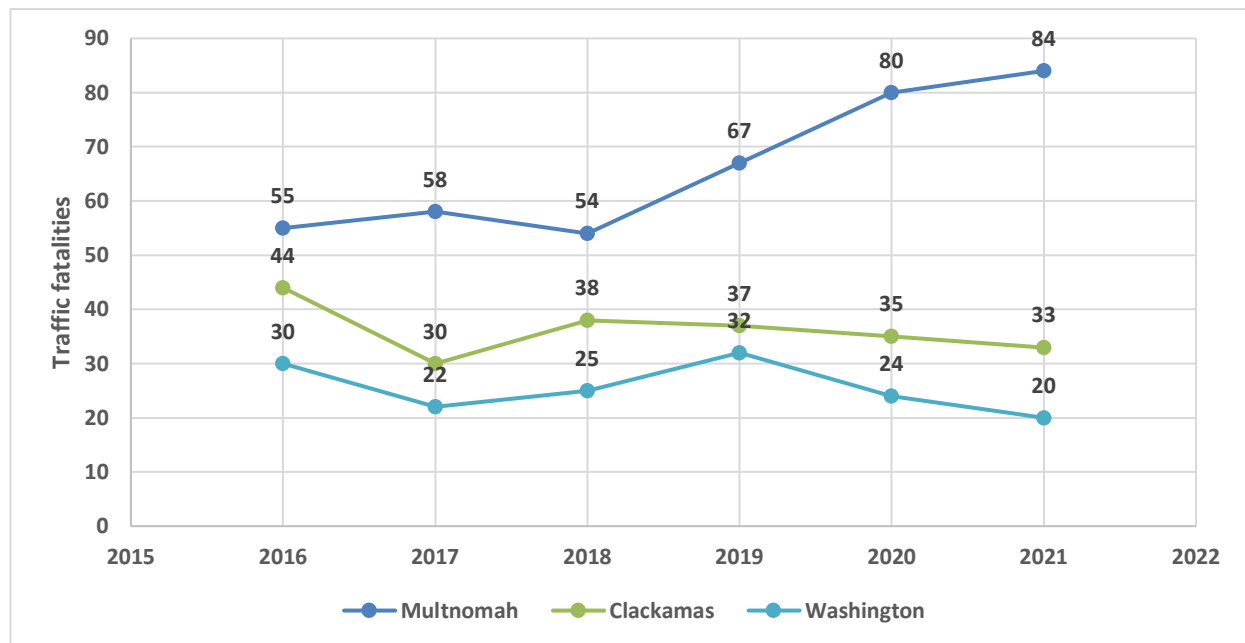
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Traffic fatalities in the Portland region have been increasing for users of all modes except for people bicycling. Severe injury crashes are also increasing, though not as dramatically as fatal crashes.

As Figure 4.10 shows, the increase in regional fatalities is driven by an increase Multnomah County. Fatal crashes have remained relatively flat in Clackamas and Washington Counties. The fact that there are more crashes in Multnomah County than in Washington and Clackamas is not surprising; half of the passenger miles traveled in the region take place in Multnomah County, and higher travel volumes mean greater exposure to crashes, all other things being equal. However, the recent increase in fatalities is concerning given that the proportion of travel occurring in Multnomah County does not appear to have increased during that same period. Local analysis is critical to understanding how local conditions, including traffic volumes, percent of people walking and bicycling, and other factors influence traffic safety.

**Figure 4.10 Annual fatalities by county, 2016-2021 (ODOT preliminary fatal crash data)**



Speed, alcohol, and/or drugs continue to be the most common contributing factors in severe and fatal crashes in the region. During 2016-2020, speed was involved in 35% of fatal and 16% of severe injury crashes, and alcohol or other drugs were involved in 38% of fatal and 14% of severe injury crashes. However, each crash captured in the data above is complex and involves multiple contributing factors and circumstances, including traffic exposure and built environment variables.

Preliminary analysis reveals many safety issues near the region’s public elementary, middle and high schools. Within a mile buffer around the average school, there are 8.1 miles of dangerous streets and 38 of fatal, severe, or bicycle and pedestrian injury crashes. A quarter of the region’s schools are surrounded by streets with mostly incomplete sidewalks.<sup>16</sup>

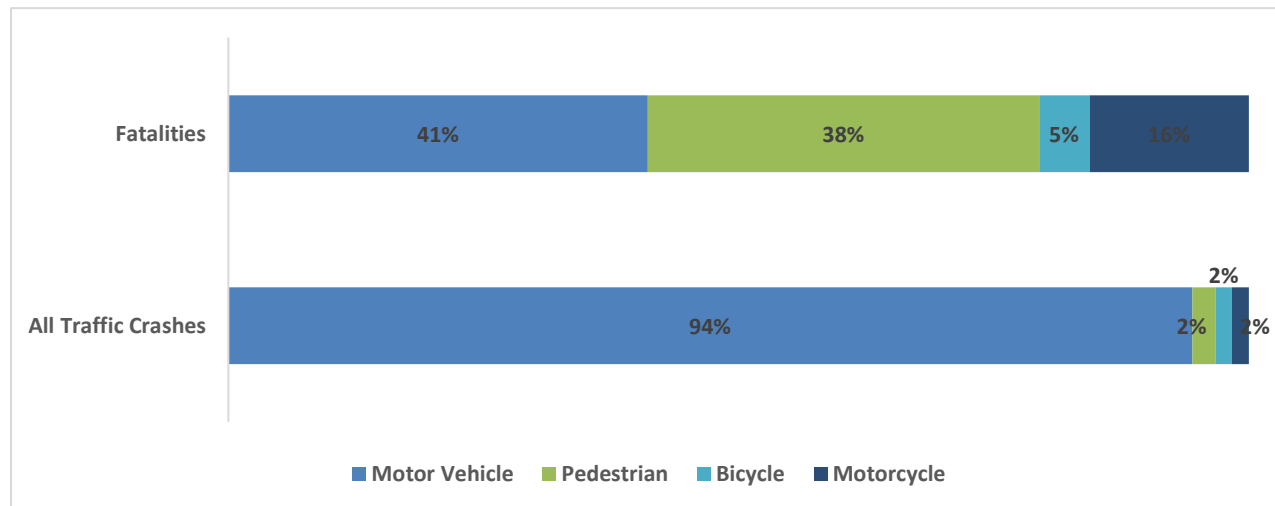
## 4.2.2 Crashes by mode

Crashes have different impacts on different users of the transportation system. In general, vehicle crashes are more frequent, because most people in the region drive for most of their trips, but crashes that involve people walking, and riding bicycles and motorcycles are more severe, because their bodies are more exposed. Figure 4.11 compares fatal crashes by mode to all crashes by mode.

<sup>16</sup> i.e., less than 50% of the sidewalks within one mile are complete. For the purposes of this analysis, a street with a sidewalk on either one or both sides counts as “complete.”



**Figure 4.11 All crashes and fatal crashes by mode, 2016-2020 (ODOT data, analyzed by Metro staff)**



As this chart illustrates, traffic deaths disproportionately impact people who walk, bicycle and ride a motorcycle. Pedestrians experience the most disproportionate impact. Auto-only crashes comprise 94% of all crashes and 41% of all fatal crashes, whereas pedestrian crashes make up 2% of all crashes and 38% of all fatal crashes. In other words, pedestrians who are involved in a crash are much more likely to die – 26 times more likely – than non-pedestrians. Pedestrian traffic deaths are steadily increasing, are the most common type of fatal crash, and have the highest severity of any crash type. This trend is being seen across the country and is attributed in part to vehicles getting larger over the years. Designing safe streets, particularly on arterials, is critical to pedestrian safety. 77 percent of serious pedestrian crashes occur on arterials.

## 4.2.3 High Injury Corridors

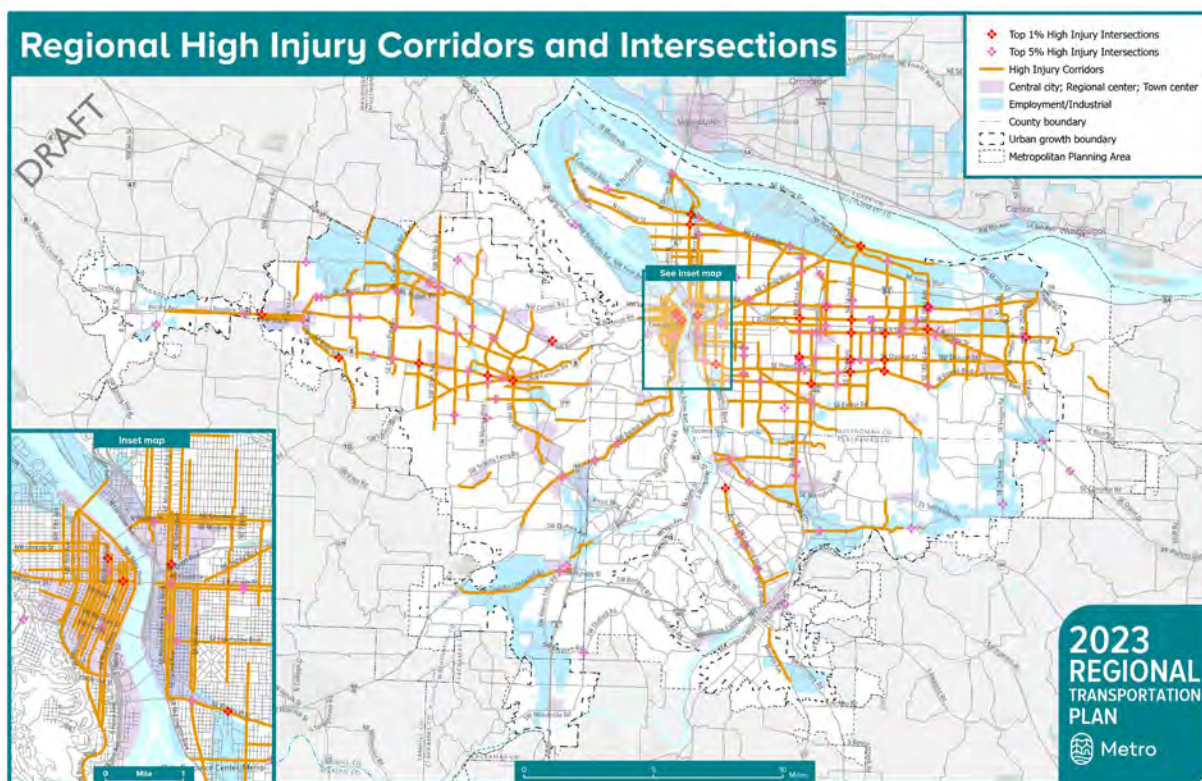
A majority of the serious and fatal crashes in the region, as well as the crashes that involve vulnerable users,<sup>17</sup> consistently occur on a small number of roads. Metro focuses its analysis on High Injury Corridors, which are the corridors where 60 percent of these crashes occur, and High Injury Intersections, which are the five percent of intersections with the highest rates of these crashes. Figure 4.12 shows High Injury Corridors (orange lines) and Intersections (those that are in the top five percent for severe injury rates are marked in pink; those that are in the top one percent are marked in red).

<sup>17</sup> When defining High Injury Corridors and Intersections, Metro accounts for pedestrian and bicycle injuries, which are particularly likely to be severe because these travelers' bodies are exposed to traffic. Fatal and severe injury crashes are given a weight of ten and other injury crashes for pedestrians and bicyclists are given a weight of three. Pedestrian and bicycle involved crashes are less frequent, but compared to vehicular crashes, they are significantly more likely to result in death or serious injury (this is true for motorcycle crashes as well, hence the need for consideration of separating out these crashes in future analysis). This weighting factor reflects the higher degree of risk involved in bicycle and pedestrian crashes. Metro's methodology provides a high-level, planning level analysis that compares all roads in the region, appropriate for identifying and prioritizing needs at the regional scale. Supplemental local analysis, including identification of safety corridors at the county and city geography, should also be used to identify needs and priorities in the RTP.

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**Figure 4.12: 2023 RTP High Injury Corridors and Intersections, 2016-2020 (ODOT crash data analyzed by Metro staff)**



The RTP recommends the use of proven safety countermeasures<sup>18</sup> to address High Injury Corridors and Intersections and locally identified safety needs. Local safety action plans describe in detail the projects that are needed to resolve safety issues at these locations and others identified by partner agencies.

<sup>18</sup> The Safety Division of the FHWA provides information on proven safety countermeasures at <https://safety.fhwa.dot.gov/provencountermeasures/>

## 4.3 EQUITY

RTP Equity Policy 3 directs Metro and its agency partners to “Prioritize transportation investments that eliminate transportation-related disparities and barriers for historically marginalized communities, with a focus on communities of color and people with low incomes.” Through extensive outreach, Metro has heard that these communities need fast, frequent, affordable, and reliable transit connections to key destinations and safer walking and biking infrastructure. The Needs Assessment evaluates equity through that lens and finds:

- The Portland region continues to grow more racially and ethnically diverse.
- The region is aging. The share of people 65 and older is growing while all other age groups are declining. However, people under 44 will continue to be in the majority.
- The COVID-19 impact had particularly severe and long-lasting impacts on people of color and workers with low incomes.
- Regional transportation agencies can advance equity by investing in transit service and safe biking and walking infrastructure in Equity Focus Areas (EFAs), which are communities with concentrations of people of color, people with low incomes, and people with limited English proficiency.
- The region has made significant progress in improving transit service and bike/ped infrastructure in EFAs, but not enough to address deep-seated inequities. Transit still offers much less access to destinations than driving does, and serious crashes are still concentrated in EFAs.

### 4.3.1 History of discriminatory planning in the greater Portland region

The disparities described in this chapter are the result of specific decisions made over the years by governments, institutions, and the public to marginalize people of color and other groups. Many of these decisions had generational impacts that continue to contribute to the inequities we see today. Knowing this history is critical to fully understanding and resolving these disparities.<sup>19</sup>

Oregon has a unique history of passing laws that discriminate against Black people. In the 1840s and 50s, State legislative bodies passed a series of laws that made it illegal for Black people to live in Oregon, and Oregon was the only state with such laws in its constitution. These State policies, along with federal policies such as the Japanese Internment law of 1942, as well as a series of actions that the real estate industry and government agencies took to concentrate people of color in particular neighborhoods and disinvest in those neighborhoods, all contribute to the region’s history of discriminatory planning. Throughout the last century, people of color and people with lower incomes have been impacted by planning decisions that targeted struggling areas for development. Major roads and freeways were often built on top of already disadvantaged communities to avoid affecting wealthy, white neighborhoods. These decisions split

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<sup>19</sup> The information in this section is adapted from Metro’s Equitable Transportation Funding Research Report: <https://www.oregonmetro.gov/sites/default/files/2022/11/16/Equitable-Transportation-Funding-Research-Report-11142022.pdf>.

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neighborhoods, displaced families, permanently damaged communities, and even led to higher rates of air pollution and chronic illness.<sup>20</sup>

Figure 4.13 provides a visual timeline of discriminatory planning in the greater Portland region from the late 19<sup>th</sup> century to the present, and also chronicles more recent efforts to restore justice. In the graphic, gold circles reflect the shift away from discrimination and the beginnings of a path towards equity.

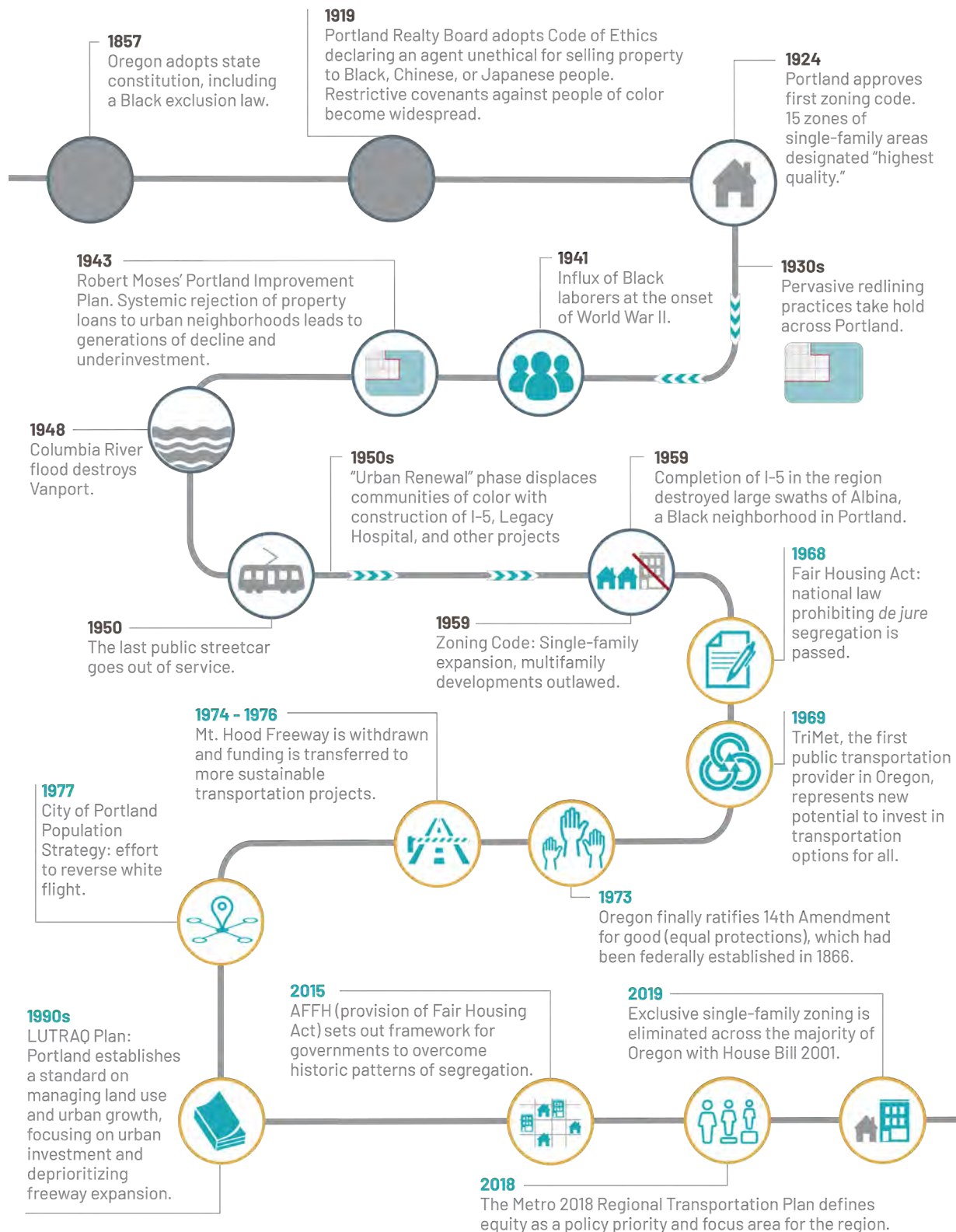
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<sup>20</sup> [Oregon Metro. \(2022\). "2023 Regional Transportation Plan Update: Work Plan."](#)

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**Figure 4.13 Timeline of discriminatory planning and advancements toward equity in the Greater Portland region**





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Beginning in the 1920s, local governments throughout the region used exclusionary zoning to prevent Black, Indigenous, and other people of color from owning property in certain neighborhoods, was common practice in the greater Portland region.<sup>21</sup> The real estate industry – including realtors, bankers, appraisers, and landlords – also used redlining, discriminatory lending, and restrictive covenants to steer people of color toward certain neighborhoods and exclude them from others.<sup>22</sup> Local governments also used single-family zoning to support these practices by forcing multi-family development into segregated neighborhoods.<sup>23</sup> Agencies significantly increased the amount of land zoned for single-family housing throughout the 1930s, 1940s, and 1950s. By the end of this period, multi-family zones accounted for only 5% of residentially zoned lands. These practices created concentrated people of color and people with lower incomes in neighborhoods that were vulnerable to disinvestment, industrial uses, infrastructure development, and urban renewal plans.<sup>24</sup>

Urban renewal, whereby government agencies razed and redeveloped ‘blighted’ areas in their jurisdictions, swept the United States in the mid-twentieth century. Local governments used this power to implement sweeping redevelopments in marginalized, often Black, communities without consulting residents. The new developments that were created through urban renewal took on many forms: transportation infrastructure, large-scale multi-family housing, event centers, parks, and office buildings, etc. The agencies who led these projects often systematically displaced former residents and bought out landowners for a fraction of their property’s value. Portland and many other cities across the U.S. have a long and well-documented history of urban renewal projects – including some that were approved by voters, such as the development of Memorial Coliseum in the heart of Portland’s black community.<sup>25</sup>

Portland’s Albina neighborhood developed into a thriving business district after the population boom throughout World War II and became a haven and area of opportunity for Black people living in the city. This sudden population growth also led to the development of Vanport in North Portland, which was initially built to provide temporary housing for shipyard workers. Many of these workers were African American and were unable to find other suitable nearby housing. In 1948, Vanport was destroyed by a flood, taking numerous lives and forcing residents to relocate, many of whom moved to Albina. In the 1950s, federal, state and local transportation agencies built the Interstate 5 freeway through Albina, and local governments razed other parts of Albina to build Memorial Coliseum and Emanuel Hospital, destroying homes and businesses, forcing displacement, and tearing the fabric of the neighborhood apart.

Exclusionary zoning and racial segregation still influence where people live and work today. Exclusive single-family zoning was eliminated in the majority of Oregon through the passing of House Bill 2001. As of June 2022, cities with a population over 25,000 and cities in the greater

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<sup>21</sup> [https://www.oregonencyclopedia.org/articles/blacks\\_in\\_oregon/#.Y0mqhXbMJPY](https://www.oregonencyclopedia.org/articles/blacks_in_oregon/#.Y0mqhXbMJPY)

<sup>22</sup> [Department of Land Conservation and Development. \(2022\). “Housing Choices \(House Bill 2001\).”](#)

<sup>23</sup> [Department of Land Conservation and Development. \(2022\). “Housing Choices \(House Bill 2001\).”](#)

<sup>24</sup> [Hughes, Jena. \(2019\). “Historical Context of Racist Planning.” \*Bureau of Planning and Sustainability\*.](#)

<sup>25</sup> [Killen, John. \(2015\). “Throwback Thursday: 60 years ago, Portland began urban renewal plan for South Auditorium district.” \*Oregon Live\*.](#)



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Portland region must allow duplexes, triplexes, quadplexes, cottage clusters, and townhouses in residential areas. Yet much still needs to be done to untangle the legacy of displacement and damage inflicted in years past. Even with the progress made since the late 1960s, the disproportionate impact of lack of transportation access to opportunities for people of color and people with low-income persists. Gentrification, population growth, and increasing demands on housing continue to threaten to further destabilize people of color and low-income communities. Implementing the recommendations in this report and continuing efforts to advance racial and income equity in future RTPs, plans, and programs, are critical to righting the wrongs of the past.<sup>26</sup>

## 4.3.2 Demographic and economic changes

People of color make up an increasing share of the regional population. The portion of residents who identify as people of color has been increasing steadily over the past several decades; from under one percent in 1960 to 28 percent in 2020. Figure 4.14 shows how the racial and ethnic makeup of the region's population changed between 2000 and 2020.

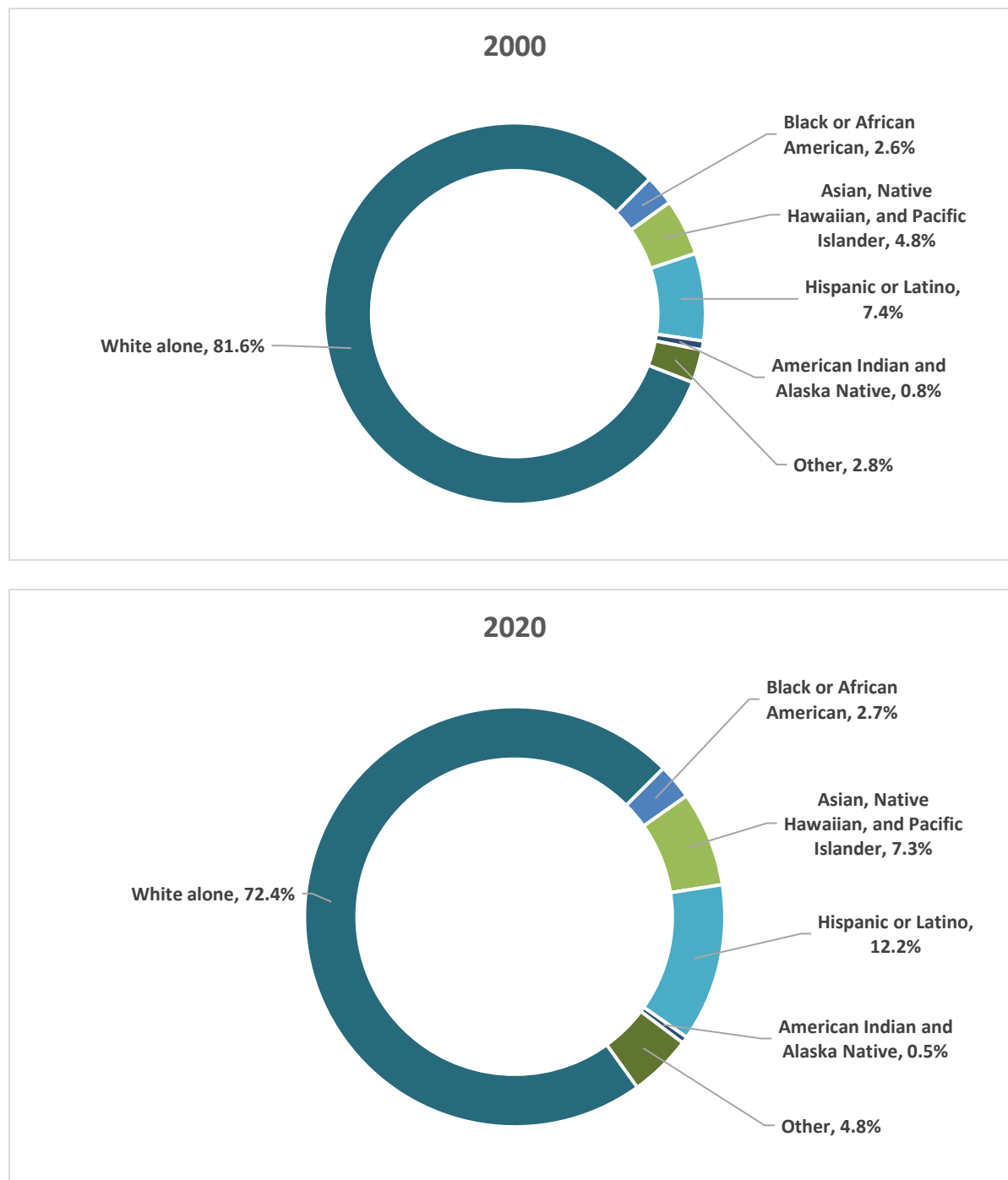
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<sup>26</sup> Much of the existing academic literature and subsequent discussions are around the City of Portland, however the patterns of exclusion and discrimination are well established to have been rampant across the country, Oregon, and the greater Portland region.

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**Figure 4.14 Population by race and ethnicity<sup>27</sup> in the Portland region and surrounding counties,<sup>28</sup> 2000 and 2020 (U.S. Census)**



<sup>27</sup> The U.S. Census uses different terms for race and ethnicity than Metro does. This figure uses the Census labels to reflect the language used in the surveys that provide this data.

<sup>28</sup> For consistency with regional and state population forecasts, Metro uses a broader 7-county region (Clackamas, Clark, Columbia, Multnomah, Skamania, Washington, and Yamhill counties) in its demographic data.

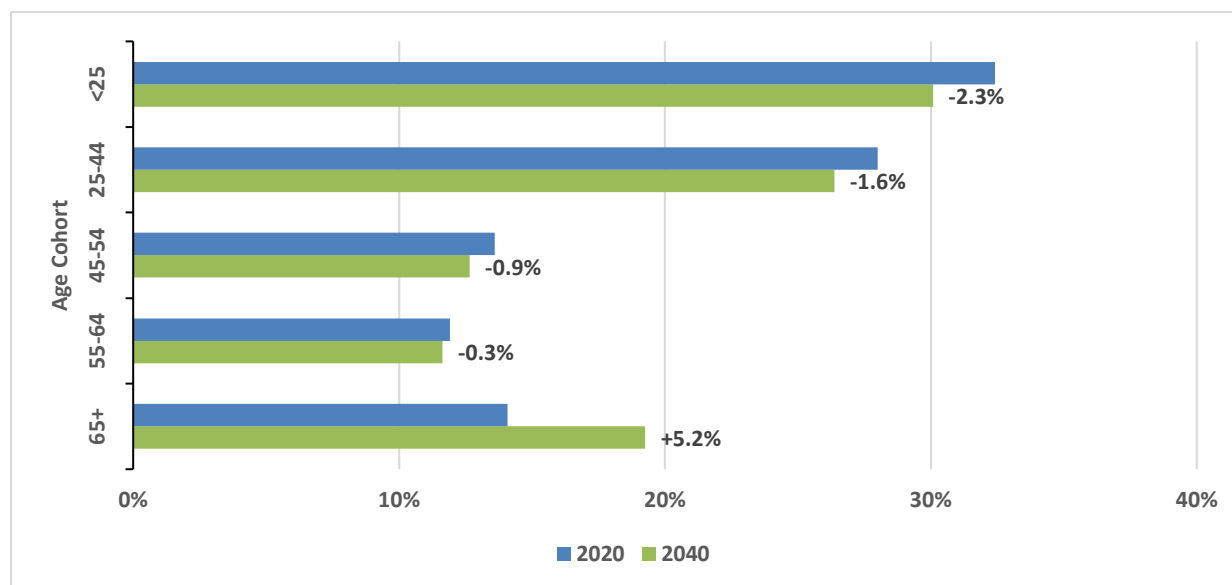
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Over the 20-year time span captured in the figure above, the share of regional residents who identify as people of color grew from 18 percent to percent. This change was driven primarily by growth among Latines, Asian Americans and Pacific Islanders, as well as an increasing number of people who identify as “other.”<sup>29</sup>

Figure 4.15 shows Metro’s forecasts for how the share of population in different age groups will change between 2020 and 2040.

**Figure 4.15: Current and forecasted population by age cohort in the 7-county Greater Portland region, 2020 and 2045 (Metroscope)**



Just like the national population, our region’s population is aging, and the share of people over 65 is projected to grow by 5 percent, while shares of all other age groups are declining. However, the two youngest age groups – people under 25 and people 25 to 44 – are projected to remain the two largest age groups in the region. By 2040, close to 50% of the region’s population will either be under 25 or over 65. Though these two groups have very different transportation needs, they also have some important similarities – lower rates of commuting by auto, high proportions of people who cannot drive due to age or disability, and lower participation in the labor force, which means that their travel patterns are less likely to be driven by commuting.<sup>30</sup>

<sup>29</sup> The Census Bureau increased the number of options for people to classify themselves as members of two or more races between 2000 and 2020. For the purpose of comparing data from 2020 with data from 2000, we use similar race/ethnicity categories as were used in 2000 – combining Asian people and Pacific Islanders in spite of the fact that the Census Bureau now differentiates between the two, and including people who identify as being part of two or more races in the “other” category.

<sup>30</sup> <https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs-45.pdf>

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## 4.3.3 Inequities in housing and employment

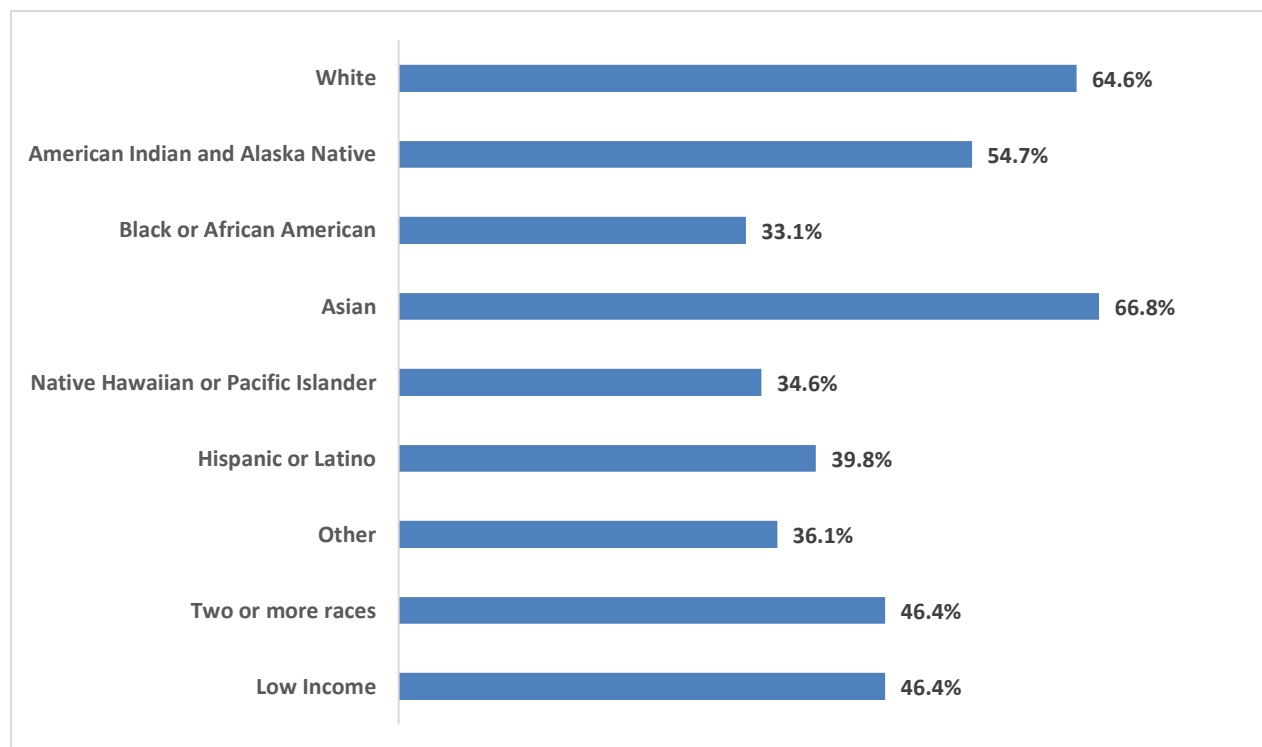
The 2018 RTP undertook a wide-ranging review of data and research on equity, both nationally and in the Portland region, and highlighted several inequities in different marginalized groups' access to housing and jobs.

- People with low incomes and most people of color (with the exception of Asian Americans) and people with low incomes are significantly less likely to own a home than white people.
- People of color are being displaced to areas of the region that lack good access to transportation options, jobs, and other important destinations.
- People of color and people with low incomes can access fewer jobs within a typical commute distance than white people.

Many of these inequities were exacerbated by the COVID-19 pandemic. The health impacts of the pandemic fell significantly upon the region's Latine population, and its economic impacts were particularly damaging for people with low incomes – both workers, who were more likely to lose their jobs, and students, who experienced greater learning loss due to the pandemic.

Significant disparities in access to jobs and housing persist. For example, Figure 4.16 shows how homeownership rates are still much lower for most non-white racial and ethnic groups and for households earning below \$75,000 per year than they are for white people.

**Figure 4.16 Homeownership rates by race and income for Multnomah, Washington and Clackamas Counties, 2020 (American Community Survey)**



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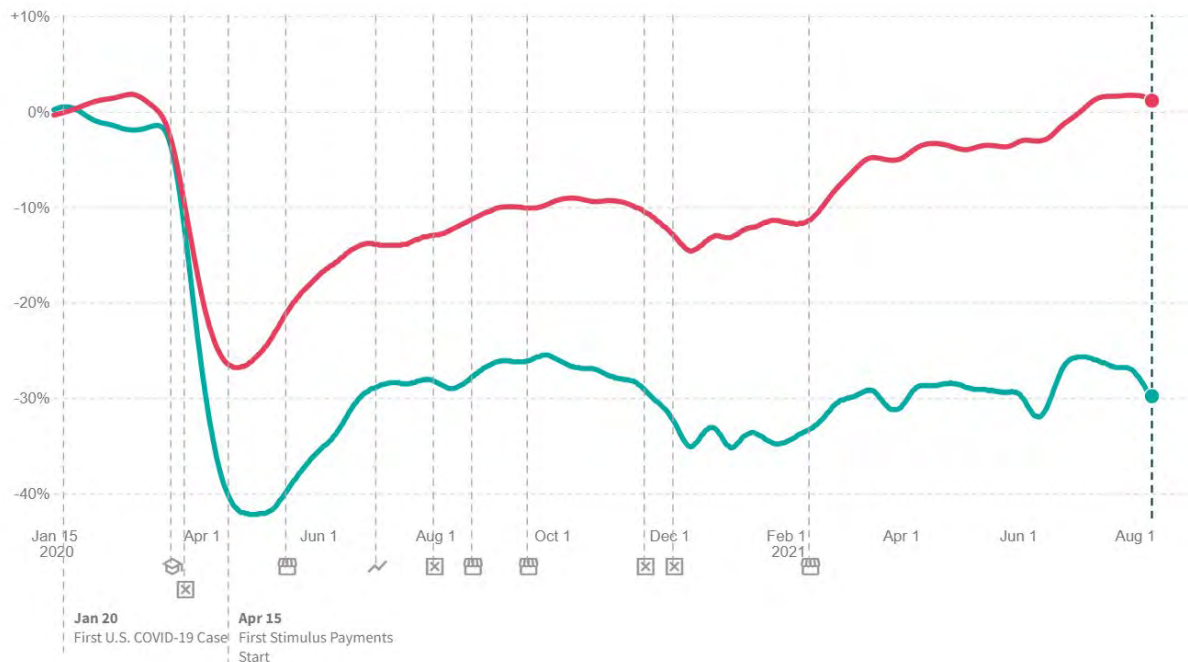
Public agencies are working to address these disparities by creating more affordable housing, supported by a regional affordable housing bond measure, which was passed by voters in 2018. The bond aims to fund the construction of 3,900 designated affordable housing units across the region, with a focus on providing homes for people of color. Though the bond measure represents significant progress in building affordable housing, it only provides a small portion of the roughly 48,000 units in the region that Metro estimates are necessary to meet the region’s needs.

Homeownership rates can affect how communities respond to the transportation projects that are the focus of the RTP. Some transportation projects – in particular, new light rail lines and bicycle/pedestrian trails – can potentially increase the value of adjacent properties. This benefits homeowners who live nearby, but it can create higher housing costs and displacement risks for people who rent. This means the groups shown as having low homeownership rates in Figure 4.16 are more likely to see new transportation investments as threatening their ability to remain in their communities.

The inequities created by the COVID-19 pandemic become very visible when comparing employment patterns for lower- and higher-income workers. Overall, the U.S. experienced historically high levels of unemployment in summer 2020, immediately following the onset of the COVID-19 pandemic. By Spring 2022, the overall unemployment rate had fallen to levels that could be considered low even by pre-pandemic standards. However, this broad trend masks significant differences in the employment rate between workers with lower incomes and those with higher incomes. Figure 4.17 shows unemployment rates over the past three years for both workers who more than the median wage (approximately \$30 per hour, or \$60,000 per year) and workers who earn less.

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**Figure 4.17 Regional employment rates for workers earning above and below the median wage (indexed to January 2020) January 2020 – August 2021 (Earnin, Intuit, Kronos and Paychex data, analyzed by Cambridge Systematics for the Commodities Movement Study)**



As of August 2021, the employment rate for workers in the Portland region who earned above the median wage had increased by 1.2 percent over pre-pandemic (January 2020) levels, whereas the employment rate for workers earning below the median wage fell by 29.8 percent. In other words, the pandemic opened up a 30-point employment gap between workers earning above the median and workers earning below the median wage.

## 4.3.4 Transportation needs in Equity Focus Areas

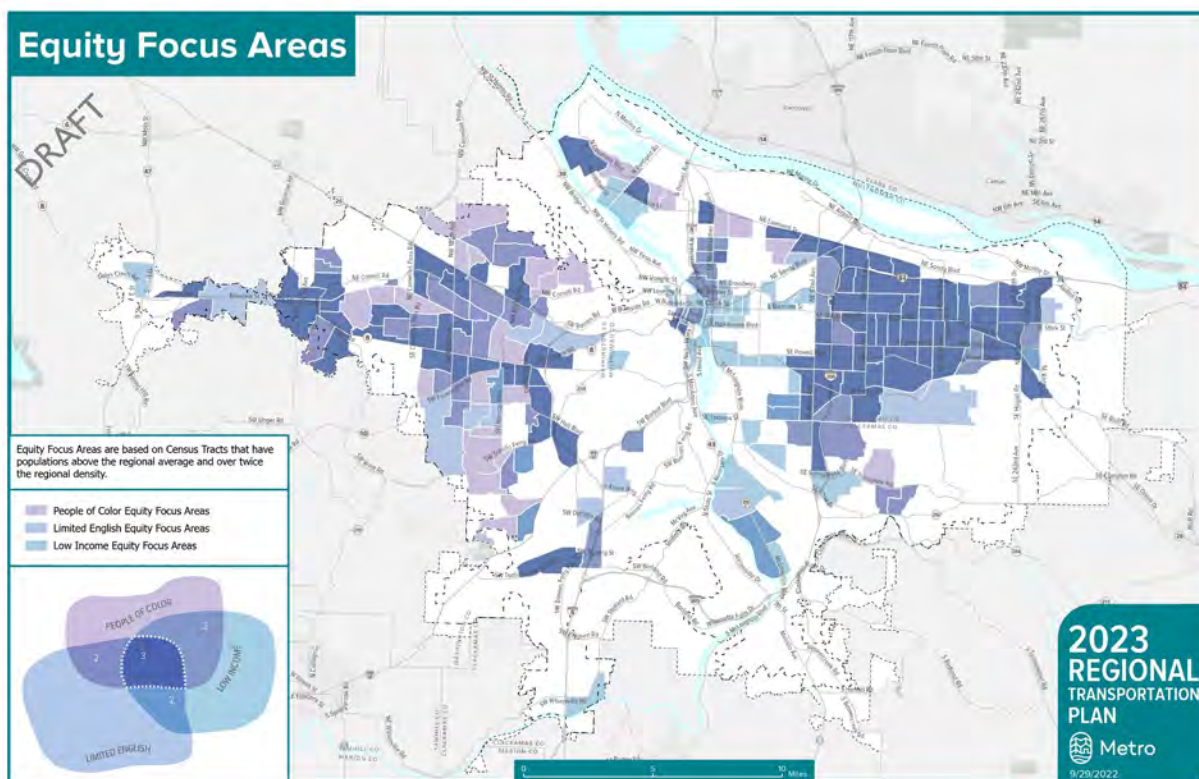
Equity Focus Areas were designed to guide transportation plans toward focusing on communities with the greatest needs, and to benefit as many people in need as possible, while accounting for regional growth and change. They highlight the communities in the region with the highest densities of people of color, people with low incomes, and people who speak limited English.

Figure 4.18 shows the updated Equity Focus Areas used in the 2023 RTP, including which of the three populations included in the definition of EFAs are concentrated within each EFA, and uses shading to illustrate how these different populations overlap with each other. These EFAs are based on 2016-20 American Community Survey data (for income and English proficiency) and 2020 Census data (for race). Appendix C provides more detail on the data sources and calculations used to create and update EFAs.



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**Figure 4.18 2023 RTP Equity Focus Areas, (Census and American Community Survey data, 2016-2020)**



EFAs are located throughout the region, and there are large concentrations of all three EFA populations in East Portland and Multnomah County and along Tualatin Valley Highway in Washington County. These are largely the same areas that were highlighted during the 2018 RTP equity analysis.<sup>31</sup> Directing transportation investments – particularly projects designed to meet the needs of the people they serve – toward the EFAs that are highlighted above helps to meet this goal.

The equity policies adopted in the 2018 RTP direct Metro and partner agencies to both learn more about marginalized people’s transportation needs<sup>32</sup> and also to act on what they learn.<sup>33</sup> Since the 2018 RTP update, Metro has conducted extensive outreach to people of color, people with low incomes, and other marginalized people to better understand their transportation needs through the development of the 2020 regional transportation funding measure, the Regional Mobility

<sup>31</sup> See the Needs Assessment memo [that was shared with TPAC as part of the July 13 meeting packet](#) (beginning p. 14) for further discussion of how and why Equity Focus Areas changed as they were updated.

<sup>32</sup> Policy 5: “Use engagement and other methods to collect and assess data to understand the transportation-related disparities, barriers, needs and priorities of communities of color, people with low income and other historically marginalized communities.”

<sup>33</sup> Policy 3: “Prioritize transportation investments that eliminate transportation-related disparities and barriers for historically marginalized communities, with a focus on communities of color and people with low income.”

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Policy update, other processes, and this update to the RTP.<sup>34</sup> Metro has consistently heard that these communities need safer and more accessible travel options – specifically better transit service and safer streets for bicycling and walking, including:

- More fast, frequent and reliable transit service for all types of trips (including at off-peak travel times)
- More affordable transit that connects people to the places and things they need to thrive.
- Better conditions for walking and biking, including adequate street lighting, protected crossings and crossing signals, particularly to improve access to transit.
- Connected and separated walking and biking infrastructure.

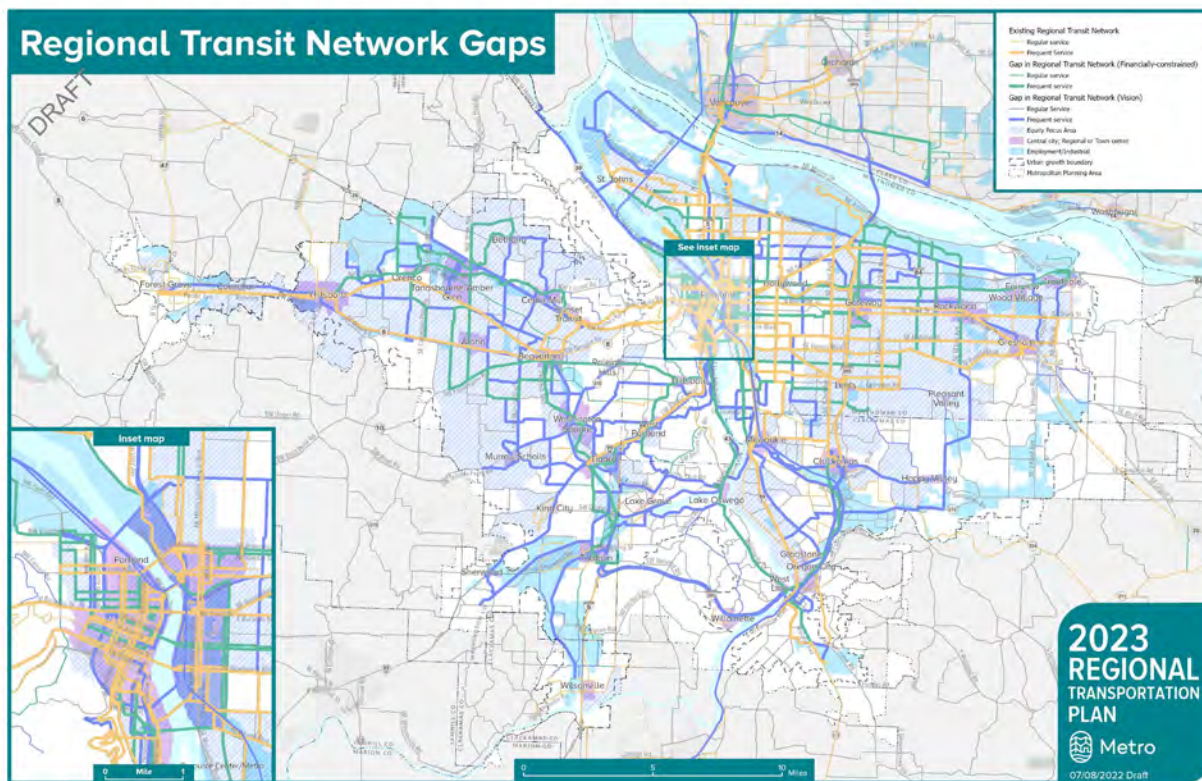
#### 4.3.4.1 Access to transit and to destinations

Figure 4.19, which is discussed in more detail in the following section on Mobility, shows where gaps in the regional transit network are located. These gaps show places where planned transit has not yet been built. The map differentiates between gaps in frequent (thick lines) and regular (thin lines) transit service, and between gaps in service that are based on the financially constrained network (i.e., gaps that the region currently has identified funding to complete, shown in green) and those that are based on the network vision (i.e., gaps that the region has not yet identified funding to complete, shown in purple). It overlays these gaps with Equity Focus Areas, which are shown in violet cross-hatching.

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<sup>34</sup> <https://www.oregonmetro.gov/sites/default/files/2020/11/10/Historically-marginalized-communities-transportation-priorities-summary.pdf>

**Figure 4.19: Regional transit network gaps (2018 RTP networks, partner agency data)**



There are many places where transportation agencies have planned to deliver the frequent transit that EFA residents say they need, but where those projects are not being implemented – i.e., where the thick green and purple lines shown in the figure above overlap with the Equity Focus Areas. Completing these transit investments – particularly those shown in green, which can be built with available funds – would address pressing equity needs while also advancing mobility and climate outcomes.

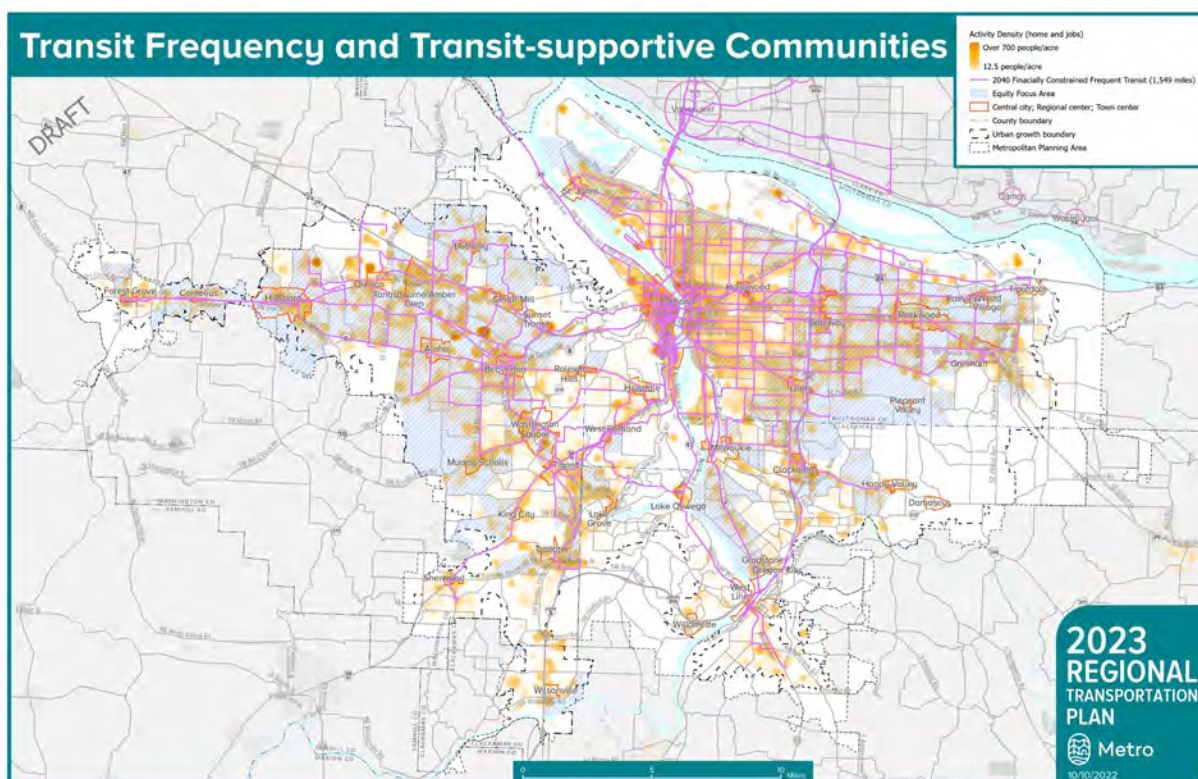
Figure 4.20 below takes a different view of the transit system. Instead of using planned transit lines as a basis for identifying needs, Figure 4.20 highlights communities that have the densities necessary to support frequent transit<sup>35</sup> (orange) and compares their location with current frequent transit service (i.e., lines with peak headways of 15 minutes, shown in purple). It shows EFAs in light blue cross-hatching.

<sup>35</sup> The High Capacity Transit and Regional Transit Strategies specify a threshold of 5 households or 15 jobs per acre for communities served by frequent transit. In order to map both jobs and housing at the same scale, Figure 4.20 combines jobs and housing into a single measure of activity density (jobs plus residents per acre) and uses a threshold of 12.5 jobs and/or residents per acre to identify communities that support frequent transit. The average household in the region includes 2.5 people, so 5 households per acre is equivalent to 12.5 residents per acre.



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**Figure 4.20 Map of high-frequency transit (headways of less than 15 minutes) and transit-supportive communities (12.5 or more people and/or jobs per acre), 2020 (Metro travel model, 2018 RTP transit network and distributed growth forecast)**



People living within EFAs have said that they need better transit connections between their communities and their destinations. If these connections were in place, the map above would likely show purple lines connecting most of the orange/red clusters of high density within the light blue EFAs. This is the case in much of the east side of the region – though there are notable gaps on several north/south corridors – but not as much in EFAs on the west side of the region. This is in part because the built environment in East Portland and Multnomah County has many transit-supportive characteristics, such as a well-connected grid of arterials and relatively high-density residential areas. There may be further opportunities in the long term to better configure the transit network to benefit current and prospective transit riders who live in EFAs.

In addition to identifying where there are needs and opportunities to provide more equitable transit service, the RTP also examines whether the transit system provides the convenient and useful connections that EFA residents have asked for. Measuring how many destinations a traveler can access within a given travel time via different modes has been established as a best practice for understanding and comparing how useful different modes are for different groups of people. This analysis can answer two questions about transit equity.

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**Does the transit system provide equitable service to marginalized people?** If so, people living in Equity Focus Areas should be able to reach the same number of other jobs (or more) as people living in other communities.

**Is transit a competitive alternative to driving?** Both community feedback and research stress that people of color and people with low incomes are more likely to rely on transit. It follows that an equitable transportation system is one in which people who travel by transit are not faced with longer, less convenient trips than people who drive – in other words, that people should be able to reach the same number of jobs (or more) via transit as they should via automobile in the same travel time. This is a challenging goal to meet given how built-out the road network is, but meeting this goal would have far-reaching benefits – not just for equity, but mobility and climate.

Table 4-5 compares access to jobs between modes (transit versus auto), community types (EFAs vs. non-EFAs) and time periods (rush hour vs. non-rush-hour) for the RTP base year of 2020. Jobs are not just commute destinations – grocery stores, medical offices, and schools are also places of employment, so jobs are a proxy for many different types of destinations that draw many different types of trips.<sup>36</sup> Metro has tested many different measures of access to jobs by income and to community places such as grocery stores, libraries, schools, medical offices, and community services and has found the same patterns in access to these important destinations as for access to all destinations. This analysis uses a 45-minute travel time to measure transit access and 30-minute travel times to measure automobile access, which accounts for the time needed for people to walk between their origins/destination and their car/transit stop and transfer between different transit routes, etc.

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<sup>36</sup> <https://ssti.us/wp-content/uploads/sites/1303/2020/12/Measuring-Accessibility-Final.pdf>

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**Table 4-5 Percent of jobs accessible by driving and by transit, by community type and time of day, 2020 (Metro travel model, 2018 RTP transit network, and land use data)**

	Percent of jobs accessible within...	
	... a 30-minute drive	...a 45-minute transit trip
<i>During rush hour</i>		
Average for EFAs	42%	8%
Average for non-EFAs	42%	6%
Average for the region	43%	7%
<i>Outside of rush hour</i>		
Average for EFAs	52%	7%
Average for non-EFAs	50%	5%
Average for the region	50%	6%

The results above show that people living in EFAs enjoy significantly better access to destinations via transit (and to a lesser extent, via driving) than people living in other communities. This is likely because many communities of color and much of the region’s naturally occurring affordable housing stock are located in regional centers that have long been key points in the transit network, but it also reflects more recent efforts by transit agencies to focus on serving marginalized communities even as these communities relocate within the region. Table 4-5 also shows the extent to which driving offers better access than taking transit does. Across all communities and all times of day, people can reach five to ten times as many destinations by auto as they can by driving. Though the Portland region has an extensive transit system relative to many other Metro areas, significant parts of the region are not served by transit and (as shown in Figure 4.20 above) do not have the land uses necessary to support frequent transit. Extending and improving transit service can help improve transit access to destinations, and land use changes that create clusters of activity that support high-quality transit can also make a big difference.

## 4.3.4.2 Safe conditions for walking and bicycling

Other than the need for better transit service for EFAs, the main need that people of color and people with low incomes have expressed in Metro’s outreach is the need for safer and more convenient walking and biking facilities, particularly near transit stations. Bicycle and pedestrian gaps are mapped in the following section on Mobility and Climate, and these maps show which gaps are located in EFAs. Table 4-6 summarizes how complete the bicycle, pedestrian and transit networks are (including bicycle and pedestrian facilities near transit) in EFAs versus in other areas.



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**Table 4-6 Pedestrian, bicycle and trail network completion for EFAs and non-EFAs (2018 RTP networks and current partner agency data)**

Network	Percent of the network that is complete...		
	In EFAs	In non-EFAs	Total
Pedestrian network	71%	46%	57%
Pedestrian network near transit <sup>37</sup>	75%	54%	64%
Bicycle network	61%	49%	55%
Bicycle network near transit <sup>37</sup>	65%	56%	61%
Trail network	45%	43%	44%
Trail network near transit <sup>37</sup>	52%	51%	51%

The region has made more progress completing the active transportation network, and also in providing bicycle and pedestrian connections to transit, in EFAs than in other communities. However, significant portions of the network still need to be completed for everyone in the region to benefit from high-quality walking and biking connections. The results above also reflect slow but steady progress in building out the region's active transportation network. The pedestrian and bicycle networks, both region-wide and in EFAs, are 3% more complete than they were when Metro last conducted for 2015, and the trail network is 6% more complete.

In spite of this progress, crashes are still concentrated in Equity Focus areas, and are particularly likely to involve BIPOC people. Metro analyzed crash data from the Fatality Analysis Reporting System (FARS), which includes race and ethnicity for traffic fatalities,<sup>38</sup> to assess the impact of fatal crashes on different populations in Multnomah, Washington, and Clackamas counties. Normalizing by population, Black, American Indian and Alaska Native people experience double or nearly double the number of traffic fatalities that other groups experience. This finding is consistent with analysis conducted by ODOT in 2019.<sup>39</sup>

As Figure 4.21 shows, three quarters of serious pedestrian and bicycle crashes and 65% of all serious crashes occur in Equity Focus Areas (see the Equity section below for information on these areas). Addressing safety in these areas is critical to making the entire transportation system safer and more equitable.

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<sup>37</sup> Research has shown that people are willing to travel further to access high-quality, frequent transit than they are normal bus service. The transit access analysis for the 2018 RTP used different travelsheds to examine access to different types of transit: ½ mile for light rail, 1/3 mile for streetcar, and ¼ mile for bus. This analysis uses these same travelsheds to identify bicycle and pedestrian facilities near transit.

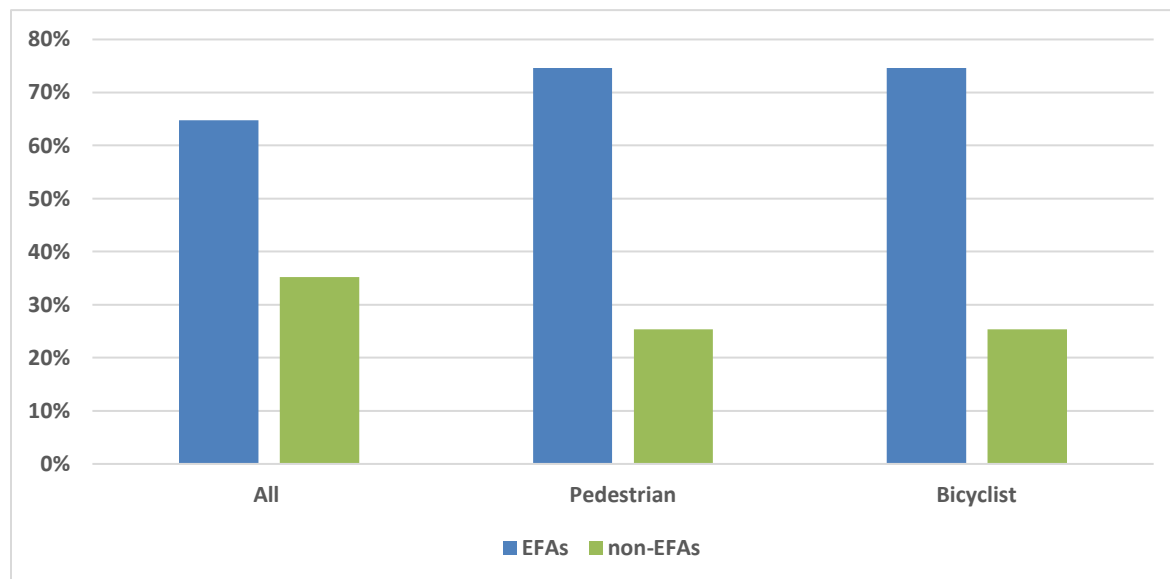
<sup>38</sup> FARS is a nationwide census providing yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

<sup>39</sup> Josh Roll, Nathan McNeil, Race and income disparities in pedestrian injuries: Factors influencing pedestrian safety inequity, Transportation Research Part D: Transport and Environment, Volume 107, 2022, 103294, ISSN 1361-9209, <https://www.sciencedirect.com/science/article/pii/S1361920922001225>. This study employs an ecological analysis to explore pedestrian safety disparities in Oregon, incorporating crash data, roadway and land use factors, and sociodemographic data. Lower median income and higher proportions of BIPOC residents are found to be associated with more pedestrian injuries. These variables may be proxies for other traffic exposure and deficient built environment variables, which may reflect a lack of historic investment in the neighborhoods where these populations are concentrated.

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**Figure 4.21 Percent of average annual traffic fatalities and severe injuries in Equity Focus Areas, by mode, 2016-2021 (ODOT crash data, analyzed by Metro staff)**



Though bicycle and pedestrian infrastructure is generally equitably distributed – in fact, the region has a slightly better track record of completing planned infrastructure in EFAs than in other communities – a higher percent of pedestrian crashes are still occurring in EFAs. One explanation for this is that other factors besides the presence of trails, sidewalks and bicycle infrastructure helps reduce crashes for vulnerable users, but other factors, such as the design and posted speed of travel lanes, also influence the overall safety of streets.

## 4.4 ECONOMY

Transportation and the economy are deeply interrelated. The transportation system plays a critical role in connecting workers to jobs in allowing employers access to the talent that they need and shifts in the economy often lead to changes in how people and goods travel through the region. The RTP aims to support the region's economy by improving connections to jobs and also to respond to how transportation patterns are changing in the region.

This section examines how the region's economy is growing and changing, how workers and goods move through the region, and how well the transportation system currently serves employment centers. Key findings include:

- Over the past decade, the Portland region's economy has grown stronger relative to the rest of the U.S., and the region has experienced slightly lower-than-average unemployment.
- Trade, transportation and utilities; professional and business services; and education and health services continue to be the largest employment sectors in the region.
- The majority of the region's jobs are located in the centers and employment / industrial areas identified by the 2040 Growth Concept.
- Over 45 percent of workers work in a different county than where they live.
- The number of commuters who travel into the region from surrounding communities is growing, but the majority of commute trips in the region still begin and end within Clackamas, Multnomah, and Washington counties.
- The majority of the region's freight still moves by truck, but high-value freight is more likely to use other modes.
- Anyone who is able to commute by auto enjoys reasonably good access to jobs, but transit does not provide nearly the same level of access as driving does. People can reach five to ten times as many jobs by auto as they can by transit.
- Active transportation networks are generally more complete within regional centers and near transit.

### 4.4.1 Jobs and growth

The 2018 RTP described a region that was growing rapidly into a major U.S. metropolitan area, with large numbers of people from other cities migrating to Greater Portland. It described some of the challenges associated with that growth, including growing congestion, rising housing costs, and increased displacement of people of color and people with low incomes to neighborhoods that are harder to serve with transit and other transportation options. These forces still continue to shape the region, though there are signs that growth may be slowing.

Between 2015 (the base year for the 2018 RTP update) and 2020 (the base year for the 2023 RTP update, the region grew significantly – by 135,000 people (an 8.4% increase), 57,000 households

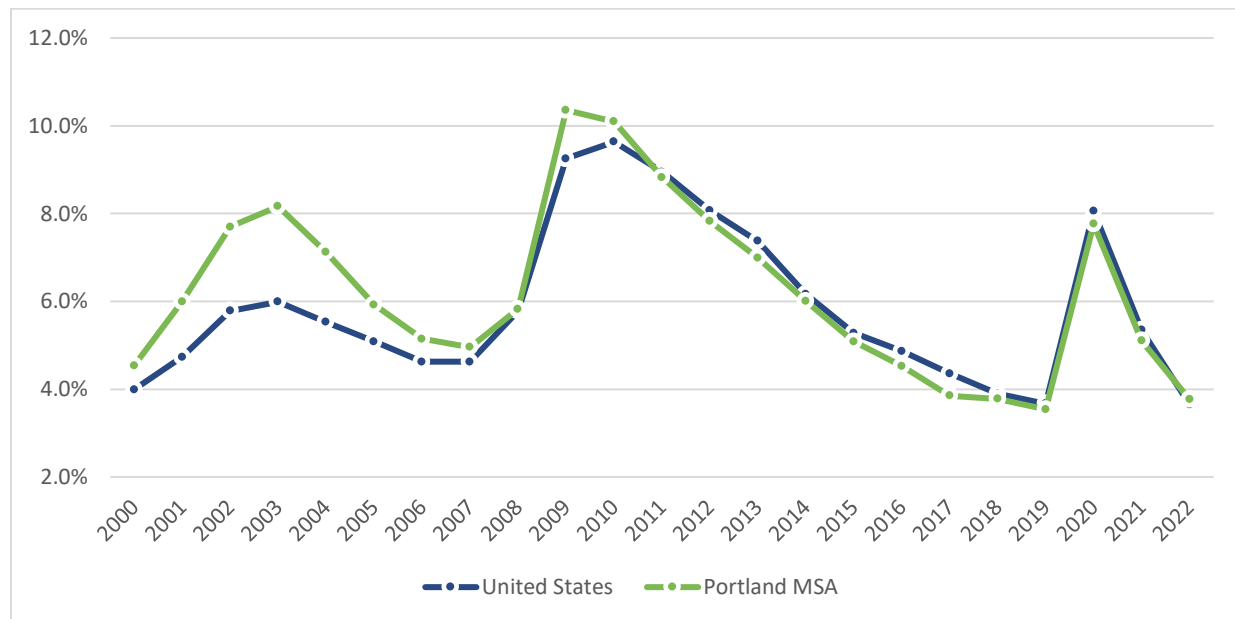
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(8.9%) and 90,000 jobs (10.1%).<sup>40</sup> This growth is projected to continue, though not necessarily at the same rapid rate as the region saw during the previous decade. Even prior to the pandemic, State economists and demographers predicted that population growth in Oregon and our region would be slower during the 2020s than it had been during the 2010s, and in 2022 the Census Bureau estimated that the State and region's population declined for the first time in years.<sup>41</sup> Generally, slower population growth also means slower economic growth, and recent State analyses find that businesses in Oregon are having a harder-than-ever time filling vacant positions.

Figure 4.22 shows historical unemployment rates for the greater Portland region, which in this and the following charts include Clackamas, Clark, Columbia, Multnomah, Skamania, Washington, and Yamhill counties – the 7-county region that is commonly used in reporting on the region's economy because it captures the full extent of potential commutes to and from our region's job centers.

**Figure 4.22 Unemployment rate in the greater Portland region vs. the U.S., 2000-22**



This chart highlights two important recent trends. One is that the region's economy has grown stronger relative to the rest of the U.S. Prior to 2011, the region generally experienced higher unemployment rates than the national average compared to the U.S. as a whole, particularly during recessions, but since then the region has consistently had lower unemployment rates than the rest of the country. These recent low unemployment rates are particularly remarkable since they are happening at a time when participation in the labor force is increasing, which normally causes unemployment to rise. Between 2011 and 2020, the labor force participation rate in the broader economic region grew or remained constant for every age group of workers, whereas in

<sup>40</sup> Metro Regional Travel Model.

<sup>41</sup> <https://oregoneconomicanalysis.com/2022/12/29/oregon-population-growth-2022/>

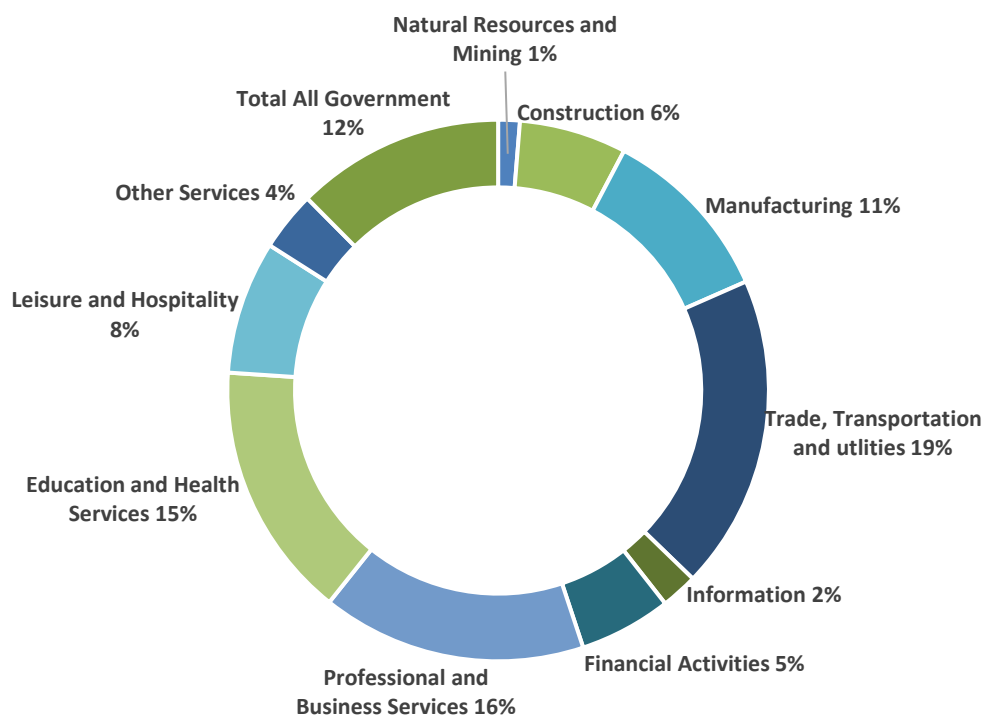
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the U.S. as a whole it fell for many age groups.<sup>42</sup> The second trend is the exceptional nature of the recent recession triggered by the COVID-19 pandemic, which receded much more quickly than prior recessions. During the prior two recessions in 2002-04 and 2009-14 both the regional and national unemployment rates remained above six percent for several years, whereas they only remained at such high rates for a single year during the most recent 2020 recession.

Figure 4.23 shows the industries in which people hold jobs within the same 7-county region discussed above.

**Figure 4.23 Employment by industry in the greater Portland region**



According to this data, which is from 2019, the most recent non-pandemic data was available, Transportation, Professional Services, and Education and Health are the largest employment sectors in the region, collectively accounting for half of the jobs. Those sectors also dominated the region's economy according to the 2015 data that was included in the last RTP update. Collectively those major employment sectors – along with Information, which is a fast-growing sector in the current economy – have accounted for most of the region's recent economic growth. The pandemic led to a seven percent overall decrease in regional employment in 2020, but all of the sectors shown above have recovered from their losses except the leisure and hospitality sector, which suffered nationwide losses as travel and in-person events ceased and continues to recover slowly due to low levels of tourism.

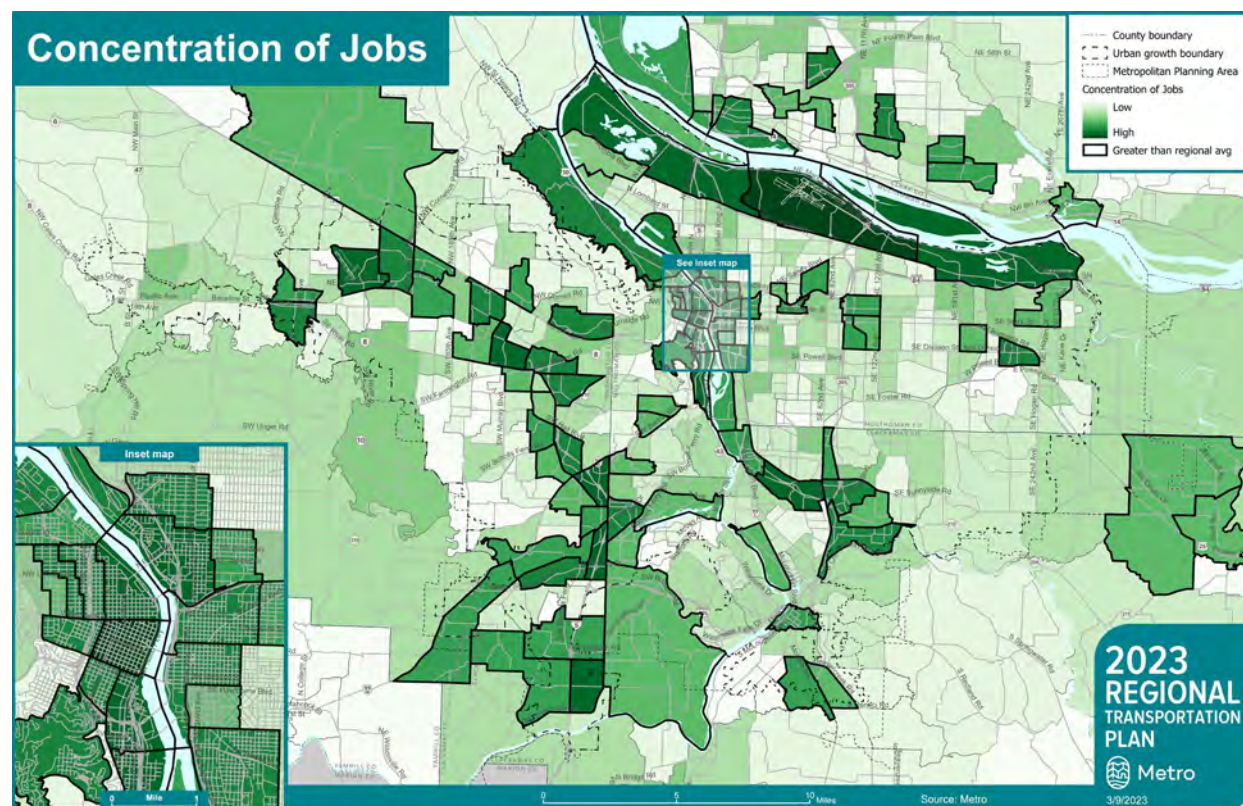
<sup>42</sup> Columbia Workforce



## 4.4.2 Where jobs are located

Figure 4.24 shows where jobs are currently located in the Portland region. Census tracts with more jobs are shaded in darker green on the map, and tracts with above average numbers of jobs are outlined in bold.

**Figure 4.24 Number of jobs by Census Tract, 2021 (Economic Value Atlas: Esri/DataAxle)**

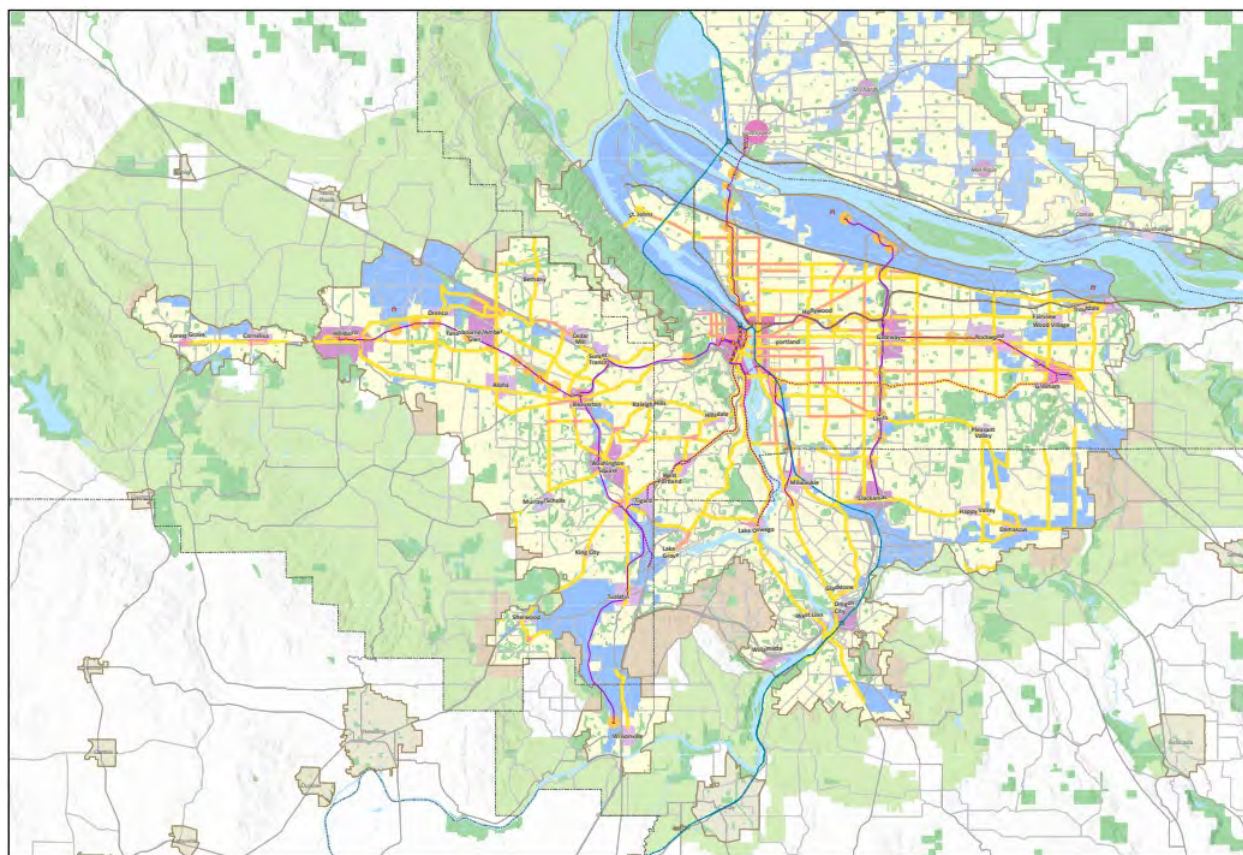


Jobs are distributed throughout the region, but there are higher-than-average concentrations of jobs in the centers of larger cities in the region, including Portland, Beaverton, Gresham, Hillsboro, and Tigard; and in major employment or industrial areas such as the Columbia Corridor, the 224 Corridor, Tualatin-Sherwood, and North Hillsboro.

The 2040 Growth Concept, shown in Figure 4.25 below, designates where and how the region is planned to grow over the next several decades. It includes a network of regional and town centers (shown in pink) and employment lands (shown in blue). These centers and employment lands include the areas that are currently rich in jobs shown in Figure 4.24 above, as well as areas where the region is planning to develop space for jobs in the future.



**Figure 4.25 2040 Growth Concept Map**



The 2040 Growth Concept helps to identify the many different job and activity centers in the region that need to be included in this web of connections. At the same time, local pedestrian, bike and transit connections are necessary in and around these centers to give people safe, affordable and healthy options for shorter trips to shops, services, and other non-work destinations.

### **4.4.3 How workers move through the region**

Between 2015 (the base year for the 2018 RTP update) and 2020 (the base year for the 2023 RTP update, the region grew significantly – by 135,000 people (an 8.4% increase), 57,000 households (8.9%) and 90,000 jobs (10.1%).<sup>43</sup> This growth is projected to continue, though not necessarily at the same rapid rate as the region saw during the previous decade. As Greater Portland continues to evolve into a major metropolitan area, with increasing housing prices and a more specialized economy, commute patterns are becoming more complex. Figure 4.26 shows how workers commute within and between counties in and around the region. It includes data for counties that are outside the region that have significant amounts of workers commuting to or from the Metro region.

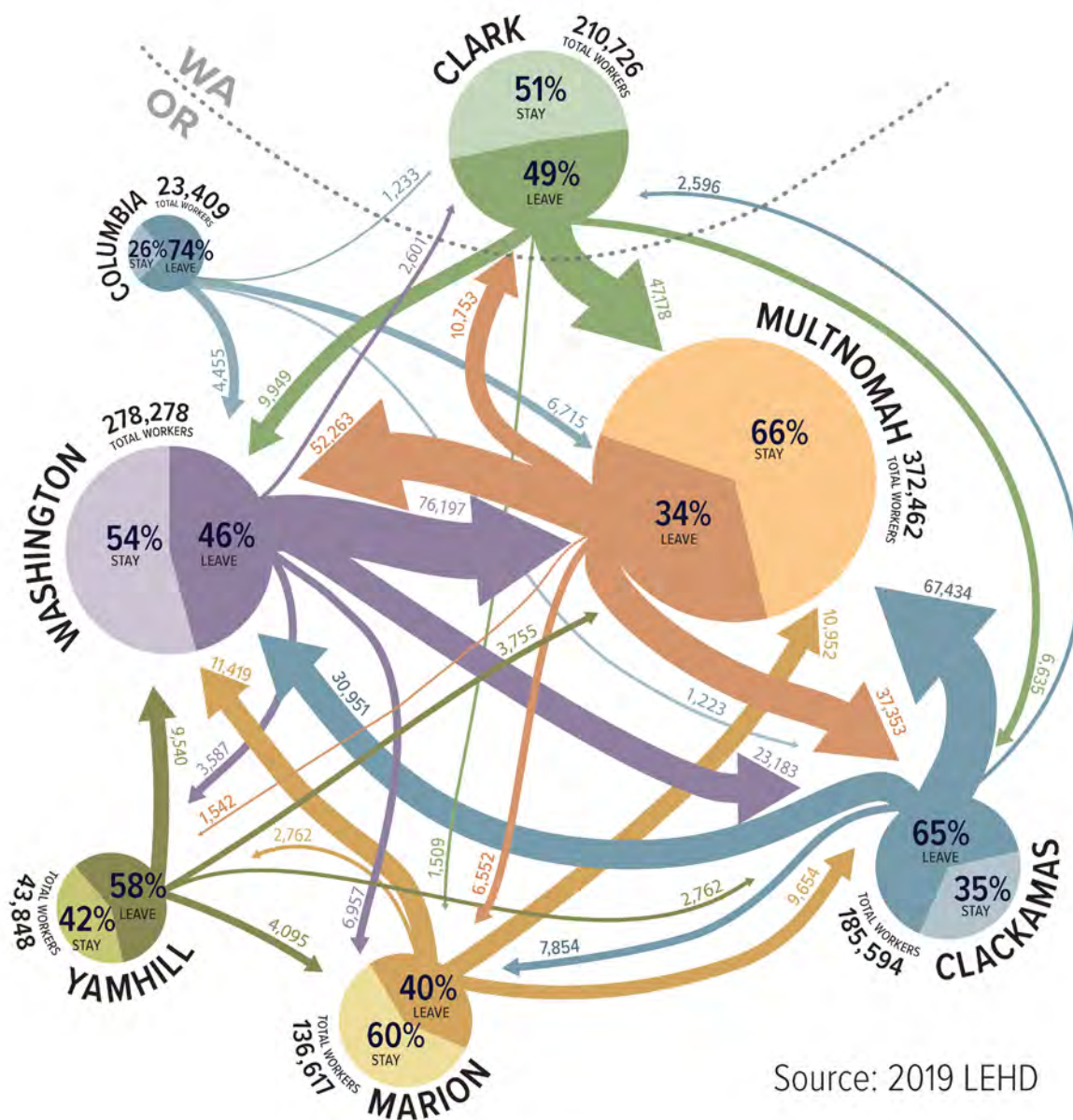
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<sup>43</sup> Metro Regional Travel Model.

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**Figure 4.26 Where workers live and commute in the Greater Portland region and surrounding counties, 2019 (Census LEHD Origin-Destination Employment Statistics)**



This figure highlights how commute patterns in the region are increasingly complex and long-distance. Over 45 percent of workers in the 3 Metro-area counties work in a different county than where they live. Travel patterns like those shown above are typical of major metropolitan areas with large populations, clusters of specialized jobs, and rising housing prices that limit many people from living close to jobs. Most of the longer-distance commute trips highlighted in Figure 4.26 are made by car; frequent and high-capacity transit routes are needed to provide affordable, congestion-free commute alternatives as the region grows.

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Though commute patterns are growing more complex and the share of long-distance commutes is increasing, the majority of commute trips pass through the heart of the region – which means that investing in the transportation system in the central areas of the region continues to be critical to supporting the region’s economic growth. Over 70 percent of the commutes within the 7-county economic region discussed above begin and end within the 3 Metro-area counties (Clackamas, Multnomah and Washington). Multnomah County is particularly central to the region’s economy – it is the only county that experiences significant population gains during the working day. Washington County has roughly the same number of workers commuting into the county and workers commuting out of the county, and Clackamas County loses more workers than it gains during the day. These numbers help to contextualize some of the findings elsewhere in this report that show Multnomah County having more crashes, more congestion, and more transit service than other counties; these issues are due in part to the fact that Multnomah County has more people commuting to, from, and through it. This is not to dismiss the growth in long-distance commutes over the past decade; the number of workers traveling into the region from counties such as Hood River and Marion increased significantly between 2019 and 2015, when Metro last reviewed this data. However, even with this growth there are roughly 36,000 of these long-distance commutes happening every day, compared to the 800,000 daily commutes within the region’s core.

## 4.4.4 How goods move through the region

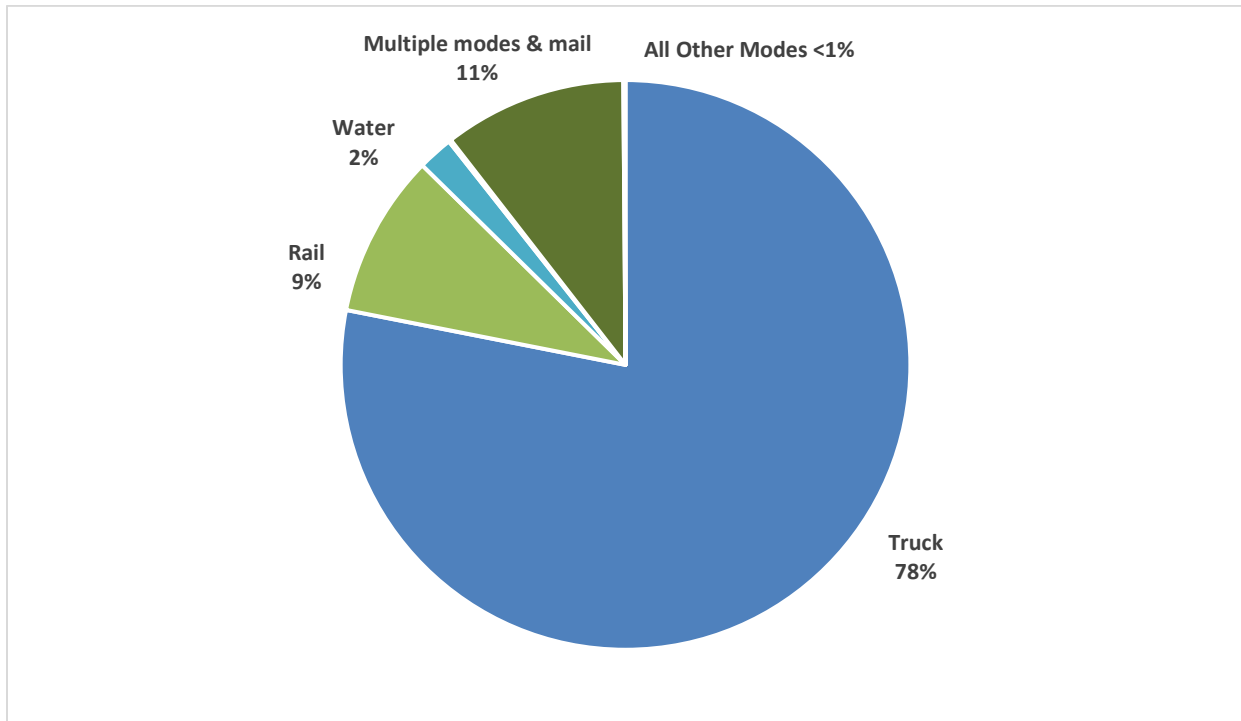
Keeping freight moving is a critical part of regional mobility. Most of the products we buy come from someplace else, and many of the goods we produce in Oregon move on to markets in other states and countries. The global economy is expanding rapidly, and our region’s ability to move products to far-flung markets depends on an efficient transportation system. With its location on Interstate 5, the West Coast artery of the Interstate Highway System, the greater Portland region is ideally situated to move freight by truck. But with Portland International Airport, two Class 1 railroads (mainline railroads Union Pacific and Burlington Northern/Santa Fe), the southern terminus of the 400-mile Olympic Pipeline, and a location at the confluence of two major rivers with ocean access and several marine terminals, the region’s freight transportation system is a multimodal network.

Figure 4.27 and Figure 4.28 summarize the value and weight of the goods that move through the region by mode. High-value goods make up an increasing share of the freight that moves through the region, and they sometimes take different routes and modes than other goods in order to arrive at their destinations safely and on time. Distinguishing between value and weight helps to identify how goods of different value are moving through the transportation system.

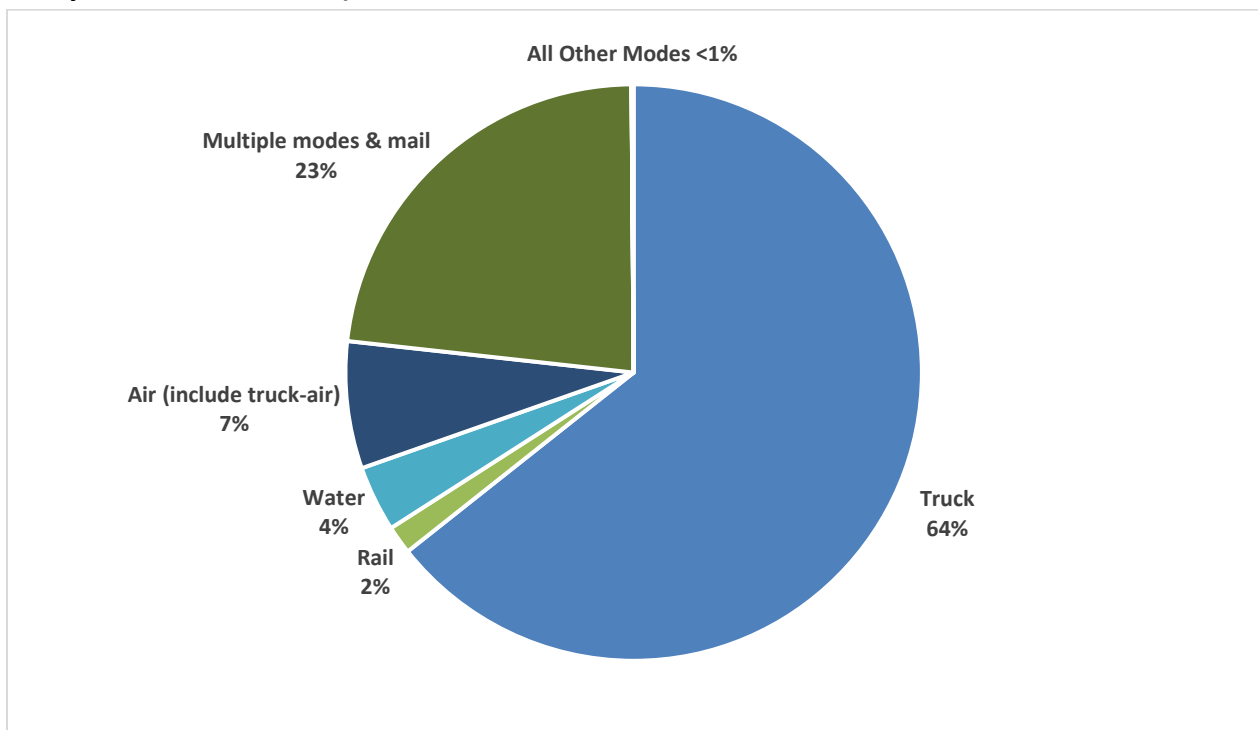
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**Figure 4.27 Weight of outbound freight by mode in the Greater Portland Region, 2017 (Freight Analysis Framework data)**



**Figure 4.28 Value of outbound freight by mode in the Greater Portland Region, 2017 (Freight Analysis Framework data)**





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The majority of the region's freight, whether by value or weight, is moved by truck. High value freight is less likely to move by truck and rail, and more likely to use multiple modes, mail, water, and air. As Oregon's economy shifts from bulk products like farm exports and timber to lighter products like semiconductors, electronics and specialized machinery, improving freight connectivity to the airport and other intermodal facilities will help keep goods moving through the region.

## 4.4.5 Connecting the region's employment centers

The RTP goals envision a region where employment centers are accessible through a variety of multimodal connections. This means that the 2040 centers and employment/industrial lands shown above in Figure 4.25 should be well-connected by vehicle and transit because commutes are often the longest trip people take in a day, and these are the modes best suited for long trips. It also means that these centers need to include solid bicycle and pedestrian infrastructure and a mix of land uses so that people can get meals or run other errands without needing to drive.

This table is also included above in the Mobility section, which provides more details on the methodology and how access to destinations is related to land use patterns and the transportation system.

Table 4-7 below examines how accessible jobs are by driving and transit, comparing access to jobs via transit and automobile during peak hours and other times of the day. This table is also included above in the Mobility section, which provides more details on the methodology and how access to destinations is related to land use patterns and the transportation system.

**Table 4-7 Percent of jobs accessible by driving and by transit, by community type and time of day, 2020 (Metro travel model and land use data)**

	Percent of jobs accessible within...	
	... a 30-minute drive	...a 45-minute transit trip
During rush hour	43%	7%
Outside of rush hour	50%	6%

Anyone who is able to commute by auto enjoys reasonably good access to jobs – the average driver can reach roughly half of the region's jobs outside of rush hour. But transit does not provide nearly the same level of access as driving does; people can reach five to ten times as many jobs by auto as they can by driving. Adding high-frequency transit service that connects the neighborhoods where workers live to employment centers is critical to meeting the RTP's goal of providing multimodal connections to work.

Table 4-8 below compares how complete the bike/ped network is<sup>44</sup> in key 2040 geographies – centers, station communities, mixed-use communities, and employment/industrial lands – versus

<sup>44</sup> Metro distinguishes between on-street bicycle and pedestrian gaps in facilities like bike lanes and sidewalks and off-street bike/ped gaps in facilities like trails. On-street facilities are generally needed to provide good active transportation connections in centers, near transit, and

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in the region as a whole. Meeting the economy goal in the RTP means prioritizing active transportation investments in these centers.

**Table 4-8 Bike/ped system completeness by location within the region (2018 RTP networks and current partner agency data)**

Network	Total planned miles	Number of miles completed	Percent of miles completed
Region-wide			
Pedestrian network	1,040	597	57%
Bicycle network	1,149	626	55%
Trail network	560	245	44%
Motor vehicle network	1,171	1,146	98%
Within 2040 centers			
Pedestrian network	181	141	78%
Bicycle network	168	112	66%
Within station communities outside above centers			
Pedestrian network	108	72	67%
Bicycle network	123	69	56%
Within mixed-use zoning outside above centers & station communities			
Pedestrian network	136	106	78%
Bicycle network	114	75	66%
Within employment and industrial areas outside above centers, station communities, and mixed-use zoning			
Pedestrian network	147	60	41%
Bicycle network	133	73	55%

Consistent with the 2040 Growth Concept, active transportation networks are generally more complete within regional centers and near transit. However, several important gaps remain in these areas, which can be seen in the “gap maps” in the Mobility section.

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along arterials, whereas off-street facilities provide longer-distance connections between these areas. Table 4-8 focuses on the on-street bike/ped network.



## 4.5 CLIMATE

Climate change is the defining global challenge of the 21st century. And as the recent increase in climate-induced wildfires and extreme weather events has demonstrated, it is likely to have significant impacts on the greater Portland region. In 2009, the Oregon Legislature set goals to reduce greenhouse gas (GHG) emissions 10 percent below 1990 levels by 2020 and at least 75 percent below 1990 levels by 2050.<sup>45</sup> More recently, Executive Order 20-04 set new emissions reduction goals that call for the State of Oregon to reduce its GHG emissions at least 45 percent below 1990 emissions levels by 2035 and at least 80 percent below 1990 levels by 2050.<sup>46</sup> These updated goals are consistent with the reductions that climate scientists now believe are necessary to avoid catastrophic climate change impacts.

The transportation sector is the largest contributor to greenhouse gas emissions in Oregon. It is therefore a key focus of the state's greenhouse gas reduction efforts. And the State, recognizing the role that regional transportation plans (RTPs) play in influencing transportation policies, projects, and outcomes, has relied on RTPs to help reduce transportation emissions. The State is responsible for allocating state and federal funds to reduce GHG emissions by making vehicles and fuels cleaner; it assigns regions targets that are designed to make up the gap between those State-led reductions and State goals. Beginning in 2012, the State set GHG reduction targets for the greater Portland region to meet and has continued to update these targets since, most recently in July 2022. The Portland region's targets for the financially constrained RTP are:

- A 20 percent reduction in per capita greenhouse gas emissions by the year 2035 (the target for the Climate Smart Strategy adopted in 2014)<sup>47</sup>
- A 25 percent reduction by 2040 (the target for the 2018 RTP)
- A 30 percent reduction by 2045 (the target for the 2023 RTP)
- A 35 percent reduction by 2050 (the target for the 2028 RTP)
- Targets for the years 2041-2049 steadily increase from 26 to 34 percent in order to maintain progress toward the 2050 target.<sup>48</sup>

These targets are relative to a 2005 base year. They are based on per capita emissions in order to control for population growth and focus on the impact of transportation policies, programs and plans on GHG emissions. Regional targets only apply to certain types of emissions, and therefore only certain reduction strategies count toward the region's targets:

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<sup>45</sup> Oregon Department of Environmental Quality, Oregon Greenhouse Gas Emissions, <https://www.oregon.gov/deq/eq/programs/Pages/GHG-Oregon-Emissions.aspx>

<sup>46</sup> [https://www.oregon.gov/gov/Documents/executive\\_orders/eo\\_20-04.pdf](https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf)

<sup>47</sup> The Climate Smart Strategy adopted in 2014 was forecasted to achieve a 29 percent reduction by 2035 if fully implemented.

<sup>48</sup> Oregon Administrative Rule 660-044-0020, <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3093>  
[https://www.oregon.gov/lcd/LAR/Documents/2022-01\\_Div44.pdf](https://www.oregon.gov/lcd/LAR/Documents/2022-01_Div44.pdf)

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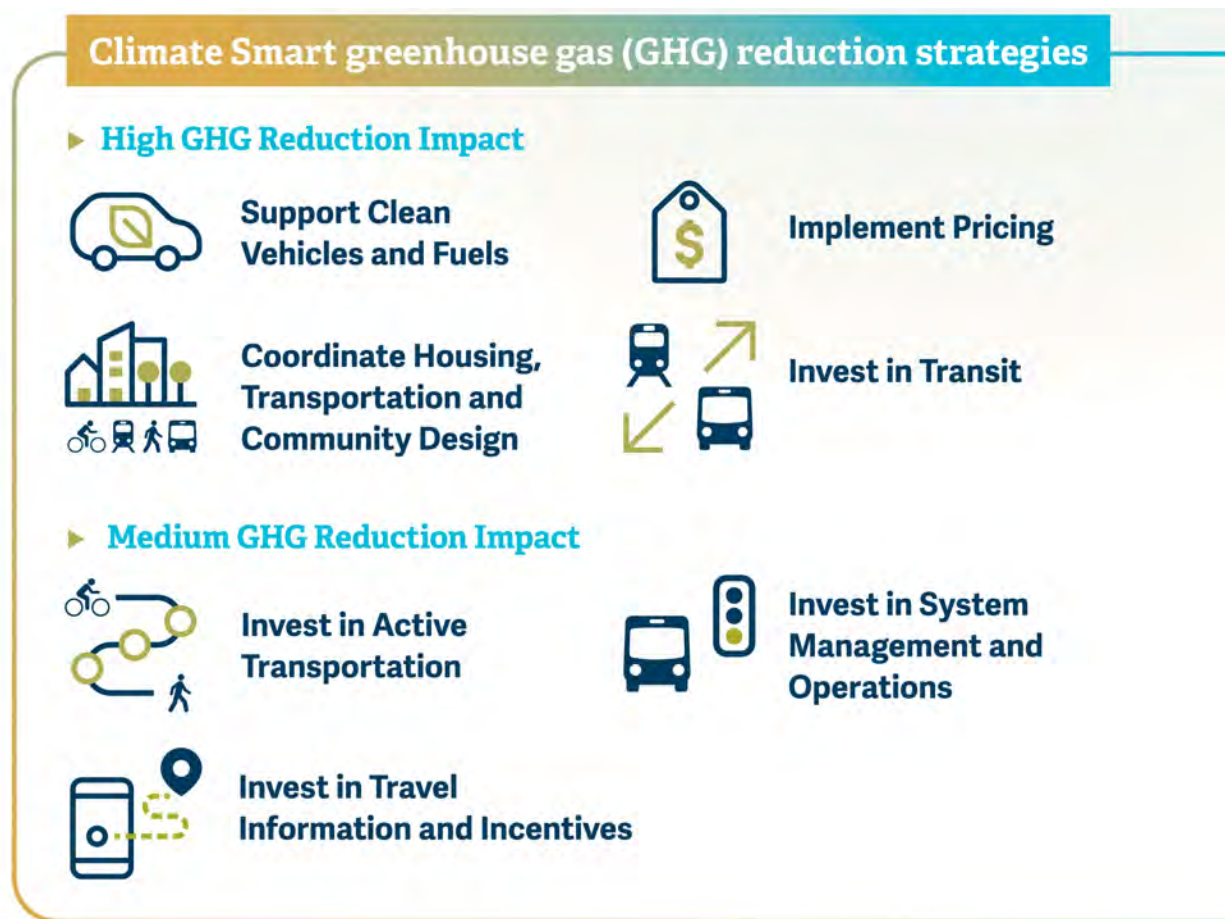
- **Strategies that reduce emissions from light vehicles**, including passenger vehicles (cars, pickup trucks and SUVs) and commercial trucks with a vehicle weight rating of 10,000 pounds or less.
- **Strategies that impact household travel**, whether physically traveled by the members of the household or by deliveries and miscellaneous commercial travel to their home.<sup>4</sup>
- **Strategies that benefit the climate by reducing vehicle miles traveled.** The State estimates the impact of State-level vehicle- and fuel-based reductions and then sets regional greenhouse gas targets to fill the remaining gap needed to meet Oregon’s emissions goals. It would be double-counting if regions also took credit for vehicle- and fuel-based reductions, which would lead agencies to overestimate progress toward Oregon’s climate goals. The state has clarified that **the targets shown above are equivalent to VMT reduction targets.**

The Climate Smart Strategy,<sup>49</sup> adopted in 2014, is the region’s blueprint for reducing emissions. It identifies a toolkit of high- and medium-impact GHG reduction strategies, summarized in Figure 4.29 below, that the region’s transportation agencies continue to rely on today.

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<sup>49</sup> <https://www.oregonmetro.gov/climate-smart-strategy>

**Figure 4.29 Climate Smart greenhouse gas reduction strategies**



## 4.5.1 The 2023 RTP GHG and VMT gap

Though the region’s basic toolkit for fighting climate change has remained consistent since 2010, the State last updated the region’s GHG and VMT targets in 2017 and requires each RTP update to include a revised climate analysis that demonstrates the region’s progress toward these targets that accounts for state clean vehicle and fuel strategies and that updates the level of implementation of different local and regional strategies to reflect the policies and investments in the RTP. If this analysis finds that the RTP is not sufficient to meet regional targets, JPACT and Metro Council can consider changes to the RTP that further reduce VMT and GHG emissions.

Prior to updating the 2023 RTP project list, Metro estimated the gap between between the region’s existing emissions under the 2018 RTP and its updated GHG reduction targets. The size and nature of the gap help to understand and anticipate the extent to which the 2023 RTP may need to change in order to meet its climate targets, and what the needed changes might look like. Metro, working in partnership with ODOT, DLCD and DEQ, used VisionEval, which is the tool the state uses to set regional climate targets and is designed to allow users to evaluate and compare multiple different GHG reduction scenarios, to assess two scenarios:

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The **target scenario**, which represents the Portland region’s GHG/VMT reduction target. The region’s emissions targets are based on a percentage reduction in 2005-level GHG emissions; the Target scenario applies these reductions to daily VMT per capita from 2005 to estimate target levels of daily VMT per capita for different milestone years.

The **STS+RTP18 scenario**, which represents the GHG/VMT reductions due to adopted State and local/regional plans. State-level reductions are based on the Statewide Transportation Strategy (STS),<sup>50</sup> which outlines the strategies that the State will take to reduce transportation-sector GHG emissions on variables such as the share of zero-emission vehicles, the carbon intensity of fuels, the balance of cars and trucks in the passenger fleet, vehicle turnover, and the cost of travel (accounting for the cost of various types of energy as well as state-implemented road pricing). Metro is required to use State assumptions about the carbon intensity of vehicles and fuels in its climate analysis and can choose whether to adjust some pricing assumptions provided by the state. Local/regional reductions are based on the 2018 RTP, which included significant investments in transit, active transportation, travel demand and system management, and other GHG reduction strategies. In 2020, Metro staff made minor adjustments to some of the VisionEval inputs that represent the 2018 RTP in order to capture progress in implementing these strategies.<sup>51</sup>

Table 4.7 and Figure 4.30 show GHG reductions under these two scenarios as well as the RTP23 gap, which is the remaining reduction in GHG/VMT that the 2023 RTP update needs to achieve in order to meet its climate targets, and which is calculated as the difference between the results of the Target Scenario and those of the STS+RTP18 Scenario. These results are shown in both absolute daily VMT per capita and in the same percentage reductions relative to the 2005 baseline that the State uses when establishing regional targets.

**Table 4-9 Estimated absolute and percentage reductions in daily VMT per capita by scenario**

Year	Target (absolute)	Target (% reduction)	STS + RTP18 (absolute)	STS + RTP18 (% reduction)	Estimated RTP23 gap (absolute)	Estimated RTP23 gap (% reduction)
2005	19.4	0%	19.4	0%	0	0%
2035	15.5	-20%	15.0	-22%	-0.4	2%
2040	14.5	-25%	14.6	-24%	0.2	-1%
2045	13.5	-30%	14.5	-25%	1.0	-5%
2050	12.5	-35%	14.3	-26%	1.8	-9%

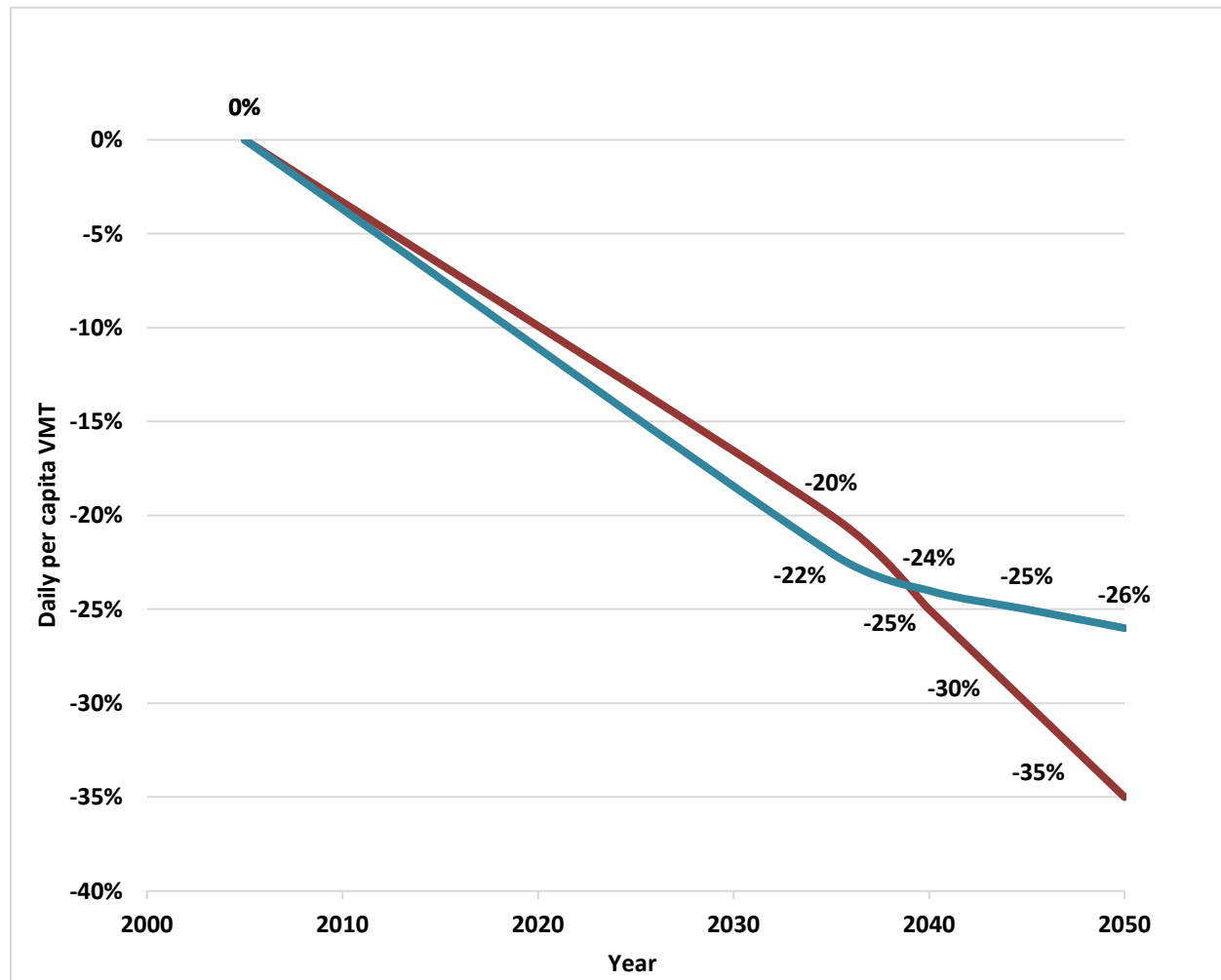
<sup>50</sup> <https://www.oregon.gov/odot/Planning/Pages/STS.aspx>

<sup>51</sup> 2020 adjustments focused on adjusting assumptions regarding participation in traveler information and incentive programs based on updated evaluation data from Metro’s Regional Travel Options program demonstrating that participation in these programs is often more limited than anticipated. The 2018 RTP assumed that 30% of workers and 45% of households receive regular travel options programming; Metro revised these assumptions downward to 5% and 0.5%, respectively. Other assumptions from the 2018 RTP climate analysis can be found in Appendix J of the 2018 RTP: [https://www.oregonmetro.gov/sites/default/files/2019/04/02/RTP-Appendix\\_J\\_Climate\\_Smart\\_Strategy\\_Monitoring181206.pdf](https://www.oregonmetro.gov/sites/default/files/2019/04/02/RTP-Appendix_J_Climate_Smart_Strategy_Monitoring181206.pdf).

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**Figure 4.30 Estimated percentage reductions in daily VMT per capita, Target vs. STS+RTP18 Scenario**



These results confirm that the 2018 RTP Climate Strategy was largely on track to meet its GHG reduction targets. The targets used in the 2018 RTP only extended through 2040, and under the STS+RTP18 Scenario is very close to Target Scenario levels through the year 2040. However, the results also highlight a growing GHG reduction gap for the years 2040-50. This is expected since the State has set targets out to 2050, whereas the GHG strategies adopted in the 2018 RTP only apply out to 2040. Nonetheless, the way that the results of the two scenarios diverge after 2040, when targets become more ambitious while local/regional GHG reductions flatten out, suggests that the region needs to focus on achieving long-term, cumulative emissions reductions to achieve its targets. This analysis estimates that the region needs to reduce 2050 daily VMT per capita by 1.8 miles below currently forecasted levels to meet its targets. This is equivalent to reducing VMT/GHG emissions by roughly a third more than what current plans are expected to achieve.

Coordinated implementation of multiple GHG reduction strategies can help to achieve the necessary reductions, particularly when it is supported by active pricing and/or management of the transportation system. The 2023 RTP update is the first to include roadway pricing policies

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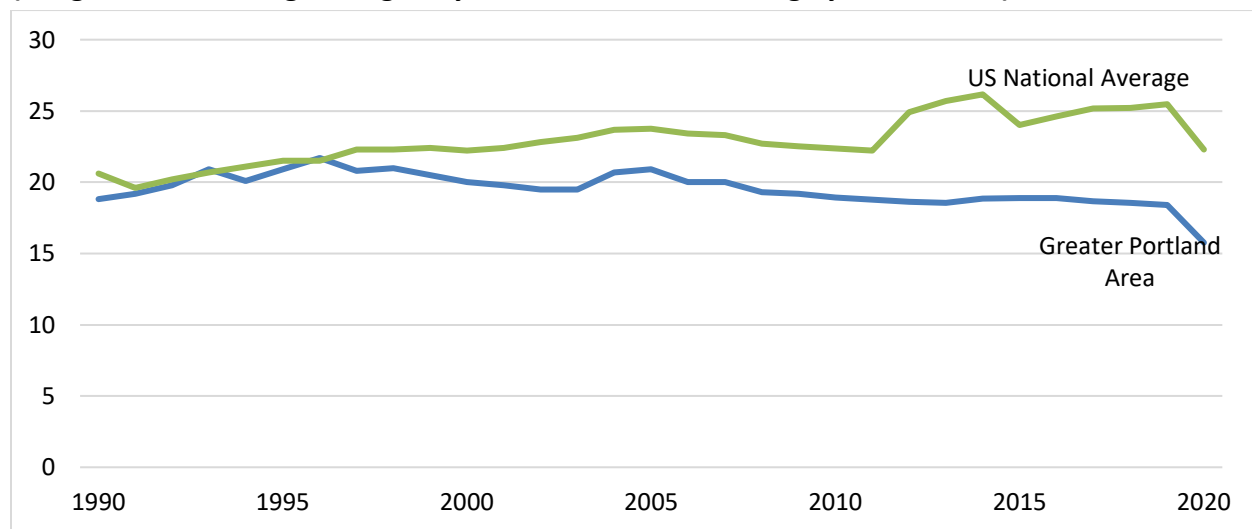
and projects, which creates a major opportunity to reduce VMT and GHG emissions. Chapter 7 updates the analysis above to evaluate the 2023 RTP update’s progress toward meeting regional climate targets.

## 4.5.2 VMT per capita

Vehicle miles traveled (VMT) per capita measures much the average person in the Portland region drives each day. Many transportation agencies in the region use VMT per capita to measure progress toward creating vibrant communities and providing multimodal travel options. As discussed above, the region’s climate targets focus on reducing VMT. Understanding current and historical VMT per capita can help identify additional opportunities to reduce emissions and close any gap remaining between emissions under the 2023 RTP update and the region’s climate targets.

Figure 4.31 below shows trends in VMT per capita between 1990 and 2020 for both the U.S. and the greater Portland region.

**Figure 4.31 Daily VMT per capita for the greater Portland region and the U.S, 1990-2020 (Oregon and Washington Highway Performance Monitoring System offices)**



Per capita VMT in the greater Portland region has been significantly lower than the national average since 1997. There has been a general downward trend, with a few exceptions during economic booms, over the past 25 years. However, between 2010 and early 2020<sup>52</sup> there was little or no decline in VMT per capita. The region’s past successes in transportation and land use planning appear to have had a lasting impact on people’s travel choices, and even during periods of growth they may have helped to keep VMT per capita from increasing. But in order to continue

<sup>52</sup> Figure 4.31 also shows a steep decline in both national and regional VMT per capita in 2020. This reflects the onset of the COVID-19 pandemic, which led many people to limit their travel as stay-at-home orders were carried out and many schools and workplaces closed. Metro’s Emerging Transportation Trends study (<https://www.oregonmetro.gov/public-projects/2023-regional-transportation-plan/research>) estimated that the persistence of teleworking and other pandemic-era behaviors could reduce 2050 VMT per capita by three to eight percent, all other things being equal.



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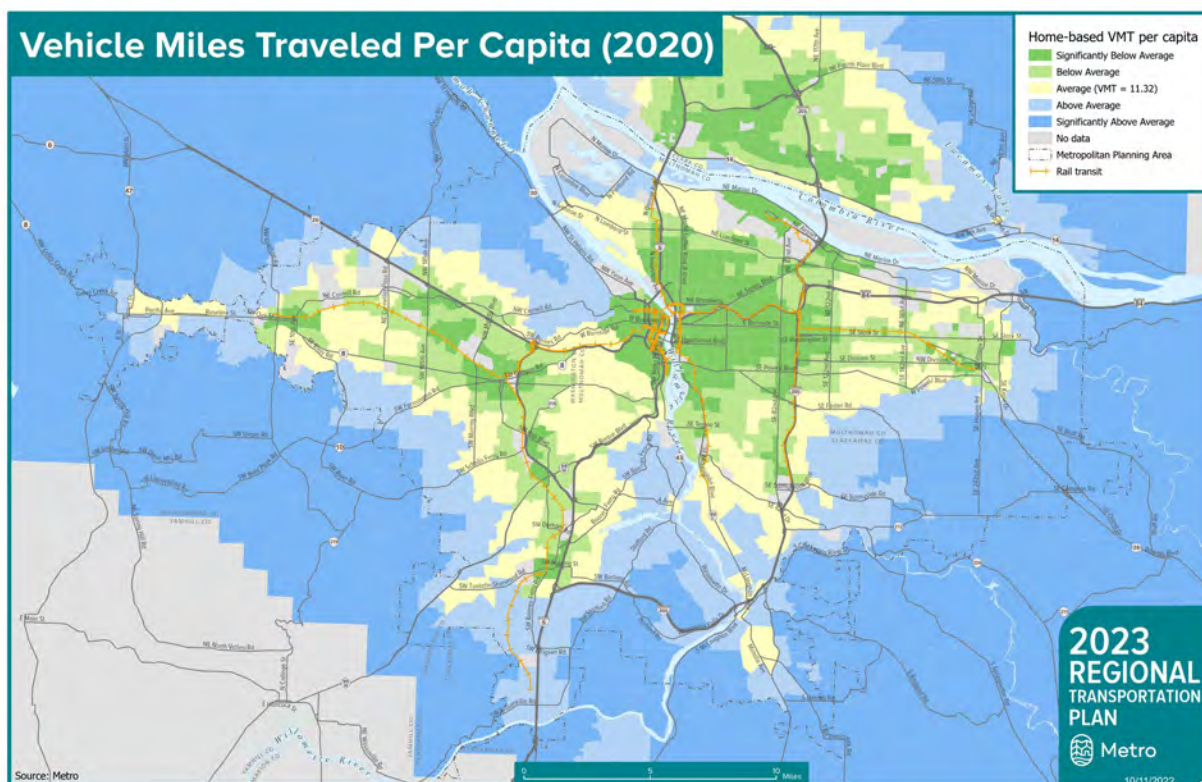
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to reduce VMT – especially in an era when high housing costs make it challenging for many people to live in neighborhoods with good access to travel options – the region will likely need to take new approaches, such as congestion pricing, or double down on high-impact strategies such as expanding frequent transit, creating affordable housing in regional centers, and managing or pricing parking.

The numbers above also help provide some context for understanding the estimated VMT reduction gap between the 2018 RTP and regional climate targets discussed in the previous section. The estimated gap of 1.8 miles per person per day is roughly the same amount that regional VMT declined between 1997 and 2002 or 2007 and 2013, which are two of the periods when VMT declined the most during the past 30 years. This suggests that closing such a gap is feasible, even during a period of economic growth such as 1997-2002 (all things being equal, VMT tends to increase as the economy grows), but it requires a deliberate and coordinated effort.

Figure 4.32 shows how estimated household-based VMT per capita from Metro’s travel model varies across the region. Though these are estimates, they highlight relative differences in VMT per capita based on nearby land uses and transportation options.

**Figure 4.32 Home-based VMT per capita by Metro transportation analysis zone, 2020 (Metro regional travel model)**



VMT per capita is lower in regional centers, along frequent transit lines, and in many of the region’s older neighborhoods. This is consistent with research finding that VMT per capita tends to be lower in compact communities with a mix of destinations and good access to transit and

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other options.<sup>53</sup> It demonstrates the impact of sound land use planning and diverse travel options on VMT per capita.

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<sup>53</sup> <https://nap.nationalacademies.org/catalog/12747/driving-and-the-built-environment-the-effects-of-compact-development>

## Chapter 5

# **Our Transportation Funding Outlook**

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This chapter will be provided in the June 15 JPACT packet.*

## Chapter 6

# **Regional Programs and Projects to Achieve Our Vision**

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This chapter will be provided in the July public review draft.*

## Chapter 7

# System Analysis

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This draft is subject to design and copy edits, technical corrections and minor updates as it is finalized for public review.*





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## INTRODUCTION

### Purpose

This chapter presents the results of the RTP system analysis conducted on the draft financially constrained project list in Chapter 6. The analysis assesses the RTP’s impact on the five RTP goal areas: mobility, safety, equity, climate and economy. The RTP uses several different performance measures to capture the region’s progress in each of these goal areas and compares the results to targets described in Chapter 2. The targets that are established through the state and federal rules that govern the RTP or that are included in policies adopted by the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council. The system analysis uses Metro’s travel model and other analytical tools. The analysis accounts not only for the projects and policies in the RTP, but also for factors such as projected population and job growth.

### Chapter organization

This chapter consists of five sections, each of which summarizes the RTP’s performance with respect to the five RTP goals: mobility, safety, equity, economy, and climate. These sections all follow the same structure. Each begins with a table that summarizes the results for performance measures related to the goal in question. For each measure, the tables include a sentence describing the measure followed by rows with numbers showing the associated target and data on results and targets for the years 2020, 2030, and 2045. The tables use **blue text to indicate where the RTP meets targets**, **orange text to indicate where it doesn’t**, and **purple text to indicate mixed results**. The text below the tables **highlights key findings in bold**, provides additional context to help interpret results, and discusses any performance measures or analyses that are still pending.

Metro sometimes cannot estimate results for certain years, and targets sometimes do not apply to all years for which the tables below show data. Blank cells in a table mean that a result or target is not available for a particular year for the measure in question.

The draft system analysis results are described alongside key takeaways from the high-level project list assessment completed as part of the evaluation process. The high-level project list assessment takes a simple, yes-or-no approach to reviewing whether individual projects in the draft RTP project list have certain features that support RTP goals and considers the share of the RTP spending devoted to different types of projects. The high-level project list assessment and system analysis in combination with public feedback received will inform policymakers and regional technical and policy advisory committees as they work together to finalize the draft RTP and projects lists for adoption in Fall 2023.

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## 3.1 OUR GROWING REGION

The system analysis focuses on how the RTP advances the region toward meeting its transportation goals. That said, other factors like regional population and employment growth and the historical development of the region's transportation system, also influence progress toward these goals. Table 7.1 summarizes how the region and its travel network are growing and changing.

**Table 7.1 Forecasted changes in regional growth and the travel network, 2020-2045**

	2020	2030	2045
<i>Population and employment</i>			
Total population	1,740,943	1,933,475	2,242,128
% change in population vs. 2020		11%	29%
Total households	693,123	794,613	950,634
% change in households vs. 2020		15%	37%
Total employment	985,260	1,050,958	1,210,997
% change in employment vs. 2020		7%	23%
<i>Travel network</i>			
Total road miles	3,723	3,754	3,789
% change in road miles vs. 2020		1%	2%
Total arterial miles	3,491	3,525	3,556
% change in arterial miles vs. 2020		1%	2%
Total lane miles	5,510	5,640	5,776
% change in lane miles vs. 2020		2%	5%
Total throughway lane miles	627	645	663
% change in throughway lane miles vs. 2020		3%	6%
Total transit network miles	1,240	1,275	1,294
% change in transit network miles vs. 2020		3%	4%
Total regional pedestrian network miles	597	646	724
% change in regional pedestrian network miles vs. 2020		8%	21%
Total regional bicycle network miles	626	800	802
% change in regional bicycle network miles vs. 2020		28%	28%
Total regional trail network miles	247	273	330
% change in regional trail network miles vs. 2020		11%	34%

This information – which comes from the regional growth distribution adopted by the Metro Council for the RTP and other local and regional planning efforts, and from the project information that agency partners submit to the RTP – forms part of the background assumptions that Metro uses to analyze the impact of the RTP on regional goals. It highlights how the region is growing and changing and provides additional context for interpreting some of the results above.

**The region is forecasted to grow significantly between now and 2045.** During that time, the region's population is anticipated to grow by 29 percent, while employment grows by 23 percent. Though the COVID-19 pandemic slowed population and job growth in the Portland region and in many other major metro areas, this growth is expected to pick up again in the future. Population

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and employment growth has a strong influence on congestion, and therefore on related performance measures such as access to jobs and corridor travel times. The region's goals are to improve access to jobs and reduce travel times on key corridors regardless of how much growth occurs, but all other things being equal these goals are harder to achieve when the region is growing more rapidly. Comparing the change in these performance measures to overall population and employment growth can help to distinguish whether growth or other issues are the driving factors behind the changes shown in the system analysis.

**The motor vehicle network is much more extensive than other networks.** The system analysis focuses on measuring system completion for different networks and in different communities where RTP policies prioritize investment. This is an important way of understanding the RTP's progress toward the region's vision for the transportation network, but those visions always build on the existing network, which was developed over several decades during which transportation agencies primarily focused on moving vehicles. Table 7.1 summarizes the current extent of different networks and the planned growth of those networks under the RTP. It illustrates why so many of the goals described above focus on completing the transit and active transportation networks – as of 2020, all those networks are less than a third of the size of the region's road network, and that is still the case in 2045 even with the RTP prioritizing transit and active transportation investments.

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## 3.2 MOBILITY

**Table 7.2 Summary of draft system analysis results: mobility**

Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
<i>The RTP aims to triple transit, bike, and pedestrian mode shares relative to the base year.</i>						
Transit mode share	4.1%		4.5%		5.4%	12.2%
Pedestrian mode share	7.5%		7.5%		7.8%	22.6%
Bicycle mode share	3.7%		3.8%		3.9%	11.1%
<i>The RTP prioritizes improving access to jobs via driving and transit relative to the base year.<sup>1</sup></i>						
% of regional jobs accessible by transit	7%		8%	7%	8%	7%
% of regional jobs accessible by driving	41%		42%	41%	37%	41%
<i>The RTP aims to provide the same level of access to jobs via transit (or greater) as via driving so that transit offers the same efficiency and convenience as driving.</i>						
% of regional jobs accessible by transit	7%	41%	8%	42%	8%	37%
<i>The RTP aims to complete the motor vehicle, transit, bicycle, trail and pedestrian networks by 2035.</i>						
% of the motor vehicle network that is complete	98%	100%	99%	100%	99%	100%
% of the transit network that is complete	70%	100%	72%	100%	73%	100%
% of the pedestrian network that is complete	57%	100%	62%	100%	69%	100%
% of the bicycle network that is complete	55%	100%	60%	100%	66%	100%
% of the trail network that is complete	43%	100%	48%	100%	58%	100%
<i>The RTP prioritizes completing the bicycle and pedestrian system near transit (relative to the regional average) in order to provide safe and convenient access to stations and stops.</i>						
% of the pedestrian network near transit that is complete	63%	57%	68%	62%	74%	69%
% of the bicycle network near transit that is complete	60%	55%	66%	60%	71%	66%
<i>The RTP aims to have no more than four hours in a day when average travel speeds fall below 35 miles per hour on the region's limited-access throughways and 20 miles per hour on other designated throughways so that the region's throughways are reliable.</i>						
% of limited-access throughway miles that fall below 35 MPH for more than 4 hours per day	TBD	TBD	TBD	TBD	TBD	TBD
% of other throughway miles that fall below 20 MPH travel speeds for more than 4 hours per day	TBD	TBD	TBD	TBD	TBD	TBD
<i>The RTP aims to increase the share of households and jobs that are located within walking distance of frequent transit service<sup>2</sup> relative to the base year.</i>						

<sup>1</sup> Access to jobs analysis involves measuring the average number of jobs that are accessible via 45 minutes via transit and 30 minutes via driving during peak travel hours across all of the travel analysis zones used in Metro's travel model. See the equity section below for more detail on the type of jobs and destinations that are captured in this analysis.

<sup>2</sup> "Frequent transit service" refers to service with headways of 15 minutes or less. Metro uses different walking distances to analyze proximity to different types of transit service, consistent with research that shows people are willing to walk longer to reach higher-quality service. This analysis defines "walking distance" as ¼ mile for bus, 1/3-mile for streetcar, and ½ mile for rail.

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Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
% of households located within walking distance of a frequent transit station	54%		56%	54%	54%	54%
% of jobs located within walking distance of a frequent transit station	64%		67%	64%	67%	64%
<i>The RTP seeks to improve mobility by filling gaps in the transportation network and by designing the transportation system for multimodal travel.</i>						
% of the capital RTP spending invested in projects that fill gaps in the transportation network			30%		29%	
% of the capital RTP spending invested in projects that include multimodal design elements			95%		91%	
% of the capital RTP spending invested in projects that fill gaps and include multimodal design elements			30%		29%	

Since the RTP is a transportation plan, it has many different performance measures related to mobility, including three new measures to support the regional mobility policy – system completeness, throughway reliability, and vehicle miles traveled (discussed in the climate section). For some of these measures the RTP meets performance targets, whereas for other measures it falls short.

**The RTP does not meet the region’s targets to triple transit, walking and bicycling mode share.** Metro’s travel models forecast that the investments in the RTP help to increase the share of trips that people make using these modes, but only by small amounts. Transit mode share is forecast to grow by 1.3% between 2020 and 2045 – a relative increase of over 30% – which is significant, but still far short of adopted targets. Walking and bicycling mode shares increase by much smaller amounts than transit mode shares.

**The RTP generally improves access to jobs.** The percentage of the region’s jobs that are accessible by transit increases between 2020 and 2045. Access to jobs by transit also increases between 2020 and 2030, but then it declines between 2030 and 2045. Generally, the investments in the RTP help to keep both roads and transit vehicles moving more efficiently, which increases access to jobs. Increasing congestion near some job centers appears to be contributing to declining motor vehicle access to jobs in the later years of the plan.

**Driving currently offers much better access to jobs than transit does, and the RTP does not change this.** The RTP improves access to jobs via transit more than it does access to jobs via driving. However, driving currently offers access to five to ten times as many destination as transit does depending on when you are traveling, where you want to go, and where within the region you are starting from, and the RTP does not change the fact that driving offers much better access than transit does. In order to give people the ability to choose from a variety of seamless and well-connected travel options and services that easily get them where they need to go, transit needs to



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offer the same level of access as driving does. Providing equal access via transit and driving is an aspirational goal for the greater Portland region – and almost any other U.S. city – due to a decades-long history of auto-oriented development, but closing the gap between transit and driving access has far-reaching benefits for the region.

**None of the region’s transportation networks are complete, but the motor vehicle network is much closer than others.** A goal of the RTP mobility policy is to complete all the planned infrastructure networks included in the plan – motor vehicle, transit, pedestrian, bicycle and trail. None of these networks are complete, but the motor vehicle network, which will be 99% complete in 2045 when other networks are only 58 to 73% complete, is much closer than the other networks. Completing all networks in the RTP is important to meeting goals, but the fact that the motor vehicle network is so much more complete than others contributes to the challenge of providing a variety of seamless and connected travel choices. Additional work is being completed by Metro staff to develop approaches for defining system completeness for transportation system management and operations (TSMO) network and transportation demand management programs.

**The region has historically prioritized completing pedestrian and bicycle facilities near transit, and the RTP upholds this priority.** The pedestrian and bicycle networks are currently more complete near transit than in other locations in the region, and though the RTP does slightly less to complete these networks near transit than in other parts of the region, they will still be more complete in 2045.

**The RTP generally improves access to frequent transit, if only slightly.** In order for the transit system to be useful, stops and stations have to be located near common origins and destinations, particularly for the frequent service that gets riders where they need to go efficiently. The RTP slightly increases the share of jobs that are near transit, and in the short term, the share of households that are located near transit as well. However, the share of households that are projected to be within walking distance of transit in 2045 is similar to the base year share. Though the RTP expands the transit system, this planned growth may not be keeping pace with new development.

Almost all of the RTP projects include design elements that support travel by transit, foot or bike. However, slightly under a third of the RTP spending goes toward projects that close gaps in regional transportation networks. Increasing this share could help the RTP better complete the transportation system.

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## 3.3 SAFETY

**Table 7.3 Summary of draft system analysis results: Safety**

Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
<i>The RTP aims to eliminate transportation related fatalities and serious injuries for all users of the region's transportation system by 2035, and to maintain progress toward this goal in interim years.</i>						
Number of fatalities	93	52				
Fatalities per 100 million vehicle miles traveled	0.9	0.5				
Number of serious injuries	512	384				
Serious injuries per 100 million vehicle miles traveled	4.8	3.6				
Number of non-motorized fatalities and serious injuries	129	95				
<i>The RTP seeks to advance safety by funding projects that benefit safety in the most dangerous locations on the region's transportation network.</i>						
% of the capital RTP spending invested in projects identified as safety projects			66%		71%	
% of the capital RTP spending invested in projects located on high injury corridors or intersections			40%		53%	
% of the capital RTP spending invested in safety projects that are located on high injury corridors or intersections			24%		43%	

**The region is not on track to meet its target of reducing fatal and serious injury crashes to zero by 2035.** Table 7.3 shows baseline 2020 results for several different indicators that examine different types of crashes (fatal crashes, serious injuries, and non-motorized crashes involving vulnerable users) using different indicators (both rates and absolute values) and compares them to 2020 targets that represent a sixteen percent reduction in crashes compared to 2014, when the region adopted these safety targets, and a fifty percent reduction by 2025. By every **safety measure that the RTP tracks, the region's streets are getting less safe**, and the RTP is not meeting the interim 2020 targets that it established to maintain progress toward the 2035 Vision Zero goal.

The needs assessment and Urban Arterials Brief prepared in Fall 2022 contain more information on where crashes are occurring in the region and who is affected by different types of crashes that helps to explain and contextualize the results above.<sup>3</sup> Key findings include:

- Pedestrians experience a disproportionately high number of traffic deaths.
- Traffic fatalities are decreasing among bicyclists.
- A majority of serious crashes and bike/ped crashes occur in equity focus areas (see the Equity section for more information).

<sup>3</sup> <https://www.oregonmetro.gov/sites/default/files/2022/11/29/2023-RTP-Needs-Assessment-fact-sheets.pdf> and <https://www.oregonmetro.gov/sites/default/files/2022/10/24/Safe%20and%20healthy%20urban%20arterials%20policy%20brief.pdf>

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- Speed, alcohol, and/or drugs continue to be the most common contributing factors in severe and fatal crashes in the region.
- Serious crashes, and particularly fatal pedestrian crashes, are increasing both in the Greater Portland region and nationally. The growing popularity of SUVs and other heavier and larger models of passenger vehicles is contributing to these trends; by 2025, light-trucks, SUVs, vans and pickups are estimated to make up 78 percent of sales. Research indicates that crashes involving SUVs and similar weight vehicles are more likely to be serious and to injure or kill pedestrians and bicyclists.<sup>4</sup>

More than two thirds of capital funding in the RTP goes to projects that lead agencies identified as safety projects, and roughly half of the capital budget goes toward projects that are on the high-injury network, which includes the relatively small share of roads and intersections where most of the serious crashes in the region occur.<sup>5</sup> However, a smaller share of the near-term (2023-30) RTP spending is devoted to these projects than of the total budget, which suggests that there may be additional opportunities to prioritize near-term investments in safety. See Chapter 3 for a map of the high injury network that is used in these safety analyses.

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<sup>4</sup> Tyndall, Justin. "Pedestrian Deaths and Large Vehicles." *Economics of Transportation*, Volumes 26–27, June–September 2021. <https://www.sciencedirect.com/science/article/abs/pii/S2212012221000241?via%3Dihub>, and Monfort, Samuel S.; Mueller, Becky C. "Pedestrian injuries from cars and SUVs: updated crash outcomes from the Vulnerable Road User Injury Prevention Alliance (VIPA)." *Traffic Injury Prevention (TIP)*, Insurance Institute for Highway Safety, May 2020. <https://www.iihs.org/topics/bibliography/ref/2203>.

<sup>5</sup> For a map of High Injury Corridors and intersections, see <https://experience.arcgis.com/experience/6b5ae16aad814e6e81546bcc4ffdf964>.

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## 3.4 EQUITY

**Table 7.4 Summary of draft system analysis results: equity**

Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
<i>Safety is a critical issue in equity focus areas. The RTP aims to eliminate transportation related fatalities and serious injuries for all users of the region's transportation system, particularly in equity focus areas, which experience higher rates of serious crashes.</i>						
Serious crashes in Equity Focus Areas (EFAs)	65%	35%				
Pedestrian- and bicyclist-involved crashes in Equity Focus Areas (EFAs)	75%	25%				
<i>The RTP prioritizes completing the bicycle and pedestrian system in equity focus areas (relative to other communities) to provide safe streets for the most vulnerable travelers.</i>						
% of the pedestrian network that is complete within EFAs	70%	45%	76%	49%	81%	58%
% of the pedestrian network near transit that is complete within EFAs	73%	53%	78%	56%	83%	64%
% of the bicycle network that is complete within EFAs	61%	49%	68%	53%	75%	58%
% of the bicycle network near transit that is complete within EFAs	64%	55%	72%	60%	77%	65%
<i>The RTP prioritizes improving access to jobs within equity focus areas (relative to other communities).<sup>6</sup></i>						
% of regional jobs accessible by transit in equity focus areas	8%	5%	9%	5%	11%	5%
% of regional jobs accessible by driving in equity focus areas	42%	40%	43%	40%	40%	33%
<i>The RTP seeks to advance equity by funding projects that benefit equity in the communities that have the greatest needs.</i>						
% of the capital RTP spending invested in equity projects (transit or walk/bike investments)			69%		75%	
% of the capital RTP spending invested in projects located in equity focus areas			37%		36%	
% of the capital RTP spending invested in equity projects that are located in equity focus areas			27%		26%	

**The RTP achieves mixed results on equity – it invests equitably, but these investments do not lead to more equitable outcomes, nor do they undo longstanding transportation inequities in safety and access to jobs.** The region's bicycle and pedestrian networks are currently more complete in the Equity Focus Areas (EFAs) where people of color, low-income people and people who speak limited English are concentrated, and the RTP continues to invest in

<sup>6</sup> The results shown here measure access to all jobs during peak hours. Community feedback has emphasized that marginalized people particularly prioritize access to community places such as schools, grocery stores and community services and access to jobs that they are qualified for, and that marginalized people are less likely to commute during peak hours and more likely to need to travel throughout the day. Metro staff analyzed access to jobs by wage level and access to community places and access during off-peak periods. All of these analyses show the same basic patterns as the results in Table 7.2 – access to destinations via transit and auto is slightly better in equity focus areas than in other communities, and access to destinations via auto is much higher than access via transit – and this memorandum does not reproduce those results in order to conserve space. The final RTP will include complete results of the accessibility analysis.

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completing those networks. However, recent data shows that these areas continue to experience three times the number of crashes that involve people walking and biking – who are particularly vulnerable to death and injury during crashes – and almost twice as many fatal and serious injury crashes as other parts of the region.

Similarly, **people living in EFAs currently enjoy significantly better access to jobs via transit and driving than people living in non-EFAs, and the RTP continues to improve access to jobs in these communities relative to others.** However, despite continued efforts to grow transit service during this and previous RTP cycles, **driving in general continues to offer much more efficient and convenient access to jobs than transit does.** Both community feedback and research emphasize that people of color and people with low incomes are more likely to rely on transit than other people are. This suggests that an equitable transportation system is one in which transit offers the same level of access to jobs as driving – and even with the investments in the RTP the region still falls short of providing equal access via driving and transit.

Over two thirds of RTP capital spending goes toward projects that invest in the transportation equity needs identified by EFA residents, and over one third goes toward projects in EFAs, with a slightly higher share of long-term funding than near-term funding devoted to these priorities. See Chapter 3 for a map of the equity focus areas used in these analyses.

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## 3.5 ECONOMY

**Table 7.5 Summary of draft system analysis results: economy**

Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
<i>The RTP aims to decrease driving and transit travel times along regional mobility corridors relative to the base year.</i>						
% change in average mid-day corridor <sup>7</sup> travel times vs. 2020 - driving			0.7%	0%	3.7%	0%
% change in average evening peak corridor travel times vs. 2020 - driving			1.5%	0%	3.8%	0%
% change in average off-peak corridor travel times vs. 2020 - transit			- 3.4%	0%	- 3.8%	0%
% change in average evening peak corridor travel times vs. 2020 - transit			- 1.2%	0%	- 1.6%	0%
<i>The RTP prioritizes completing the bicycle and pedestrian system in job and activity centers (relative to the regional average) in order to provide safe and convenient options for short trips and connections to transit.</i>						
% of the pedestrian network that is complete within centers, station communities, and mixed-use areas	74%	57%	77%	62%	80%	69%
% of the bicycle network that is complete within centers, station communities, and mixed-use areas	63%	55%	69%	60%	74%	66%
% of the pedestrian network that is complete within employment and industrial areas	39%	57%	44%	62%	52%	69%
% of the bicycle network that is complete within employment and industrial areas	55%	55%	58%	60%	64%	66%
<i>The RTP supports the economy by prioritizing by filling gaps in the transportation network and by designing the transportation system for multimodal travel.</i>						
% of the capital RTP spending invested in projects located in planned job centers and growth areas			89%		88%	
% of the capital RTP spending invested in projects located in areas that currently have higher-than-average concentrations of jobs			83%		80%	

The RTP achieves mixed results on regional economic goals. It reduces transit travel times along the corridors that connect the region's centers, but driving times along these corridors increase, particularly in 2045, due to increased congestion. However, travel times increase at a much slower pace than the region's population and employment grows (under 4% by 2045, compared to 29% growth in population and 23% growth in jobs), which suggests that the RTP helps traffic

<sup>7</sup> Metro uses mobility corridors that link different regional centers for the purposes of travel analysis (<https://www.oregonmetro.gov/mobility-corridors-atlas>) and forecasts driving and transit times between key destinations along each corridor using its travel model. The averages presented for this metric are based on the longest-distance route along each corridor for which forecasted both driving and transit travel times are available, and, in the case of peak-hour results, the route corresponding with the direction of peak travel.



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move more efficiently along these corridors than it would otherwise given the pressure that new growth and new trips put on the transportation system.

In order to help workers take advantage of the faster and more frequent transit connections that the RTP provides, the RTP must also complete the bicycle and pedestrian networks in the communities where jobs are located. Doing so gives transit commuters safe and convenient connections from transit stations to their places of work. The bicycle and pedestrian network is already more complete than average in centers, station communities and other mixed-use areas where many of the region's office, service, and other jobs are located, and the RTP continues to prioritize investment in these areas. However, even with the investments planned in the RTP, the pedestrian and bicycle networks – particularly the former – are not nearly as complete in employment and industrial areas that are home to many of the region's manufacturing and transportation jobs as it is in the rest of the region. Many businesses in these areas need freight access and ample floor space for manufacturing or warehousing, which can pose challenges to creating convenient and safe walking and biking environments, and new transit options, particularly smaller and more flexible service that can serve routes with many dispersed stops, are needed to give people a car-free option that connects within walking or biking distance of their jobs. However, completing these networks, especially the pedestrian network, can help transit riders safely and conveniently complete the last mile of their commutes.

The RTP invests heavily in projects that are located both in planned job centers and in the places where jobs are currently concentrated, which reflects a continued emphasis on investing in transportation facilities that support current and planned growth.

## 3.5.1 Analyses under development

Note: The RTP uses **freight-related performance measures** to examine economic performance. The final draft of the 2023 RTP update will include versions of the travel reliability measure discussed in the Mobility section focused on examining the variations in travel times and speed on the regional freight network. Metro staff are working to update these measures through the Freight and Commodities Movement Study and will share freight performance measure results with RTP policy and technical committees as part of the Freight and Commodities Movement Study results in July 2023.

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## 3.6 CLIMATE AND ENVIRONMENT

Note: This section will be updated in consultation with ODOT, DLCD and DEQ.

**Table 7.6 Summary of draft system analysis results: climate and environment**

Measure	Base year value	Base year target	2030 result	2030 target	2045 result	2045 target
<i>The RTP aims to reduce <b>greenhouse gas emissions and vehicle miles traveled</b> in order to meet regional climate targets set by the state which are to reduce vehicle miles traveled per person by 35% by 2050, with a 30 percent reduction by 2045 and a 25% reduction by 2040, compared to 2005.</i>						
% reduction in VMT per capita (relative to 2005)					22-40%	30%
% reduction in GHG emissions per capita (relative to 2005)					TBD	30%
<i>The RTP aims to reduce total <b>greenhouse gas emissions</b> in order to meet State goals.</i>						
% reduction in total GHG emissions (relative to 2005)						
<i>The RTP aims to keep <b>criteria pollutants</b> from mobile sources below thresholds set by the federal government.</i>						
Total summer carbon monoxide emissions (lbs)	261,097		111,508	261,097	77,805	261,097
Total winter carbon monoxide emissions (lbs)	206,410		85,266	206,410	71,579	206,410
Total summer volatile organic compound emissions (lbs)	11,734		2,836	11,734	2,374	11,734
Total winter particulate matter 10 exhaust (lbs)	375		125	375	62	375
Total winter particulate matter 2.5 exhaust (lbs)	336		111	336	55	336
<i>The RTP aims to keep <b>air toxics</b> from mobile sources below current levels.</i>						
To be added						
To be added						
To be added						
To be added						
To be added						
To be added						
<i>The RTP seeks to advance climate and resilience by funding high-impact greenhouse gas reduction strategies and projects on key emergency routes.</i>						
% of the capital RTP budget invested in high- or moderate-impact Climate Smart Strategies			32%		28%	
% of the capital RTP budget invested in projects located on Emergency Transportation / Seismic Lifeline routes			72%		71%	

**The RTP meets its targets to reduce criteria pollutant emissions.** These emissions are known to cause health and respiratory issues for people and damage the environment, so meeting this

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goal also supports public health and the general health of the region’s ecosystem. Progress toward this target is largely driven by the fact that the next generation of vehicles is expected to produce less pollution than the cars that are currently on the road. The region’s success in reducing per capita VMT also helps to ensure that increases in driving don’t counteract the benefits of cleaner vehicles.

**The RTP meets state-mandated regional climate targets by implementing the projects and programs in the constrained RTP project list in combination with state-led actions identified in the Oregon Statewide Transportation Strategy (STS),** which is Oregon’s strategy to reduce transportation-sector GHG emissions. The STS includes state-led pricing actions, in addition to implementation of clean vehicle and fuel programs and regulations at the state and federal level. The fleet and technology actions cover variables such as the share of zero-emission vehicles, the carbon intensity of fuels, the balance of cars and trucks in the passenger fleet, and vehicle turnover. The state-led pricing-actions assumed in the STS assume that the state will implement extensive changes to how transportation revenues are collected in Oregon, both to replace the gas tax, which is not producing enough revenue to meet Oregon’s transportation needs, and to reduce GHG emissions by managing demand for driving and encouraging the use of cleaner modes and vehicles. New revenue mechanisms in the STS include a road user charge that levies per-mile fees on drivers, carbon taxes, and additional road pricing beyond what is currently included in the 2023 RTP. These changes are not reflected in the RTP because they are not yet adopted in state policies or regulations, but the climate analysis for the RTP is allowed to include them because these state-led pricing actions are identified in STS and were assumed when the state set the region’s climate targets.<sup>8</sup>

The RTP climate targets are designed to ensure that the region and state work together to meet Oregon’s transportation-sector GHG reduction goals. The climate analysis must reflect both the transportation investments and policies in the RTP and the impact of state vehicle and fuel regulations as reflected in the Statewide Transportation Strategy (STS). More discussion of the role of state-led pricing actions in meeting the region’s climate targets is recommended.

Table 7.6 shows the range of potential VMT reductions that the RTP could achieve based on two scenarios that Metro developed to represent the range of potential VMT and GHG reductions that the RTP could demonstrate through its climate analysis. Table 7.7 describes the assumptions behind these two scenarios, and Figure 7.1 illustrates the VMT reductions that each scenario achieves, and also shows emissions levels under the 2018 RTP update for comparison.

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<sup>8</sup> OAR 660-044-0030(4)(a):

[https://secure.sos.state.or.us/oard/viewSingleRule.action;JSESSIONID\\_OARD=Pk5WeLsr40n1ZMdFGJr943D9KeHyA7LSgdLuG\\_bsnXZJvNrXnl8x!-286176765?ruleVrsnRsn=293065](https://secure.sos.state.or.us/oard/viewSingleRule.action;JSESSIONID_OARD=Pk5WeLsr40n1ZMdFGJr943D9KeHyA7LSgdLuG_bsnXZJvNrXnl8x!-286176765?ruleVrsnRsn=293065)

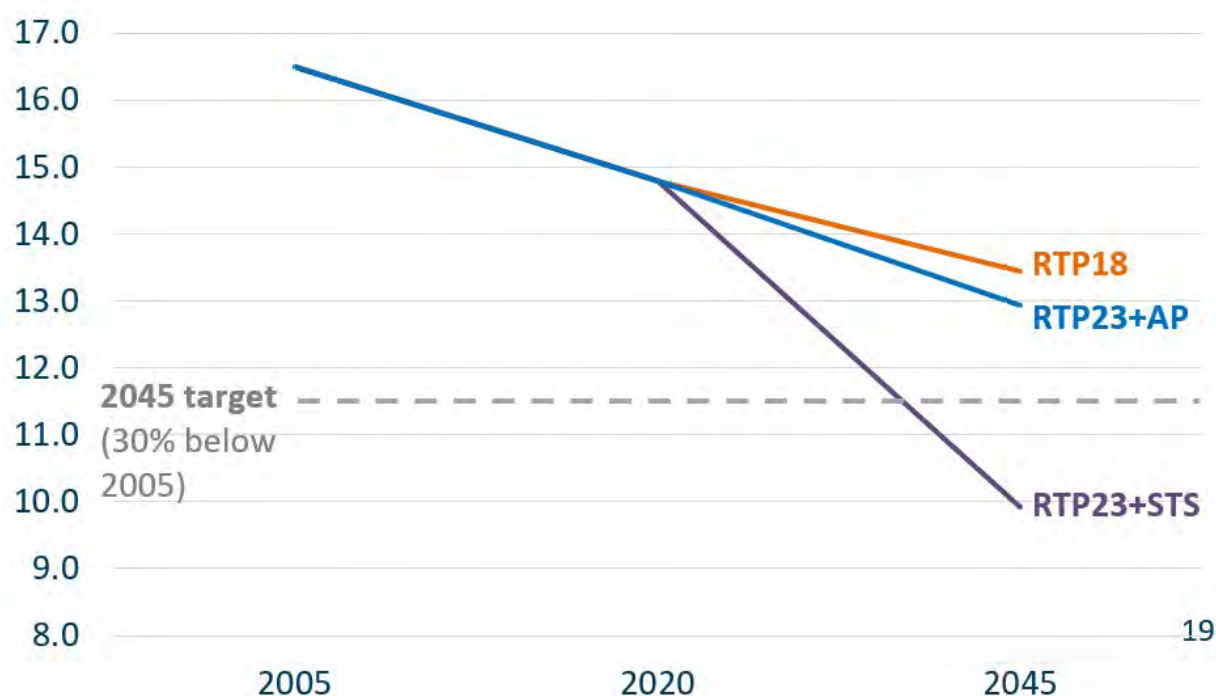
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**Table 7.7 Climate scenarios and associated assumptions**

	<b>RTP23 + adopted plans (AP) scenario</b>	<b>RTP23 + STS scenario</b>
Description	Includes all RTP investments, including the throughway pricing currently included in the RTP.	Includes RTP investments and throughway pricing as well as all additional pricing and revenue mechanisms included in the STS.
Throughway pricing assumptions	Includes the Regional Mobility Pricing Project and tolls on the I-5 Bridge Replacement and I-205 projects; these tolls average ~\$0.13/mi. on the priced portions of I-5 and I-205	Includes STS levels of pricing on the region's entire throughway network, which average \$0.30/mi.
Additional pricing and revenue mechanisms	None	Includes a combination of per-mile charges and taxes equal to roughly \$0.17/mi.
VTM reductions (vs. 2005 levels)	22%	40%

**Figure 7.1 Daily VMT per capita by scenario vs. regional climate target**



## 3.6.1 Analyses under development

Note: Metro staff will continue to work with state agencies and regional partner agencies to identify a preferred scenario to use in the RTP climate analysis over Summer 2023. Metro staff will use this preferred scenario to further develop GHG performance measure results.

## Chapter 8

# **Moving Forward Together**

## 2023 Regional Transportation Plan

May 26, 2023 WORKING DRAFT

*This chapter will be provided in the June 15 JPACT packet.*

**Exhibit B to Resolution No. 23-5343**  
**2023 Regional Transportation Plan**  
**Draft Project List**



RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Active Transportation - Pedestrian	Clackamas County	Happy Valley	Happy Valley	169th Ave Sidewalk Infill: Sunnyside Rd - Stonybrook Ct	12198	Sunnyside Rd	Stonybrook Ct	Project performs sidewalk infill on east side of 169th Ave from Sunnyside Rd to Stonybrook Ct.	\$8,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	37th Ave Sidewalks	10096	Lake Rd	Harrison St	Fill in sidewalk gaps on both sides of street to increase pedestrian safety and to improve accessibility in equity priority areas.	\$1,560,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Intersection Curb Ramp Improvements (Milwaukie)	11621	Citywide	Citywide	Install curb ramps at all intersections with sidewalks to improve safety and connectivity in equity priority areas.	\$3,898,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Lake Road Sidewalks	10094	Where Else Ln	Railroad Ave	Fill in sidewalk gaps on both sides of street.	\$1,560,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Ochocho St Sidewalks and Bridge	10112	19th Ave	McLoughlin Blvd	Construct sidewalks, reconstruct bridge over Johnson Creek.	\$1,715,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	97th Ave/Mather Road Complete Street	11522	Lawnfield Rd	Summers Lane	Add bikeways, pedways along project length, add eastbound left turn lanes at Mather Rd / Summers Ln, provide ADA accessibility improvements as necessary.	\$5,516,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Courtney Ave: OR 99E to Oatfield Rd	11520	OR 99E	Oatfield Rd	Fill gaps in pedways and bikeways, improve intersection safety, increase access to employment, transit access and ADA accessibility.	\$2,959,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Courtney Ave: River Rd to OR 99E	11525	River Rd	OR 99E	Construct pedway / complete gaps on the south side; add bikeways, improve ADA access, increase transit accessibility, improve access to employment.	\$7,996,000	\$5,080,000	\$5,080,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave	11503	River Rd	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities. Phase II of project that is currently underway.	\$2,674,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: Oatfield to OR 99E	12202	Oatfield Road	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities.	\$5,278,000	\$5,278,000	\$5,278,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: River Rd to OR 99E	12203	River Rd	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities. Phase II of project that is currently underway. Phase II of project that is currently underway.	\$1,678,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd and Bell Ave Intersection Safety Improvements (TSAP)	11774	Johnson Creek Blvd/Bell Ave Intersection	Johnson Creek Blvd/Bell Ave Intersection	Improve intersection of Johnson Creek Blvd and Bell Ave to improve intersection safety by implementing proven safety counter measures for bicyclist and pedestrians as identified in county Transportation Safety Action Plan and improve ADA accessibility. No change in intersection capacity.	\$1,707,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Linwood Ave: Monroe St to Johnson Creek Blvd	10102	Monroe St	Johnson Creek Blvd	Add bikeways. Linwood Ave / Monroe St intersection improvements. Add curbs/sidewalks, improve horizontal alignments, add ADA accessibility features, add stormwater features.	\$16,664,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Monroe St	11494	Linwood Ave	Fuller Rd	Add bikeways, pedways and traffic calming and safety measures, improve ADA accessibility, improve stormwater, increase access to transit and access to employment for historically marginalized community. Combines two projects from 2014 RTP.	\$6,913,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Oak Grove Blvd	11504	Oatfield Rd	River Rd	Fill gaps in pedways and bikeways.	\$3,049,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	82nd Drive Bike and Pedestrian Improvements	10022	Jennifer	Herbert Court	Improve safety for bicyclists and pedestrians by implementing proven safety counter measures and filling gaps in bikeways and pedestrian facilities.	\$6,102,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Oregon City	Abernethy Road Bike & Pedestrian Improvements	11187	Redland Road	Washington Street	Add a bike lane to the south side. A shared-use path will be added on the north side. (TSP B8, S2)	\$3,420,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Borland Rd: Tualatin to Stafford Rd	10043	Tualatin City Limits	Stafford Rd	Add paved shoulders and turn lanes at major intersections. The project or a portion of the project is outside the designated urban growth boundary.	\$13,830,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Clackamas Industrial Area Bike/Ped Improvements (TSAP)	11772	Intersection of 106th Ave and OR 212	Intersection of Jennifer Rd and 122nd Ave	Improve intersection of 106th and OR 212, and Jennifer Drive and 122nd Ave to facilitate bike and pedestrian safety per county adopted TSAP, and provide ADA accessibility improvements as needed. Also improve intersection geometry to facilitate truck access to industrial park.	\$4,556,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Clackamas Rd	11506	Johnson Road	Webster Road	Fill gaps in bikeways and pedestrian facilities including improvements to stormwater facilities and ADA accessibility as needed.	\$8,786,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Concord Rd	11501	River Rd	Oatfield Rd	Fill gaps in bike and ped facilities as necessary including improvements to stormwater facilities and ADA accessibility. Main project segments are from Trolley Trail to McLoughlin Blvd, and from Harold Rd to Oatfield Rd.	\$11,389,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Flavel Dr	11491	Alberta Ave	County boundary	Add bikeways to provide connection between Springwater/Powerline trail and bike facilities on Flavel Dr and 52nd Ave in Portland.	\$5,614,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Fuller Rd. Improvements	10009	Otty Rd.	Johnson Creek Blvd.	Add pedestrian facilities, turn lanes, on-street parking, central median and landscaping, improve pedestrian treatments at intersections and improve ADA accessibility.	\$7,159,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Harmony Road Improvements	10003	Linwood Ave	Fuller Rd	Add bikeways and sidewalks where needed, including safety treatments at intersections and ADA accessibility improvements as necessary.	\$12,107,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	I-205 Multiuse Path from OR 224 to OR 212	11767	OR 224 - Sunrise Multi-use Path	OR 212 - I-205 Multi-use Path	Improve safety for bicyclists and pedestrians by filling a gap of approximately 1 mile in the I-205 Multi-use path and implementing proven safety counter measures, as well as creating connections to other regional multi-use paths and implementing ADA accessibility improvements as necessary.	\$10,251,000	\$1,095,000	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Johnson Rd., Clackamas Rd., McKinley Rd.	10050	Lake Rd.	Hwy 212	Bikeway and pedestrian facilities infill, including safety treatments at intersections, stormwater improvements, and ADA accessibility improvements.	\$10,901,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Oatfield Road	12206	Park Ave	Courtney	Add bikeways and sidewalks where needed, including safety treatments at intersections and ADA accessibility improvements as necessary.	\$5,044,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	River Rd: Lark St to Courtney	11499	Lark St	Courtney	Improve safety on known high crash corridor by implementing proven safety counter measures, adding bicycle and pedestrian facilities including ADA accessibility features and improvements to stormwater.	\$11,552,000	\$0	\$0	2031-2045	Yes



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Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	River Rd: Oak Grove Blvd. to Risley Ave.	11500	Oak Grove Blvd	Risley Ave	Improving safety on known high crash corridor by implementing proven safety counter measures, filling gaps in bikeways and pedways networks including improvements to ADA accessibility and stormwater as necessary.	\$14,481,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Stafford Rd Improvements	10029	I-205	Rosemont Rd.	Add paved shoulders and turn lanes at major intersections. The project or a portion of the project is outside the designated urban growth boundary.	\$20,188,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Sunrise Multi- use path Phase II	11668	122nd Ave	Rock Creek Junction	Improve safety for bicyclist and pedestrians by constructing a new multi-use path from 122nd Ave to 172nd paralleling the Sunrise Phase 2 project.	\$14,528,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Gladstone	Gladstone	Portland Avenue Multi-Modal Project Design and Engineering	12264	Clackamas Blvd	Jersey St	Project development and engineering to implement the Portland Avenue Streetscape Plan, including wider sidewalks, lighting, marked crossings, bike lanes, and street reconstruction.	\$3,414,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Gladstone	Gladstone	Portland Avenue Multi-Modal Project Construction	12265	Clackamas Blvd	Jersey St	Implement the Portland Avenue Streetscape Plan, including wider sidewalks, lighting, marked crossings, bike lanes, and street reconstruction.	\$11,389,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Clackamas River Trail: North Carver	12195	Hwy. 212/224 Interchange	Springwater Bridge	Constructs outstanding segments of multi-use regional trail to follow north side of Clackamas River between Hwy. 212/224 interchange and Springwater Bridge.	\$3,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 3	12042	Hagan Rd	Hwy. 212	A multi-use path following Rock Creek between former golf club and Hwy. 212. Alignment to cross Sunnyside Rd and Sunrise Corridor below grade. Includes connections to Pioneer Park on SE 153rd as well as Hood View Park and area schools.	\$9,300,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Butler Buttes Trail	12320	Borges Rd	Scouters Mountain Trail by Voyageurs Lp and 172nd	New regional trail connects Springwater Trail in Gresham to Happy Valley, traversing Gabbert, Towle, and Butler buttes along the way.	\$3,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Clackamas Bluffs Trail	12319	Rock Creek Blvd	Richardson Creek Trail by OR 224	New regional trail in emerging urban area. Trail connects Sunrise Corridor Trail and Richardson Creek Trail.	\$5,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	East Buttes Powerline Trail - Cheldelin to Sunnyside	12317	Cheldelin Rd	Sunnyside Rd	Multi-jurisdictional trail connecting Gresham and Clackamas River. Project connects Scouters Mountain Trail near 162nd Ave/Hagen Rd to Clackamas River Trail near OR 212/242 east of 132nd Ave.	\$4,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 6	10070	Mount Scott Blvd./Ridgecrest Rd	Scott Creek drainage north of Sunnyside Rd	Project begins in Scott Creek drainage corridor north of Sunnyside Rd and runs north to end near Mt Scott Blvd/Ridgecrest Rd intersection. The proposed trail has separate routes for bicyclists and pedestrians.	\$18,400,000	\$200,000	\$200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Carman Dr. sidewalks &/ bike lanes	11082	Meadows Rd	Parker Rd	4,200' long widening for 6' wide bike lanes, 6' wide separated concrete sidewalks along 80% of length, both sides. Continuation of improvements toward I-5 expected to be incorporated into SW Corridor project.	\$9,400,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Goodall Rd Pathway	11612	Knaus Rd	Country Club Rd	3,000' long, 6' wide asphalt shoulder pathway on both sides of road. R/W needed for stormwater swale. Completes a connection.	\$3,900,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Bonita Rd Sidewalks and Bike Lanes	11607	Windfield Way	Carman Drive	1,300' long, 5.5' sidewalks and 6' bike lanes on both sides. Widening of roadway involves tree removals and loss of on-street parking. Continuation of improvements toward I-5 expected to be incorporated into SW Corridor project.	\$9,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Knaus Rd Pathways and Bike Lanes	11613	Boones Ferry Rd	Country Club Rd	4,000' long, 6' wide separated asphalt pathway and 5' wide bike lanes on both sides of roadway.	\$20,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	South Shore Pathway	11396	Lakeview Blvd	McVey Ave	12,800' long, 6' wide separated asphalt pathway on south side of roadway. Retaining walls and storm water improvements required.	\$27,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Stafford Road Improvements	11936	South Shore Blvd	Rosemont Road	6,000' long, 6' bike lanes and 8' pedestrian facilities on each side of the roadway. Modification to intersections, installation of retaining walls and stormwater improvements required for widening.	\$18,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Tryon Creek Ped Bridge (@Tryon Cove Park)	11171	Foothills Park	Tryon Cove Park	500' long, 10' wide asphalt pathway completes a connection at the existing north end Foothills pathway with to Tryon Cove Park with a pedestrian bridge (per Foothills District Plan). Connects to future Willamette River Greenway Trail.	\$6,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Environmental/Engineering	10151	Portland Ave.	Oregon City Clackamas R. Trail	Regional trail would connect the proposed regional Trolley Trail to the Clackamas River Trail via an existing railroad bridge spanning the Clackamas River.	\$2,140,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Phase I	11886	Portland Avenue in Gladstone	Clackamas River Trail, Oregon City	First phase of construction of the Trolley Trail Bridge between Gladstone and the Oregon City Willamette River Trail.	\$7,279,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Bicycle and Pedestrian Overpass over Railroad Ave	11533	Railroad Ave	International Way	Establish a dedicated bicycle and pedestrian connection across Railroad Ave and the railroad tracks.	\$4,678,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 1--Monroe St Neighborhood Greenway	10099	McLoughlin Blvd	Linwood Ave	Designate Monroe St as a Neighborhood Greenway and install traffic-calming improvements and fill sidewalk gaps on both sides of street. Traffic-calming improvements and completed sidewalk sections will increase bicycle and pedestrian safety. Intersection improvements to improve safety of crossing at Linwood Ave and Monroe St. Improves bicycle and pedestrian network in an equity priority area.	\$15,593,000	\$6,000,000	\$6,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 6--Sidewalk & Pedestrian Safety Projects (part 1)	11535	Various locations	Various locations	Harmony Rd Sidewalks: Fill in sidewalk gaps on both sides of street. Logus Rd Sidewalks: Fill in sidewalk gaps on both sides of street. International Way Sidewalks: Fill in sidewalk gaps on both sides of street. Brookside Dr Sidewalks = Fill in sidewalk gaps on both sides of street. River Rd Sidewalks = Fill in sidewalk gaps on both sides of street. Group 6 projects improve pedestrian safety and access to equity priority areas.	\$15,727,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 6--Sidewalk & Pedestrian Safety Projects (Part 2)	11954	Various Locations	Various Locations	Fill in sidewalk gaps on Ochoco St. King Rd Blvd Treatments = install street boulevard treatments: widen sidewalks and improve crossings. Group 6 projects improve will improve pedestrian access to equity priority areas.	\$1,559,000	\$0	\$0	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 7--Bicycle Infrastructure Improvements	11541	Various locations	Various locations	Outfield Rd Bike Lanes Fill in gaps in existing bicycle network with bike lanes. Harrison St Bike Lanes Fill in gaps in existing bicycle network with bike lanes (cost included with Harrison St road widening project). International Way Bicycle Facilities = Construct bike lanes or other bike facilities. Group 7 projects improve safety and bicycle connectivity to equity priority areas.	\$1,715,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Railroad Ave Capacity Improvements	10095	37th Ave	Harmony Rd	Pedestrian aspect: construct multiuse path. Public transit aspect: Provide bus service to extend to Clackamas Town Center and points east. Project improves bicycle and pedestrian access to public transit and equity priority areas.	\$10,136,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 10--19th Avenue Neighborhood Greenway Improvements	11622	Milwaukie Riverfront	River Rd at Sparrow St	19th Ave and Sparrow St Neighborhood Greenway Designate as a "neighborhood greenway" and install traffic-calming improvements. Project will improve bicycle and pedestrian network in an equity priority area and increase safety for cyclists and pedestrians. This would connect the south end of Kellogg Creek Trail to River Rd.	\$6,150,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 5--Stanley Avenue Neighborhood Greenway Improvements	10097	Springwater Trail	Railroad Ave	Stanley Ave Neighborhood Greenway Pedestrian aspect: Fill in sidewalk gaps on both sides of street. Bicycle aspect: Designate as a neighborhood greenway and install traffic-calming improvements.  Stanley Ave Connectivity at King Rd = Enhance connection along Stanley Ave at King Rd.  Stanley Ave Connectivity at Monroe St = Enhance connection along Stanley Ave at Monroe St.  Group 5 projects increase connectivity and bicycle and pedestrian safety in an equity priority area.	\$15,717,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	North Clackamas Park	Clackamas River Greenway Trail	12318	SE 142nd Avenue & Clackamas Highway	82nd Drive & SE Hanson Court	4-mile continuous public regional trail along the Clackamas River. Acquisition, development, and management of a regional trail along the Clackamas river, within the Clackamas Industrial Area, which will provide access to employment.	\$39,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	North Clackamas Park	Mt. Scott/Scouter Mountain Loop: Segment 4E (Powerline Corridor)	12252	SE Sunnyside Road & SE 142nd Avenue	Highway 212, between SE 132nd and SE 142nd.	Multi-jurisdictional trail connecting Gresham and Clackamas River. Project connects Sunnyside Road to Clackamas River Trail near OR 212/242 east of 132nd Ave.	\$6,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	North Clackamas Park	Mt. Scott/Scouter Mountain Loop: Segment SE	12251	I-205 bike/ped path / Sunrise Corridor Bike Path	Highway 212, between SE 132nd and SE 142nd.	A multi-use route within road right-of-way between the I-205 bike/ped path and the intersection of Highway 212 and SE 135th. Alignment follows Lawnfield, Mather, SE 122nd and Hubbard Road.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	Clackamas County	North Clackamas Regional Parks Trail	11617	OR 213	Linwood Ave	Construct multi-use path from OR 213 to Linwood Ave through existing park, including ADA accessibility improvements as necessary.	\$3,183,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	Clackamas County	Phillips Creek Regional Trail	12103	SE Otty Rd and I-205 Bike Path	SE Sunnybrook Blvd and SE 82nd Avenue	Construct new shared multi-use trail	\$8,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	McLoughlin Blvd. Improvement	10024	Milwaukie	Gladstone	Improve safety for bicyclist and pedestrians by adding bikeways, pedestrian facilities, fill sidewalk gaps, add transit supportive elements, improve ADA accessibility, and implementing proven safety counter measures.	\$8,746,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	West Linn	OR 43 Multimodal Improvements - Arbor Dr. to Mary S. Young State Park	11746	Arbor Drive	Mary S. Young State Park	Construction of multimodal transportation improvements on OR 43 (N. West Linn city limits to Mary S. Young Park) in accordance with 2016 TSP and 2016 Highway 43 Concept Plan, optimizing traffic flow at major intersections and improving ped/bike safety.	\$12,430,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	82nd Ave. Bike and Ped Safety Improvements	10018	Monterey Ave.	Sunnybrook Blvd.	Improve safety for bike and pedestrian system by completing gaps and implementing proven safety counter measures at identified locations within the corridor. Improve ADA accessibility.	\$2,840,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	82nd Ave. Multi-Modal Improvements	10014	Clatsop Ave.	Monterey Ave.	Improve safety for bicyclists and pedestrians by implementing proven safety counter measures, widening to add sidewalks, lighting, central median, planting strips and landscaping.	\$23,520,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	West Linn	OR 43 Multimodal Improvements - Holly St. to Mary S. Young State Park	10127	Holly St.	Mary S. Young State Park	Improve roadway with widening, turn lanes, street trees, signal interconnections, cycle tracks, and sidewalks.	\$50,339,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Holcomb Boulevard Safe Routes to School Project	12266	Holcomb School Road	Winston Drive	Construct sidewalk, street lighting and bicycle lane on the north side of roadway. Project including RRFB's at Oak Tree Terrace & Winston Drive, a when flashing school zone.	\$2,100,000	\$2,100,000	\$2,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Main Street Bike & Pedestrian Improvements	11184	Agnes Avenue	10th Street	Construct streetscape improvements from 10th Street to 15th Street. Construct separated multi-use path or sidewalks and bike lanes from 15th Street to Agnes Avenue. (TSP D90, W3, B3, B4, S1)	\$13,230,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Willamette Falls Shared-Use Path	10123	10th Street	S 2nd Street	Add a shared-use path along the Willamette River. (TSP S3)	\$5,740,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Holcomb Boulevard Bike & Pedestrian Improvements	10047	Abernethy Road	UGB	Complete sidewalk and bike lane gaps on both sides, improve street lighting, add four enhanced street crossings, install a speed warning system near Winston Drive and smooth out the curve near Long View Way. (TSP W6, W11, W12, W13, B9, B12, D16, C3, C4, C5, C6)	\$20,680,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Meyers/Beavercreek Shared-Use Path	11546	Morrie Drive	Beavercreek Road	Regional trail would generally follow the Power line alignment, beginning at the Oregon City Loop Trail, meander through a collection of residential neighborhoods on and off a collection of local roads, and into an essential Oregon City Business core area. (TSP S22)	\$4,790,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Molalla Avenue Bike & Pedestrian Improvements, Phase 2	10124	Holmes Lane	Beavercreek Road	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. Also includes adaptive signal timing upgrades project (D1, W73 - Not shown in TSP Walking solutions map)	\$12,760,000	\$0	\$0	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Oregon City Loop Trail, Phase 1	10148	Bueler Road	Hwy 99E	Regional trail would generally follow the Oregon City UGB on a collection of local roads, through new development, along Power line right-of-way, and down the bluff to link up with the Promenade in downtown Oregon City. (TSP S23, S26, C17, S30, C21, S33, C22, C23, S34, C27, FF10, FF15, FF16) The project or a portion of the project is outside the designated urban growth boundary.	\$10,480,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Washington Street Bike & Pedestrian Improvements (South)	10120	Home Depot Drive	Abernethy Road	Complete the Boulevard project including stormwater low impact development design improvements, sidewalks, landscaping and street lighting. (TSP WS)	\$4,330,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Willamette River Shared-Use Path	11186	S 2nd Street	UGB	Add a shared-use path along the railroad grade. Rehabilitate existing boardwalk between South 2nd Street and Hedges Street (TSP Project S37).	\$12,990,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	SMART	SMART	SMART Bus stop access improvements	11343	NA	NA	Design & construct a variety of improvements to enhance access to transit including bus stops, bus shelters (with solar or conventional lighting), bus pull-outs, ADA improvements at stops, interactive kiosks, etc.	\$2,032,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	To be determined	Clackamas County	I-205 Multiuse Path from OR 224 to OR 212 Design and Environmental	12204	OR 224	OR 212	Conduct public engagement and prepare project preliminary design	\$1,707,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette Falls Drive Multimodal Improvements - 10th St. to Tualatin River	11747	10th St.	Tualatin River (S. City Limits)	Provide bike lanes/cycle tracks and sidewalks. This will provide a direct connection between downtown Willamette Main Street area and South city limits.	\$8,482,701	\$3,400,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette River Greenway Trail	10129	Willamette Park	Willamette Falls - Mill St.	Paved trail running parallel to the Willamette River from Willamette Park at the mouth of the Tualatin River eventually to the Lake Oswego City Limits facilitating connection to the Willamette River Trail with neighboring cities as part of the Metro Region.	\$1,559,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Ostman Road/Blankenship Road Improvements	11748	Johnson Rd.	Willamette Falls Dr.	Provide congestion relief, address safety issues, and improve bike/ped connectivity	\$3,007,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Rosemont Rd./Carriage Way Multimodal Project	11755	Suncrest Dr.	Carriage Way	Includes construction of multimodal improvements to including turn lanes, sidewalks, and bike lanes.	\$6,581,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Salamo Bike and Ped Project	11754	Tannler Dr.	Barrington Dr.	Provide bike lanes/cycle tracks and sidewalks. Project will allow for connection with existing bike/ped facilities on a high traffic arterial and encourage alternative modes of transportation.	\$2,323,356	\$1,428,000	\$1,428,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Sunset Bike and Ped Project	11756	Cornwall St.	Willamette Falls Dr.	Provide bike lanes/cycle tracks and sidewalks. Project will allow for connection with existing bike/ped facilities.	\$4,100,040	\$800,000	\$800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette Falls Drive Multimodal Improvements - OR 43 to 10th St.	10128	OR 43	10th St.	Provide bike lanes/cycle tracks and sidewalks. This will provide a direct connection between commercial areas (including Downtown Oregon City).	\$23,188,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	French Prairie Drive Pathway	11777	Country View Lane	Miley Road	Construct 10 foot wide shared use path, removing bicycles and pedestrians from vehicle travel lane.	\$2,300,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	I-5 Walking and Biking Bridge	11554	Boones Ferry Rd.	Town Center Loop Road	Construct bike/pedestrian bridge over I-5 to connect Town Center area with businesses and neighborhoods west of I-5.	\$14,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Boeckman Creek Trail	11555	Canyon Creek Park	Memorial Park	Construct multi-use trail along Boeckman Creek with connections to parks	\$5,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	French Prairie Bicycle/Pedestrian/Emergency Bridge	10133	Boones Ferry Rd.	Butteville Rd..	New bicycle/pedestrian/emergency vehicle only bridge crossing the Willamette River. This project or a portion of the project is located outside the urban growth boundary.	\$36,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Ice Age Tonquin Trail (Segments 1, 2, 3 and 4)	10092	Washington/Clackamas County line	Boones Ferry Landing	Shared use path with some on-street portions consistent with Metro Ice Age Tonquin Trail Master Plan. The project or a portion of the project is outside the designated urban growth boundary.	\$22,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Wilsonville Town Center Cycle Track - Town Center Loop West to Memorial Drive	12201	SW Town Center Loop West	SW Memorial Drive	Construct two-way cycle track through Wilsonville Town Center.	\$3,800,000	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Clackamas County	ODOT	ODOT	I-205 Abernethy Bridge (CON)	11969	OR99E Interchange	Oswego Hwy (OR 43) Interchange	Widen both directions of the I-205 Abernethy Bridge and approaches to address recurring bottlenecks on the bridge. Install Active Traffic Management (ATM) on northbound and southbound I-205. The project will include new pedestrian and bicycle facilities around OR 43 and OR 99E to increase comfort for people walking, biking or rolling in these areas. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS). ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes).	\$545,000,000	\$545,000,000	\$545,000,000	2023-2030	Yes
Freight	Clackamas County	To be determined	West Linn	Willamette Falls Locks Repair Project	12090	Willamette Falls Locks	Willamette Falls Locks	Capital improvements needed to repair and reopen the Willamette Falls Locks to support freight transportation, tourism and recreation activities. The project includes structural and electrical repairs, seismic upgrades, and other elements.	\$45,556,000	\$0	\$0	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Pricing Programs	Clackamas County	ODOT	ODOT	I-205 Tolling Project (PE)	12099	Oswego Hwy (OR 43) Interchange	Stafford Rd Interchange	The Project would toll all lanes of I-205 on or near the Abernethy Bridge and Tualatin River Bridge. The Project's purpose is to raise revenue to fund construction of the I-205 Improvements Project and manage congestion between Stafford Road and Oregon Route 213 (OR 213). The PE phase includes completion of environmental analysis under the National Environmental Policy Act (NEPA). The NEPA process for the I-205 Toll Project will analyze the benefits and impacts of tolling on I-205 between Stafford Road and Oregon Route 213 (OR 213), and describe mitigation commitments. The Project area includes all adjacent, connected, or parallel highways as described in ORS 383.009(2)(j) that may or may not be impacted by diversion. Money from the Toll Program Fund will be used to fund improvements in the Project area, including any mitigation identified for toll related impacts, and I-205 improvements in the Project area, pending NEPA outcomes. The Project will enhance the connection between tolling on I-205 and the Regional Mobility Pricing Project. The Project will use the Oregon Toll Program's Equity Framework and demonstrate how the pricing system will manage demand to reduce greenhouse gases. Before a toll is assessed, the Project will establish and implement equitable income-based toll strategies as described in HB 3055 Section 162 (2021). I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total	\$27,000,000	\$27,000,000	\$27,000,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	162nd Ave Extension South: Phase 2	11346	157th Ave.	Rock Creek Blvd.	Extend 162nd Ave from 157th Ave to Rock Creek Blvd by constructing new, 3 lane roadway with continuous left turn lane, sidewalks, bike lanes, traffic signals and bridge over Rock Creek. Project improves access to Rock Creek Employment Center and industrial sector.	\$26,400,000	\$15,640,000	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd Ave: Phase 1 - Design	10033	Cheldelin Rd.	Sunnyside Rd.	Phase 1 design work to widen 172nd to five lanes between Sunnyside Rd and 172nd - 190th Connector and to three lanes from the 172nd - 190th Connector to Cheldelin Rd. Project includes bike lanes, sidewalks and continuous left turn lane.	\$6,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd Ave: Phase 2 - Construction	12071	Cheldelin Rd	Sunnyside Road	Public right-of-way acquisition and construction to widen 172nd to five lanes between Sunnyside Rd and 172nd - 190th Connector and to three lanes from the 172nd - 190th Connector to Cheldelin Rd. Project includes bike lanes, sidewalks and continuous left turn lane.	\$51,200,000	\$16,796,000	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	82nd Drive/Strawberry Lane Intersection	11514	82nd Dr/Strawberry Lane Intersection	N/A	Improve safety at a key intersection on a high crash corridor by implementing proven safety counter measures, installing a traffic signal and turn lanes on eastbound and northbound approaches, improve ADA accessibility as necessary.	\$4,837,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Oregon City	Beavercreek Road Improvements, Phase 3A	10026	Clackamas Community College	Meyers Road	Widen to 3 lanes with sidewalks and bike lanes. (TSP D81 & D82)	\$11,073,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd/79th Ave Intersection (TSAP)	11763	80th Place	79th Ave	Construct new signalized intersection at the intersection of Johnson Creek Blvd and either 79th Ave or 80th Place and implement proven safety counter measures at high injury location identified in county Transportation Safety Action Plan, including bike/ped and ADA accessibility improvements as necessary.	\$2,504,000	\$2,504,000	\$2,504,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	162nd Ave Extension South: Phase 1	10041	Rock Creek Blvd.	Hwy. 212	Extend 162nd Ave from Rock Creek Blvd to Hwy-212; construct new, 3 lane roadway with continuous left turn lane, sidewalks, bike lanes, intersection improvements at Hwy. 212/162nd on all four approaches. Project terminates at industrial employment sector. In addition, will improve safety on a High Injury Corridor.	\$12,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd-190th Connector: Phase 1 - Design	12193	172nd Ave	190th	Phase 1 design to construct connector between 172nd and 190th Ave using adopted alignment; project includes bike lanes, sidewalks and continuous left turn lane; important connector in n/s freight route alternative to I-205 between I-84 and Hwy-212.	\$5,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Foster Rd (Upper): Widening and Multimodal	10035	Cheldelin Rd	172nd 190th Connector	Widen two-lane minor arterial from the county line to the 172nd/190th connector, to include continuous left turn lane, sidewalks and bike lanes. Project segment length is 2,000 ft.	\$10,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Stafford Rd Improvements	12205	I-205	Boeckman Rd / Advance Rd	Implement needed safety investments as identified in Road Safety Audit.	\$14,421,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	West Linn	Stafford Rd./Childs Rd. Intersection Improvements	12073	Stafford Rd./Childs Rd. Intersection	Stafford Rd./Childs Rd. Intersection	Installation of traffic circle at existing intersection to improve traffic circulation and safety. Project was identified through the Clackamas County Road Safety Audit. This project or a portion of the project is located outside the urban growth boundary.	\$5,694,500	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	West Linn	Stafford Rd./Rosemont Rd. Improvements	12074	Rosemont Rd./Stafford Rd. Intersection	I-205 interchange	Addition of paved shoulders per the Clackamas County Active Transportation Plan. Addition of turn lanes at major intersections. Project identified through Clackamas County Road Safety Audit. This project or a portion of the project is located outside the urban growth boundary.	\$4,555,600	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Sunnyside Rd East Extension	10076	SE 172nd Ave.	Foster Road	Construct new 5 lane road with continuous left turn lane, sidewalks, bike lanes, and roundabouts. Project component of Happy Valley Boulevard.	\$64,800,000	\$11,000,000	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Misty Drive Extension: 162nd - 169th	11271	162nd Ave.	169th	Construct new 3 lane road with continuous left turn lane, sidewalks, bike lanes, traffic signal and bridge over Rock Creek. Project location improves access to government services, urban and employment centers.	\$18,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Rock Creek Blvd: New Road and Multimodal	11135	172nd	177th Ave.	Construct new 3 lane road from 172nd Ave to 177th Ave. Facility improvements include signal modifications at 172nd with dedicated left and right turn lanes at the intersection, continuous left turn lane, sidewalks, and bike lanes.	\$11,400,000	\$3,300,000	\$0	2031-2045	Yes

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Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	Boones Ferry Rd bike lanes	11081	Country Club	North City Limits	3,500' long widening includes retaining walls above and below the roadway grade for bike lanes, sidewalks, and intermittent turn lanes.	\$17,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	Lakeview Boulevard Improvements	11935	Jean Road	SW McEwan Road	3,500' long widening for two 14' shared use lanes with an 8' sidewalk on one side separated by stormwater planter and curb.	\$4,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	4th Street Reconstruction	11609	4th/A Ave	4th/B Ave	450' long, 60' wide roadway reconstruction. 12' travel lanes, 8' parking lanes, 10' sidewalks.	\$5,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Group 8--Street Connectivity & Intersection Improvement Projects	11540	Various locations	Various locations	Harrison St and King Rd Connection Enhance connection between King Rd and Harrison St at 42nd Ave. Intersection Improvements at 42nd Ave and King Rd Enhance intersection function. Intersection Improvements at 42nd Ave and Harrison St = Signalize intersection to facilitate dominant traffic flow. Intersection Improvements at Johnson Creek Blvd and Linwood Ave = Improve safety of crossing at intersection. Intersection Pedestrian Signal Improvements City-wide - committed. Traffic-Calming Improvements on River Rd at Lark St = Install traffic-calming measures such as a permanent speed-warning sign and/or roundabout.	\$2,784,500	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Local Street Improvements in Tacoma Station Area	11624	Location-specific	Location-specific	Construct street improvements on Stubb St, Beta St, Ochoco St, Hanna Harvester Dr, and Mailwell Dr. (TSAP). Street improvements will improve connectivity to equity priority areas.	\$8,732,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Harrison St Capacity Improvements	11542	32nd Ave	42nd Ave	Widen to standard three lane cross section.	\$8,656,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Linwood/Harmony Rd./ Lake Rd. Intersection	10000	Railroad Ave / Linwood Ave / Harmony Rd Intersection	Railroad Ave / Linwood Ave / Harmony Rd Intersection	Railroad crossing and intersection improvements based on further study of intersection operations including bikeways and pedestrian facilities to be undertake jointly by the City of Milwaukie and the County	\$48,517,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Kellogg Creek Dam Removal and OR 99E Underpass	10101	Location- Specific	Location- Specific	Replace OR 99E bridge over Kellogg Creek, remove dam, restore habitat. Construct bike/ped undercrossing between downtown Milwaukie and Riverfront Park. Improves cyclist and pedestrian safety and increases connectivity in an equity priority area.	\$40,654,000	\$19,900,000	\$19,900,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 213 & Beaver Creek Road WB Right-Turn Merge Lane	11758	OR 213 & Beaver Creek Road	~1,300 feet north of OR 213 & Beaver Creek Road	Addition of a Westbound Right-Turn Free Flow Acceleration Lane on Hwy 213 Northbound, approximately 1,300 feet in length.	\$4,470,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Group 4--Pedestrian Improvements at Hwy 224	11537	Harrison St	Freeman Way	Intersection Improvements at Hwy 224 and 37th Ave: Consolidate the two north legs of 37th Ave and International Way into one leg at Hwy 224. Intersection Improvements at Hwy 224 and Oak St: Add left-turn lanes and protected signal phasing on Oak St approaches.  Study of Pedestrian Crossings on Hwy 224 = Examine alternatives for improving pedestrian crossings at five intersections along Hwy 224 (Harrison St, Monroe St, Oak St, 37th Ave, Freeman Way).  Intersection Improvements at Hwy 224 and Oak St = Improve pedestrian crossing.  Intersection Improvements at Hwy 224 and 37th Ave = Improve pedestrian crossing.  Hwy 224 Crossing Improvements at Oak and Washington St = Improve intersection crossing safety for bicyclists at Washington St and Oak St.  Intersection Improvements at Hwy 224 and Freeman Way = Improve pedestrian crossing.  Intersection Improvements at Hwy 224 and Harrison St = Improve pedestrian crossing.  Intersection Improvements at Hwy 224 and Monroe St = Improve pedestrian crossing.	\$7,061,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	Hwy 99E & I-205 SB Interchange Access	10144	Dunes Drive	I-205 SB Ramp Terminus	Dual left turn lanes on 99E approach to SB I-205 ramp, ramp widening to accommodate approach. (Closely related to TSP D75, D76 but not actually these projects)	\$6,040,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	McLoughlin Blvd-River Rd Intersection Improvements	11539	Location-specific	Location-specific	Consolidate a single access point for the area at Bluebird St with full intersection treatment and signalization or add second northbound left-turn lane at River Rd. This project improves safety and reduces congestion in an equity priority area.	\$2,278,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Clackamas County	OR 212 Intersection Improvements	11670	172nd Ave	242nd Ave	Improve safety and reduce delay by making improvements as recommended in the Damascus Mobility Plan to the intersections of Sunnyside Rd/OR 212, Foster Rd/OR 212, 222nd Ave/OR 212 and 242nd Ave/OR 212.	\$39,862,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 213 & Redland, Phase 2	10119	Redland Road	Redland Road Undercrossing	Add third through lane in both northbound & southbound directions. This is Phase 2 of the completed Jughandle Project. (TSP D79)	\$22,780,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 99E & I-205 NB Interchange Access	11891	I-205 SB Ramp Terminus	I-205 NB Ramp Terminus	Dual left turn lanes on 99E approach to NB I-205 ramp, ramp widening to accommodate approach, dual left turn lanes from off-ramp on to Hwy 99E SB, signal modifications. (Closely related to TSP D75, D76 but not actually these projects)	\$6,040,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Linn/Leland/Meyers Road Roundabout	11183	Linn/Leland/Meyers Intersection	Linn/Leland/Meyers Intersection	Reconstruct intersection for safety and capacity improvements into a roundabout. (TSP D34)	\$5,740,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Maple Lane Road & Walnut Grove Way Roundabout	12267	Walnut Grove Way	Beaver Creek Road	Construction of a roundabout at the intersection of Maple Lane Road and Walnut Grove Way.	\$1,500,000	\$1,500,000	\$1,500,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Molalla Avenue Roundabout	11182	Taylor Street	Division Street	Reconfigure intersection for safety and LOS into roundabout. (TSP D30)	\$2,710,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Holly Lane Extension (North)	11545	Maple Lane Road	Thayer Road	Construct new 3 lane roadway, sidewalks, bike lanes, turn lanes to serve UGB expansion area. (TSP D57) The project or a portion of the project is outside the designated urban growth boundary.	\$10,940,000	\$0	\$0	2031-2045	Yes

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Roadway (Capital)	Clackamas County	Confederated Tribes of the Grand Ronde Community of Oregon	TBD	Willamette Falls Legacy Project Internal Roadways	12089	Willamette Falls Legacy Project Area	Willamette Falls Legacy Project Area	Construct new roadways to support the Willamette Falls Legacy Project and Riverwalk, consisting of Main Street, Water Street, 4th Avenue, 3rd Street, and Railroad Street, including sidewalks and bikeways.	\$13,224,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boeckman Rd. at Boeckman Creek	10156	Canyon Creek Rd. N	Stafford Rd.	Widen Boeckman Road to 3 lanes with bike lanes, sidewalks and connections to regional trail system and install bridge. The road has had a serious injury. A vertical curve has limited sight distance causing reduced emergency response times. The installation of buffered bike lane and complete sidewalks will remove conflicts that exist on the current two lane road.	\$19,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Courtside Drive Extension - Town Center Loop West to Park Place: Complete Street	12199	SW Town Center Loop West	SW Park Place	Construct two lane extension of Courtside Drive through Wilsonville Town Center with sidewalks, curb extensions, street trees, lighting, and on-street parking.	\$6,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Park Place Extension - Wilsonville to Courtside: Complete Street	12196	SW Courtside Drive	SW Wilsonville Road	Construct two lane extension of Park Place through Wilsonville Town Center with sidewalks, curb extensions, street trees, lighting, on-street parking and traffic signal at Wilsonville Road.	\$6,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Parkway Ave Urban Upgrade	11775	Target/Costco Entrance	Printer Parkway	Widen to 3 lane section and add sidewalks and buffered bike lanes. The road is adjacent to I-5, which encourages higher speeds along this stretch of road. This project will create a left turn pocket for access to employment along with removing pedestrian traffic from the vehicle lane.	\$8,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Stafford Road Urban Upgrade	11773	Kahle Road	Boeckman Road	Widen road to 3 lane section with sidewalks and buffered bike lanes which will remove pedestrians from the vehicle travel lane. This project or a portion of the project is located outside the urban growth boundary.	\$16,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Wilsonville Road Intersection Modifications - Town Center Loop West to Town Center Loop East	12197	SW Town Center Loop West	SW Town Center Loop East	Implement traffic management plan to improve traffic flow, add wider sidewalks and safer pedestrian crossings, and add bike lanes.	\$3,200,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Advance Road - Stafford to 60th: Complete Street	12200	SW Stafford Road	SW 60th Avenue	Widen to 3 lane section and add sidewalks and protected bike lanes. The project also adds a roundabout at the 60th Avenue intersection for traffic calming.	\$14,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boones Ferry Road Extension	11764	Commerce Circle	Ridder Road	Construct 3-lane section with bike lanes and sidewalk	\$4,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Printer Parkway Urban Upgrade	11776	Parkway Avenue	Canyon Creek Road	Widen to 3 lane section at intersections and add sidewalks, bike lanes and multi-use path.	\$8,200,000	\$0	\$0	2031-2045	Yes
Throughways	Clackamas County	ODOT	West Linn	I-205 / 10th Street Improvements	11242	Willamette Falls Drive	Blankenship Rd / Salamo Road	Construct a long-term interchange improvement to provide congestion relief, address safety issues, and improve bike/ped connectivity.	\$12,162,696	\$5,000,000	\$5,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-205 Southbound and Northbound widening (PE, ROW)	11586	Oswego Hwy Interchange	Stafford Rd Interchange	PE/ROW Phase. The project is located along a 7-mile portion of Interstate 205 (I-205) between the Stafford Road and OR 213 interchanges. Add variable rate tolls on the I-205 Abernethy Bridge and Tualatin River Bridges to raise revenue for construction of planned improvements on I-205 and to manage congestion. Adds a third travel lane in each direction of I-205 between the Stafford Road interchange and OR 43 interchange, constructing a northbound auxiliary lane between OR 99E and OR 213, and seismic upgrades to or reconstruction of eight bridges along I-205 between Stafford Road and OR 213. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes). The project or a portion of the project is outside the designated urban growth boundary.	\$68,000,000	\$53,000,000	\$53,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	11904	Oswego Hwy Interchange	Stafford Rd Interchange	The Project is located along a 7-mile portion of Interstate 205 (I-205) between the Stafford Road and OR 213 interchanges. Add variable rate tolls on the I-205 Abernethy Bridge and Tualatin River Bridges to raise revenue for construction of planned improvements on I-205 and to manage congestion. Adds a third travel lane in each direction of I-205 between the Stafford Road interchange and OR 43 interchange, constructing a northbound auxiliary lane between OR 99E and OR 213, and seismic upgrades to or reconstruction of eight bridges along I-205 between Stafford Road and OR 213. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes).	\$557,000,000	\$0	\$0	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (PE, RW)	12305	Wilsonville Rd	Wilsonville-Hubbard Hwy	Conduct preliminary engineering and right of way work to address congestion, safety, and the seismic resiliency of Interstate 5 in the vicinity of the Boone Bridge. The project will replace Boone Bridge with a seismically resilient structure and add an auxiliary lane on SB I-5 from Wilsonville Road to the Wilsonville-Hubbard Highway (OR 551), preserving the current NB auxiliary lane, to address crashes due to short merging distances, closely spaced interchanges and frequently congested conditions both on and just south of the Boone Bridge. Bike/ped access will be determined. A portion of the project is outside the designated urban growth boundary.	\$50,000,000	\$0	\$0	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (PE, ROW)	10890	122nd Ave	172nd Ave.	Conduct preliminary engineering (PE) and acquire right-of-way (ROW) on phase 2 of the OR 212/224 Sunrise Corridor from SE 122nd Ave to SE 172nd Ave consistent with the Final Environmental Impact Statement (FEIS)/Record of Decision (ROD).	\$85,000,000	\$0	\$0	2023-2030	Yes



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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Throughways	Clackamas County	ODOT	ODOT	OR 224 Milwaukie Expressway improvements	11350	I-205	Rusk Rd	Construct a third westbound lane on Milwaukie Expressway (Hwy-224) from I-205 to Rusk Rd.	\$20,000,000	\$0	\$0	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (UR, CN, OT)	11990	Wilsonville Rd	Wilsonville-Hubbard Hwy	Replace Boone Bridge with a seismically resilient structure and add an auxiliary lane on SB I-5 from Wilsonville Road to the Wilsonville-Hubbard Highway (OR 551), preserving the current NB auxiliary lane, to address crashes due to short merging distances, closely spaced interchanges and frequently congested conditions both on and just south of the Boone Bridge. Bike/ped access will be determined. A portion of the project is outside the designated urban growth boundary.	\$670,000,000	\$0	\$0	2031-2045	Yes
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	11301	122nd Ave	172nd Ave.	Construct Phase 2 of the OR 212/224 Sunrise corridor, consisting of a 4-lane roadway from SE 122nd Ave to SE 172nd Ave, consistent with the FEIS/ROD.	\$331,000,000	\$0	\$0	2031-2045	Yes
Transit Capital - Other	Clackamas County	TriMet	TriMet	Park Avenue Park & Ride	12253	12952 SE 27th Pl, Milwaukie	12952 SE 27th Pl, Milwaukie	This project is a part of the Portland-Milwaukie Light Rail Project to add two floors to the Orange Line Park Avenue Park and Ride and approximately 320 parking spaces in a single phase of construction.	\$24,000,000	\$8,100,000	\$8,100,000	2023-2030	Yes
Transit Capital - Other	Clackamas County	TriMet	Clackamas County	Transportation demand management and transit supportive investments	11937	Countywide	Countywide	Implement Transportation Demand Management techniques and Transit supportive investments as identified in the Transit Development Plan, such as micro-transit, shuttles, mobility hubs, first and last mile options, shelters and park-and-rides	\$10,000,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Bus Purchases and Replacements - including Alternative Fuel Vehicles	11109	NA	NA	Purchase new buses and replace those that are out of date, unreliable or inoperable. New and replacement buses will include alternative fuel vehicles.	\$11,152,000	\$900,000	\$400,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Customer Service Center at Wilsonville Transit Center	11750	9699 SW Barber St, Wilsonville, OR 97070	9699 SW Barber St, Wilsonville, OR 97070	SMART transit customer service center on first floor in a multi-story transit oriented development (TOD) facility with intention to provide regional customer service hub for multiple transit providers. Affordable housing on the upper levels.	\$6,373,000	\$1,900,000	\$1,900,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	Wilsonville SMART Fleet Facility Expansion	11112	28879 SW Boberg Rd, Wilsonville, OR 97070	NA	Completion of SMART fleet facility expansion to underground electrical for bus charging, expand bus parking area, and update security gate.	\$7,074,000	\$250,000	\$250,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	TriMet	TriMet	Oregon City Transit Center Improvements	12270	1035 Main St, Oregon City	1035 Main St, Oregon City	Expand and retrofit the Oregon City transit center to add bus layover capacity for service expansion, make pedestrian safety improvements and improve amenities for bus operators and riders.	\$8,800,000	\$5,000,000	\$5,000,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Commuter Bus Service to Neighboring Communities	11327	NA	NA	Additional service hours for new services and related bus stop and ROW improvements to neighboring communities; such as but not limited to Salem, Tigard, Tualatin, Sherwood, Keizer, Woodburn, Portland, etc.	\$9,432,000	\$76,000	\$76,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service for Wilsonville Developing Areas	11108	NA	NA	Additional service hours for new services and related bus stop and ROW improvements for the developing areas of Wilsonville; such as the areas of Coffee and Basalt Creek, and Frog Pond.	\$3,983,000	\$0	\$0	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service to Clackamas Town Center and Oregon City	11328	Wilsonville Transit Center, 9699 Barber St., Wilsonville, OR 97070	Clackamas Town Center, 12000 SE 82nd Ave, Happy Valley, OR 97086	Additional service hours for new service to Clackamas Town Center and related bus stop and ROW improvements, with possible intermediate stops at Riverside High School, and in cities of West Linn, and/or Oregon City.	\$15,242,000	\$472,000	\$472,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service from Wilsonville to downtown Portland	11107	Wilsonville	Downtown Portland	Create bus commuter route from Wilsonville Transit Center to the Downtown Portland area.	\$5,377,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Clackamas County	SMART	SMART	SMART Vanpool Services	11531	NA	NA	Continue and expand vanpool program in partnership with Commute with Enterprise.	\$1,694,000	\$96,000	\$96,000	2023-2030	Yes
Transportation System Management (Technology)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek/Linwood Ave ITS Improvements (project underway using federal funds)	11766	Johnson Creek Blvd/Linwood Ave Intersection	Johnson Creek Blvd/Linwood Ave Intersection	Implement proven safety counter measures by adding intelligent transportation system improvements at the intersection of Johnson Creek Blvd and Linwood Ave to provide warnings and special phasing for bicyclists and pedestrians. Include ADA accessibility improvements as necessary.	\$1,594,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Clackamas County	Clackamas County	Clackamas County	Sunnyside Road Adaptive Signal Control Phase II	11762	132nd Ave	172nd Ave	Install adaptive signal control at major intersections from 132nd Ave to 172nd Ave and upgrade ADA accessibility features as necessary.	\$2,959,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County, Multnomah County	To be determined	Lake Oswego	Lake Oswego to Portland Trail	10087	Hwy 43/A Ave	Sellwood Bridge	3.15 mile multi-use pathway adjacent to existing Willamette Shore (rail) Line. Connects Lake Oswego to Portland at Sellwood Bridge. Part of the Willamette River Greenway Trail. Full construction cost to be shared by all agency partners. Initial costs shown for planning, engineering, and possible acquisitions.	\$22,800,000	\$0	\$0	2031-2045	Yes
Throughways	Clackamas County, Multnomah County	ODOT	ODOT	I-205 Active Traffic Management	11305	Columbia River	I-5	Construct improvements to address recurring bottlenecks on I-205. Specific improvements as identified in operational analysis, Mobility Corridor analysis, refinement planning and Active Traffic Management Atlas.	\$18,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Clackamas County, Multnomah County	TriMet	TriMet	ETC: Lombard/Cesar Chavez Enhanced Transit Project	12034	St. Johns Town Center	Milwaukie Town Center	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit Maintenance	Clackamas County, Multnomah County	TriMet	TriMet	Willamette Shore Line Improvements	12257	311 N State St, Lake Oswego	S Lowell & Bond, 0650, S Lowell St, Portland	Repair and replace trestles, routine maintenance and track improvements on Willamette Shore Line rail corridor.	\$4,000,000	\$4,000,000	\$4,000,000	2023-2030	Yes
Roadway (Capital)	Clackamas County, Washington County	Clackamas County	Clackamas County	65th/Elligsen/Stafford Intersection Roundabout	10054	65th, Elligsen, Stafford Rd. intersections	65th, Elligsen, Stafford Rd. intersections	Implement proven safety counter measure, a roundabout, at a high crash intersection identified in the county adopted TSAP.	\$15,593,000	\$0	\$0	2023-2030	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Service, Operations and Maintenance: 2023-2030	12097	SMART service area	SMART service area	Operations of transit services, such as drivers, security, facilities and rolling stock maintenance.	\$43,435,000	\$1,500,000	\$1,500,000	2023-2030	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Weekend Service Expansion	11994	NA	Portland Metro Area	Additional service hours for in-town and security services.	\$5,576,000	\$0	\$0	2023-2030	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Service, Operations and Maintenance: 2031-2045	12324	N/A	N/A	Operations of transit services, such as drivers, security, facilities and rolling stock maintenance.	\$86,869,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Multnomah County	Portland	Portland	N Willamette Blvd Bikeway	11842	N Rosa Parks Way	N Richmond Ave	Enhance existing bikeway from Rosa Parks to Ida by adding protection and extend protected bikeway to Richmond. Incorporate pedestrian safety and access to transit improvements throughout the project.	\$6,000,000	\$6,100,000	\$915,137	2023-2030	Yes
Active Transportation - Bicycle	Multnomah County	Portland	Portland	Terwilliger Bikeway Gaps	11862	SW Sheridan St	SW Boones Ferry Rd	Design and implement bicycle facilities to fill in gaps in the Terwilliger Bikeway.	\$2,000,000	\$0	\$0	2023-2030	Yes

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Active Transportation - Pedestrian	Multnomah County	Multnomah County	Multnomah County	ADA Curb Ramp Replacements: Tier 1	12221	N/A	N/A	Design and reconstruct all Tier 1 curb ramps not compliant with ADA standards in County right of way according to the County ADA Transition Plan.	\$7,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Multnomah County	Multnomah County	Multnomah County	ADA Curb Ramp Replacements: Tier 2	12243	N/A	N/A	Design and reconstruct all Tier 2 curb ramps not compliant with ADA standards in County right of way according to the County ADA Transition Plan.	\$11,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Multnomah County	Portland	Portland	Eastside MAX Station Pedestrian Improvements	10312	122nd Ave	162nd Ave	Retrofit existing streets along eastside MAX and at intersecting streets to include better sidewalks and crossings, curb extensions, bus shelters, and benches at 122nd, 148th, and 162nd stations.	\$7,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Fairview	Fairview	Fairview Parkway Multi-Use Path and Bike/Transit Hub	12262	Halsey St/Fairview Parkway	NE 213 Ave/Park Cleone	Construct a multi-use pathway along Fairview Parkway connecting Salish Ponds and Park Cleone City Parks. Along this route, project will also develop a bike and transit hub at the northeast corner of the NE Fairview Parkway/NE Halsey St intersection.	\$6,700,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	181st - I-84 to San Rafael: Pedestrian and Bicycle Improvements	11676	I-84	San Rafael	Complete sidewalk connections on 181st from I-84 to San Rafael - Bicycle improvements and routing at I-84 interchange.	\$2,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	1st Street - Powell to 257th: Complete Buildout	10425	242nd Ave.	257th Ave.	Construct to minor arterial standards with sidewalk and bicycle lane.	\$3,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Division - Gresham/Fairview Trail to Wallula/212th: Sidewalks, Bike Lanes	10440	Gresham Fairview Trail	Wallula	Add bicycle lanes and sidewalks.	\$9,500,000	\$7,166,000	\$7,166,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham Transit Center: Access and Design Enhancements	10441	Gresham Transit Center	Gresham Transit Center	Improve sidewalks, lighting, crossings, bus shelters, benches.	\$2,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham/Fairview Trail - Halsey to Sandy: Construct Multi-Use Path	10437	Halsey	Sandy Blvd.	Construct multi-use path between Halsey and Sandy.	\$7,800,000	\$5,000,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham/Fairview Trail - Sandy to Marine (Phase V): New Multi-Use Path	11602	Sandy Blvd.	Marine Dr.	Construct multi-use path between Sandy Blvd. and Marine Dr. This ultimately connects the Springwater Trail to Marine Drive Trail.	\$4,800,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Pleasant View Bridge - start of the Powerline Trail multi-use path	12220	Powell Loop	100 feet south of Johnson Creek	Reconstruct bridge with sidewalk and bicycle lanes. Prepares access for East Buttes Powerline Trail.	\$5,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Powell Multi-Use Path	12219	Cleveland	1st Street	Construct a multi-use path along the north side of Powell Blvd, from Cleveland to 1st Street.	\$3,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Wy'East Way/Max Path - Cleveland to Hogan: Construct Multi-Use Path	10436	Cleveland	Hogan	Construct new shared multi-use path to from 197th to Hogan.	\$4,200,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	162nd - I-84 RR Bridge: Reconstruct for Ped/Bike	10492	NE Russell Street	City Limits	Reconstruct RR bridge to accommodate sidewalks and bikeways.	\$6,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	East Buttes Powerline Trail - Springwater to Cheldelin: New Multi-Use Path	10069	Springwater/Gresham-Fairview trail	Cheldelin Road	Construct new shared multi-use trail 14 ft. wide pervious asphalt.	\$6,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Kelley Creek Multi-Use Path - Springwater Trail to Rodlun Road	11074	Springwater Trail	Rodlun Road	Construct new shared multi-use trail 14ft. wide pervious asphalt	\$20,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave: Fairview Elementary School Bike and Pedestrian Facilities	12222	Lincoln St	Bridge St	Construct new sidewalks along the west side of the road from Lincoln Street to Cedar Street/First Street. Install bike lanes on both sides of the road between Lincoln and Bridge Street. Install stormwater catch basin/facility treatment in southwest corner of Harrison Street and NE 223rd Avenue/Cedar Street/First Street intersection. Improve pedestrian ramps to meet ADA needs at Lincoln Street, Walnut Lane, SE Matney Street, Harrison Street, Cedar Street/First Street. (502U)	\$2,600,000	\$2,600,000	\$2,600,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave. (Gisan St to Sandy Blvd): Complete Street	10388	Gisan St	Sandy Blvd	Reconstruct 223rd Avenue to 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes, and intersection improvements. To address safety and reduce crashes the project will use proven safety countermeasures. Project does not include implementation of a context sensitive design through area known as Old Town Fairview. (501U, 502U)	\$12,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Main Streets on Halsey	10385	201st Ave	Historic Columbia River Hwy	Reconstruction of the Halsey corridor through Fairview, Wood Village, and Troutdale to be a pedestrian and bike-friendly "main street" based on the Main Streets on Halsey Street Design Concept Plan. This includes a roundabout, intersection improvements, bicycle-specific safety enhancements, new sidewalk/lighting/crossing enhancements, pedestrian/bicycle crossing with refuge and/or RRB. (519U, 520U, 522U)	\$37,200,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Safe Streets Project Implementation	11599	East Multnomah County	East Multnomah County	Implement safety countermeasures on High Injury Corridors as prioritized in Safety Action Plan and Safe Routes to School program across East County cities.	\$5,700,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Safety corridor: 257th (Cherry Park - SE Stark)	11684	Cherry Park Rd/SWSturges Drive	SE Stark St	Address high crash corridor using proven safety countermeasures including improved street crossings, street lighting, bike boxes, and other measures identified through public engagement process. Project will also repave road, upgrade signals, and reconstruct ADA curb ramps.	\$6,800,000	\$6,800,000	\$6,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Sandy Blvd Complete Street: Quail Hollow to 230th	12223	Quail St.	230th St	Reconstruct Sandy Blvd to minor arterial standards with bike lanes, sidewalks and drainage improvements, utilizing recommendations from TGM grant. Addition of bike lanes and sidewalks will improve safety of this area and reduce conflict among modes. To address safety and reduce crashes the project will use proven safety countermeasures.	\$20,200,000	\$1,000,000	\$1,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Sandy Blvd. Complete Street: 201st to Quail Hollow	10399	201st Ave	Quail St.	Fill gaps in sidewalks and bike lanes and add enhanced crosswalks and transit access improvements. This project will use proven safety countermeasures to reduce conflicts between freight and neighborhood use. Also includes replacing a culvert for fish passage.	\$7,900,000	\$6,800,000	\$400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road at Beaver Creek: Fish Passage Restoration and Fill Bike and Pedestrian Gap	11673	Beaver Creek crossing at Troutdale Rd	Beaver Creek crossing at Troutdale Rd	Replace the existing culvert and failed fish ladder on Beaver Creek at Troutdale Rd with a new bridge. The project will fill a gap in sidewalks and bicycle lanes on Troutdale Rd where there is currently not adequate space over the existing culvert. (542U)	\$11,600,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road: Bike and Pedestrian Safety Improvements	11674	SW Cherry Park Rd	Stark St	Reconstruct S Troutdale Road between SW Cherry Park Road and SE Stark Street to major collector standards with two travel lanes, a center lane or median, sidewalks, and bicycle lanes. Project includes enhanced pedestrian crossings at Beaver Creek Lane and the planned regional trail. Project does not include major culvert replacement over Beaver Creek (see 11673). (542U)	\$12,100,000	\$0	\$0	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave. (Sandy Blvd to 40 Mile Loop): Complete Street	10389	Sandy Blvd	40 Mile Loop	Improve 223rd Ave to major collector standards including 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes; to address safety and reduce crashes the project will use proven safety countermeasures. Project includes replacing a culvert for fish passage. Replacement of RR bridge not included in this proposal (10394) (503U)	\$22,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Buxton Road- Historic Columbia River Highway to SE Cherry Park Rd: Bike and Crossing Improvements	12244	Historic Columbia River Highway	SE Cherry Park Rd	Add on-street bike lanes on Buxton Road between East Historic Columbia River Highway and SW Cherry Park Road and reconfigure existing crossings at SW 7th Street and at SW Cherry Park Road for walking and biking to be consistent with Safe Routes to School Action Plan. Install traffic signal at intersection of East Historic Columbia River Highway and Buxton Road. (508U, 542U)	\$3,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Glisan St - 202nd Ave to 207th Ave: Complete Street	10386	202nd Ave./Gresham-Fairview Trail	207th Ave./Salish Ponds Natural Area	Reconstruct Glisan Street to provide multimodal connection between Gresham-Fairview Trail, Salish Ponds Natural Area, and area schools. Include bike lanes, sidewalks, and two travel lanes in each direction. Design green-street treatment for drainage improvements, including Fairview Creek culvert replacement. South side of Glisan St is in Gresham, north is City of Fairview. To address safety and reduce crashes the project will use proven safety countermeasures. (516U)	\$27,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	NE 223rd Avenue: North Railroad Crossing Bridge Replacement	10394	2000' north of I-84	2000' north of I-84	Reconstruct railroad bridge on 223rd Ave, 2000' north of I-84 to accommodate wider travel lanes, sidewalks and bike lanes; to address safety and reduce crashes the project will use proven safety countermeasures. (504U)	\$31,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Scholls Ferry, SW (Humphrey - County line): Multimodal Improvements	10188	SW Humphrey	County Line	Complete street improvements based on the Scholls Ferry Concept Plan, including bicycle and pedestrian facilities and improved stormwater drainage. Project also includes intersection improvements at SW Patton Road for a dedicated left turn lane for the southbound direction, ADA ramp improvements, and signals with permissive / protective phasing. Project includes complete overlay from SW Thomas Street to Sheridan Court. (535U, 536U)	\$48,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Stark St - 257th Ave to Troutdale Rd: Complete Street	10382	257th Ave.	Troutdale Rd.	Reconstruct SE Stark Street between SW 257th Avenue and S Troutdale Road to minor arterial standards which includes filling gaps in bicycle lanes, sidewalks, and multimodal intersection improvements at SW 257th Avenue. Project also includes enhanced pedestrian crossings at SW Corbath Lane, and at future regional trail crossing.	\$16,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Halsey/I-205 Overcrossing Trail	11647	NE 92nd Ave & Tillamook St	NE 102nd Ave & Halsey St	Sidewalk infill and bike lanes on 92nd from Tillamook to Halsey. Multi-use path on Halsey structure over I-205 to connect to Gateway and I-205 Path.	\$3,500,000	\$3,500,000	\$1,035,850	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	SW Macadam Ped/Bike Improvements	10309	SW Bancroft	County Line	Improve pedestrian and bicycle crossings of Macadam and connections to the Willamette Greenway Trail.	\$2,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	I-405 South Portland Crossing Improvements	11787	SW Harbor Dr	SW Broadway	Improve opportunities for people walking and bicycling to cross I-405 on Harbor Dr, Naito Pkwy, 1st, 4th, 5th, 6th, and Broadway.	\$11,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Multnomah Viaduct Safety Improvements	11830	Multnomah Blvd, SW (I-5 Crossing)	Multnomah Blvd, SW (I-5 Crossing)	Construct new bicycle and pedestrian facilities at or parallel to Multnomah Blvd viaduct crossing I-5.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	NW Bridge Ave Multi-use Path	11814	St Helens Rd	St Johns Bridge	Construct a multi-use path along Bridge Avenue between both St Helens Rd intersections.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Upper I-405 Trail	11792	SW Water	SW 4th	Design and implement a pedestrian and bicycle connection along the I-405 off-ramp to 4th & Lincoln. Supports future Green Loop project.	\$6,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	IUS 26 Multi-use Path	11831	Canyon Ct	Canyon Rd	Design and implement a multi-use path.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	West Portland Connected Centers Project	10287	West Portland Town Center	West Portland Town Center	Construct high-priority bikeways, pedestrian improvements, and transit priority treatments in and around West Portland Town Center.	\$10,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Port of Portland	Port of Portland	40 Mile Loop: Blue Lake Park to Sundial Road	12075	Blue Lake Park	Sundial Road	Construct two segments of a 10-foot wide, paved multi-use path as part of the greater 40 Mile Loop, for a total of 1.6 miles, located in the Troutdale Reynolds Industrial Park along the Sandy and Columbia Rivers.	\$4,159,000	\$4,159,000	\$4,159,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	122nd Ave Corridor Safety and Transit Improvements	11868	NE Prescott St	SE Foster Rd	Construct multimodal corridor safety and access to transit improvements as well as transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$37,000,000	\$20,000,000	\$20,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	57th/Cully Safety Improvements	11845	Prescott/Cully	Klickitat/57th	Construct sidewalk infill, curb ramp upgrades, protected bike lane, and a signal rebuild at Fremont.	\$8,500,000	\$8,500,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	60th MAX Station Area Improvements	11320	60th Ave MAX Station Area	60th Ave MAX Station Area	Construct priority pedestrian and bicycle access to transit improvements in the 60th Ave MAX Station Area, as identified in the Growing Transit Communities Plan. Improve traffic safety on NE Halsey St.	\$9,500,000	\$2,408,600	\$2,408,600	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Brentwood-Darlington Safe Routes to School	11856	SE 52nd Ave	SE 87th Ave	Sidewalk infill behind existing curb on SE Duke St and SE Flavel St from 52nd Ave to 82nd Ave. Construct a neighborhood greenway on Knapp and Ogden from 52nd to 87th, with traffic calming and crossing improvements.	\$5,500,000	\$5,350,000	\$2,467,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Central City Multimodal Safety Improvements, Phase 2	11832	Portland Central City	Portland Central City	Construct high-priority bikeways, pedestrian improvements, and transit priority treatments in the Central City, identified through the Central City Multimodal Project planning phase.	\$10,000,000	\$0	\$0	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Division-Midway Connected Centers Project Phase 1	11859	Division-Midway Town Center	Division-Midway Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to Division-Midway Town Center and nearby neighborhood centers, including projects identified in the Division-Midway Neighborhood Street Plan and the Growing Transit Communities Plan.	\$5,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	E Burnside Safety and Access to Transit	11858	82nd Ave	102nd Ave	Construct priority pedestrian and bicycle safety and access to transit improvements in the E Burnside corridor, as identified in the Growing Transit Communities Plan, including ITS and NextGen TSP.	\$9,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Flanders/Naito Crossing	10232	NW Flanders St & Naito Pkwy	NW Flanders St & Naito Pkwy	Construct a new at-grade crossing of Naito Parkway. This project will be coordinated with the railroad operator and ODOT Rail.	\$2,500,000	\$2,400,000	\$2,400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Holgate Blvd Corridor Improvements	10307	SE McLoughlin Blvd	SE 92nd Ave	Design and construct multimodal safety improvements along Holgate Blvd, including enhanced pedestrian crossings at regular intervals, bus stop improvements, lighting upgrades, bike network improvements, and signal upgrades. Reconstruct pavement in segments in poor condition along the corridor.	\$5,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Jade & Montavilla Connected Centers Project	11855	Jade District and Montavilla Neighborhoods	Jade District and Montavilla Neighborhoods	Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers.	\$7,000,000	\$7,200,000	\$3,132,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Killingsworth/Interstate Connected Centers Project, Phase 1	11846	Killingsworth/Interstate Town Center	Killingsworth/Interstate Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to the Killingsworth / Interstate Town Center and nearby Neighborhood Centers.	\$5,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Area Connected Centers Project, Phase 1	11316	Lents Town Center	Lents Town Center	Construct pedestrian and bicycle improvements to build out the active transportation network in and around Lents Town Center and other nearby Neighborhood Centers.	\$5,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Columbia Blvd Safety Improvements	10341	N Lombard St	N Argyle St	Improve safety and access by filling high-priority sidewalk gaps, adding pedestrian crossings, improving access to transit (supporting TriMet's proposed future bus line from N Lombard St to NE 60th Ave), and employing safety countermeasures to reduce motor vehicle crashes. Design and implement a protected bikeway or multi-use path along Columbia Blvd from N Lombard St to N Portsmouth Ave to fill a gap in the bikeway network.	\$8,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Interstate Ave Bike and Ped Safety Improvements	11843	N Russell St	N Argyle St	Enhance existing bike lanes and extend bike lanes to fill gaps along the corridor. Improve pedestrian safety at signalized intersections, especially at MAX station locations.	\$2,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Columbia Blvd Safety Improvements	12321	N Argyle St	NE 60th Ave	Fill high-priority sidewalk gaps, adding pedestrian crossings, improving access to transit for proposed bus line from N Lombard to NE 60th and employ safety countermeasures to reduce motor vehicle crashes.	\$8,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Halsey Safety and Access to Transit	10320	NE 67th Ave	NE 92nd Ave	Construct high-priority safety and access to transit improvements along the Halsey corridor, as identified in the Growing Transit Communities Plan. Elements include bicycle facilities on Halsey/82nd overpass, improvements to existing path under Halsey overpass west of MAX station, and neighborhood greenway connection to Tillamook.	\$5,000,000	\$5,200,000	\$2,271,261	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 1	11640	Kelley Point Park	N. Columbia Blvd	Construct the North Slough Bridge and build trails connecting south to Columbia Blvd and north to Marine Drive to fill the last remaining gaps in Segment 1 of the N Portland Greenway Trail.	\$5,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 2	11641	N. Columbia Blvd	Cathedral Park	Build a multi-use trail connecting Chimney Park, Pier Park, Baltimore Woods, Cathedral Park, and St Johns.	\$5,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Trail: Columbia Blvd Bridge	11741	N Columbia Blvd at Chimney Park	N Columbia Blvd at Chimney Park	Construct a pedestrian/bicycle bridge over Columbia Blvd and adjacent connections. Connects North Portland Greenway Trail segments 1 and 2.	\$10,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Alberta Neighborhood Greenway	11847	NE 72nd Ave	I-205 Path	Design and implement a neighborhood greenway, including connection through or around Sacajawea Park.	\$5,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Holgate Blvd Corridor Improvements	11823	92nd Ave	136th Ave	Construct sidewalks and crossing improvements to facilitate pedestrian travel and access to transit. Enhance existing bicycle facilities and extend bicycle facilities from 130th to 136th.	\$4,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Stark Safety and Access to Transit	10321	SE 111th	City Limits	Construct priority pedestrian and bicycle access to transit improvements in the Outer Stark corridor, as identified in the Safer Outer Stark Plan. Elements include improved pedestrian crossings, enhanced bikeways, transit stop improvements, transit priority improvements, lighting upgrades, and roadway design changes to improve traffic safety. Project includes repaving to address areas in poor condition.	\$21,500,000	\$21,350,000	\$1,509,712	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Taylors Ferry Safety Improvements, Segment 1	10284	SW Capitol Hwy	SW 48th	Widen shoulders to provide bike lanes and construct a walkway for pedestrian travel and access to transit. Rebuild traffic signal.	\$11,500,000	\$0	\$0	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Prescott Multimodal Improvements	10311	NE 72nd Ave	I-205 Path	Install separated bike lanes on Prescott from 72nd Ave to I-205 Path. Construct sidewalk infill on Prescott from Sandy to 92nd.	\$5,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Red Electric Trail, Segment 1	12207	City Limits	SW Bertha Blvd	Provide east-west route for pedestrians and cyclists in SW Portland that connects the Fanno Creek Trail to the Hillsdale neighborhood.	\$11,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SE 92nd Ave Safety Improvements	10271	SE Stark	City Limits	Design and implement bicycle facilities to fill all bikeway gaps along SE 92nd Ave. Enhance existing bike lanes. Fill sidewalk gaps and provide enhanced pedestrian crossings at regular intervals.	\$3,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Seventies Greenstreet and Bikeway	10220	NE Lombard St	SE Flavel St	Develop a combined pedestrian greenway and bike boulevard including crossing improvements from Lombard St to the Springwater Corridor.	\$11,500,000	\$11,500,000	\$5,465,133	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	St Johns Connected Centers Project	10182	St Johns Town Center	St Johns Town Center	Enhance pedestrian connectivity and access to transit, improve safety, improve sub-standard streets, add lighting and crossings, and construct bikeway connections within and around St Johns Town Center.	\$5,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Stark/Washington Multimodal Improvements	10319	SE 92nd	SE 111th	Build protected bike lanes, pedestrian crossings, and transit improvements in and around the Stark/Washington couplet in Gateway Regional Center.	\$12,500,000	\$12,250,000	\$400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Water Ave Corridor Improvements and Realignment	11786	SE Stark St	SE Caruthers St	From Stark to Clay, remove rails from roadway, repair pavement, build sidewalks, and provide an enhanced bikeway. South of Clay, realign SE Water Ave as shown in the OMSI Master Plan.	\$22,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	102nd Ave Corridor Safety Improvements	12217	NE Weidler St	SE Washington St	Design and implement safety and access to transit improvements.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Alderwood Path	10338	NE Cornfoot Rd	NE Columbia Blvd	Construct a multi-use path on the west side of Alderwood to separate pedestrians and bicyclists from motor vehicle traffic.	\$5,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Beaverton-Hillsdale Hwy Corridor Improvements	10279	SW Capitol Hwy	City Limits	Improve corridor safety and access to transit by adding a planted median, enhanced crossings at bus stops and other destinations, lighting improvements, and intersection redesigns.	\$6,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Broadway/Weidler Corridor Improvements	11646	Broadway Bridge	NE 24th Ave	Enhance existing bike lanes and improve pedestrian/bicycle crossings. Add traffic signals, improve signal timing, improve transit stops, provide transit priority treatments, and construct streetscape improvements.	\$19,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cascade Station Trail	11837	Cascade Station	NE Alderwood Rd & Glass Plant Rd	Construct a multi-use path connecting Cascade Station to Alderwood via Glass Plant Rd, and add eastbound bike lane to Alderwood underneath I-205.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Columbia Slough Trail Gaps	10234	Confluence of Columbia Slough and North Slough	NE 158th Ave	Close gaps in Columbia Slough Trail: North Slough to North Portland Rd; Vancouver to NE Elrod; NE Elrod to NE 47th Ave; I-205 to approx. NE 128th; NE 145th to 158th, Delta Park Trail.	\$11,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cross-Levee Trail	11813	NE Marine Dr	NE Sandy Blvd	Construct a multi-use path, with crossing improvements at Sandy, Airport Way, and Marine Dr.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cully to Columbia Connector	11804	NE Lombard St	NE Columbia Blvd	Upgrade Cully Blvd to include curbs, drainage, sidewalks, and bike lanes. Improve safety for all modes at railroad crossing.	\$8,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Division-Midway Connected Centers Project, Phase 2	11824	Division-Midway Town Center	Division-Midway Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to Division-Midway Town Center and nearby neighborhood centers.	\$10,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Fields Park Pedestrian / Bicycle Bridge	11780	NW Overton	NW Naito Pkwy	Construct a pedestrian/bicycle bridge over the railroad tracks and Naito Pkwy.	\$15,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Foster Rd Corridor Improvements, Phase 2	11817	SE Powell Blvd	SE 90th Ave	Construct remaining elements from the Foster Rd Transportation and Streetscape Plan, including curb extensions along the corridor, bikeway improvements, and roadway widening or lane reconfiguration at 82nd/Foster in order to extend bike lanes through intersection.	\$4,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Gateway 99th/96th Streetscape Improvements	10205	SE Stark St	SE Market St	Construct streetscape improvements including wider sidewalks, lighting, street trees, center turn lane, bike lanes, and new signals.	\$9,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Gateway Pacific St Streetscape Improvements	10204	99th Ave	102nd Ave	Construct streetscape improvements including wider sidewalks, lighting, street trees, center turn lane, bike lanes, and new signals.	\$16,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Halsey/Weidler Safety and Access to Transit	11851	NE 100th Ave	NE 122nd Ave	Construct the Halsey/Weidler area active transportation improvements identified in the Growing Transit Communities Plan to provide safe access to schools and transit.	\$11,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Hollywood Town Center Safety Improvements	10268	Hollywood Town Center	Hollywood Town Center	Implement multimodal safety improvements including traffic signals, restriping, improved pedestrian crossings, and connections to transit center.	\$15,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	I-84 Path Extension	11850	I-205 Path	NE 122nd Ave	Construct a multi-use path using existing bridge from I-205 Path to NE Fremont St and a two-way bikeway along the south side of NE Fremont St connecting to I-84 Path at 122nd, with sidewalk infill on the north side of NE Fremont St.	\$15,500,000	\$0	\$0	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Capitol Hwy Corridor Improvements	10273	SW Terwilliger	SW Sunset	Construct sidewalks, crossing improvements for access to transit, and bike improvements, and install left turn lane at the Capitol/Burlingame intersection.	\$6,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner E Burnside Corridor Improvements	11816	12th Ave	82nd Ave	Improve multimodal safety and access along the E Burnside corridor, including bikeway network improvements, enhanced crossings, roadway safety redesign, and transit access and priority improvements, including ITS and NextGen TSP.	\$25,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Milwaukie Streetscape Improvements	11818	Gideon	Mall	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner NE Glisan St Corridor Safety Improvements	12231	NE 60th Ave	NE 82nd Ave	Design and implement safety and access to transit improvements.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Killingsworth/Interstate Connected Centers Project, Phase 2	11805	Killingsworth / Interstate Town Center	Killingsworth / Interstate Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to the Killingsworth / Interstate Town Center and nearby Neighborhood Centers.	\$10,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Area Connected Centers Project, Phase 2	12009	Lents Town Center	Lents Town Center	Construct pedestrian and bicycle improvements to build out the active transportation network in and around Lents Town Center and other nearby Neighborhood Centers.	\$10,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Town Center Improvements, Phase 2	10186	SE 94th Ave	SE 101st Ave	Enhance bike facilities and implement Lents Town Center Business District Transportation Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, and street lighting.	\$5,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Marine Dr Trail Gaps	10206	I-5	NE 122nd Ave.	Construct remaining gaps in the Marine Dr Trail, including two gaps in the Bridgeton area and one from 112th Ave to 122nd Ave. Coordinate with Army Corps of Engineers levee project and I-5 Bridge Replacement project to fill some of these gaps in the Bridgeton and East Columbia areas.	\$11,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Markham School Pedestrian/Bicycle Overpass	10286	I-5 near Markham School	I-5 near Markham School	Construct pedestrian path and bridge over Barbur Blvd. and I-5 to connect SW Alfred and SW 52nd to the rear of Markham School.	\$31,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Argyle Corridor Improvements	10219	Columbia Blvd	Denver Ave	Design and implement pedestrian and bicycle facilities on N Argyle from N Columbia Blvd to N Denver Ave. Construct safety and connectivity improvements at the Columbia, Brandon, and Denver intersections.	\$5,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE 82nd Ave to PDX Airport Corridor Improvements	11803	Alderwood	Lombard	Construct pedestrian and bicycle facilities and other safety improvements. Includes a portion of NE 82nd Ave under ODOT ownership from just south of NE Lombard St to just south of the Columbia Slough.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Killingsworth St Corridor Safety Improvements	11940	NE MLK Jr Blvd	NE Lombard St	From MLK Jr Blvd to 42nd Ave, add enhanced pedestrian crossings at regular intervals to improve safety and access to transit. From 42nd Ave to Lombard St, redesign roadway to enhance existing bicycle facilities, add and enhance pedestrian crossings, construct transit stop improvements, and support safety and access to transit.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Prescott Safety Improvements	11806	I-205	NE 122nd Ave	Construct bicycle facilities, sidewalks, and crossing improvements for pedestrian and bicycle safety and to improve access to transit.	\$4,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Hayden Island Drive	11632	Burlington Northern Rail Bridge	Hayden Island	Construct a multi-use path on one side of N Hayden Island Dr, and install pedestrian/bicycle crossing improvements.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 3	11642	Cathedral Park	Swan Island	Build a multi-use trail connecting the Cathedral Park with Swan Island via University of Portland and Willamette Cove.	\$32,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 4	11643	Swan Island	N. Going St	Build a multi-use trail connecting Waud Bluff Trail to N Going Street through Swan Island.	\$11,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 5	11644	N. Going St	N. Tillamook/ Interstate	Build a multi-use trail along the Albina Yard connecting Swan Island to the Rose Quarter.	\$16,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Glisan Corridor Improvements, Segment 2	10203	NE 122nd	City Limits	Retrofit street with new traffic signals, bicycle facilities, improved pedestrian facilities and crossings, street lighting, transit priority, and other safety and access to transit improvements.	\$4,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Post Office Blocks Transportation Improvements, Phase 2	11795	NW 9th to Broadway; NW Lovejoy to Hoyt	NW 9th to Broadway; NW Lovejoy to Hoyt	Extend the Green Loop through the Broadway Corridor redevelopment site from North Park Blocks to Broadway Bridge. Enhance existing bike lanes along Broadway and Lovejoy viaducts.	\$11,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Red Electric Trail, Segment 2	10354	SW Bertha Blvd	Willamette Park	Provide east-west route for pedestrians and cyclists in SW Portland that connects the Hillsdale neighborhood to the Willamette Greenway Trail.	\$15,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sixties Neighborhood Greenway	11821	NE Sacramento St	Springwater Trail	Design and implement a neighborhood greenway, with traffic calming and enhanced crossings as needed.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Slavin Rd Ped/Bike Improvements	11829	SW Barbur Blvd	SW Corbett Ave	Build a pedestrian and bicycle connection on Slavin Road from Barbur to Corbett, and construct an improved pedestrian/bicycle crossing of Barbur at the Capitol Hwy on-ramp.	\$8,000,000	\$0	\$0	2031-2045	Yes



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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Springwater Gap Trail	10159	SE Linn St	SE 19th Ave.	Construct trail-with-rail multi-use path between Linn and 19th to fill in the "Springwater Gap."	\$15,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sullivan's Gulch Trail: Jonesmore Segment	11808	NE 62nd Ave	NE 92nd Ave	Construct a multi-use trail for pedestrians and bicycles along Broadway and Jonesmore adjacent to the I-84 sound wall, with an improved crossing of 74th Avenue. Provide neighborhood greenway bikeway connections west to 62nd & Hancock and east to 92nd & Schuyler.	\$4,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sunset Blvd Ped/Bike Improvements	10280	SW Dosch	SW 18th Dr.	Construct a pedestrian walkway and climbing bike lane.	\$5,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW 30th/Hume/31st Pedestrian and Bike Improvements	12091	SW Capitol Highway	SW Barbur Boulevard	Construct a pedestrian walkway and bicycle facilities	\$6,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW Multnomah Blvd Ped/Bike Improvements, Phase 2	11351	SW 31st Ave	SW 40th Ave	Provide separated pedestrian and bicycle facilities, along with stormwater management facilities.	\$2,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW Pomona/64th Ped/Bike Improvements	11825	Pomona & 61st	Barbur & 64th	Construct sidewalks and bicycle facilities.	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Swan Island Active Transportation Improvements	11197	Various roadways on Swan Island	Various roadways on Swan Island	Improve access and mobility on Swan Island by constructing the recommended bikeway and trail network in the Portland Bicycle Plan for 2030, including an improved bikeway connection from Basin to Going Ct.	\$10,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Troutdale	Troutdale	Troutdale Sandy Riverfront Trail	12109	Gateway to the Gorge Visitor Center, Troutdale	I-84 bike/ped interchange	Project includes a 1/4 mile, 12-ft wide paved trail and three parks. The trail connects the existing I-84 pedestrian/bike interchange to downtown Troutdale through the urban renewal area along the Sandy River.	\$3,500,000	\$3,500,000	\$3,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Troutdale	Troutdale	Troutdale 2nd Street Ped/Bike Bridge	12108	SW Halsey ST	SW 2nd ST and SW Kendall Ave	Construct a pedestrian/bicycle bridge over 257th, a high-crash corridor. The project will connect the Halsey corridor project to downtown Troutdale bicycle/pedestrian facilities. Project emerged from 2020-2040 Town Center Plan, adopted in the 2022 amendment of the 2014 Transportation System Plan	\$4,555,600	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Multnomah County	BNSF	Portland	N Lombard St Bridge Replacement	12234	Lombard St, N (over railroad cut)	Lombard St, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	\$31,000,000	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Earthquake Ready Burnside Bridge: Phase 2 (Design)	11376	Willamette River	Willamette River	Earthquake Ready Burnside Bridge project will increase safety of people and structures during and after an earthquake by replacing the Burnside Bridge with a seismically resilient structure. Phase 2 will move into the Design, Right of Way, and Utility Phases based on the Preferred Alternative defined during the NEPA Phase.	\$127,600,000	\$9,800,000	\$9,800,000	2023-2030	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Earthquake Ready Burnside Bridge: Phase 3 (Construction)	12076	Willamette River	Willamette River	Earthquake Ready Burnside Bridge project will increase safety of people and structures during and after an earthquake by replacing the Burnside Bridge with a seismically resilient structure. Phase 3 will move forward with construction.	\$767,200,000	\$0	\$0	2023-2030	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Stark Street Bridge over Sandy River: Replacement	11375	Stark Street Bridge at Sandy River	Stark Street Bridge at Sandy River	Replace the existing Stark Street Bridge with a new bridge that meets current design standards, provides improved bike and pedestrian facilities, and is seismically resilient.	\$18,000,000	\$2,200,000	\$2,200,000	2023-2030	Yes
Bridge (Capital)	Multnomah County	Portland	Portland	Kittridge Bridge Seismic Retrofit	10244	NW Kittridge/Yeon Bridge	NW Kittridge/Yeon Bridge	Retrofit existing seismically vulnerable bridge (#010) across railroad tracks to ensure emergency response and access to petroleum supplies located along the Willamette River in the event of an earthquake.	\$31,000,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Movable Span Deck Replacement	12224	Willamette River	Willamette River	Replace failing FRP deck on the movable span of the Broadway Bridge (BUN-BR-16)	\$20,900,000	\$20,900,000	\$20,900,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Rehabilitation 2	11902	Willamette River	Willamette River	Electrical/structural upgrade to gates (BUN-BR-10), fix pavement and update drainage, restripe (BUN-BR-11); replace lighting (BUN-BR-07).	\$22,600,000	\$0	\$0	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Rehabilitation: Phase 2	12077	Willamette River	Willamette River	Deck rehabilitation on bridge approaches (BUN-HA-17)	\$9,600,000	\$9,600,000	\$9,600,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Morrison Bridge Rehabilitation: Phase 2	11128	Willamette River	Willamette River	Painting and structural rehabilitation on the Morrison Bridge west approach (BUN-MO-09).	\$9,000,000	\$9,000,000	\$9,000,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Limited Seismic Retrofit	12248	Willamette River	Willamette River	Limited seismic upgrades to ensure life safety and to prevent collapse of the bridge during a major earthquake (BUN-BR-06).	\$67,100,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge West Approach Structural Rehab and Paint	12245	Willamette River	Willamette River	Lead paint removal and repainting of west approach; structural concrete and steel repairs (BUN-BR-09)	\$37,900,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Limited Seismic Retrofit	12247	Willamette River	Willamette River	Limited seismic upgrades to ensure life safety and to prevent collapse of the bridge during a major earthquake (BUN-HA-06).	\$65,100,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Rehabilitation	10413	Willamette River	Willamette River	Strengthen load capacity (BUN-HA-08) and operating machinery, trunnion, and trunnion tower structural rehabilitation (BUN-HA-01)	\$30,800,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Structural Rehab	12246	Willamette River	Willamette River	Span lock and live load shoe rehab (BUN-HA-02) and main river spans structural rehab (BUN-HA-10)	\$20,400,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Morrison Bridge Rehabilitation: Phase 3	11958	Willamette River	Willamette River	Repave bridge asphalt approaches and upgrade drainage, repair concrete approach decks, and improve illumination (BUN-MO-02) and movable span bearing and span lock improvements (BUN-MO-02).	\$30,100,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Multnomah County	Multnomah County	Marine Dr - Interlachen to I-84: Freight and Multimodal Improvements	10401	Interlachen	I-84	Reconstruct Marine Drive to have a two-way, five-lane cross section. Project includes constructing sidewalks and bicycle lanes where there are currently gaps. (S28U,S29U,S30U)	\$81,700,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	ODOT	Portland	NE Lombard & 33rd Ave Ramp Redesign	12209	NE Lombard St	NE 33rd St.	Redesign ramps and intersections from Lombard to 33rd to reduce motor vehicle speeds, address turning conflicts, and consolidate access points. Close one ramp and signalize remaining. Provide a pedestrian and bicycle connection from Lombard to 33rd Ave.	\$8,000,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Port of Portland	Port of Portland	T4 Modernization	11208	Terminal 4	Terminal 4	The Port of Portland's Terminal 4 Berth 410 is located at the Port of Portland's (Port) Terminal 4 along the Willamette River and functions as part of a bulk-material handling and loading facility leased and operated by Kinder Morgan for exporting soda ash. It is a timber structure built between 1959 and 1962 and is an extension of the Berth 411 wharf structure. A structural inspection of Berth 410 conducted in 2018 showed that the overall condition of Berth 410 has significantly deteriorated over time, and that in order to assure continuing safe operations, it needs either significant repairs or a full replacement.	\$22,000,000	\$22,000,000	\$22,000,000	2023-2030	Yes

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Freight	Multnomah County	Port of Portland	Port of Portland	T6 Modernization	11207	Terminal 6	Terminal 6	The Port of Portland's Strengthening Terminal 6 in Response to Operational Needs, Growth, and Energy Reliability Project (STRONGER T6 or the "Project") consists of pavement improvements to Yards 604, 605, 606, and 607, upgrades to the electrical system serving these areas, and a new stormwater collection system. The Project will bring the pavement and the electrical system to a state of good repair so that they can operate at a high standard for years to come, and reduce terminal operating costs and emissions from electricity generation.	\$42,106,000	\$42,106,000	\$42,106,000	2023-2030	Yes
Freight	Multnomah County	Portland	Portland	Central Eastside Access and Circulation Improvements	11841	Central Eastside	Central Eastside	Improve access and circulation in the Central Eastside by adding new signals and crossings at Salmon & Grand, Salmon & MLK, Washington & Grand, Ankeny & Sandy, and 16th & Irving.	\$7,500,000	\$3,600,000	\$3,600,000	2023-2030	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Freight Improvements: Project Development	12004	NE 60th Ave	NE 82nd Ave	Alternatives analysis and project development to identify preferred street and intersection modifications to improve freight reliability and access to industrial properties. Analyze the feasibility and benefits of freight-only lanes to ensure improvements prioritize freight movement.	\$2,000,000	\$0	\$0	2023-2030	Yes
Freight	Multnomah County	Portland	Portland	Cathedral Park Quiet Zone	10375	Cathedral Park UPRR Tracks, N	Cathedral Park UPRR Tracks, N	Address rail switching noise related to the Toyota operations at T-4 by improving multiple public rail crossings in the St. Johns Cathedral Park area.	\$13,000,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Freight Improvements: Design/Construction	10376	NE 60th Ave.	NE 82nd Ave.	Construct street and intersection modifications to improve safety, freight reliability, and access to industrial properties, based on results of project development (RTP ID #12004).	\$53,500,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd over Columbia Way and Railroad Bridge Replacements	10331	N Columbia Blvd over Columbia Way and BNSF railroad	N Columbia Blvd over Columbia Way and BNSF railroad	Replace the three existing bridges that carry N Columbia Blvd over to N Columbia Way and the BNSF Railroad, to improve seismic resiliency and address the risk of future weight restrictions.	\$31,000,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Over-Dimensional Freight Improvement	11801	N Columbia Blvd at railroad bridge near I-5	N Columbia Blvd at railroad bridge near I-5	Reconstruct the UP Railroad Bridge over Columbia Blvd with a type that has more clearance underneath to enable more over-dimensional freight movement. Alternatively, lower the roadway underneath the railroad bridge (potentially requires moving a jet-fuel line).	\$31,000,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Pedestrian Overpass Removal	11800	N Columbia Blvd west of N Midway Ave	N Columbia Blvd west of N Midway Ave	Remove the pedestrian overpass to enable the use of Columbia Blvd as an over-dimensional freight route.	\$3,000,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Marine Dr & 33rd Intersection Improvements	10337	Marine Dr & 33rd Ave. NE	Marine Dr & 33rd Ave, NE	Construct a signal or roundabout to improve safety and freight movements.	\$9,500,000	\$0	\$0	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	NE 60th Ave Rail Undercrossing Improvements	12312	Columbia	Lombard	Improve the NE 60th Ave Rail Undercrossing to improve vertical clearance for freight movement and to provide pedestrian and bicycle facilities.	\$31,000,000	\$0	\$0	2031-2045	Yes
Mega Project	Multnomah County	ODOT	ODOT	I-5 Interstate Bridge Replacement Program	10866	Victory Blvd.	Washington state line	Replace I-5/Columbia River bridges, add auxiliary lanes and improve interchanges on I-5, extend light rail transit from Expo Center to Vancouver, WA, add protected/buffered bikeways, cycletracks and a new trail/multuse path or extension and implement variable rate tolling.	\$6,000,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	162nd - Glisan to Halsey: Complete Buildout	10447	Glisan	Halsey	Construct to 3 lanes with buffered bike lanes and sidewalks. Focus is on safety and access to transit improvements to support future frequent service transit.	\$13,700,000	\$8,443,000	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	181st - Glisan to Yamhill: Complete Buildout w/Boulevard Design	10454	Glisan	Yamhill	Construct safety improvements such as center medians for access management, ADA sidewalk improvements, and lighting.	\$8,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th - 30th to Richey: Complete Buildout	10533	30th	Richey	Improve existing road to 5-lane arterial standards with sidewalk and planter strip, signalize 190th at Giese, Butler, SW 41st.	\$5,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	223rd at Stark: Add Turn Lanes	10473	223rd at Stark	223rd at Stark	Add EB and NB RT lanes and 2nd NB and SB LT lanes.	\$5,300,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - 197th to Eastman: Complete Boulevard Design	10434	197th	Eastman	Complete boulevard design improvements on Burnside from Wallula/212 to Eastman, with median for access control.	\$8,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Cleveland - Burnside to Stark: Complete Buildout	11096	Burnside	Stark	Reconstructs street from Stark to Burnside, with two travel lanes, center turn lane, bike lane, and sidewalk.	\$6,700,000	\$4,938,000	\$4,938,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan at Stark: Add Turn Lanes	10511	Stark	Stark	Add right turn lanes on all approaches and second northbound and southbound left turns.	\$4,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	172nd - Giese to Foster: Complete Buildout	10465	Giese Rd.	Foster Rd.	Upgrade street to urban standards with sidewalks and bikelanes.	\$27,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	182nd - Powell and Division Intersections: Add Turn Lanes and Transit Supportive Design	10498	181st at Division	181st at Powell	At Division: add second westbound left turn lane (TIF P1). At Powell, add northbound and southbound double left turn lanes (TIF P2 and TSP8). At Powell add SB and NB lanes. Transit/Enhanced Transit Corridor supportive project.	\$4,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - 181st to 197th: Construct Boulevard Improvements	10421	181st	197th	Complete boulevard improvements: rain gardens, sidewalk enhancements, lighting.	\$19,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Hogan to Powell: Safety Improvements	10522	Hogan	Powell	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	\$21,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Butler - Binford to Rodlun: Extend Road and Bridge Crossing	10471	Binford	Rodlun	Construct new Butler road extension and bridge crossing.	\$15,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Foster at Kelley Creek: Bridge Crossing in Pleasant Valley	10469	Foster Rd.	Kelley Creek	Reconstruct bridge crossing of Foster Road as bridge crossing for 172nd Avenue in Pleasant Valley area.	\$6,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - 182nd to 172nd: Road, Bike, Ped Extension	10464	182nd	172nd	New extension of Giese Road, 182nd to 172nd.	\$28,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - 182nd to 190th: Complete Buildout	10468	182nd Ave.	190th Ave.	Construct 3 lane street to urban standards with sidewalks and buffered bike lanes.	\$8,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Halsey - 162nd to City Limits: Safety Corridor	11683	162nd	City Limits	Halsey safety corridor - Sidewalk infill, lighting, mid-block crossings.	\$5,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Powell to Burnside: Boulevard Design + Intersection Improvements	10512	Powell	Burnside	Improve east side to boulevard standards with center median, second travel lane, planter strip, and new sidewalk. Bike lane east side between Powell and Burnside.	\$9,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Powell to Palmquist: Complete Buildout	10527	Powell	Palmquist	Improve to urban arterial standards with sidewalks and buffered bikelanes.	\$30,100,000	\$0	\$0	2031-2045	Yes

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Roadway (Capital)	Multnomah County	Multnomah County	Multnomah County	172nd - Cheldelin to Foster: Complete Buildout & Roundabout	10466	Foster	Cheldelin Rd.	Upgrade street to urban standards with sidewalks, bikelanes, and add roundabout at 172nd/Foster.	\$17,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Multnomah County	Multnomah County	Wood Village Blvd: Intersection Safety	12249	Halsey St.	Gilisan St	Evaluate and implement safety of intersections (both public and private roadways) on NE Wood Village Boulevard between Gilisan Street and Halsey Street. (545U, 521U)	\$4,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Inner Powell Blvd Corridor Improvements: Local Contribution to State-Owned Arterial	10259	SE 9th Ave	I-205	Retrofit existing street with multimodal safety improvements including enhanced pedestrian and bicycle crossings, pedestrian and bike activated signals, median islands with trees, redesign of selected intersections, and stormwater management facilities.	\$10,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	N Lombard Corridor Improvements: Local Contribution to State-owned Arterial	10299	N Richmond St	NE MLK Jr Blvd	Design and implement transportation improvements including signal upgrades, lane reconfiguration, enhanced crossings, in-roadway and/or parallel bikeways, and pedestrian improvements along the corridor. Improve pedestrian safety and accessibility of the crossing of I-5. Project will coordinate with ODOT to identify locations and design treatments.	\$5,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	ODOT	Powell, SE (I-205 to 174th) Multi-Modal Improvements, Phase 2	11742	I-205	SE 174th	Widen Street to 3-4 lanes (inclusive of center turn lane) with sidewalks, buffered bikelanes or other enhanced bike facility, and enhanced pedestrian/bicycle crossings. Phase 2 includes all segments except phase 1 (RTP # 11648): 116th to 136th.	\$120,000,000	\$120,000,000	\$120,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	South Portal Intersection Improvements	10164	Bancroft/Hood/Macadam	Bancroft/Hood/Macadam	Improve the South Portal to the North Macadam District (intersection of Bancroft, Hood, and Macadam) to address safety and capacity issues. Includes new extension of Lowell St.	\$11,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Columbia/MLK Intersection Improvements, Phase 2	11877	Columbia/MLK	Columbia/MLK	Intersection and signalization improvements with a dedicated northbound right turn lane, a second dedicated southbound left turn lane, wider sidewalks adjacent to the roadway, and improvements to the geometry of the existing southbound through/right turn lane.	\$15,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	NE Lombard Corridor Safety Improvements: Local Contribution to State-owned Arterial	11865	NE MLK Jr Blvd	NE Sandy Blvd	Construct safety improvements to reduce rear end and lane departure crashes, including improvements at Lombard/11th rail crossing to address crash history. Upgrade existing bicycle facilities east of 11th Ave and extend an in-roadway or parallel bikeway along the corridor west of 11th Ave. Rebuild and add new traffic signals. Improve ped/bike safety at I-205 interchange. Project will coordinate with ODOT to identify locations and design treatments.	\$5,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	NW St Helens Rd Corridor Safety Improvements: Local Contribution to State-owned Arterial	11815	107th	Kittridge	Design and implement pedestrian and bicycle facilities and improve traffic safety for all modes.	\$5,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Outer Sandy Blvd Corridor Improvements: Local Contribution to State-owned Arterial	11810	I-205	Portland City Limits	Widen street to three lanes with a sidewalk and bike lanes from 141st Ave to Portland City Limits. Improve safety for all modes in the Parkrose main street segment.	\$5,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	SW Broadway Traffic Improvements	11788	SW Grant	SW 5th	Make improvements on SW Broadway and/or other city streets to reduce the vehicle queue on the I-405 SB Exit Ramp that connects to SW Broadway.	\$4,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	148th Ave Corridor Improvements, Segment 1	10330	NE Halsey St	SE Powell Blvd	Construct safety and access to transit improvements from Halsey to Powell, including sidewalk infill, enhanced bike lanes, and crossings. Supports future bus service along the corridor.	\$8,000,000	\$7,900,000	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	82nd Ave Corridor Improvements	11844	NE Lombard St	SE Clatsop St	Design and implement multimodal improvements to sidewalks, crossings, transit stops, striping, and signals to enhance ped/bike safety, access to transit, and transit operations. Address major asset needs including pavement, ADA ramps, and traffic signals.	\$150,000,000	\$150,000,000	\$150,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Cesar Chavez Corridor Improvements	10315	NE Sandy Blvd	SE Woodstock Blvd	Repair street, upgrade sidewalks, and add pedestrian/bicycle crossing improvements. Upgrade signals and make striping changes to improve traffic safety and transit operations. Improve access to transit and provide transit priority treatments. Project includes lane reconfiguration south of Powell Blvd to add a center turn lane and bus priority, including ITS and NextGen TSP.	\$14,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Columbia & Cully Intersection Improvements	10336	NE Cully Blvd & Columbia Blvd	NE Cully Blvd & Columbia Blvd	Reconstruct intersection to provide signalization, left turn pockets, enhancing turning radii and improving circulation for trucks serving expanding air cargo facilities south of Portland.	\$4,500,000	\$4,500,000	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Columbia/Alderwood Intersection Improvements	11570	NE Columbia Blvd & Alderwood Rd	Columbia/Alderwood	Improve intersection and install traffic signal at Columbia & Alderwood.	\$5,000,000	\$5,000,000	\$2,559,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Cornfoot Rd Corridor Improvements	10340	NE 47th Ave	NE Alderwood Rd	Improve roadway and intersections to improve freight operations. Construct a multi-use path on the north side of Cornfoot Rd to separate pedestrians and bicyclists from motor vehicle traffic. Install guardrails where needed.	\$7,000,000	\$0	\$0	2023-2030	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Roadway (Capital)	Multnomah County	Portland	Portland	Gateway Local Street Improvements, Phase 2	10328	Gateway Regional Center, NE/SE	Gateway Regional Center, NE/SE	High priority local street and pedestrian improvements in regional center.	\$5,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Inner W Burnside Corridor Improvements	11959	NW 15th Ave	NW 2nd Ave	Construct transportation improvements including pavement reconstruction, new and upgraded traffic signals, turn lanes, curb extensions, bicycle network improvements, transit priority and access improvements, and crossing improvements.	\$4,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	N Lombard St (formerly N Burgard Rd) Viaduct Replacement	11797	N Lombard St (Bridge over UPRR near T4)	N Lombard St (Bridge over UPRR near T4)	Replace the existing N Lombard St (formerly N Burgard Rd) Viaduct (#001) over the UPRR tracks. Completes one element of the larger Barnes to T4 Port project.	\$17,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE Airport Way Safety and Access to Transit	11811	I-205	Portland City Limits	Construct priority pedestrian and bicycle access to transit improvements in the Airport Way corridor, as identified in the Growing Transit Communities Plan.	\$4,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE MLK Jr Blvd Corridor Improvements	10302	NE Hancock St	NE Lombard St	Multimodal safety and access to transit improvements including signal timing upgrades, enhanced pedestrian crossings, access management, and transit priority.	\$4,500,000	\$4,700,000	\$254,039	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Foster Corridor Safety Improvements	11860	SE 101st Ave	City Limits	Improve safety and access by filling high-priority sidewalk gaps, adding pedestrian crossings, enhancing safety of existing bike lanes, and employing safety countermeasures to reduce motor vehicle crash severity. Improve access to transit and transit priority in segments with transit service.	\$2,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Glisan Corridor Improvements, Segment 1	10318	82nd Ave	NE 122nd	Retrofit street with new traffic signals, bicycle facilities, improved pedestrian facilities and crossings, street lighting, and other safety and access improvements. Implement EPASS recommendations.	\$5,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Halsey Corridor Improvements	11849	114th	162nd	Construct enhanced crossings, enhance bicycle facilities, and redesign roadway to reduce crashes. Improve access to transit and transit priority.	\$3,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Post Office Blocks Transportation Improvements, Phase 1	11840	Post Office Blocks	Post Office Blocks	Extend Johnson and Park Streets through the Post Office Blocks redevelopment site. Add traffic signals at 9th/Everett and 9th/Glisan.	\$28,000,000	\$2,095,000	\$2,095,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SE Hawthorne Blvd Corridor Safety Improvements	11854	SE 12th Ave	SE 23rd Ave	Improve safety for all modes, including roadway redesign, crossings, and transit improvements.	\$2,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	W Burnside Corridor Improvements	10250	NW 23rd Ave	NW 15th Ave	Design and construct corridor improvements including pavement reconstruction, sidewalk improvements, safer crossings, new traffic signals, transit priority improvements, and traffic management.	\$6,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	148th Ave Corridor Improvements, Segment 2	12214	NE Airport Way	NE Sacramento St	Widen 148th Ave roadway to three lanes, with pedestrian and bicycle facilities and crossings, from Airport Way to Sacramento St.	\$15,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	B-H Hwy/Bertha/Capitol Hwy Improvements	10274	Intersection B-H Hwy/Bertha/Capitol Hwy	B-H Hwy/Bertha/Capitol Hwy	Redesign intersection to improve safety.	\$3,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Burnside/Skyline Intersection Improvements	10166	Intersection NW Burnside/ Skyline Rd.	Intersection NW Burnside/ Skyline Rd.	Construct intersection improvements at both legs of the double intersection to improve safety for all modes.	\$4,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy Bridge Seismic Retrofit	11828	Capitol Hwy, SW (over Barbur and along hillside)	Capitol Hwy, SW (over Barbur and along hillside)	Retrofit existing seismically vulnerable bridge over Barbur (#139) and semi-viaduct along hillside (#140) to ensure emergency response and economic recovery in the event of an earthquake.	\$31,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol/Vermont/30th Intersection Improvements	10272	SW Vermont St & 30th Ave	SW Vermont St & 30th Ave	Realign the Capitol/Vermont/30th intersection and provide sidewalks, bike lanes, and drainage improvements.	\$4,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Interstate-Larrabee Overpass	10242	N Interstate/Larrabee Bridge	N Interstate/Larrabee Bridge	Remove the existing weight-restricted, low-clearance, poor-condition Interstate to Larrabee southbound flyover ramp (Bridge #153) and replace with a new overpass including a multi-use path to connect the future N Portland Greenway Trail to the Broadway Bridge. Assess the costs and benefits of providing vehicle access on the new structure as part of project development.	\$31,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Marine Dr Corridor Safety Improvements	11864	N. Columbia Blvd	NE 33rd Dr	Improve corridor safety along Marine Dr, including improvements to address speeding and lane departure issues. From Bridgeton Rd to 33rd Dr, coordinate with the Army Corps of Engineers, Port of Portland, and Metro on street design changes associated with Levee projects and filling the Marine Drive Trail gap along this segment of the corridor.	\$8,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Moody Ave Extension	11869	Bancroft	Hamilton	Extend SW Moody Ave and the streetcar line from Bancroft to Hamilton Ct to improve circulation and transit access within the South Waterfront Neighborhood.	\$75,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 105th/Holman Corridor Improvements	11812	NE 102nd & Killingsworth	NE Holman St & 112th	Improve roadway and add pedestrian and bicycle facilities to enhance multimodal safety and access along 105th and Holman. Construct a roadway connection on NE Killingsworth from 102nd to 105th to improve connectivity for all modes.	\$22,000,000	\$0	\$0	2031-2045	Yes

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Roadway (Capital)	Multnomah County	Portland	Portland	NE 12th Ave Bridge Replacement	10243	NE 12th/Lloyd Blvd Bridge	NE 12th/Lloyd Blvd Bridge	Replace the existing fracture critical and seismically deficient 12th Ave bridge (Bridge #025) over I-84 and railroad tracks with a new structure. Provide multimodal transportation improvements on the new structure.	\$46,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 158th Ave Corridor Improvements	11852	NE Sandy Blvd	NE Airport Way	Widen roadway and fill gaps in center turn lane, bicycle facilities, curbs, and sidewalks to improve safety and access to transit.	\$6,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 162nd Ave Corridor Improvements	11848	Sandy Blvd	Portland City Limits	Widen roadway with pedestrian and bicycle facilities and crossings, from Sandy Blvd to I-84.	\$11,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 33rd Ave Bridge Replacement	11807	33rd Ave, NE (over railroad tracks and Columbia Blvd)	33rd Ave, NE (over railroad tracks and Columbia Blvd)	Replace the existing seismically vulnerable 33rd Ave bridge (#009) over railroad tracks and provide pedestrian and bicycle facilities on the new structure. Improve and signalize the intersection of 33rd & Columbia, and remove the seismically vulnerable, fracture critical ramp over Columbia (#009A). Project design will consider freight movement needs, consistent with policies, street classification(s) and uses.	\$46,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE Broadway Corridor Improvements	11943	NE 24th Ave	NE 42nd Ave	Construct traffic signals, enhanced crossings, transit priority treatments, and traffic safety improvements. Provide an enhanced bikeway along the corridor, within or parallel to the roadway.	\$11,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	North Portal Street Improvements	11782	SW Water	SW Bond	Improve access into the northern end of the North Macadam District by improving SW Corbett and SW Sheridan Street, including their connections with SW Kelly Way, SW Harbor Drive, and SW River Parkway.	\$20,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Sandy Blvd Corridor Safety Improvements	10180	NE 14th	I-205	Design and implement multimodal corridor improvements including pedestrian lighting, new and enhanced crossings, new or modified signals, transit stop upgrades, transit priority treatments, bicycle network improvements, access management, and roadway design changes to improve traffic safety.	\$11,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SE Yamhill/Taylor Couplet	11793	SE Water	SE Grand	Improve traffic safety and capacity by converting Yamhill and Taylor to couplet operation between Water and Grand Ave, including new traffic signals at Yamhill / MLK, Yamhill / Grand, and Taylor / Water. As part of the project, reconfigure the ramp from Belmont viaduct to MLK.	\$6,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Southern Triangle Access Improvements	10237	Powell (12th/Ross Island Bridge)	Hawthorne Bridge (railroad mainline)	Improve vehicle access to the Southern Triangle district from eastbound Powell Blvd, and improve vehicle access from CEID to westbound Powell and southbound I-5.	\$8,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SW Terwilliger Corridor Improvements, Segment 1	11827	SW Taylors Ferry	SW Palater	Construct sidewalks and bicycle facilities. Redesign intersection of Terwilliger & Boones Ferry to improve safety for all modes.	\$8,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Tacoma Main Street Improvements	11820	Sellwood Bridge	McLoughlin Blvd	Implement boulevard design based on Tacoma Main Street study recommendations and incorporate McLoughlin Neighborhoods Project recommendations.	\$8,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Vista Bridge Renovation	11789	Vista Bridge, SW	Vista Bridge, SW	Renovate and strengthen the structurally deficient Vista Bridge (Bridge #036).	\$31,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Multnomah County	Port of Portland	Port of Portland	82nd Ave./Airport Way Grade Separation	10362	82nd Avenue/Airport Way Intersection	82nd Avenue/Airport Way intersection	Grade-separate Eastbound Airport Way over 82nd Avenue to reduce intersection signal phase competition, merge northbound left-turners with westbound traffic without a traffic signal and reduce cross traffic exposure for bicycling and walking across Airport Way.	\$119,490,000	\$0	\$0	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (PE, NEPA, ROW)	10867	I-84	Greeley St.	Conduct preliminary engineering and National Environmental Policy Act review, and right of way work to improve safety and operations on I-5, connection between I-84 and I-405, and multimodal access to and connectivity between the Lloyd District and Rose Quarter.	\$338,000,000	\$218,000,000	\$218,000,000	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	11176	I-84	Greeley St.	The Project adds auxiliary lanes and shoulders to reduce congestion and improve safety on I-5 between I-84 and I-405 where three interstates intersect and feature the biggest traffic bottleneck in Oregon. The project will also improve community connections with a highway cover, which includes reconnecting neighborhood streets, enhancing public spaces, and promoting economic development opportunities.	\$975,000,000	\$0	\$0	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 South Operational Improvements	11304	Marquam Bridge	Region Boundary	Construct improvements to address recurring bottlenecks on I-5 south of the central city. Specific improvements as identified in operational analysis, Mobility Corridor analysis and refinement planning.	\$50,000,000	\$0	\$0	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-405 Operational Improvements	11974	Fremont Bridge	I-5	Construct operational improvements to address bottlenecks and improve safety on I-405. Specific improvements as identified in operational analysis, mobility corridor analysis, and refinement planning.	\$98,000,000	\$0	\$0	2031-2045	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Southbound Truck Climbing Lane	11984	Marquam Bridge	Multnomah Blvd	I-5 Truck Climbing Lanes SB (Marquam to Multnomah Blvd). Preliminary Engineering (PE) and Right-of-Way (ROW) and Construction (CON) phases.	\$203,000,000	\$0	\$0	2031-2045	Yes
Throughways	Multnomah County	ODOT	ODOT	I-84 Operational Improvements	11993	I-5	Troutdale	Construct improvements to address bottlenecks and improve safety on I-84. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning.	\$41,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC: Portland Central City Portals Transit Enhancements	11761	Portland Central City	Portland Central City	Construct transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$5,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC: SE Hawthorne/Foster Ave Enhanced Transit Corridor	11834	Portland Central City	SE 97th Ave	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times, including ITS and NextGen TSP.	\$4,000,000	\$0	\$0	2023-2030	Yes

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Transit - Better Bus	Multnomah County	Portland	Portland	ETC: Inner North Portland Enhanced Transit Corridor Improvements	11833	Portland Central City	N Lombard St	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times on Vancouver, Williams, Mississippi, and Albina, including NextGen TSP.	\$5,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC/Rose Lanes Transit Improvement Fund	12232	N/A	N/A	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$5,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: East Burnside/SE Stark Enhanced Transit Project	12030	Central City Portland	Gresham Town Center	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: NE MLK Jr Blvd Enhanced Transit Project	12027	Central City Portland	N Vancouver Way and Jubitz	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: NE Sandy Blvd Enhanced Transit Project	12028	Central City Portland	Parkrose/Sumner Transit Center	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: SE Belmont Enhanced Transit Project	12033	Central City Portland	Gateway Transit Center	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: SE Powell Blvd Transit Project	12035	Central City Portland	TBD	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County	Portland	Portland	HCT: Portland Streetcar Operational Improvements	11783	Portland Central City	Portland Central City	Design and construct improvements along streetcar line to add transit capacity. Construct turnbacks where needed to improve operations.	\$4,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County	Portland Streetcar, Inc	TriMet	HCT: Streetcar Montgomery Park Extension	11319	NW Lovejoy/Northrup	Montgomery Park	Extend streetcar from NW Lovejoy/Northrup to Montgomery Park.	\$80,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: 82nd Ave Transit Project	12029	Clackamas Town Center	TBD	Contingent on federal, state and local funding commitments, the 82nd Ave Transit Project will improve travel between Clackamas Town Center and important destinations in NE Portland with easier, faster and more reliable bus service as well as necessary safety and accessibility improvements, paving and signals.	\$300,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Steel Bridge Transit Bottleneck Project Development	12050	Central City (West)	Central City (East)	Project Development to analyze Central City transit capacity and identify preferred options to address transit bottlenecks, delays, layover needs and improve transit speed, reliability, travel times and regional mobility. Include analysis of a potential tunnel option.	\$67,500,000	\$0	\$0	2031-2045	Yes
Transit Capital - Other	Multnomah County	Portland	Portland	Passenger Ferry Pilot	12311	Cathedral Park	Riverplace	Ferry dock reinforcement/railings, boat build/lease to enable ferry service pilot with FTA Passenger Ferry Grant Program support.	\$12,000,000	\$0	\$0	2023-2030	Yes
Transit Capital - Other	Multnomah County	TriMet	TriMet	MAX Blue Line Station Rehabilitation	12261	Hollywood Transit Center	Cleveland MAX Station, Gresham	Multi-year, multi-location state of good repair project to make critical updates and improvements at eastside MAX Blue Line stations and surrounding station areas.	\$28,700,000	\$2,500,000	\$2,500,000	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Center Street Bus Garage Improvements	11038	1851-1717 SE Center St, Portland	1851-1717 SE Center St, Portland	Improvements at Center Bus Garage.	\$5,600,000	\$0	\$0	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: North Downtown Transit Mall Layover Terminal	12037	Central City Portland	Central City Portland	Terminal in northern portion of downtown Portland for bus layover.	\$13,500,000	\$0	\$0	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Powell Bus Garage Improvements and ZEB transition	12291	9800 SE Powell Blvd, Portland	9800 SE Powell Blvd, Portland	Planning and design to support zero emissions bus improvements.	\$23,550,000	\$5,200,000	\$5,200,000	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Powell Bus Garage Improvements and ZEB Transition Construction	12279	9800 SE Powell Blvd, Portland	9800 SE Powell Blvd, Portland	Expand bus operations, maintenance and storage facility to accommodate larger fleet and make zero emissions bus improvements.	\$226,700,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Center Street Zero Emission Bus Transition: Phase 2	12277	1851-1717 SE Center St, Portland	1851-1717 SE Center St, Portland	Zero emissions bus improvements and expansion to support zero emissions fleet at Center Street Bus Garage.	\$192,000,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Multnomah County	Multnomah County	Multnomah County	East Multnomah County: Transportation Demand Management	12018	East Multnomah County	East Multnomah County	Targeted programs and outreach to reduce single occupant vehicle travel and provide more travel options for underserved community members.	\$3,300,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Safe Routes to School, Phase 1	11127	N/A	N/A	Safe routes to school projects serving Title 1 schools within the City of Portland.	\$5,000,000	\$0	\$0	2023-2030	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Citywide TDM Strategy	12078	Citywide	Citywide	Develop and implement a citywide Transportation Demand Management (TDM) strategy to reduce motor vehicle trip demand.	\$10,000,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Safe Routes to School, Phase 2	11779	N/A	N/A	Safe routes to school projects serving Title 1 schools within the City of Portland.	\$10,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	238th/242nd Ave./Hogan Dr.: ACM with Adaptive Signal Timing	11300	Sandy	Palmquist	Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings, and making intersection improvements to lanes. Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. (506U)	\$11,100,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	257th/Kane Dr.: Arterial Corridor Management (ACM) w/ Adaptive Signal Timing	11299	I-84	Orient Dr.	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	\$6,800,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	NE 207th Ave.: Arterial Corridor Management (ACM)	11297	Sandy	Gilsan	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. (500U)	\$3,800,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	NE Gilsan Street: Fairview Parkway to NE 242nd Avenue: Arterial Corridor Management (ACM)	12225	Fairview Parkway	NE 242nd Avenue	Install upgraded traffic signal controllers, enhance communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings at up to five (5) traffic signals. Provide realtime and forecasted traveler information. (517U)	\$5,100,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	ODOT	Portland	Barbur Blvd ITS	11826	I-405	Portland City Limits	Install ITS infrastructure (Next-Gen transit signal priority and queue jumps, truck priority detection, CCTV cameras, and vehicle/pedestrian detectors).	\$2,000,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	ODOT	Portland	Water/Yamhill Traffic Signal	11839	SE Water and Yamhill	SE Water and Yamhill	Construct traffic signal at Water/Yamhill to improve safety and capacity at freeway off-ramp.	\$3,000,000	\$0	\$0	2031-2045	Yes



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Transportation System Management (Technology)	Multnomah County	Portland	Portland	122nd Ave Corridor ITS Improvements	10198	NE Airport Way	SE Powell Blvd	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	\$4,500,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	ITS Network Cyber Security Enhancement	12211	N/A	N/A	Evaluate existing PBOT ITS network and upgrade system for resiliency.	\$2,500,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SE Powell Blvd ITS Improvements	12213	SE Milwaukie Ave	SE 82nd Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$6,500,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SW Capitol Hwy / Beaverton Hillsdale Hwy ITS Improvements	12212	SW Barbur Blvd	City Limits	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$7,000,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Central City Traffic Transportation System Management	10264	Central City	Central City	Implement Central City TSM improvements to arterials.	\$6,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Gateway Regional Center TSM	10327	Gateway Regional Center, NE/SE	Gateway Regional Center, NE/SE	Implement a comprehensive traffic management plan throughout the regional center to reduce cut-through traffic on residential streets and improve traffic flow on regional streets. Project includes utility improvements.	\$4,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Going St Connected/Automated Vehicle Connection	11796	Swan Island Industrial Area	I-5	Design and construct a Connected/Automated Vehicle connection between Swan Island and I-5.	\$10,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Grand/MLK Lloyd District Traffic Signals	11794	NE Lloyd Blvd	NE Broadway	Construct traffic signals along Grand/MLK couplet in the Lloyd District.	\$8,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	I-405 Corridor ITS Improvements	10266	SW Clay	NW Glisan	ITS improvements at six signals between Clay and Glisan including communications infrastructure and closed circuit TV cameras for remote monitoring and control of traffic flow.	\$2,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Marine Drive ITS	10346	N Terminal Hg Rd	NE 185th Ave.	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, queue detection warning system, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	\$4,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	N/NE Lombard St ITS	12218	N Columbia Blvd	NE MLK Jr Blvd	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$11,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	NW Northrup Traffic Signals	11791	NW 11th Ave.	NW 16th Ave.	Construct traffic signals along Northrup at 11th, 12th, 13th, 14th, and 16th to improve traffic flow and transit operations.	\$8,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	NW Yeon Ave / St Helens Rd (Hwy 30) ITS Improvements	12230	NW Nicolai St	NW 107th Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$3,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Portland TSMO Maintenance and Improvements to implement Regional TSMO Plan	12086	Citywide	Citywide	Implement projects city wide consistent with the regional TSMO strategy and local plans, including priorities identified in PBOT ETC Plan and 2040 Freight Plan, including both maintenance/replacement or enhancements of signals and software to support improvements on arterial streets to better manage traffic flow and provide greater priority to transit and freight movement.	\$35,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Rivergate ITS	10373	N Lombard St	Rivergate Industrial Area	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	\$4,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	S Macadam Ave ITS	12236	S Bancroft Ave	Sellwood Bridge	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$4,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Sandy Blvd ITS	10301	NE Couch St	NE 82nd Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	\$4,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SE Stark St ITS Improvements	12237	SE 82nd Ave	City Limits	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$3,500,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	W Burnside St/Rd ITS Improvements	12238	Naito Pkwy	SW Tichner Dr	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	\$2,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	ODOT	ODOT	Jordan Road Trail	12293	I-84 Bridge	Entrance to Parking area	Paved multi-use path connection along Jordan Road paralleling the Sandy River	\$3,000,000	\$3,000,000	\$3,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	Westside Regional Trail Segment #19	11967	Westside Trail at NW Skycrest Parkway	THPRD Eastern Boundary at NW 124th Ave.	Design and construct a 12' wide regional, multi-use trail segment connecting THPRD and Portland trail systems, completing a gap, serving historically marginalized communities, improving safety, increasing access to jobs, schools, and 2040 centers.	\$4,900,000	\$0	\$0	2031-2045	Yes
Throughways	Multnomah County, Washington County	ODOT	ODOT	US 26 (Sunset Highway) Operational Improvements	11971	I-405	West MPO Boundary	Construct Improvements to address bottlenecks and improve safety on US 26 (Sunset Highway) Specific improvements as identified in operational analysis, mobility corridor analysis, and refinement planning.	\$98,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Multnomah County, Washington County	TriMet	TriMet	ETC: SW Beaverton-Hillsdale Hwy Enhanced Transit Project	12032	Central City Portland	Washington County (54 to BTC and 56 to Washington Square)	Planning, design and improvements for regional enhanced transit project.	\$2,000,000	\$0	\$0	2023-2030	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: MAX Red Line Improvements Project: Capital Construction	10922	Fairplex/Hillsboro Airport MAX	Portland Airport MAX	Capital construction to enable extension of Red Line service to the Hillsboro Airport/Fair Complex Station and improve reliability of the entire MAX light rail system. Project includes double-tracking and a new Inbound Red Line station at Gateway Transit Center, double-tracking at Portland Airport, upgrades to signals and switches along the alignment, and purchase of new light rail vehicles needed to operate the extension and needed storage capacity at Ruby Junction to house the new vehicles.	\$68,000,000	\$68,000,000	\$39,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: Southwest Corridor Project Development	12322	Bridgeport Village, Tualatin	Downtown Portland	Project Development for High Capacity Transit project between Portland and Tualatin via Tigard.	\$4,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	Washington County	HCT: Southwest Corridor Project Development Support	12301	Bridgeport Village, Tualatin	Downtown Portland	Project development to address traffic mitigation and access improvements for SW Corridor High Capacity Transit project between Portland and Tualatin via Tigard.	\$2,300,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	Washington County	HCT: Southwest Corridor Engineering and ROW Support	12300	Bridgeport Village, Tualatin	Downtown Portland	Support SW Corridor engineering and right-of-way for High Capacity Transit project between Portland and Tualatin via Tigard.	\$20,700,000	\$0	\$0	2031-2045	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: Southwest Corridor: PD, Engineering and ROW	12292	Bridgeport Village, Tualatin	Downtown Portland	Project Development, Engineering and Right of Way for High Capacity Transit project between Portland and Tualatin via Tigard.	\$855,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	TriMet	TriMet	Access: Bike & Ride Facilities: Phase 1	11411	Regionwide	Regionwide	Provide and maintain secure bike parking facilities and enhancements at TriMet stations and stops.	\$2,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	TriMet	TriMet	Access: Bike & Ride Facilities: Phase 2	11594	N/A	N/A	Provide secure bike parking facilities and enhancements at TriMet stations and stops.	\$2,000,000	\$0	\$0	2031-2045	Yes
Bridge Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Bridge Rehabilitation & Repair: 2023-2030	12092	Region-wide	Region-wide	Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.	\$149,000,000	\$0	\$0	2023-2030	Yes
Bridge Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Bridge Rehabilitation & Repair: 2031-2045	12294	Region-wide	Region-wide	Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.	\$441,000,000	\$0	\$0	2031-2045	Yes
Pricing Programs	Region-wide (all three counties)	ODOT	ODOT	I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	12304	I-205 Glenn Jackson Bridge/I-5 Interstate Bridge	I-5 Boone Bridge	Apply congestion pricing on all lanes of Interstate-5 (I-5) and Interstate-205 (I-205) to manage travel demand and traffic congestion on these facilities in the Portland, Oregon metropolitan area in a manner that will generate revenue for transportation system investments.	\$400,000,000	\$0	\$0	2023-2030	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Corridor Investment Areas Activities for 2023-2030	11664	Regional	Regional	The RTP identifies mobility corridors and future high capacity transit capital investments needed to support the 2040 Growth Concept. Corridor investment areas activities focus on aligning investments around specific outcomes to support local and regional goals in locations with multi-jurisdictional interests. Investment areas activities include completing corridor refinement planning and developing multimodal projects in major transportation corridors identified in the RTP as well as developing shared investment strategies to align local, regional and state investments in economic investment areas that support the region's growth economy. Activities include ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.	\$6,730,000	\$0	\$0	2023-2030	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Regional MPO Activities for 2023-2030	11103	Regional	Regional	Transportation planning, programming, monitoring and federal reporting that Metro must conduct in order to remain certified as a metropolitan planning organization (MPO) by the federal government for the region and be eligible to receive federal transportation funding dollars.	\$14,230,000	\$0	\$0	2023-2030	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Corridor Investment Areas Activities for 2031-2045	11964	Regional	Regional	The RTP identifies mobility corridors and future high capacity transit capital investments needed to support the 2040 Growth Concept. Corridor investment areas activities focus on aligning investments around specific outcomes to support local and regional goals in locations with multi-jurisdictional interests. Investment areas activities include completing corridor refinement planning and developing multimodal projects in major transportation corridors identified in the RTP as well as developing shared investment strategies to align local, regional and state investments in economic investment areas that support the region's growth economy. Activities include ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.	\$16,080,000	\$0	\$0	2031-2045	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Regional MPO Activities for 2031-2045	11745	Regional	Regional	Transportation planning, programming, monitoring and federal reporting that Metro must conduct in order to remain certified as a metropolitan planning organization (MPO) by the federal government for the region and be eligible to receive federal transportation funding dollars.	\$33,990,000	\$0	\$0	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	Cities and counties	Cities and counties	Local Roadway Operations, Maintenance and Preservation: 2024-2030	12098	N/A	N/A	Local roadway operations, maintenance and preservation activities	\$3,441,327,000	\$0	\$0	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	Cities and counties	Cities and counties	Local Roadway Operations, Maintenance and Preservation: 2031-2045	12323	N/A	N/A	Local roadway operations, maintenance and preservation activities	\$9,885,862,000	\$0	\$0	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Culvert Replacement & Repair: 2023-2030	12093	Region-wide	Region-wide	Repair and replacement of culverts that have or are in danger of failure, do not provide adequate drainage or are a habitat barrier to Threatened & Endangered species that do not add motor vehicle capacity.	\$75,000,000	\$0	\$0	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Highway Pavement Maintenance: 2023-2030	12094	Region-wide	Region-wide	Pavement rehabilitation/repair projects includes overlays, slurry seals, full pavement replacement, and other minor roadway improvements (curb and gutters, adding/widening shoulders) that do not add motor vehicle capacity.	\$224,000,000	\$0	\$0	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Culvert Replacement & Repair: 2031-2045	12295	Region-wide	Region-wide	Repair and replacement of culverts that have or are in danger of failure, do not provide adequate drainage or are a habitat barrier to Threatened & Endangered species that do not add motor vehicle capacity.	\$221,000,000	\$0	\$0	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Highway Pavement Maintenance: 2031-2045	12298	Region-wide	Region-wide	Pavement rehabilitation/repair projects includes overlays, slurry seals, full pavement replacement, and other minor roadway improvements (curb and gutters, adding/widening shoulders) that do not add motor vehicle capacity.	\$662,000,000	\$0	\$0	2031-2045	Yes

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Roadway Operations	Region-wide (all three counties)	ODOT	ODOT	Safety & Operations Projects: 2023-2030	12095	Region-wide	Region-wide	Projects to improve safety and/or operational efficiencies such as pedestrian crossings, speed feedback signs, transit priority technology at signals on arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, sidewalks, bicycle lanes, and other improvements that do not add motor vehicle capacity.	\$349,000,000	\$0	\$0	2023-2030	Yes
Roadway Operations	Region-wide (all three counties)	ODOT	ODOT	Safety & Operations Projects: 2031-2045	12299	Region-wide	Region-wide	Projects to improve safety and/or operational efficiencies such as pedestrian crossings, speed feedback signs, transit priority technology at signals on arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, sidewalks, bicycle lanes, and other improvements that do not add motor vehicle capacity.	\$882,000,000	\$0	\$0	2031-2045	Yes
Throughways	Region-wide (all three counties)	ODOT	ODOT	I-5 Freight Operational Improvements	11991	Columbia River	South MPO Boundary	Construct improvements to address bottlenecks and improve safety on I-5. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning.	\$358,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Region-wide (all three counties)	TriMet	TriMet	ETC: Better Bus Program Phase 1	12283	N/A	N/A	Program for roadway treatments, transit signal priority and other transit roadway improvements	\$13,500,000	\$5,969,000	\$5,969,000	2023-2030	Yes
Transit - Better Bus	Region-wide (all three counties)	TriMet	TriMet	ETC: Better Bus Program Phase 2	12284	N/A	N/A	Program for roadway treatments, transit signal priority and other transit roadway improvements	\$30,000,000	\$0	\$0	2031-2045	Yes
Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Optimization, Reliability and Station Improvements: Phase 1	12087	Regionwide	Regionwide	Improvements to HCT including optimizing and rehabilitating stations, station areas, and operational improvements including track, ties, signals and switches.	\$119,000,000	\$2,430,000	\$2,430,000	2023-2030	Yes
Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Optimization, Reliability and Station Improvements: Phase 2	12269	N/A	N/A	Improvements to HCT including optimizing and rehabilitating stations, station areas, and operational items including track, signals and switches.	\$255,000,000	\$0	\$0	2031-2045	Yes
Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Project Development for Future HCT	12285	N/A	N/A	Project Development for Rapid Transit Project	\$40,000,000	\$0	\$0	2031-2045	Yes
Transit Capital - Other	Region-wide (all three counties)	To be determined	TriMet	Access: Bus Stop and Access to Transit Improvements: Phase 1	11331	Regionwide	Regionwide	Transit stop, right of way, sidewalk, crossing and ADA improvements to support expansion of services and amenities.	\$2,000,000	\$1,360,000	\$1,360,000	2023-2030	Yes
Transit Capital - Other	Region-wide (all three counties)	TriMet	TriMet	Access: Bus Stop and Access to Transit Improvements: Phase 2	11230	N/A	N/A	Transit stop, right of way, sidewalk, crossing and ADA improvements to support expansion of services and amenities.	\$10,000,000	\$0	\$0	2031-2045	Yes
Transit Maintenance	Region-wide (all three counties)	TriMet	TriMet	Transit Maintenance: Phase 1	12282	N/A	N/A	Maintenance of transit services, such as drivers, security, facilities and rolling stock.	\$1,255,980,000	\$0	\$0	2023-2030	Yes
Transit Maintenance	Region-wide (all three counties)	TriMet	TriMet	Transit Maintenance: Phase 2	12297	N/A	N/A	Maintenance of transit services, such as drivers, security, facilities and rolling stock.	\$3,698,200,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: Columbia Bus Base	11041	4421 NE Columbia Blvd Portland	4421 NE Columbia Blvd Portland	Design and Construction of new Zero Emission Fleet operations center.	\$250,000,000	\$0	\$0	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Equipment and Facilities: Phase 1	11335	N/A	N/A	Equipment and facilities to support system replacement, refurbishment, and growth.	\$37,550,000	\$0	\$0	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Fleet Vehicles: Phase 1	10928	N/A	N/A	Replacement and refurbishment of zero emission buses, articulated buses, light rail and LIFT vehicles.	\$694,600,000	\$27,472,000	\$27,472,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Information Technology: Phase 1	10927	N/A	N/A	Communication systems, information technology, cyber security and improvements to Hop.	\$68,000,000	\$4,500,000	\$3,857,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Safety and Security: Phase 1	11334	N/A	N/A	Safety and security enhancements, CCTV, Rail crossing enhancements	\$24,000,000	\$1,461,000	\$1,461,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Transit Center and Layover Improvements: Phase 1	12255	N/A	N/A	Program to improve, expand or create new transit centers or layover facilities.	\$20,900,000	\$1,000,000	\$806,260	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: 5th Bus Base Land Acquisition	12280	N/A	N/A	Land acquisition and planning of a 5th bus base to support growth of TriMet bus service.	\$80,000,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Equipment and Facilities: Phase 2	11338	N/A	N/A	Equipment and facilities to support system replacement, refurbishment, and growth.	\$130,464,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Fleet Vehicles: Phase 2	10999	Regionwide	Regionwide	Replacement, refurbishment and/or expansion of zero emission buses, articulated buses, light rail and LIFT vehicles.	\$2,364,900,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Information Technology Phase 2	10998	Regionwide	Regionwide	Communication systems, information technology, cyber security and improvements to Hop.	\$145,710,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Safety & Security: Phase 2	11016	N/A	N/A	Safety and security enhancements, CCTV, Rail crossing enhancements	\$5,067,643,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Transit Center and Layover Improvements: Phase 2	12256	N/A	N/A	Program to improve, expand or create new transit centers or layover facilities.	\$62,000,000	\$0	\$0	2031-2045	Yes
Transit Oriented Development	Region-wide (all three counties)	Metro	Metro	Regional TOD Investments for 2023-2030	10855	2040 Centers, Stations Areas and Corridors	2040 Centers, Stations Areas and Corridors	Metro's TOD program helps build climate-friendly communities near transit that prioritize the needs of people with low-incomes and communities of color. The core program activity is to provide financial incentives and acquire land to increase affordable housing opportunities in areas that are well-served by transit, particularly those where communities are at risk of gentrification and displacement.	\$35,510,000	\$0	\$0	2023-2030	Yes
Transit Oriented Development	Region-wide (all three counties)	Metro	Metro	Regional TOD Investments for 2031-2045	11977	2040 Centers, Stations Areas and Corridors	2040 Centers, Stations Areas and Corridors	Metro's TOD program helps build climate-friendly communities near transit that prioritize the needs of people with low-incomes and communities of color. The core program activity is to provide financial incentives and acquire land to increase affordable housing opportunities in areas that are well-served by transit, particularly those where communities are at risk of gentrification and displacement.	\$84,830,000	\$0	\$0	2031-2045	Yes
Transit Oriented Development	Region-wide (all three counties)	TriMet	TriMet	Transit-Oriented Development: Phase 1	12271	N/A	N/A	Site acquisition, station area planning, activation or infrastructure improvements	\$2,000,000	\$0	\$0	2023-2030	Yes
Transit Oriented Development	Region-wide (all three counties)	TriMet	TriMet	Transit-Oriented Development: Phase 2	12272	N/A	N/A	Site acquisition, station area planning, activation or infrastructure improvements	\$5,000,000	\$0	\$0	2031-2045	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	STIF Regional Coordination Funds: Phase 1	12273	N/A	N/A	Pass through funds for regional shuttle services.	\$48,000,000	\$15,462,000	\$13,660,000	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	Streetcar STIF Funds: Phase 1	12275	N/A	N/A	Pass through funds for Portland Streetcar.	\$25,500,000	\$6,000,000	\$3,213,000	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	TriMet Operations: Phase 1	12096	Region-wide	Region-wide	Operations of transit services, such as drivers, security, facilities and rolling stock.	\$4,453,020,000	\$0	\$0	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	STIF Regional Coordination Funds: Phase 2	12274	N/A	N/A	Pass through funds for regional shuttle services.	\$140,000,000	\$0	\$0	2031-2045	Yes

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Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	Streetcar STIF Funds: Phase 2	12276	N/A	N/A	Pass through funds for Portland Streetcar.	\$66,600,000	\$0	\$0	2031-2045	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	TriMet Operations: Phase 2	12296	N/A	N/A	Operations of transit services, such as drivers, security, facilities and rolling stock.	\$13,021,800,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Safe Routes to School Program Activities for 2023-2030	12021	Regional	Regional	Educational and encouragement activities that help children safely walk and roll to school. Funded through the Regional Travel Options program with programs and services provided directly by Metro staff and by local agency and non-profit organizations through grants and agreements.	\$5,400,000	\$0	\$0	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Travel Options (RTO) Program Activities for 2023-2030	11054	Regional	Regional	Education, services, and small capital projects that promote and make transit, bicycling, walking and ridesharing easier to use. Program elements are delivered by local government agencies, community non-profit organizations and colleges with US and Oregon Department of Transportation funding allocated by the Metro Regional Travel Options program. The program helps the region meet goals for increased access to jobs, education and services and to reduce motor vehicle miles traveled.	\$28,000,000	\$0	\$0	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Safe Routes to School Program Activities for 2031-2045	12022	Regional	Regional	Educational and encouragement activities that help children safely walk and roll to school. Funded through the Regional Travel Options program with programs and services provided directly by Metro staff and by local agency and non-profit organizations through grants and agreements.	\$12,870,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Travel Options (RTO) Program Activities for 2031-2045	12010	Regional	Regional	Education, services, and small capital projects that promote and make transit, bicycling, walking and ridesharing easier to use. Program elements are delivered by local government agencies, community non-profit organizations and colleges with US and Oregon Department of Transportation funding allocated by the Metro Regional Travel Options program. The program helps the region meet goals for increased access to jobs, education and services and to reduce motor vehicle miles traveled.	\$66,900,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	Access: Park & Ride Facilities: Phase 1	10988	Regionwide	Regionwide	Improvements or modifications to Park & Ride facilities.	\$2,000,000	\$0	\$0	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	TriMet Fare Discount Programs: Phase 1	12258	N/A	N/A	TriMet programs to provide discounted fares for eligible groups.	\$60,000,000	\$29,605,916	\$0	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	Access: Park & Ride Facilities: Phase 2	12079	N/A	N/A	Additions or modifications to existing Park & Ride lots.	\$2,000,000	\$0	\$0	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	TriMet Fare Discount Programs: Phase 2	12268	N/A	N/A	TriMet programs to provide discounted fares for eligible groups.	\$90,000,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Corridors Priority Investments for 2023-2030	12024	Regional	Regional	As coordinated through the regional TSMO program, provide funding and secure discretionary grants for operators to work together to deploy safe, integrated corridor management with advanced technology in regional mobility corridors including decision support systems, real-time traveler information on route choice and estimated travel time that uses a variety of data sensors, software and systems (e.g., smart mobility hubs, internet of things, connected and automated vehicles). This also includes deployment of innovative technology systems, automated corridor management, and other active traffic management strategies.	\$9,420,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Program Investments for 2023-2030	11104	Regional	Regional	Implement and maintain Transportations System Management and Operations (TSMO) investments used by multiple agencies (e.g., Central Signal System, traffic signal priority, data communications and archiving) and coordinate response to crashes. The regional program also includes strategy planning (e.g., periodic TSMO Strategy updates), coordination of activities for TransPort subcommittee to TPAC, updates to the blueprints for agency software and hardware systems (ITS Architecture), improving traveler information with live-streaming data for connected vehicle and mobile information systems (TripCheck Traveler Information Portal Enhancement), and improving "big data" processing (PSU PORTAL) to support analyzing performance measures.	\$9,420,000	\$0	\$0	2023-2030	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Corridors Priority Investments for 2031-2045	12025	Regional	Regional	As coordinated through the regional TSMO program, provide funding and secure discretionary grants for operators to work together to deploy safe, integrated corridor management with advanced technology in regional mobility corridors including decision support systems, real-time traveler information on route choice and estimated travel time that uses a variety of data sensors, software and systems (e.g., smart mobility hubs, internet of things, connected and automated vehicles). This also includes deployment of innovative technology systems, automated corridor management, and other active traffic management strategies.	\$22,600,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Program Investments for 2031-2045	12013	Regional	Regional	Implement and maintain Transportations System Management and Operations (TSMO) investments used by multiple agencies (e.g., Central Signal System, traffic signal priority, data communications and archiving) and coordinate response to crashes. The regional program also includes strategy planning (e.g., periodic TSMO Strategy updates), coordination of activities for TransPort subcommittee to TPAC, updates to the blueprints for agency software and hardware systems (ITS Architecture), improving traveler information with live-streaming data for connected vehicle and mobile information systems (TripCheck Traveler Information Portal Enhancement), and improving "big data" processing (PSU PORTAL) to support analyzing performance measures.	\$22,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	173rd Avenue: Walker Road to Cornell Road (Bikeway)	12052	Walker Road	Cornell Road	Restriping (removing center turn lane) and construction of protected bike lane.	\$11,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Hall Boulevard: 12th to Allen Blvd (Bike Lanes/Turn Lanes)	10669	12th Street	Allen Boulevard (approximately 600 ft south)	Construct bike lanes and turn lanes on Hall Boulevard, between 12th Street and Allen Boulevard.	\$12,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Hall Boulevard: Cedar Hills Blvd to Crescent St (Bike Lanes)	10663	Cedar Hills Boulevard	Crescent Street	Construct bike lanes	\$12,500,000	\$0	\$0	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Active Transportation - Bicycle	Washington County	ODOT	Washington County	Beaverton-Hillsdale Hwy Bike Lanes	11925	OR 217	Multnomah County Line	Completes 12,000 feet of bike lanes.	\$4,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Butner Road Bike Lanes	10614	Cedar Hills Blvd.	Park Way	Completes 7800 feet of bike lanes to transit corridor.	\$16,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Cornell Road Bike Lanes	10613	Saltzman Rd.	119th Ave.	Completes 1750 feet of bike lanes in town center.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Saltzman Road Bike Lanes	10610	Cornell Rd.	Barnes Rd.	Complete 950 feet of bike lanes in town center.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Science Park Drive Bike Lanes	10609	Murray Blvd.	Cornell Rd.	Complete 3,600 feet of bike lanes in town center.	\$10,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Washington County Neighborhood Bikeways (Ph. 1)	11239	County-wide	County-wide	12 miles of neighborhood bikeways (bike boulevards) on low-traffic streets throughout unincorporated urban Washington County, including enhanced at-grade crossings of arterials.	\$18,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	Beaverton	Beaverton	Beaverton Access to Transit Sidewalk Infill	11888	Citywide	Citywide	Construct sidewalk where missing on arterials and collectors near transit (MAX stations and bus stops). Final project to complete: Laurelwood Avenue Sidewalk: Scholls Ferry to Laurelwood Court)	\$2,600,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Beaverton	Beaverton	Watson/Hall: Cedar Hills to Allen (Pedestrian Safety)	10646	Cedar Hills Boulevard	Allen Boulevard	Reconstruct intersections on Hall Boulevard, between Cedar Hills and Crescent St. Reconstruct intersections on Hall Boulevard and Watson Ave, between 5th St. and Allen Boulevard. Curb extensions, lighting, landscaping, ADA ramp upgrades, and benches.	\$4,100,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Beaverton	Canyon Road Multimodal Improvement: Hocken Ave to 117th Ave	11379	Hocken Avenue	117th Avenue	Construct a landscaped median for access control, enhanced midblock pedestrian crossings at Rose Bigli Ave, lighting, ADA ramp upgrades, crosswalk markings.	\$6,300,000	\$5,475,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	ODOT	King City	King City Sidewalk Infill	11692	1000' west of SW Royalty Pkwy	SW Beef Bend Rd.	Add sidewalks.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Sherwood	OR 99W Pedestrian Improvements	10706	UGB Northern Boundary	UGB Southern Boundary	Pedestrian upgrades. Completes pedestrian links along 99W from north to south end of city limits. Includes ADA upgrades as required at intersection and local connections. Assumes bike lanes already provided along OR 99W (SW Pacific Highway).	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Tualatin	OR 99W Sidewalks (S. to N. City Limits)	10743	South City Limits	North City Limits	Install sidewalks on both sides of 99W from Cipole to Tualatin River.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Cornelius	TV Highway Pedestrian Infill	10805	Cornelius east city limits	Cornelius west city limits	Build out sidewalk gaps on TV Hwy. in Cornelius.	\$6,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	Tigard	Tigard	Downtown pedestrian improvements (urban renewal)	12167	Downtown Tigard	Downtown Tigard	Improve sidewalks, lighting, crossings, bus shelters and benches throughout Tigard Downtown.	\$2,300,000	\$2,000,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Aloha Pedestrian Improvements	10608	Aloha Town Center	Aloha Town Center	Sidewalk infill and pedestrian crossing of 185th Ave. at Cascade Dr.	\$9,400,000	\$8,300,000	\$300,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	92nd Avenue Pedestrian Improvements	11089	Allen Blvd.	Garden Home Rd.	Completes 3800 feet of sidewalk improvements to transit corridor.	\$9,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Oak St (Butternut to 179th) Sidewalks	12057	Butternut Dr	179th Ave	Add sidewalks between Butternut Dr and 179th Ave.	\$3,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Blvd Complete Street: Murray Blvd to OR 217 (Design)	11900	Murray Boulevard	OR Highway 217	Design a Complete Street along Alan Boulevard, between SW Murray Boulevard and OR Highway 217. The project is anticipated to include investments in sidewalks, bike lanes, signals, and vehicle turn lanes where needed.	\$2,300,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Denney Rd: OR 217 to Scholls Ferry (Ped/Bike/Turn Lanes)	10670	OR 217	Scholls Ferry Road	Construct bike lanes, sidewalks, and turn lanes where needed, along SW Denney Road, between OR 217 and Scholls Ferry Road.	\$10,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Hall - Millikan Way to 1st	12121	Millikan Way	1st Street	Construct complete street on Hall Boulevard between Millikan Way and 1st Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	\$13,700,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson - Millikan Way to 1st	10664	Millikan Way	1st Street	Construct complete street on Watson Avenue between Millikan Way and 1st Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	\$12,100,000	\$4,000,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson/Hall - Crescent to 5th	12125	Crescent Street	5th Street	Preliminary design and engagement for project to construct complete street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	\$2,800,000	\$2,000,000	\$2,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Murray Blvd to Menlo Drive	12110	Murray Boulevard	Menlo Dr.	Construct complete street: sidewalks, street trees, bike lanes, lighting, signals, and turn lanes, where needed.	\$38,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Hall Boulevard - 1st to 5th	12123	1st Street	5th Street	Construct complete street on Hall Boulevard, between 1st Street and 5th Street, with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	\$29,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson Ave - 1st to 5th	12122	1st Street	5th Street	Construct complete street on Watson Avenue between 1st Street and 5th Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	\$29,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	Cornelius Citywide Sidewalk Infill	11246	City-wide	City-wide	Sidewalk infill on Heather St (8th Ave - 10th Ave); 4th Ave (3F Railroad - Barlow); and 26th Ave (Holladay - S. City Limits)	\$2,500,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	S. 29th Boulevard Connection	11917	SW 345th Ave.	450 feet south of S. Dogwood St.	Construct new collector into Cornelius SE UGB expansion area.	\$5,100,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	19th/20th Avenue	11249	Council Creek	Between S. Ginger and S. Heather Streets	Improve to collector standards by building out sidewalk gaps, creating bike facilities, and improving rail crossing.	\$11,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	Davis Street Sidewalks and Bike Signage	11245	10th Ave	19th Ave	Add sidewalks on south side of this collector street. Also add bike markings (sharrows) and bike signage.	\$7,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Forest Grove	Forest Grove	Forest Grove Bike Lanes and Sidewalks Infill	12131	Forest Grove East City Limits	Forest Grove West City Limits	Enhance pedestrian and bicycle safety by infilling gaps and improve bike lane safety.	\$2,300,000	\$500,000	\$100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Davis Rd Turn Lanes and Bike/Ped Improvements	10838	Brookwood Ave	Century Blvd	Widen from three to five lanes by adding one general travel lane in each direction; project includes widening bridge over light rail; rebuild bike facilities as cycle track	\$5,800,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Safe Routes to School Projects (Hillsboro)	11933	City -wide	City -wide	Implement Safe Routes to School projects around Hillsboro area Title I schools.	\$3,900,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	15th Ave Bike/Ped Improvements	11165	Sunrise Ln	Evergreen Rd	Improve road to urban standards and construct missing sidewalks and bike facilities	\$8,300,000	\$0	\$0	2031-2045	Yes



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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	25th Ave Bike/Ped Gaps	11166	Intel Jones Farm/Hillsboro Fire Station 5 driveway	Evergreen Rd	Improve to three-lane urban arterial standards	\$6,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	25th Ave Turn Lanes and Bike/Ped Improvements	11905	Cornell Rd	Griffin Oaks St	Widen to add concrete center turn lane and improve sidewalks and bike facilities	\$18,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Century Blvd Turn Lanes and Bike/Ped Gaps (Baseline to Alder)	10819	Baseline Rd	Alder St	Complete missing urban sections including sidewalks, bike facilities, and center turn lane where appropriate	\$4,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Elam Young Pkwy Bike/Ped Improvements	12137	Cornell (West)	Cornell (East)	Construct sidewalks on inside loop; need widening at intersections to accommodate bike lanes; stripe bike lanes as part of pavement management program south of light rail tracks; future cycle track	\$5,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Reedville Trail (South Segment)	11462	Tualatin Valley Highway	Rosedale Rd	Construct multi-use trail along BPA Pearl-Keeler power line corridor	\$13,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Sunrise Ln Bike/Ped Improvements	11163	Jackson School Rd	25th Ave	Widen and improve road to urban standards with sidewalks and bike facilities; construct missing sidewalks	\$20,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Walker Rd Turn Lanes and Bike/Ped Improvements	10823	Cornelius Pass Rd	206th Ave	Complete three-lane urban upgrade including center turn lane, sidewalks and bike lanes	\$8,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	SW Elsner Road: Sidewalks, Cycletrack, Turn-lanes - Phase 1	12157	River Terrace Blvd.	SW Beef Bend Road	Improve with pedestrian and bike facilities from SW Roy Rogers Road to SW Beef Bend Road. 2-lane street with sidewalks and a one-way cycle track on each side to the Tualatin River Trail, then shared use path on west side and left-turn lanes where needed.	\$4,800,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	OR 99W Connector Trail: OR 99W to south side of Tualatin River	12152	OR 99W N of Tualatin River	OR 99W S of Tualatin River	Construct a shared-use path from Tualatin River Trail (TRT) to SW Versailles Road along west side of OR 99W, from the TRT under 99W to fire signal along east side of 99W, & Construct bike/Ped crossing of the Tualatin River along the west side of OR 99W.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	SW Elsner Road Sidewalks, Cycletrack, Turn-lanes - Phase 2	12156	SW Roy Rogers Road	River Terrace Blvd	Improve with pedestrian and bike facilities from SW Roy Rogers Road to SW Beef Bend Road. 2-lane street with sidewalks and a one-way cycle track on each side to the Tualatin River Trail, then shared use path on west side and left-turn lanes where needed.	\$6,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	Westside Trail: Segment 1	11947	Beef Bend Rd.	Tualatin River	Construct a shared-use path for bike/ped w/ connections to adjacent streets. Includes crossing of the Tualatin Rv. Realigns 137th Avenue to connect with Colyer Way with intersection improvements. Install an enhanced bike/ped crossing at the Fischer & Capulet intersections.	\$13,200,000	\$358,000	\$358,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Hillsboro	Downtown Hillsboro Access and Safety Improvements	10849	City-wide	City-wide	Improve pedestrian and bicycle facilities, safety, and access in the Hillsboro Downtown Regional Center; special attention to pedestrian and bicycle access across Hwy 8 one-way couplet (Oak St and Baseline St).	\$4,300,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Sherwood	OR 99W Regional Trail Crossing	10707	SW Pacific Hwy. (west side)	SW Pacific Hwy. (east side)	Constructs separated grade crossing for Cedar Creek Trail (regional trail system) under SW Pacific Hwy (OR 99W).	\$23,900,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd Complete Street: Hocken to 117th (Design)	12113	Hocken Ave.	117th Ave./Broadway St.	Preliminary Design and engagement for a complete street on Canyon Road, from Hocken Ave. to 117th Ave. Wider sidewalks, street trees, bikes lanes, signal and intersection, lighting, and landscaped median investments. Explore jurisdictional transfer.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT, Forest Grove	Forest Grove	OR 8/Pacific/19th Corridor Safety and Complete Street	10779	Cornelius City Limits	Quince Street/OR 47	Retrofit the street from B Street to Cornelius City Limits including wider sidewalks, curb extensions, safer street crossings. Local match for TV Hwy HCT and Safety and Complete Street projects.	\$14,100,000	\$2,800,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Sherwood	Sherwood	Cedar Creek Trail	10701	SW Oregon St	SW Roy Rogers Rd	Regional trail between OR 99W (Pacific Highway) & SW Edy Rd and SW Edy Rd to SW Roy Rogers Rd, all-phases including additional Plan Development, Design, ROW Acquisition, Construction, Construction Administration, Inspections.	\$15,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Fanno Creek Connections Project	10766	Woodard Park	Milton	Construct 3 new segments of the Fanno Creek Trail and make improvements to existing segment from Ash Ave to Hall Blvd.	\$11,800,000	\$10,400,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Templeton-Twality Safe Routes to School Improvements	12173	McDonald St	Sattler St	Improve pedestrian crossings, complete missing sidewalk segments, pave trail through East Butte Park.	\$2,300,000	\$2,000,000	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Fanno Creek Trail Gap (Bonita to Cook Park)	12088	Bonita Road	Durham Park	Complete regional trail gap.	\$15,900,000	\$1,000,000	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Hunziker St Sidewalks	12001	Near 7585 Hunziker	72nd Ave	Add sidewalk and bike lane on north side of Hunziker from current sidewalk end (near 7585 Hunziker) to 72nd Ave.	\$4,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	OR 217 Ped-Bike Crossing at SW 95th Ave	12168	Oak Street	Shady Lane	Construct a new Highway 217 overcrossing for active transportation users connecting Metzger Neighborhood and WSRC area with the Greenburg Neighborhood, Tigard Heritage Trail, Fanno Creek Trail, and Downtown Tigard.	\$24,400,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	SW 95th Ave Ped/Bike Rail Undercrossing at Commercial St and Heritage Trail	12171	SW 95th Ave	Tigard Heritage Trail	Build a railroad undercrossing for pedestrians and bicycles west of Pacific Highway (OR99W), connecting Grant Ave with 95th Ave.	\$8,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard Triangle multi-modal Improvements (urban renewal)	10760	Tigard Triangle	Tigard Triangle	Upgrade and improve roads, improve sidewalks, lighting, crossings, implement curbside management strategies, bus shelters and benches throughout the Tigard Triangle.	\$17,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Council Creek Regional Trail (East-West)	10806	Forest Grove	Hillsboro	Multi-use trail from the end of the Westside MAX light-rail line in Hillsboro, through Washington County, the City of Cornelius, and extending into the City of Forest Grove. The project or a portion of the project is outside the designated urban growth boundary.	\$39,800,000	\$23,800,000	\$700,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Hillsboro	Crescent Park Greenway - Brookwood Overcrossing	12133	Brookwood Parkway	Brookwood Parkway	Grade-separated over-crossing of Crescent Park Greenway at Brookwood Parkway	\$6,000,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Tualatin Hills Park & R	McKernan Creek Trail	12106	SW Rigert Rd. at Summercrest Park	SW Grabhorn Rd. north of SW Tile Flat Rd.	Plan, design, and construct a 12' wide multi-use regional trail from Summercrest Park to SW Grabhorn Rd. serving the urbanizing Cooper Mountain area; improving safety, access to jobs, and linking the area to the regional trail network	\$21,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Tualatin Hills Park & R	Reedville Trail - South	12107	SW Grabhorn Rd. at SW Stonecreek Dr.	SW Grabhorn Rd. at South Cooper Loop Trail	Plan, design, & construct a 12' wide multi-use regional trail connecting the Reedville Trail - North segment at SW Grabhorn Rd. & SW Stone Creek Dr to the South Cooper Loop & McKernan Creek regional trails, improving safety/access to new urban areas.	\$6,500,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Westside Trail: Segment 2	11484	Tigard City Limit	Beef Bend Rd.	Multi-use trail following BPA powerline.	\$10,400,000	\$0	\$0	2031-2045	Yes



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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Nyberg Creek Greenway Trail - East	10745	65th	Martinazzi	Shared Use Path with boardwalk sections through wetland/natural areas. Trail will provide access to nature and jobs for communities of color, and English language learners. Includes grade-separated crossing under/over I-5.	\$5,100,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Phase 1: 65th Ave - Safety Improvements NB Turn Lane	11426	Tualatin River	I-205	To improve safety for residents and employees, add a share use path on one side of this roadway section. Include northbound right-turn lane on 65th at Borland.	\$6,800,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segment 17)	11427	112th	Tualatin / Boones Ferry	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan.	\$16,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Martinazzi Safety Improvements (Warm Springs to TS Rd)	11428	Warm Springs	Tualatin-Sherwood	To improve safety for employees and residents, add bike lanes or other improvements for pedestrians, cyclists, and vehicle flow/safety on this section of roadway.	\$4,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Norwood Street Sidewalks and Bike Lanes	11431	Boones Ferry Road	East City Limits	Add sidewalks and bike lanes, upgrade to urban standards.	\$4,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Tualatin River Pathway	10744	Eastern city limits	Western city limits	Fill in system gaps from eastern city limits to western city limits.	\$8,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Beaverton Creek Trail (Regional) Seg. #3 & #4	12043	THPRD Nature Park	S.W. Hocken Blvd.	Design & construct a 12' wide regional, multi-use trail connecting THPRD's trail system to Downtown Beaverton; improving safety, serving historically marginalized communities, filling a gap, and increasing access to jobs, transit, & 2040 Centers.	\$6,900,000	\$1,638,000	\$1,638,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Bridge crossing of Hwy. 26 by the Westside Trail	11211	Powerline Corridor North of Hwy 26 near NW Science Park Drive	Powerline Corridor South of Hwy. 26 near SW Greenbrier	Construct a 12' wide multi-use trail bridge over US-26 eliminating out of direction bike/ped routes along high-injury/crash corridors; serving historically marginalized communities & improving safety/access to transit, schools, jobs, & 2040 Centers.	\$19,900,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Westside Trail (Regional) Seg. 15 -17	11405	Bronson Creek just north of NW Kaiser Rd.	north side of Hwy. 26 just west of NW Science Park Dr.	Design & construct 12' wide multi-use regional trail linking the northern Westside Trail to the Westside Trail Bridge over US-26; improving safety, serving historically marginalized communities, and increasing access to jobs, schools, & 2040 Centers.	\$4,900,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Westside Trail (Regional) Segment #14	10810	South of Hwy 26 at Greenbrier Pkwy.	THPRD Nature Park	Design & construct a 12' wide regional trail connecting the southern Westside Trail at 158th Ave & Walker Rd to the Westside Trail Bridge over US-26; serving historically marginalized communities, and improving safety/access to jobs & retail hubs.	\$6,000,000	\$0	\$0	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Beaverton Creek Trail (Regional) Seg. #1 & #2	10811	SW 194th Ave.	Westside Trail at THPRD Nature Park	Design & construct a 12' wide regional multi-use trail segment connecting City of Hillsboro and THPRD trail systems; improving safety, completing a gap, serving historically marginalized communities, and increasing access to jobs, schools, & transit.	\$16,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	North Johnson Creek Trail	11966	Cedar Mill Creek Trail at Foege Park	SW Miller Rd.	Design & construct a 10'-12' wide multi-use community trail providing a safe alternative to high-injury corridors and connecting a high-density MAX light-rail station community, 2040 Centers, jobs, and other regionally connected trail systems.	\$16,600,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & R	Tualatin Hills Park & R	Waterhouse Community Trail Connection, Segment 9	11942	THPRD boundary	SW Springville Rd. just west of Sickle Terr.	Design & construct a short but significant 10' wide multi-use trail to connect a fast-growing urban area to the Rock Creek Regional Trail; serving historically marginalized communities, improving safety, and increasing access to jobs & 2040 Centers.	\$4,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	School Access Improvement Projects	11922	Washington County	Washington County	Add sidewalks, neighborhood bikeways, signage, crossings.	\$34,600,000	\$500,000	\$500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	95th Ave. Ped/Bike Connection	10589	Morrison St.	Barnes Rd.	Pedestrian/bicycle pathway, lighting, bridge over Johnson Creek.	\$22,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Alexander St (192nd to 209th) Bike Lanes and Sidewalks	12062	192nd Ave	209th Ave	Add bike lanes, sidewalks and turn lanes where appropriate.	\$18,200,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Tualatin	Boones Ferry Safety Improvements (Bridgeport to Tualatin Rd)	11961	Bridgeport Road	Tualatin Road	Provide mid-block crossings, buffered bike lane or shared use path.	\$4,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Forest Grove	Gales Creek Road Improvement	11973	Thatcher Road	Forest Gate Drive/Williamina Avenue	To enhance the pedestrian safety by connecting gaps, improve bike lane safety, some storm drainage and road improvements.	\$3,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Locust Avenue Bike Lanes and Sidewalks	10611	Hall Blvd.	72nd Ave.	Completes 1650 feet of bike lanes and missing sidewalks in regional center.	\$8,100,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Meadow Dr/Downing St (Murray to Walker) Bike Lanes and Sidewalks	12059	Murray Blvd	Walker Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	\$17,700,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Metzger Area Sidewalks and Bikeways	11465	Metzger Area	Metzger Area	Washington Dr. sidewalks (Taylor's Ferry to Hall), Accessways, Oak St. sidewalks/bike lanes (Hall to 72nd).	\$29,300,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Rigert Rd (185th Ave to 170th Ave) Bike Lanes and Sidewalks	12067	185th Ave	170th Ave	Add bike lanes, sidewalks and turn lanes where appropriate	\$23,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Safe Access to Priority Transit Corridors	11468	add area	add area	Conduct project development, preliminary/system engineering, design, and construct enhanced pedestrian crossings Countywide on priority transit corridors.	\$22,800,000	\$0	\$0	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Sunset TC Station Community Pedestrian Improvements	10607	Sunset TC Station Community	Sunset TC Station Community	Sidewalks, pedestrian crossings, accessways, ped/bike bridges over creeks.	\$14,600,000	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Washington County	Beaverton	Beaverton	Hall Boulevard Bridge Reconstruction (Beaverton Creek)	12100	Crescent Street	Crescent Connection MUP	Construct new roadway bridge with wider sidewalks and protected bike lanes. Reconstruct intersection with SW Crescent Avenue/Crescent Connection multiuse path and replace traffic signal.	\$26,000,000	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Washington County	ODOT	Tigard	Hall Blvd/Fanno Creek Bridge	12003	Over Fanno Creek in Tigard	Over Fanno Creek in Tigard	Replace bridge with new bridge meeting current standards with sidewalks and bike lanes.	\$13,700,000	\$0	\$0	2031-2045	Yes
Bridge (Capital)	Washington County	Tigard	Tigard	North Dakota St (Fanno Creek) Bridge Replacement	12170	North Dakota Street at Fanno Creek	North Dakota Street at Fanno Creek	Replace bridge, with bike lanes and sidewalk.	\$8,000,000	\$8,000,000	\$0	2023-2030	Yes
Bridge (Capital)	Washington County	Tigard	Tigard	Tigard St (Fanno Creek) Bridge Replacement.	11996	Tigard St at Fanno Creek	Tigard St at Fanno Creek	Replace bridge with bike lanes and sidewalk.	\$6,800,000	\$6,800,000	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Barrows Rd: Tile Flat to Loon Dr (South Cooper Mtn Extension)	11892	Tile Flat Road	Loon Drive	Construct new three lane collector street with bike lanes, sidewalks, street trees, and lighting. (Partially Complete)	\$18,200,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Hocken Ave: Canyon Rd to Farmington Rd (Railroad Crossing)	12127	Canyon Road	Farmington Rd	South bound, right turn lane extended, between Farmington Rd and Canyon Rd. Project includes sidewalk and railroad crossing safety treatments.	\$2,800,000	\$0	\$0	2023-2030	Yes

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Roadway (Capital)	Washington County	Beaverton	Beaverton	McKernan Creek Parkway: Siler Ridge Lane to Kemmer Road	12129	Siler Ridge Lane	Kemmer Road	Design new collector street in Cooper Mountain area with shared use pathway adjacent to the street.	\$2,300,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Millikan Way Extension: Watson Avenue to Lombard Avenue	10620	Watson Avenue	Lombard Ave.	Construct new two-lane collector street between Watson Avenue and Lombard Street with protected bike lanes, sidewalks and street trees. Complete sidewalk gaps. Realign Millikan between Watson Avenue and Hall Boulevard.	\$15,000,000	\$925,000	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	SW Mountainside Way: Scholls Ferry Rd to UGB (New Collector)	11893	Scholls Ferry Road	Urban Growth Boundary	Construct three lane collector road with bike lanes, sidewalk, street trees and lighting.	\$5,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Cedar Hills Boulevard/Canyon Road Intersection (Reconfiguration)	12117	Cedar Hills Boulevard/Canyon Road	Cedar Hills Boulevard/Canyon Road	Construct new signal; Add NB and SB left turn lanes on Cedar Hills Blvd; add EB left turn lane on Canyon road; add sidewalks and ramps. Eliminate left turning movements around the Broadway jughandle; add protection for cyclists on SW Broadway St.	\$9,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Cedar Hills/Dawson Way/Westgate (Intersection Realignment)	10618	Rose Biggi Avenue	Cedar Hills Boulevard	Construct realignment of Dawson Way/SW Westgate Drive at Cedar Hills Boulevard. Add turn lanes at intersection. Construct sidewalks on SW Westgate Drive and on-street bikeway (sharrows) on Westgate Drive and Dawson Way.	\$21,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Farmington Road/Cedar Hills Boulevard (Add Turn Lanes)	11895	Farmington Road/Cedar Hills Boulevard	Farmington Road/Cedar Hills Boulevard	At intersection of Farmington Road and Cedar Hills Boulevard, construct southbound double left turn lanes and southbound right turn lane. Restripe southbound through lanes as side-by-side left turn lanes. Construct second eastbound left turn lane.	\$8,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Hall Blvd/Allen Blvd Intersection (add turn lanes)	11896	Hall Boulevard/Allen Boulevard	Hall Boulevard/Allen Boulevard	Construct eastbound and westbound right turn lanes, and northbound and southbound double left turn lanes at the intersection of Hall Boulevard and Allen Boulevard.	\$6,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	McKernan Creek Parkway: Siler Ridge Lane to Kemmer Road	12128	Siler Ridge Lane	Kemmer Road	Construct new collector street in Cooper Mountain area with shared use pathway adjacent to the street.	\$19,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Cornelius	Cornelius	S. 29th Blvd. - Phase 2	11918	250 feet east of 345th Avenue	SW 345th Avenue	Create new intersection of S. 29th Blvd and SW 34th Avenue, improve passive rail crossing, and complete the eastern portion of S. 29th Blvd.	\$1,600,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Cornelius	Cornelius	345th Avenue Traffic Signals and Crossing Gates	10802	TV Hwy (OR 8)	S. 29th Blvd.	Install traffic signals at intersection of Hwy 8 and SW 345th Avenue and install crossing gates and signals at SW 345th railroad crossing between Baseline and S. 29th Blvd.	\$4,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	David Hill Road Improvement	10784	Thatcher Road	West UGB	Improve David Hill Road west of Thatcher Road to collector road standards to improve pedestrian and bicycle safety and improve multimodal access from nearby neighborhoods to community park.	\$22,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	Heather Industrial Connector	12132	Mountain View	Poplar Street	Construct collector road to improve circulation	\$3,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	Thatcher Road Improvement	10773	David Hill Road	Gales Creek Road	Improve Thatcher Road to arterial design standards and improve intersection with Gales Creek Road.	\$26,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	194th Ave/Amberglan Pkwy Extension and Realignment	11277	Amberglan Pkwy	Cornell Rd	Construct three-lane realignment of Amberglan Pkwy with sidewalks and bike facilities; see AmberGlen "Crossroads" LPA	\$10,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	25th Ave Realignment	12135	NE Beacon Ct	Evergreen Rd	Construct three-lane realignment away from airport Runway Protection Zone (RPZ); see HIO Master Plan; additional refinement needed for the two intersections of NE 25th and NE 15th Ave on Evergreen	\$9,600,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	30th Ave Extension	11388	Evergreen Rd	Meek Rd	Construct three-lane road; include intersection improvements at Evergreen and Huffman	\$32,200,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Amberglan Parkway Extension	10825	Wilkins St	Stucki Ave (future extension)	Extend three-lane road with bike/ped facilities	\$3,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Extension and Improvements (Baseline to Lois)	10818	Baseline Rd	Lois St	Construct three lane extension of Century from Main to Lois, including new segment to Borwick, realignment from Ariel to Lois, and bridge over Rock Creek.	\$21,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Cornell Rd & 25th Ave Intersection Improvements	11169	Cornell Rd & 25th Ave	Cornell Rd & 25th Ave	Construct second southbound left-turn lane, convert northbound right to second northbound through, construct second northbound receiving lane; extend bike lanes on west leg for 300'; MSTIP-3d committed project	\$7,200,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Huffman St Extension, Phase 1	10821	Brookwood Pkwy	Sewell Rd	Widen to five lanes from Brookwood to Starr and three lanes from Starr to Sewell; preserve seven-lane right-of-way from Brookwood to Starr and five-lane right-of-way from Starr to Sewell; include intersection improvements at Brookwood	\$17,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Kinnaman Rd Extension	11272	Century Blvd & 67th Ave (future intersection)	209th Ave & Kinnaman intersection	Construct three-lane road extension through South Hillsboro including intersections at Cornelius Pass Rd, 209th Ave, and two intersecting neighborhood routes	\$12,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Sewell Ave	12104	Evergreen	Meek Rd	Construct two-lane Commercial and Industrial Collector; alignment north of Waibel Creek to be determined	\$29,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Walker Rd Extension and Realignment	11275	Amberwood Dr	Stucki Ave (future extension)	Construct three-lane extension of Walker from Overlook to Amberglan Pkwy realignment with bike facilities and sidewalks; see AmberGlen "Crossroads" LPA	\$7,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	25th Ave Extension	11906	Evergreen Rd	Jackson School Rd	Construct three-lane road; also see 25th Ave realignment project (22-003)	\$19,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Improvements (South Hillsboro)	11394	Kinnaman Rd	Rosedale Rd	Widen road to three-lane collector standard; include roundabout at Kinnaman, bridge over Butternut Creek and box culvert at tributary south of Ross; include intersection improvements at Rosedale and signal at Murphy	\$84,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Hillsboro Safety Action Projects	11932	City -wide	City -wide	Implement projects as identified in the Hillsboro Transportation Safety Action Plan to improve safety at locations with high fatal and/or serious crashes.	\$10,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Huffman St Extension, Phase 2	11890	NW 273rd	Jackson School Rd	Construct three-lane road, preserve five-lane right-of-way (cost estimate represent higher cost option of Waibel Creek alternative alignment with roundabout at Jackson School Road)	\$38,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Murphy Rd Construction	11384	Century Blvd	209th Ave	Construct new three-lane road with new intersections at Century, Cornelius Pass, and 209th Ave	\$24,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Rosedale Rd Turn Lanes and Bike/Ped Improvements	11911	Century Blvd (229th Ave)	209th Ave	Widen and improve road to three-lane collector standard; box culvert at Rosedale Creek east and west crossings	\$26,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Stucki Ave Extension and Realignment	11276	206th Ave	Walker Rd	Construct three-lane extension with new intersections at Gibbs, Wilkins extension, Amberglan extension, and 205th; see AmberGlen "Crossroads" LPA	\$45,100,000	\$0	\$0	2031-2045	Yes

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Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Veterans Dr Extension	12140	Brookwood	Belknap	Construct three-lane extension east of Brookwood to connect to Elam Young Pkwy via Belknap Ct; require bridge over Dawson Creek; improve Belknap Ct to two-lane collector standard and remove on street parking to accommodate bike lanes	\$26,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 1	11946	Roy Rogers Rd.	150th Ave.	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	\$10,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	King City	King City	SW River Terrace Boulevard Corridor Extension	12101	SW Beef Bend Rd	SW Elsner Road	Construct a Collector Street with bike/ped facilities. 2-lane street with parking, sidewalks and a one-way cycle track on each side, with 3-lanes at the Beef Bend intersection. Improve the Beef Bend Road, Fischer Rd and Elsner Rd intersections with signals or roundabouts.	\$13,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	King City	King City	154th Ave New Collector	12149	SW Beef Bend Rd	New E-W Collector (KT Blvd)	Construct a Collector Street with pedestrian and bike facilities. 2-lane street with parking, sidewalks on both sides, with 3-lanes provided at the SW Beef Bend intersection.	\$6,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 2	12150	154th Ave	147th Ave	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	\$19,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 3	12151	147th Ave	King Lear Way	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	\$5,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	SW 150th Avenue Corridor Improvements	12155	SW Beef Bend Rd	New E-W Collector	Construct a Collector Street with pedestrian and bike facilities. 2-lane street with parking, a shared-use path on the west side and a sidewalk on the east side, with 3-lanes provided at the SW Beef Bend intersection.	\$7,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ Fernhill-Maple St. Intersection Improvements	11667	HWY 47	Fernhill-Maple	Construct intersection improvements to address safety issues at high crash intersection and improve access to employment area and regional recreational facility.	\$3,200,000	\$750,000	\$750,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ Martin Road Intersection Improvements	11661	OR 47	Martin Road	Construct improvement (e.g. roundabout) at Highway 47 intersection with Holladay Street extension, Martin Road and 23rd Avenue extension. This project or a portion of the project is located outside the urban growth boundary.	\$3,000,000	\$3,000,000	\$3,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Hillsboro	TV Hwy & 198th Ave Intersection Improvements	11390	TV Hwy & 198th Ave	TV Hwy & 198th Ave	Five lane north-south through intersection: Construct southbound right-turn lane, second westbound left-turn lane, and convert northbound right-turn to shared through-right; widen north leg for second northbound receiving lane	\$6,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Wilsonville	Boones Ferry / I-5 off ramp improvements	11489	SB I-5 off ramp	Boones Ferry Rd	Construct second right-turn lane.	\$2,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Farmington Rd. realignment and widening, sidewalks, bike lanes,	10560	170th	209th	Widen by 2 to 3 lanes with turn lanes at major intersections, bike lanes, sidewalks, access management, realignment of Rosa/179th intersection.	\$111,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Hall Blvd. Improvements	11739	Oleson Rd.	Locust	Improve to 2/3-lane cross section with bike lanes and sidewalks.	\$33,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Hall Blvd. Improvements	10595	Scholls Ferry Rd.	Oleson Rd.	Improve to five lanes with bike lanes and sidewalks.	\$5,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Tigard	Hall Blvd. Improvements - Locust to Durham	11220	Locust	Durham	Build protected bike facilities, complete sidewalks on both sides of the road, and provide new and improved pedestrian crossings throughout the corridor. Maximum roadway cross section of 3 lanes away from intersections. Combine and coordinate with ODOT State of Good Repair project and potential Washington County project north of SW Locust.	\$32,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Tigard	Hall/Hunziker/Scoffins Intersection Realignment	11223	Hall Blvd.	Intersection with Hunziker & Scoffins	Realign offset intersection to cross intersection to alleviate congestion and safety issues.	\$17,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Tualatin	Nyberg On-Ramp Lane and Safety Enhancement	11420	I-5 on-ramp	I-5 on-ramp	Add an additional on-ramp lane for vehicles traveling westbound on SW Nyberg Street to I-5 northbound (northeast quadrant of the Nyberg Interchange). Reduce the pedestrian island and improve illumination to enhance safety.	\$5,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47 at David Hill Road Intersection Roundabout Improvement	11948	David Hill Road	Highway 47	Add an additional second circulating lane to the existing roundabout to provide separation for northbound left turning and through traffic as well as a separate lane for southbound turns.	\$5,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47 at Purdin Rd/Verboort Rd Roundabout Improvement	11950	Highway 47	Purdin Road/Verboort Road	Add a northbound right turn slip lane on the south leg of the roundabout and a southbound right turn slip lane on the south leg of the roundabout to the overall roundabout intersection. The project or a portion of the project is outside the designated urban growth boundary.	\$9,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Hillsboro	US 26 at NE 185th Eastbound On-Ramp Widening	12148	185th	US 26 Eastbound	Widen on-ramp to two full lanes and allow shared right-turn from outside northbound through lane on 185th	\$4,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT, Forest Grove	Forest Grove	Yew St / Adair St Intersection Improvements	11380	Yew St	Adair St	Construct intersection improvements at Yew Street/Adair and Yew Street/Baseline to improve safety.	\$3,200,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	P&W RR	Beaverton	Downtown Beaverton Railroad Crossing Safety: 5th to Hocken	12120	5th Ave.	Hocken Ave.	Construct new sidewalks and curb ramps, bike lanes, traffic signals, and rail safety equipment at six railroad crossings. Implement a railroad quiet zone.	\$9,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Oregon Street Improvements	10699	SW Murdock Rd	SW Langer Farms Pkwy	Widen existing substandard 2-lane road (no sidewalks, no median) to a 3-lane collector meeting current TSP standards (8' sidewalks, 5' landscape strip, 12' travel, 14' median, 12' travel, 5' landscape, 8' sidewalks, plus 2 on-street bike lanes or 4' added to each 8' sidewalk). On-street bike lanes vs. 2 multi-use paths TBD with future development.	\$9,600,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Tonquin Area East-West Collector	12046	SW 124th Avenue	SW Tonquin Road	Construct 3-lane collector status road between SW 124th Avenue and SW Tonquin Road through the Tonquin employment area to serve recent UGB annexation area.	\$14,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Baler Way Extension	11404	SW Langer Farms Parkway	SW Tualatin-Sherwood Road	Extend SW Baler Way (3-lane collector) between SW Tualatin-Sherwood Road and SW Langer Farms Parkway, possibly SW Pacific Highway depending upon results of widening of SW Tualatin-Sherwood Road project by Washington County.	\$4,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Brookman Road Improvements	10682	SW Pacific Highway	SW Ladd Hill Rd.	Arterial road between OR 99W and SW Ladd Hill Road, all-phases including additional Plan Development, Design, ROW Acquisition, Construction, Construction Administration, Inspections.	\$34,800,000	\$0	\$0	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Roadway (Capital)	Washington County	Sherwood	Sherwood	Edy Rd Improvements	10692	SW Elwert Rd	SW Cherry Orchards Pl.	Reconstruct road to 3-lane collector standards w/ sidewalks and bike lanes. Partial Washington County jurisdictions and assumed to become City's jurisdiction upon completion of project.	\$21,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Langer Farms Parkway Extension	12044	SW Pacific Hwy	SW Roy Rogers Rd	Extends SW Langer Farms Parkway (3-lane collector street) west across OR 99W to serve undeveloped land within city limits and UGA expansion areas.	\$7,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Sherwood Blvd Improvements	10691	SW Century Dr.	SW 3rd St.	Reconstruct road to 3-lane arterial standards. Median/turn lane, landscape strip, ADA compliant sidewalks. Reconstruct intersection at 3rd St to increase capacity. Assume SW Century Drive improved by development and/or local funds.	\$4,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	72nd Ave. Improvements - 99W to Dartmouth	10755	99W	Dartmouth	Build complete street with separated cycletracks, sidewalks, and improved pedestrian crossings. Includes new bridge over Red Rock Creek.	\$17,100,000	\$550,000	\$550,000	2023-2030	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	McDonald Street Improvements	11217	Hwy 99W	Hall Blvd	Widen roadway to a 3-lane complete street (with sidewalks, bike lanes, and center turn lanes where appropriate) and crossing enhancements at some locations.	\$28,100,000	\$28,100,000	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Atlanta Street Extension to 74th Ave	11408	74th Ave	69th Ave	Extend Atlanta Street west to 74th Ave.	\$16,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Tiedeman Ave Complete Street	11998	Greenburg Rd	Walnut St.	Following the completion of a circulation study, construct the identified projects to improve circulation and bring the roadways up to urban standards with complete bicycle and pedestrian facilities.	\$32,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Walnut Street Improvements	11229	Tiedeman Ave	Hwy 99W	Build complete street with sidewalks and bike lanes on both sides and ped crossing improvements; may include turn lane approaching Hwy 99W.	\$16,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	To be determined, Washington County	Sherwood	Oregon-Tonquin Intersection Improvements	10674	SW Oregon Street	SW Tonquin Rd	Reconstruct and realign three leg intersection with a roundabout (partial two-lane roundabout) approx 400 feet northeast of existing roundabout at SW Oregon St & Murdock Rd. ROW, PE, design & construction.	\$4,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Herman Rd Widening (Cipole to 124th Ave)	10718	Cipole	124th Ave	Reconstruction: Widen to 3-lanes from Cipole to 124th.	\$11,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Boones Ferry Rd Upgrade (Norwood to I-5)	11419	Norwood	I-5	Upgrade to urban standards, and add sidewalks.	\$16,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Helenius Upgrade to Urban Standards (109th to Grahams Ferry)	11430	109th	Grahams Ferry Road	Upgrade to urban standards.	\$4,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Myslony Widening (Hedges Creek to 124th Ave)	10716	Hedges Creek	124th Ave	Reconstruct/widen from 112th to 124th to fill system. Improve the intersection of 124th and Myslony.	\$8,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Teton Ave Safety Improvements (Tualatin Rd to Avery)	10738	Tualatin	Avery	Safety and active transportation improvements: Widen Teton to three lanes, add bike lanes. Add right-turn lanes from NB Teton to WB T/5 Road. Signalize intersection of Teton/Tualatin Rd. Add SB turn-pocket at Teton/Avery and signalize intersection.	\$9,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	170th Ave. Improvements	10546	Merlo Rd.	Alexander St.	Improve roadway to 3 lanes with left turn lanes at major intersections, enhanced pedestrian crossings, sidewalks, and bike lanes or cycle tracks.	\$38,700,000	\$1,600,000	\$1,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	198th Ave Widening and Bike/Ped Improvements	11386	TV Hwy	Alexander St	Widen roadway to five lanes (two through in each direction plus center turn lane) with bike/ped facilities; also see project 11390 - intersection improvements at TV Hwy & 198th	\$5,100,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	205th Ave. Improvements	10592	Quatama Rd.	Baseline Rd.	Improve road to 3 lanes with bike lanes and sidewalks. Widen bridge over Beaverton Creek to four lanes with bike lanes and sidewalks.	\$33,000,000	\$1,020,000	\$1,020,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 1	10553	Alexander Street	Kinnaman Rd	Widen roadway from two/three lanes to five lanes; improve from rural to urban standard with bike facilities and sidewalks; improve intersections and railroad crossing; new signals at Blanton and Kinnaman; project to serve South Hillsboro UGB area	\$12,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 2	11752	Blanton St	Vermont St	Widen and improve road to five lanes with sidewalks and bike facilities; include bridge widening across Butternut Creek; intersection improvements include new roundabout at McInnis and new signals at Deline and Vermont	\$30,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Alexander St. Improvements	10584	192nd Ave	178th Ave	Add sidewalks, lighting, streetscape features, protected bicycle lanes, intersection improvements at 185th Ave, turn lanes at major intersections.	\$23,700,000	\$950,000	\$950,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Basalt Creek Parkway	11470	Grahams Ferry Rd.	Boones Ferry Rd	Extend new 5 lane Arterial with bike lanes, sidewalks and street lighting.	\$74,000,000	\$1,250,000	\$1,250,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Blanton St. (198th to 209th)	12053	198th Ave	209th Ave	Construct two-lane road with sidewalk on south side and shared-use path on north side as a segment of the Tualatin Valley Trail, lighting, and turn-lane where necessary.	\$8,500,000	\$7,500,000	\$700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Boones Ferry Capacity Improvements (TS Rd Intersection)	11422	Tualatin- Sherwood Road	Tualatin-Sherwood Road	Improve traffic capacity through the addition of turn lanes and increased stacking distance on northbound or southbound Boones Ferry to Tualatin-Sherwood Road. Possible turn lanes on Tualatin-Sherwood, and possible side street closure intersecting Boones.	\$11,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Brookwood Ave Extension	12142	250' south of Davis Rd	River Rd	Construct three-lane arterial with pedestrian and bicycle facilities; include bridge over Gordon Creek; include improvement from Davis to Oakhurst according to LPA	\$28,700,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornelius Pass Rd Extension, Phase 2	11920	Blanton St	Vermont St	Construct five-lane road extension with new intersections at Kinnaman, McInnis, Butternut Creek, Deline, and Vermont; bridge at Butternut Creek (bridge is part of MSTIP Bonding program)	\$25,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornell at Brookwood and NE 48th Intersections	11170	Brookwood	48th	Add second southbound through lane and extend receiving lane to Veterans Dr, second eastbound and westbound left-turn lanes, northbound right-turn lane; add westbound right-turn lane starting at Elam Young west to NE 48th	\$13,500,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornell Rd Realignment	12136	East of 34th	West of Brookwood	Realign Cornell Rd to avoid airport Runway Protection Zone (RPZ); see HIO Master Plan	\$9,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Evergreen Rd Turn Lanes at 15th & 25th	12138	NE 15th	NE 25th	Construct side-by-side lefts; include cost estimate of signal modification at NE 15th Ave	\$2,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser	11477	County Line	Springville Rd.	Improve from 2 to three lanes with sidewalks, bike lanes, street lighting, and community features	\$8,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser Improvements	10564	Springville Rd.	Bethany Blvd.	Improve from two to three lanes with bike lanes and sidewalks.	\$10,400,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kinnaman Rd. Improvements	12183	209th Ave.	198th Ave.	Reconstruct with sidewalks, bike lanes and turn lanes at major intersections; consolidate offset intersection at 198th Ave.	\$6,800,000	\$6,000,000	\$275,000	2023-2030	Yes

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Roadway (Capital)	Washington County	Washington County	Hillsboro	River Rd Urban Upgrade	12144	WHVS northern boundary	WHVS southern boundary	Widen and improve road to three-lane arterial standard with pedestrian and bicycle facilities; include arch culvert at Gordon Creek; include intersection controls at Pheasant and Brookwood	\$9,600,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Roy Rogers Rd	11914	UGB	Chicken Creek Bridge	Improve roadway to 4-5 lanes, includes sidewalks and bike lanes. The project or a portion of the project is outside the designated urban growth boundary.	\$39,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	12192	Laidlaw Road	Bayonne Road	Improve to three lanes with bike lanes and sidewalks and realign roadway to the west including new structure over Bronson Creek, connecting to intersection of Laidlaw and 130th.	\$22,200,000	\$600,000	\$600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd	11915	Tile Flat Rd.	Roy Rogers Rd.	Improve roadway to 5 lanes on south side, includes sidewalks and bike lanes. The project or a portion of the project is outside the designated urban growth boundary.	\$5,700,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11458	West property line of Sato Elementary	Kaiser Rd.	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany.	\$15,900,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Springville Rd	11916	Kaiser Rd.	County Line	Improve south side from 2 lanes to 3 lanes with bike lanes and sidewalks.	\$8,000,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Springville Rd. Improvements	10565	PCC	Joss St.	Improve from 2 to 3 lanes with bike lanes and sidewalks.	\$13,700,000	\$12,000,000	\$500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Thompson Rd	11581	Saltzman Rd.	Marcotte Rd.	Improve to three lanes with bike lanes and sidewalks.	\$6,400,000	\$5,600,000	\$2,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Thompson Rd Realignment	11463	Saltzman Rd.	Circle A Dr.	Realign as 3 lane arterial to address safety and reduce crashes, with sidewalks, bike and street lighting.	\$9,600,000	\$8,400,000	\$600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Tile Flat Rd	11919	UGB	Scholls Ferry Rd.	Interim 3-lane and north side pedestrian/bicycle improvements. The project or a portion of the project is outside the designated urban growth boundary.	\$4,300,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. double left and right turn lanes: Butner to Park Way	12186	Butner	Park Way	Add double lefts and right turn lanes on all approaches at Walker/Murray intersection.	\$39,800,000	\$35,000,000	\$8,250,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	11233	185th Ave.	173rd Ave.	Improve from two to five lanes with bike lanes and sidewalks.	\$30,700,000	\$27,000,000	\$3,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements - Ph. II	12189	Schendel	Butner	Improve to five lanes, including bicycle and pedestrian improvements.	\$28,400,000	\$25,000,000	\$12,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. widen to 5 lanes: Park Way to Westfield	12187	Park Way	Westfield	Improve to five lanes, including bicycle and pedestrian improvements.	\$39,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	King City	137th Avenue Corridor: Beef Bend Rd to Fischer Rd ext.	12154	SW Beef Bend Rd	SW Fischer Road Extension	Improve to include pedestrian (Neighborhood Pedestrian Overlay) and bike facilities (Neighborhood Bicycle Overlay). Cost assumes a 2-lane street, a sidewalk on the west side and shared lane markings for bikes, with 3-lanes provided at the SW Beef Bend intersection.	\$14,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	174th Ave. Improvements	10548	Meadowgrass Ln.	Bronson Rd.	Add turn lanes, bike lanes and sidewalks	\$20,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	175th Ave (Kemmer Rd to Rigert Rd)	12066	Kemmer Rd	Rigert Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	\$23,900,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	175th Ave.	12179	Barrows Rd.	Weir Rd.	Improve standard curve, add bike lanes, sidewalks and turn lanes where appropriate.	\$35,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	185th Ave (Farmington to Gassner)	12061	Farmington Rd.	Gassner Rd.	Add bike lanes, sidewalks, and turn lanes where appropriate.	\$36,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	185th Avenue sidewalks and bike lanes: Kinnaman to Farmington	11480	Kinnaman Rd.	Farmington Rd.	Improve from two lanes to three lanes with bike lanes and sidewalks - interim improvement.	\$52,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	197th/198th Ave. Improvements	10586	Baseline Rd	Tualatin Valley Highway	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	\$46,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 3	11753	Vermont St	Farmington Rd	Widen and improve road to five lanes with sidewalks and bike facilities; improve culvert at Rosedale Creek; improve intersections including new signal at Murphy and modified signal at Rosedale	\$25,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	80th Avenue Complete Street	11578	Oleson Rd	Oak St	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	\$31,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10579	Cedar Hills Blvd	118th	Construct sidewalks on north side.	\$7,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Beef Bend Rd	11577	Roy Rogers	OR 99W	Improve to three lanes with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	\$95,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Blanton St. (170th to 198th)	12180	170th Ave.	198th Ave.	Improve two-lane road with sidewalks, raised protected bike lanes, lighting, and turn-lane where necessary (near-term segment of Tualatin Valley Trail).	\$35,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Boones Ferry Improvements	11487	Basalt Creek East-West Arterial	Day Rd.	Improve from 3 lanes to 5 lanes with bike lanes, sidewalks and street lighting.	\$12,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Cipole Street Reconstruction (OR 99W - Tualatin-Sherwood)	10717	OR 99W	Tualatin-Sherwood	Reconstruct/widen to 3 lanes from 99W to Tualatin-Sherwood Road and include shared-use path for the Ice Age Tonquin Trail. The project or a portion of the project is outside the UGB.	\$16,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornelius Pass Rd Extension, Phase 3	11921	Vermont St	Rosedale Rd	Construct five-lane road extension with new intersections at Murphy and Rosedale; box culvert at south tributary of Butternut Creek	\$24,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell @ 143rd Improvements	10549	143rd Ave.	Science Park Dr.	Realign 143rd with Science Park Dr. @ Cornell as a 4-way signalized intersection.	\$30,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell and 185th Intersection Improvements	11737	185th Ave.	Cornell Rd	Intersection improvements to maintain or improve mobility, safety and transit reliability. Prioritize near-term TSMO improvements and transit priority (TSP, queue bypass and BAT lanes).	\$50,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Garden Home Rd Improvements	11481	92nd	Oleson Rd.	Improvements to enhance safety, and bike / ped accessibility.	\$21,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Gassner Rd (Grabhorn Rd to 185th Ave) Bike Lanes and Sidewalks	12069	Grabhorn Rd	185th Ave	Add bike lanes, sidewalks and turn lanes where appropriate.	\$27,300,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Glencoe Rd. Improvements	10591	Evergreen Rd.	Jackson Ave.	Improve to three lanes with bike lanes and sidewalks.	\$63,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Grabhorn Rd	12181	Tile Flat Rd.	Farmington Rd	Interim 3-lane and east side pedestrian/bike improvements. Realign two 90 degree curves.	\$48,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Grabhorn Rd	12182	Tile Flat Rd.	add entent	Construct intersection improvements.	\$11,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Grahams Ferry Rd Upgrade (SW Ibach to Helenius)	11962	SW Ibach Road	Helenius Road	Upgrade SW Grahams Ferry Road to roadway standards between SW Ibach Road and Helenius Road.	\$13,000,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Wilsonville	Grahams Ferry Road Improvements	10588	Day Road	Basalt Creek Parkway	Widen Grahams Ferry Road to 3 lanes, with protected bike lanes, sidewalks and transit facilities. Protected bike lanes will reduce bicycle and freight conflicts.	\$30,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Greenburg Road	10612	Hall Blvd.	OR 217	Upgrades roadway to up to 5-lane urban standard with 3400 feet of bike lanes and sidewalks in regional center.	\$32,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Jackson School Rd Improvements	11907	Evergreen Rd	Storey Creek (UGB)	Widen and improve road to three-lane arterial standard; sidewalk on UGB side only; cycle track on east side and buffered bike lane on west side; additional refinement needed for future intersections with Huffman and 25th Ave extension	\$15,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Jenkins Rd. Improvements	11464	Murray Blvd.	Cedar Hills Blvd.	Improve from 3 lanes to 5 lanes with bike lanes, sidewalks and street lighting.	\$24,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Johnson St. Improvements	10585	Cornelius Pass Rd	185th Ave	Add sidewalks, bike lanes, lighting, turn lanes as needed.	\$22,800,000	\$0	\$0	2031-2045	Yes



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Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser/143rd Ave. Improvements	10563	Bethany Blvd. 198th Ave.	Cornell Rd. Farmington Rd.	Improve from two to three lanes with bike lanes and sidewalks. Reconstruct with sidewalks, bike lanes and turn lanes at major intersections; consolidate offset intersection at 198th Ave.	\$45,600,000 \$48,800,000	\$0 \$0	\$0 \$0	2031-2045 2031-2045	Yes Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Laidlaw Improvements	11466	Skycrest Pkwy.	Lakeview Dr.	Straighten curves, improve to 3 lanes with bike lanes and sidewalks.	\$24,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Laidlaw Improvements	11471	Saltzman Rd.	County Line	Improve to three lanes with bike lanes and sidewalks.	\$12,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Merlo/158th Improvements	10578	170th Ave.	Jenkins Rd.	Improve roadway to five lanes with bike lanes and sidewalks with an off-street multi-use trail on the south side to close gap for Beaverton Creek Trail.	\$11,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Miller Hill Rd (Farmington to Gassner) Bike Lanes and Sidewalks	12058	Farmington Rd	Gassner Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	\$19,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	OR 10: Oleson Rd. Improvement Ph. 1	10545	Oleson Rd. south of OR10	Oleson Rd. at Scholls Ferry	Realign Oleson Rd. 500 feet to east and reconfigure Oleson intersections with OR10 and Scholls Ferry Rd. to address safety and reduce crashes.	\$91,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Rigert Rd (170th Ave to 155 Ave) Bike Lanes	12068	170th Ave	155th Ave	Add bike lanes, and turn lanes where appropriate.	\$5,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	11476	Thompson Rd.	Bauer Woods Dr.	Improve to three lanes with bike lanes and sidewalks.	\$22,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	11451	Bayonne Road	Thompson Rd.	Improve to three lanes with bike lanes and sidewalks.	\$8,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Improvements	10577	Allen Blvd.	Beaverton-Hillsdale Hwy.	Improve roadway from two to three lanes with bike lanes and sidewalks.	\$54,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd. Improvements	11452	SW Pleasant Valley Road	SW Teufel Hill Road	Realign curves to improve safety and reduce crashes. The project or a portion of the project is outside the designated urban growth boundary.	\$10,400,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11459	Kaiser Rd.	Eleanor Ave.	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany.	\$13,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Taylor's Ferry (65th Ave to Washington Dr)	12065	65th Ave.	Washington Dr.	Add bike lanes, sidewalks, and turn lanes where appropriate.	\$34,200,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Taylor's Ferry Extension	10567	Oleson Rd.	Washington Dr.	Construct new two lane extension with bike lanes and sidewalks	\$10,700,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Tile Flat Rd	12184	Existing improvement extents in South Cooper Mountain	Grabhorn	Interim 3-lane and north side pedestrian/bike improvements	\$9,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker and 185th Intersection Improvements	11738	185th Ave.	Walker Rd.	Intersection improvements to maintain or improve mobility, safety and transit reliability. Prioritize near-term TSMO improvements and transit priority (TSP, queue bypass and BAT lanes).	\$50,800,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	10569	Ambergen Pkwy.	185th Ave.	Improve from two to five lanes to address congestion and safety, reduce crashes, with bike lanes and sidewalks.	\$42,600,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	12188	Westfield	123rd	Improve Cedar Hills/Walker to include double lefts and right-turn lanes on all approaches.	\$32,500,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	West Union Rd.	10575	Cornelius Pass Rd.	185th Ave.	Improve from two to five lanes with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	\$50,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	West Union Rd. Improvements	10571	185th Ave.	143rd Ave.	Improve to five lanes from 185th to Laidlaw and from two to three lanes from Laidlaw to 143rd Ave, with bike lanes and sidewalks.	\$66,100,000	\$0	\$0	2031-2045	Yes
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Garden Acres Road Extension	10853	Day Road	Ridder Road	Construct three lane road extension with sidewalks and cycle track and reconstruct/reorient Day Road/Grahams Ferry Road/Garden Acres Road intersection.	\$22,800,000	\$0	\$0	2023-2030	Yes
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Day Road Improvements	11243	Grahams Ferry Rd.	Boones Ferry Rd.	Widen street from 3 to 5 lanes with buffered bike lanes, sidewalks and street lighting. Improve structural integrity for increased freight traffic and provide congestion relief. Sidewalk infill and creation of Tonquin Trail multi-use path spur will reduce pedestrian and vehicle conflicts. Bike buffers will reduce bicycle and freight conflicts.	\$24,100,000	\$0	\$0	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	I-5 Northbound Braided Ramps I-205 to Nyberg	11989	I-205	Nyberg Rd	Replace the inside merge at I-205 entrance by constructing braided ramps.	\$98,000,000	\$0	\$0	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry - Phase 2	11402	Nyberg Rd.	Lower Boones Ferry Rd. Interchange	Extend existing auxiliary lane. This is Phase 2 (RTP ID 11583 is Phase 3 further north).	\$26,000,000	\$0	\$0	2031-2045	Yes
Throughways	Washington County	ODOT	Washington County	Jackson School Road Traffic Signal	11454	US 26 and Jackson School Road	US 26 and Jackson School Road	Signalize ramp intersections. The project or a portion of the project is outside the designated urban growth boundary.	\$3,300,000	\$0	\$0	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	11988	Beaverton-Hillsdale Hwy	Allen Blvd	Design and construct braided ramps on southbound OR 217 at Canyon Rd and Beaverton Hillsdale Hwy, including expanded bridge.	\$203,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Washington County	ODOT	Washington County	TV Hwy (and Canyon Rd) Corridor Safety and Access to Transit	11440	209th Ave.	107th Ave.	Bus stop improvements, ADA improvements, sidewalk infill, enhanced pedestrian crossings, signal priority, queue jumps.	\$2,700,000	\$0	\$0	2023-2030	Yes
Transit - Better Bus	Washington County	ODOT	Hillsboro	OR 8: TV Highway Transit Access and Multimodal Safety	10846	Maple St	Cornelius Pass Rd	Provide bike/ped improvements and safety and lighting improvements. Local match for TV Hwy HCT and Safety and Complete Street projects.	\$45,600,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Washington County	ODOT	Washington County	TV Highway Safe Access to Transit	11441	Cornelius Pass Rd.	160th Ave.	Enhanced station access (ADA, bike lanes and sidewalk infill), lighting, access management, and intersection safety. Local match for TV Hwy HCT and Safety and Complete Street projects.	\$70,000,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Washington County	Washington County	Washington County	ETC: Line 52 (185th and Farmington) safe access/enhanced transit	12064	PCC Rock Creek	Beaverton Transit Center	Improvements to enhance safety, and bike / ped accessibility including ADA improvements, sidewalk infill, enhanced pedestrian crossings, transit priority (TSP, queue bypass and BAT lanes) and bus stop improvements.	\$48,800,000	\$0	\$0	2031-2045	Yes
Transit - Better Bus	Washington County	Washington County	Washington County	ETC: Line 48 (Cornell/Barnes) safe access/enhanced transit corridor	12063	Sunset Transit Center	Hillsboro Transit Center	Improvements to enhance safety, and bike / ped accessibility including ADA improvements, sidewalk infill, enhanced pedestrian crossings, transit priority (TSP, queue bypass and BAT lanes) and bus stop improvements.	\$48,800,000	\$0	\$0	2031-2045	Yes
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Tualatin Valley Highway Transit Project	11589	Forest Grove	Beaverton Transit Center	Planning, design and construction of Rapid Transit Project along Tualatin Valley Highway.	\$300,000,000	\$0	\$0	2023-2030	Yes
Transit - High Capacity	Washington County	Washington County	Washington County	HCT: 185th Avenue/MAX Grade Separation	11045	185th Avenue	Baseline Road	Grade separate 185th Avenue/Baseline Road intersection and MAX line. Match funding only.	\$27,700,000	\$0	\$0	2031-2045	Yes
Transit Capital - Other	Washington County	TriMet	Hillsboro	Transit Stop Enhancements (Hillsboro)	11381	City-wide	City-wide	Provide citywide improvements to transit stops including landing pads, shelters, and other amenities.	\$8,500,000	\$0	\$0	2031-2045	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Beaverton Transit Center Improvements	12254	Beaverton Transit Center, Beaverton	Beaverton Transit Center, Beaverton	Reconfigure, update and expand bus layover facilities and add zero emissions fleet charging infrastructure at TriMet's Beaverton Transit Center.	\$9,000,000	\$5,600,000	\$1,240,000	2023-2030	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Bus: Merlo Bus Garage Improvements and ZEB Transition: Phase 1	11037	16130 SW Merlo Rd, Beaverton	16130 SW Merlo Rd, Beaverton	Zero emissions bus charging infrastructure and improvements to support new fleet at Merlo bus garage.	\$52,000,000	\$5,000,000	\$5,000,000	2023-2030	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Bus: Merlo Bus Garage Expansion and ZEB Transition: Phase 2	12278	16130 SW Merlo Rd, Beaverton	16130 SW Merlo Rd, Beaverton	Improvements at Merlo Bus Garage and to support ZEB transition and larger vehicles	\$167,000,000	\$0	\$0	2031-2045	Yes



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Transportation System Management (Technology)	Washington County	Hillsboro	Hillsboro	Communications (ITS) Projects	11931	City-wide	City-wide	Install fiber, ITS, and other communications equipment and devices for improved signal coordination.	\$2,600,000	\$0	\$0	2031-2045	Yes
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS (Phase 1)	10605	County-wide	County-wide	Install advanced traffic management systems including adaptive signals, retrofit ADA ramps at traffic signals, communications, dynamic messaging signs, and surveillance and management equipment.	\$16,800,000	\$250,000	\$250,000	2023-2030	Yes
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS (Phase 2)	11475	County-wide	County-wide	Install advanced traffic management systems including adaptive signals, retrofit ADA ramps at traffic signals, communications, dynamic messaging signs, and surveillance and management equipment.	\$23,900,000	\$0	\$0	2031-2045	Yes
Active Transportation - Bicycle	Clackamas County	ODOT	Lake Oswego	OR 43 (State St) Bike Lanes	11172	Terwilliger Blvd	McVey Rd	5,500' long widening for bike lanes, NB and SB. NHS/AASHTO/ODOT stds apply. Improve access and connectivity to the Foothills area.	\$22,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Clackamas County	Happy Valley	152nd Ave Sidewalk Infill: City Limits - OR 212	12314	South of Sedona Dr	OR-212	Project adds sidewalks on both sides of 152nd Ave, from the Happy Valley City limits south of Sedona Drive to OR-212. Project fills gap in regional on-street pedestrian network.	\$3,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Clackamas County	Happy Valley	Monner Rd Sidewalk Infill: 147th Ave - 162nd Ave	12315	147th Ave	162nd Ave	Performs sidewalk infill on both sides of Monner Rd from 147th to 162nd Ave.	\$9,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Happy Valley	Happy Valley	OR 224 Sidewalk Infill: Eckert Lane - City Limits	12302	Eckert Ln	City limits north of Grand St	Provides sidewalks in urbanizing area, between Eckert Lane and north of Grand.	\$6,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	ODOT	Milwaukie	McLoughlin Blvd Sidewalks	10098	Harrison St	UPRR	Fill in sidewalk gaps on both sides of street to increase pedestrian safety and access to equity priority area.	\$12,983,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	ODOT	Happy Valley	OR 224 Sidewalk Infill: Eckert Lane Intersection	12303	South of OR 212/224 Interchange	Eckert Ln	Sidewalk infill on east side of OR 224 at Eckert Lane.	\$3,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Oregon City	Oregon City	Linn Avenue Pedestrian Improvements	11760	Jackson Street/5th Street	Warner Milne Road	Construct Linn Avenue pedestrian improvements including sidewalk infill or multi-use path for safety and to connect pedestrian generators. (TSP D19, FF24, FF27, W62, W63, W77, W78, C19, C28, C31, C32, SS2)	\$13,220,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Borland Rd: Stafford Rd to West Linn City Limits	11618	Stafford Rd	West Linn City Limits	Add paved shoulders. The project or a portion of the project is outside the designated urban growth boundary.	\$20,257,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Tualatin	Borland Road (65th Ave to Tualatin City Limits)	11553	City Limits	SW 65th Ave	Upgrade to urban standards and fill sidewalk gaps. The project or a portion of the project is outside the designated urban growth boundary as of March 2014. Project includes PE, ROW, Environmental and Construction. Add paved shoulders and turn lanes at major intersections.	\$8,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: Oatfield to Webster Rd.	11517	Oatfield Road	Webster Road	Improve safety by implementing proven safety counter measures, and widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities to fill existing system gaps.	\$32,540,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Linwood Ave Capacity Improvements (north)	11538	Johnson Creek Blvd	Monroe St	Widen to standard three lane cross section. This project improves safety and connectivity in an equity priority area.	\$15,932,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Rusk Rd Bike/Ped Improvements (TSAP)	11769	Aldercrest Road	OR 224	Provide bicycle and pedestrian improvements on Rusk Road between Aldercrest Rd and OR 224 to improve safety, fill an important system gap and provide ADA accessibility improvements as needed.	\$13,911,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Webster Rd Safety Sidewalks, Bike Lanes	11518	OR 224	Gladstone	Fill gaps in bikeways and pedestrian facilities, improve access to school, provide bike/ped safety counter measures at key intersections and improve ADA accessibility.	\$39,374,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Hubbard Rd	11508	122nd Ave	132nd Ave	Fill gaps in pedestrian facilities and improve ADA facilities as needed. In addition, will improve facilities in an Equity Priority Area.	\$4,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 2	12316	Clatsop Rd	Hagen Rd	Completes Segment 2 of Mt. Scott/Scouters Mountain Trail Loop. Segment includes (1) signed bicycle route, south of Clatsop on SE 162nd and Vradenburg and (2) bike/ped route from Buttes Natural Area to Scouters Mountain and the existing Powerline Trail.	\$34,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Bryant Rd bike lanes/pathway	11087	Boones Ferry Rd	Childs Rd	7,500' long widening for 6' bike lanes, 6' sidewalk/pathway, both sides. Railroad crossing reconstruction; retaining wall needed at crossing.	\$36,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Phase 2	11887	Portland Ave, Gladstone	Clackamas River Trail, Oregon City	Second phase of construction of the Trolley Trail Bridge across the Clackamas River from Gladstone to Oregon City.	\$10,338,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 3-Improved Bike/Ped Connections to Springwater Trail near Tacoma Station	11174	Various Locations	Various Locations	29th/Harvey/40th Neighborhood Greenway Designate as a neighborhood greenway and install traffic-calming improvements. Improved Connection from Springwater Trail to Pendleton Site (Ramps) Construct ramps to improve existing connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP) Improved Connection from Springwater Trail to Pendleton Site (Widened Undercrossing) = Widen existing undercrossing to improve connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP). Improved Connection from Springwater Trail to Tacoma Station = Construct stairs to connect Springwater Trail to Tacoma station. (TSAP) Improved Connection from Springwater Trail to Pendleton Site (Tunnel) = Construct tunnel under Springwater Trail to improve connection to Pendleton site at Clatsop St. (TSAP) Improved Connection from Springwater Trail to McLoughlin Blvd = Construct stairs or other facility to connect Springwater Trail to west side of McLoughlin Blvd. (TSAP) Springwater Trail Completion = Contribute to regional project to complete Springwater Trail ("Sellwood Gap") along Ochoco St. Bicycle/Pedestrian Improvements to Main St - Construct multiuse path or other improved bike/ped facilities on Main St to provide safer connection between downtown and Tacoma station. (TSAP). - Phase 1 Committed = Downtown to Ochoco. Bicycle/Pedestrian Connection over Johnson Creek - Construct bike/ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect Tacoma station area with adjacent neighborhood. (TSAP). Improved Bicycle/Pedestrian Connections on West Side of Tacoma Station Area = improve bike/ped connections to adjacent neighborhood to west of Tacoma station area at Ochoco St and Milport Rd. (TSAP). Projects in Group 3 increase pedestrian and cyclist safety while improving bicycle and pedestrian network connectivity in an equity priority area.	\$20,272,000	\$0	\$0	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 9--Downtown Pedestrian Improvements	10100	Downtown	Downtown	Group 9 – Downtown Pedestrian ImprovementsDowntown Streetscape Improvements Install sidewalk bulbouts, lighting, and pedestrian amenities. Downtown Parking Signage Install wayfinding and identification signage at McLoughlin Blvd intersections and around public parking lots. Downtown Public Parking Lot Improvements – Upgrade and maintain off-street public parking facilities with improved landscaping and lighting.	\$31,434,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Park	Clackamas County	Bike and Pedestrian Bridge across the Willamette River	10085	Milwaukie City Limit	Abernethy Bridge	Provide an active transportation connection across the Willamette River by providing a new bike/ped bridge across the river	\$69,961,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Lake Oswego	OR 43 Pathway: LO to West Linn	11397	Oak St	Arbor Dr	Implement the design plan for an active transportation corridor along Hwy 43 consistent with the Connecting Clackamas Plan.	\$43,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Barlow Road Shared-Use Trail	10150	Abernethy Road	UGB	Add a shared-use path on the west/south side of Redland Road, along the north side of the gully from the Redland/Livesay to Holcomb/Oak Tree intersection, and from Holcomb to Ames Street. Install enhanced crossings at Redland Road and Holcomb Blvd (TSP S6, S9, S10, S11, C5, C7).	\$10,480,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Beaver Lake Shared-Use Trail	10149	Holly Lane Extension / Loder Road	Oregon City UGB	Add a shared-use path on the east side of the Holly Lane extension between Loder Road and Meadow Lane and on the north side of the Meyers Road extension between the Holly Lane extension and the UGB. (TSP S16, S19)	\$4,560,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Division Street Bike & Pedestrian Improvements	11627	7th Street	18th Street	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, add bus stop amenities. (TSP D80, W70, B60)	\$6,380,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Maple Lane Road Bike & Pedestrian Improvements	11626	UGB	Beavercreek Road	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. Intersection improvements (roundabouts) at Holly Lane & Walnut Grove Way. (TSP D37, D38, D84, W23, B21, C9)	\$5,790,000	\$750,000	\$750,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Newell Creek Canyon/Holly Lane Shared-Use Path	10147	Hwy 213 and Redland Road	Maple Lane Road	Add a shared-use path along the west side of the gully between the Redland/Livesay and Holly/Donovan intersection and then along Holly Lane between Donovan and Maple Lane. Will require a bridge over the gully south of Redland Road (TSP Project S12, S13). The project or a portion of the project is outside the designated urban growth boundary.	\$11,390,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	OR 99E Pedestrian Overcrossing	11552	Willamette River	McLoughlin Promenade	Construct a pedestrian and bicycle bridge over Highway 99E, connecting the McLoughlin Promenade to the Willamette Falls Shared-Use Path.	\$14,810,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Washington Street Bike & Pedestrian Improvements (North)	11548	11th Street	7th Street	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. (TSP D28 & D92 plus 50% of D1)	\$3,650,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd-190th Connector: Phase 2 - Construction	12194	172nd Ave	190th	Public right-of-way acquisition and construction to build new, 5-lane connector between 172nd and 190th. Project includes bike lanes, sidewalks and continuous left turn lane; important connector in n/s freight route alternative to I-205 between I-84 and Hwy-212	\$40,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	82nd Dr. Improvements	10023	Hwy 212	Strawberry Lane Intersection	Improve safety by implementing proven safety counter measures on known high crash corridor, widening to a consistent 4 lane cross section and include bike/ped improvement and ADA accessibility improvements as necessary. Not including intersection improvements at Strawberry Lane.	\$41,977,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Beavercreek Rd Phase 3B	12038	Meyers Rd	Urban Growth Boundary	Widen to four lanes and complete bike lane and sidewalks on both sides.	\$40,675,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Foster Rd (Middle): Widening and Multimodal	11669	172nd 190th Connector	Sunnyside Rd Extension (Happy Valley Blvd)	Widen two-lane minor arterial from the 172nd/190th connector to Sunnyside Road east (Happy Valley Blvd), to include continuous left turn lane, sidewalk and multi-use path. Project segment is 10,700 feet in length and includes proposed roundabouts.	\$36,400,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd. Improvements	10002	55th Ave	82nd Ave.	Implement proven safety counter measures and widen to 3 lanes with bikeways and pedestrian facilities from 55th Ave to 82nd Ave to improve safety, improving freight access to industrial area and increasing accessibility for historically marginalized communities.	\$40,025,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Redland Road	10057	Abernethy Road	UGB	Improve Redland Road to urban standards, adding left turn lanes at major intersections, upgrading two bridges and completing sidewalk gaps on west/south side between Abernethy and Anchor Way, north side between Anchor and Livesay, and both sides from Livesay to the UGB (Oregon City TSP Projects D91, W7, W17, W18).	\$30,019,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Oregon City	South End Road	11551	Partlow Road	UGB	Street improvements including lane reconfigurations, sidewalks, ADA accessibility, bike lanes, street lighting, and travel lanes. (TSP D89, D33, D23, D41, D42) The project or a portion of the project is outside the designated urban growth boundary as of March 2014.	\$17,540,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	145th Ave/147th Ave	10036	Clatsop St.	Monner Rd.	Widen 145th/147th Ave to include continuous left turn lane, sidewalk and bike lane infill. Project provides safe route between residential and recreational land uses.	\$15,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	162nd Ave Extension North	10040	Clatsop St.	Scouters Mountain Rd	Extend 162nd Ave from Clatsop to Scouters Mountain Rd, including two through lanes, left turn lanes, sidewalks, bike lanes and traffic signal. Project creates direct connection between circuitous bike/ped parkways, travel alternative to 172nd Ave arterial.	\$13,400,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Mt. Scott Blvd - Widening and Multimodal	10082	Happy Valley City Limits	129th Ave	Widen Mt. Scott Blvd. Facilities to three lanes, with continuous left turn lane, sidewalks and bike lanes.	\$44,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Public Parking Structure	11175	Location-specific	Location-specific	Construct 3- to 4-story public parking structure with retail at ground floor for visitor/employee parking.	\$33,484,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Wilsonville	Boones Ferry Road Urban Upgrade Phase 1	11765	Ridder Road	Boeckman Road	Widen to 3 lanes and construct bike lanes and sidewalks. Existing road has had two serious injuries. Project will create left turn pockets to reduce minor crashes. Complete sidewalk will remove pedestrian conflict from roadway.	\$13,400,000	\$0	\$0	2031-2045	No

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Roadway (Capital)	Clackamas County	ODOT	Wilsonville	Boones Ferry Road Urban Upgrade Phase 2	11778	Barber Street	Wilsonville Road	Widen to 3-lane urban section with buffered bike lanes. Existing road has had two serious injuries. Project will create left turn pockets to reduce minor crashes. Complete sidewalk will remove pedestrian conflict from roadway.	\$13,400,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Group 11--Intersection Improvements in North Industrial Area	11623	Ochoco St	Harrison St	Signage and intersection improvements at McLoughlin Blvd and Ochoco St. Establish signage for trucks and improve intersection. (TSAP). Intersection improvements at McLoughlin Blvd and 17th Ave Prohibit left-turn movement from 17th Ave to northbound McLoughlin Blvd and include in Hwy 224 & Hwy 99E Refinement Plan. Intersection Improvements at Main St and Mallwell Dr = Upgrade intersection turning radii to better accommodate freight movements. Projects will improve freight mobility in an equity priority area.	\$5,239,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Clackamas County	Johnson Creek Blvd. Interchange Improvements	10001	JCB/I-205 interchange	JCB/I-205 interchange	Increase safety at interchange by implementing proven safety counter measures, and improve interchange operations by adding a loop ramp and northbound on-ramp; realign southbound off-ramp and install dual right-turn lanes.	\$16,949,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Holly Lane Extension (South)	11550	Thayer Road	Meyers Road	New 3 lane roadway, sidewalks, bike lanes, turn lanes to serve UGB expansion area. (TSP D58)	\$10,940,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Regional Center Road Extension	11543	Washington Street/Home Depot Driveway	Abernethy Road	Construct new 3 lane roadway, sidewalks, bike lanes, turn lanes to serve a Regional Center. (TSP D63, SS)	\$29,620,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boeckman Rd./I-5 Overcrossing Improvements	10132	Boberg Rd.	Parkway Ave.	Widen Boeckman Road bridge over I-5 to 4 lanes. Add bike/pedestrian connections to regional trail system. Road has had a serious crash. Bikes and pedestrians travel on the road adjacent to freight in existing conditions.	\$35,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Brown Road Extension Phase 2	11557	Wilsonville Road	Kinsman Road	New connection between Wilsonville Road/ Brown Road intersection and Kinsman Road	\$8,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Weideman Road Extension - East	11771	Canyon Creek Road	Stafford Road	Construct new road with sidewalks and buffered bike lanes. This project or a portion of the project is located outside the urban growth boundary.	\$20,000,000	\$0	\$0	2031-2045	No
Throughways	Clackamas County	ODOT	ODOT	I-205 Operational Improvements	11992	Columbia River	I-5	Construct improvements to address bottlenecks and improve safety on I-205. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning.	\$40,000,000	\$0	\$0	2031-2045	No
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Project Phase 3	12020	I-205	172nd Ave	Construct remaining improvements in the Sunrise Corridor consistent with the FEIS/ROD. Construction may take place in multiple future phases. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$939,000,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Clackamas County	P&W RR	SMART	HCT: WES Expansion to Salem	11751	Wilsonville	Salem	WES service expansion from Wilsonville to Salem	\$34,167,000	\$0	\$0	2031-2045	No
Transit Capital - Other	Clackamas County	Milwaukie	Milwaukie	Downtown Milwaukie Transit Center Improvements	11536	Location-specific	Location-specific	Construct new bus layover facility outside of the downtown core.	\$2,506,000	\$0	\$0	2031-2045	No
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Property Acquisition for In-Town Turnaround	11749	Wilsonville Road	Wilsonville Road	Obtain property to create easier crosstown turnarounds for local bus service	\$18,222,400	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Clackamas County	Oregon City	Oregon City	City Wide Transportation System Management & Operations	11630	Citywide	N/A	Blvd traffic surveillance, integrated corridor management, weather information systems, advanced warning systems, speed warning systems, school zone flashers. (TSP D2-D6, D9, D10, D13-D26)	\$12,530,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County, Multnomah County	ODOT	ODOT	I-205 Multi Use Path	11985	Glen Jackson Bridge	82nd Drive (southern terminus)	Improve crossings and access to I-205 MUP at Parkrose Transit Center, Gilsan, Burnside, Stark, Washington, Springwater Trail, Johnson Creek/Flavel, Crystal Springs, Clackamas Town Center, and other locations, as needed.	\$20,000,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Multnomah County	Portland	Portland	Boones Ferry Rd Bikeway	10308	SW Terwilliger	Portland City Limits	Design and implement bicycle facilities.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Multnomah County	Portland	Portland	N Mississippi Streetscape Improvements	11876	Fremont	Skidmore	Construct streetscape improvements to enhance the area as a Pedestrian District.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	17th - Kane to East City Limit: Bike/Ped Improvements	11680	Kane	East City Limit Boundary	17th Ave: Kane to Gresham east city boundary Bike/Ped Improvements	\$4,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	182nd - Giese to Cheldelin: Complete Buildout	10541	Giese	Cheldelin	Improve 182nd to collector standards.	\$28,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Division - 257th/Kane to City Limits: Complete Buildout	10422	257th Ave.	City limits	Improve to community street standards, including bikelanes.	\$9,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Towle - Butler to Binford Lake: Ped/Bike/Intersection Improvements	10461	Butler	Binford Lake	Construct sidewalks, bike lanes and intersection improvements.	\$8,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Historic Columbia River Hwy - NE 244th Avenue to NE Halsey Street: Complete Street	10391	244th Ave.	Halsey St.	Reconstruct West Historic Columbia River Highway from NE 244th Avenue to NE Halsey Street, including two travel lanes, a center turn lane or median, bicycle lanes and sidewalks. Reconstruction of the railroad overcrossing is not included in this project	\$25,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	SE Cochran Road: SE Troutdale Road to Gresham / Troutdale City Limits	12226	Gresham / Troutdale City Limits	SE Troutdale Road	Fully reconstruct SE Cochran Road between SE Troutdale Road and the Gresham / Troutdale City Limits to major collector standards with two travel lanes, a center lane/median, sidewalks, and bicycle lanes.	\$8,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Stark St - Troutdale Rd to Evans Ave: Complete Street	10406	Troutdale Rd	Evans Ave	Reconstruct SE Stark Street between S Troutdale Road and SE Evans Avenue to two travel lanes, a center turn lane or median, sidewalks, and bicycle lanes. Project includes signal upgrades at the intersection of SE Stark Street and SW Evans Avenue for enhanced pedestrian safety. (538U)	\$4,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road (SE Stark to SE Strebin): Complete Street	12242	SE Stark St	SE Strebin St	Reconstruct S Troutdale Road between SE Stark Street and SE Strebin Road to three lanes, with two travel lanes, center turn lane or median, bicycle lanes and sidewalks. Project includes pavement overlay.	\$10,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Barbur Blvd Walking and Biking Improvements	12313	I-405	Barbur Transit Center	Build continuous high quality sidewalks, bike facilities and crossings on Barbur between I-405 and the Barbur Transit Center.	\$69,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	ODOT	I-5 Multi-Use Path	11983	Hayden Island Drive	Victory Blvd	Construct improvements to the I-5 MUP in Jantzen Beach to bring path up to current standards, improve safety, and improve access to the I-5 Columbia River Bridge. Improve ped. crossings at Tomahawk Island Drive and Hayden Island Drive.	\$20,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Inner Powell Blvd Corridor Improvements: Additional Local Contribution to State-owned Arterial	12229	Willamette River	I-205	Add sidewalks, lighting, enhanced pedestrian crossings and parallel greenway connections to reduce severe injury and fatal crashes.	\$69,000,000	\$0	\$0	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Portland to Milwaukie Trail	11198	Various roadways following the PMLR alignment	Various roadways following the PMLR alignment	Construct a shared-use path along SE McLoughlin Blvd from 17th Ave to the Springwater Corridor Trail. This project will be coordinated with ODOT to determine the alignment along McLoughlin Blvd.	\$31,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Port of Portland	Port of Portland	PIC Ped/Bike Network	10368	Mt. Hood MAX Station	NE Alderwood Road	Construct bike and pedestrian facilities as shown in the CS/PIC Plan District.	\$2,820,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	122nd Ave Safety Improvements: NE Marine to SE Foster	12307	NE Marine Dr	SE Foster Rd	Add proven safety countermeasures (sidewalks, crossings, lighting) to roadway to reduce severe injury and fatal crashes.	\$69,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Albina Vision Improvements	12310	Albina Vision Study Area	Albina Vision Study Area	Improvements to include: bus stop enhancements (wider platforms, bus pads, improved shelters and lighting), public art, placemaking elements (distinctive materials, special lighting, public spaces, planted medians and street trees), safer marked crossings, improved bikeways, pedestrian scale street lighting and sidewalk extensions	\$69,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Belmont Streetscape Improvements	10292	SE 25th	SE 43rd	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Flavel Dr Roadway Improvements	10222	SE 45th	Clatsop	Fully improve street from SE 45th to Clatsop Street with travel lanes, curbs, swales, sidewalks, and separated in-roadway bicycle facilities from 52nd to Clatsop.	\$16,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Green Loop/Central City in Motion Improvements	12308	Green Loop	Green Loop	Transit priority, protected bikeway and crossing treatments to make it easier and safer to take transit, walk and bike in the Central City and help implement the Green Loop vision identified in the 2035 Comp Plan.	\$69,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Killingsworth St Corridor Improvements	10294	N Interstate Ave	N Greeley	Design and implement streetscape and safety improvements to enhance sidewalks, lighting, crossings, transit stops, and signals. Reconstruct pavement where it is in poor condition.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE 162nd Ave Complete Street Improvements	12309	NE Sandy Blvd	NE Glisan St	Add turn lanes, and improved/ continuous curbs, sidewalks, lighting, bike and stormwater facilities.	\$69,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Fremont Streetscape Improvements	10293	NE 42nd	NE 52nd	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NW 13th Ave Ped/Bike Bridge	11790	NW Raleigh	NW Naito Pkwy	Construct a pedestrian and bicycle bridge over the railroad tracks to connect the North Pearl District to Naito and the waterfront.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NW Marshall Pedestrian/Bicycle Bridge	11784	NW 9th	NW Naito Pkwy	Construct a pedestrian/bicycle bridge over the railroad tracks, potentially connecting to Broadway Bridge.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Milwaukie Streetscape Improvements	10295	SE Yukon	SE Tacoma	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Taylors Ferry Safety Improvements, Segment 2	11883	48th	City Limits	Widen shoulder to provide bicycle climbing lane and construct a walkway for pedestrian travel and access to transit.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Reedway Ped/Bike Overcrossing	11819	SE 23rd Ave	SE 28th Ave	Construct a pedestrian/bicycle overcrossing of McLoughlin Blvd, light rail, and railroad tracks.	\$54,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SE 13th Ave Streetscape Improvements	11882	Malden	Tacoma	Plan and implement streetscape and transportation improvements, including crossing improvements, to increase opportunities to walk and enhance the main street character.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sullivan's Gulch Trail, Segment 1	11323	Eastbank Esplanade	NE 21st	Multi-use path along Sullivan's Gulch. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	\$87,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	TriMet, Gresham	Gresham	Rockwood Town Center at 181st: Max Station Enhancements	11098	181st LRT Station	Local streets to LRT station	Improve sidewalks, lighting, crossings, bus shelters, benches at 181st LRT station, on Stark St. and other intersecting streets.	\$21,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	UPRR	Portland	Sullivan's Gulch Trail, Segment 2	11878	21st Ave	Hollywood Transit Center	Construct a multi-use trail for pedestrians and bicycles within the Banfield (I-84) Corridor from 21st Ave to the Hollywood Transit Center. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	\$65,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	UPRR	Portland	Sullivan's Gulch Trail, Segment 3	11879	Hollywood Transit Center	Broadway	Construct a multi-use trail for pedestrians and bicycles within the Banfield (I-84) Corridor from the Hollywood Transit Center to Broadway. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	\$78,000,000	\$0	\$0	2031-2045	No
Bridge (Capital)	Multnomah County	Gresham	Gresham	190th - Highland Bridge	12239	200' south of SW 11th	Linneman Ave	Reconstruct and widen bridge to five lanes with sidewalks and bike lanes.	\$26,000,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Multnomah County	Multnomah County	Marine Drive and 223rd Ave Intersection: Freight and Multimodal Improvements	11600	Marine Drive at 223rd	Marine Drive at 223rd	Widen and improve intersection at NE Marine Drive and NE 223rd Avenue to accommodate freight traffic and provide bicycle and pedestrian facilities. Project includes reconstructing and upsizing a significant culvert under the intersection. (5311U)	\$30,300,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	SW Quad Access	10363	NE 33rd Ave.	SW Quad	Provide street access from 33rd Ave. into SW Quad.	\$14,330,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	T6 Second Entrance from Marine Drive	11306	N. Bybee Lake Rd.	N. Pacific Gateway	Construct 2nd entrance from Marine Drive and internal rail overcrossing to Terminal 6. I.	\$29,100,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	T6 Suttle Road entrance	11307	Terminus of N. Suttle Road	Terminal 6	Access to the east end of Terminal 6 off the terminus of Suttle Road.	\$7,300,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Portland	Portland	Going/Greeley Interchange Improvements	11871	N Going/Greeley	N Going/Greeley	Redesign Going/Greeley interchange including climbing lane on Going to improve truck movement between Swan Island, Lower Albina, and I-5.	\$39,000,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Portland	Port of Portland	Marine Dr. Improvement Phase 2	10379	BNSF grade crossing on Marine Drive	BNSF grade crossing on Marine Drive	Construct rail overcrossing on Marine Dr.	\$23,107,000	\$0	\$0	2031-2045	No
Freight	Multnomah County	Troutdale	Port of Portland	Troutdale Airport Master Plan Transportation Improvements	11743	Sundial Road	Swigert Way/Graham Road	Implement transportation improvements developed as part of the Troutdale Airport Master Plan	\$11,400,000	\$0	\$0	2031-2045	No

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Roadway (Capital)	Multnomah County	BNSF	Portland	N Fessenden St Bridge Replacement	11872	Fessenden St, N (over railroad cut)	Fessenden St, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	\$31,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	BNSF	Portland	N Willamette Blvd Bridge Replacement	11873	Willamette Blvd, N (over railroad cut)	Willamette Blvd, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	\$31,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	BNSF	Portland	Willbridge Industrial Area Rail Overcrossing	11117	NW Balboa	NW St Helens Rd	Provide an alternative crossing of the BNSF Railroad to improve connectivity and safety between US 30 and the industrial properties served by NW Front Avenue in the Willbridge area of the NW Industrial District.	\$46,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	181st at Stark and Sandy Intersections: Add Turn Lanes	10497	Sandy	Stark	At Sandy: Northbound right turn, 2nd westbound left turn. Overlap eastbound right turn. At Stark, add 2nd left turn lane on east and west legs.	\$4,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th - Richey to Cheldelin: Complete Buildout	12263	30th	Cheldelin	Improve existing road to major arterial standards, signalize 190th at Giese, Butler, Richey, Cheldelin.	\$42,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th/Highland - Linneman to 30th: Complete Buildout	10431	Linneman Ave	30th	Reconstruct and widen street to 5 lanes with sidewalks and bike lanes.	\$52,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	202nd/Birdsdale - Division and Stark Intersections: Add Turn Lanes	10450	Division	at Stark	Division: SB, EB turn lanes. At Stark: add 2nd NB LT lane and exclusive RT lane.	\$3,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Cleveland to Hogan: Complete Boulevard Design	12241	Cleveland	Hogan	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	\$18,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Eastman to Cleveland: Complete Boulevard Design	12240	Eastman	Cleveland	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	\$20,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Division - Kelly to Burnside: Boulevard Improvements	10433	Kelly	Burnside	Complete boulevard design improvements, medians for safety, wider sidewalk and buffered bicycle lanes.	\$25,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - Jenne to 172nd: New Roadway, Bike/Ped Facilities	10463	Jenne	172nd	New north extension of Foster.	\$37,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Burnside to Division: Complete Buildout	11603	Burnside	Division	Build out of Hogan to major arterial cross-section. Includes two travel lanes, center turn lane, multi-use path on the west side, bike lane and sidewalk on the east side.	\$20,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Palmquist to Rugg: Complete Buildout (to arterial standards)	10417	Palmquist	Rugg Rd.	Complete project development and construct new principal arterial connection with multi-use path.	\$82,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Stark to Burnside: Complete Buildout	10416	Stark	Burnside	Interim capacity improvements and access controls.	\$46,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Orient - South City limits to Kane Dr: Complete Buildout	10430	South City Limits	Kane Dr	Upgrades to arterial 4 lane standards.	\$21,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Powell Valley Rd. - Burnside to 282nd: Complete Buildout	10429	Burnside	282nd. Ave.	Improve Powell Valley to complete build out, with sidewalks and bike lanes.	\$35,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Regner - Roberts to Southern City Limits: Complete Buildout	10427	Roberts	Southern City Limits	Brings to minor arterial standard, adds pedestrian, bicycle facilities, improves Regner/Butler intersection by adding NB left-turn pocket and signaling intersection.	\$70,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Multnomah County	Port of Portland	Sundial Road Improvements	11190	Sundial Road	North of Marine Drive	Construct signal and turn lanes at Graham Road/Sundial Road intersection. Complete sidewalk gaps on Sundial Road	\$7,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	ODOT	Portland	Ross Island Bridgehead Improvements	10235	SW Naito Parkway	SW Barbur	Reconstruct Naito Pkwy as two-lane road w/bike lanes, sidewalks, left turn pockets, & on-street parking. Includes realignment/grading at intersecting streets; removal of Barbur tunnel, Ross Is Br ramps, Arthur/Kelly viaduct & Grover ped bridge. This project will be coordinated with ODOT and with the Southwest Corridor Project, and will consider impacts to ODOT facilities including Naito Parkway and the Ross Island Bridge.	\$156,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy / Bertha Blvd Bridge Replacement	11884	Capitol Hwy, SW (bridge over Bertha Blvd)	Capitol Hwy, SW (bridge over Bertha Blvd)	Replace existing weight-restricted bridge over Bertha Blvd (#081) with a new structure with improved vertical clearance.	\$23,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy / Multnomah Blvd Bridge Replacement	11885	Capitol Hwy, SW (bridge over Multnomah Blvd)	Capitol Hwy, SW (bridge over Multnomah Blvd)	Replace existing weight-restricted bridge over Multnomah Blvd (#082) with a new structure.	\$39,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Clatsop Street Extension	10536	SE 162nd Ave	Portland City Limits	Extend street east into Pleasant Valley based on the Pleasant Valley Implementation Plan.	\$15,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Halsey St Bridge Seismic Retrofit	10316	NE Halsey/I-84	NE Halsey/I-84	Retrofit existing seismically vulnerable bridge across I-84 (#021) to ensure emergency response and economic recovery in the event of an earthquake.	\$23,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Parkrose Connectivity Improvements, NE	10288	105th	109th	Supplement access route for commercial properties in Parkrose by improving 109th from Sandy to Killingsworth and Killingsworth from 109th to 105th, serving truck access functions, pedestrian, and bike connections.	\$15,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Pleasant Valley Foster Rd Extension	10347	SE Jenne Rd	SE Giese Rd.	Design and implement multimodal improvements based on the Pleasant Valley Implementation Plan recommendations.	\$8,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	W Burnside/Couch St Couplet Project	10171	Burnside Bridge	W 15th	Implements a one-couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes, on-street parking and street trees. This project will be coordinated with ODOT to address potential impacts to the I-405 interchanges, overcrossings and ramps.	\$156,000,000	\$0	\$0	2031-2045	No
Throughways	Multnomah County	ODOT	ODOT	I-5 Northbound: Lower Boones Ferry to Carman Auxiliary Lane Extension - Phase 3	11583	Lower Boones Ferry Rd. Interchange	Carman Dr. Interchange	Extend existing auxiliary lane between the Lower Boones Ferry Road interchange and the Carman Drive interchange. This is Phase 3 (RTP ID 11402 is Phase 2 further south). Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$49,000,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	ODOT	TriMet	HCT: Steel Bridge Transit Bottleneck Capital Construction	10921	NW 1st and NW Everett, Portland	N Interstate and N Multnomah, Portland	Construction to address transit bottleneck at the Steel Bridge and Rose Quarter.	\$5,696,000,000	\$0	\$0	2031-2045	No



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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Transit - High Capacity	Multnomah County	Portland	Portland	HCT Strategy, Tier 2 Improvements: Additional Local Contribution from Reg/State/Fed funding	12306	N/A	N/A	Improvements to improve transit speed, reliability, station access, amenities and rider experience; including enhancements to transit stations, and bus priority/queue bypass lanes, ITS and NextGen TSP investments from additional regional, state or federal funding that is in line with Strategic revenue forecast	\$69,000,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	Portland	TriMet	HCT: Streetcar Lovejoy to Hollywood Extension	11102	NE Grand Ave	Hollywood Town Center	Extend streetcar along NE Broadway/Weidler corridor to Hollywood Town Center	\$159,446,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	Portland Streetcar, Inc	TriMet	HCT: Streetcar Johns Landing	11639	SW Lowell	Willamette Park	Corridor Alternatives Analysis, public outreach, planning, design, engineering, and construction for future streetcar extension from Portland to Johns Landing. Potential future construction.	\$150,000,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Burnside/Stark Corridor High Capacity Transit	12286	Beaverton	Gresham	Project development of high capacity transit options and construction and implementation of high capacity transit from Beaverton to Gresham on the Burnside/Stark corridor.	\$162,700,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Lombard/Cesar Chavez Corridor High Capacity Transit	12288	St. Johns	Milwaukie	Project development of high capacity transit options and construction and implementation of high capacity transit from St. Johns to Milwaukie on the Lombard/Cesar Chavez corridor.	\$162,700,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Martin Luther King Corridor High Capacity Transit	12287	Hayden Island	Downtown Portland	Project development of high capacity transit options and construction and implementation of high capacity transit from Hayden Island to Downtown Portland on the Martin Luther King Boulevard corridor.	\$162,700,000	\$0	\$0	2031-2045	No
Transit Capital - Other	Multnomah County	Portland	Portland	Union Station, Phase 3	11870	Union Station	Union Station	Core building improvements, operational improvements, and railside improvements for Union Station.	\$327,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tigard	Tigard	Red Rock Creek Greenway Trail	12008	Dartmouth/217 area along Red Rock Ck	I-5 / 64th Ave	New trail parallel along Red Rock Ck in the Triangle from Near Dartmouth/217 to I-5.	\$6,800,000	\$300,000	\$300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	Bethany Creek Community Trail #2	11945	Waterhouse Trail at Abbey Creek	Rock Creek/Westside Trail intersection south of Springville Rd.	Design, & construct a 10' wide multi-use trail connecting new urban area residents to the Waterhouse, Westside, and Rock Creek Trail networks, serving historically marginalized communities & improving safety/access to jobs, schools, and 2040 Centers.	\$2,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	Bonny Slope West Trail	12105	NW Laidlaw Rd. at NW Saltzman Rd.	NW Cornell Rd. at Cedar Mill Creek	Plan, design, and construct a 10' wide paved, multi-use community trail. The off-street facility provides a safer alternate to on-street travel and increases access to 2040 regional centers near historically marginalized communities.	\$19,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	ODOT	ODOT	Active Transportation Critical Connections Region-Wide	11982	Region-wide	Region-wide	Construct improvements to address gaps and deficiencies in the regional active transportation network on ODOT facilities. Specific projects to be determined based on ODOT Region 1 Active Transportation Needs Inventory.	\$198,000,000	\$0	\$0	2031-2045	No
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: 5th Bus Base Design and Construction	12281	N/A	N/A	Construction of a 5th Bus Base	\$350,000,000	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Region-wide (all three counties)	ODOT	ODOT	Active Traffic Management (ATM) & Connected & Automated Vehicles (CAV) Region-wide Phase 1	11584	N/A	N/A	Deploy ATM recommendations from the ODOT Active Traffic Management Strategy. Specific projects to be determined. Deploy Connected, Automated and Electric Vehicle strategies.	\$46,000,000	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Region-wide (all three counties)	ODOT	ODOT	Active Traffic Management (ATM) and Connected and Automated Vehicles (CAV) Region-wide Phase 2	11980	Region-wide	Region-wide	Deploy ATM recommendations from the ODOT Active Traffic Management Strategy. Perform enhancements to existing infrastructure and deploy new infrastructure to support CAV applications. Specific projects to be determined.	\$20,000,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	6th St: Murray Boulevard to Erickson Avenue (Bike Lanes)	10665	Murray Boulevard	Erickson Avenue	Construct bike lanes along 6th Street, between Murray Boulevard and Erickson Avenue.	\$8,600,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Baseline Road: 158th Avenue to Jenkins Road (Bike Lanes)	12051	158th Avenue	Jenkins Road	Install bike lanes along SW Baseline Road, between 158th Avenue and SW Jenkins Road.	\$11,400,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Farmington Road: Hocken Ave to OR Highway 217 (Bike Lanes)	10668	Hocken Avenue	OR Highway 217	Construct bike lanes along Farmington Road, between Hocken Avenue and OR Highway 217	\$30,600,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	ODOT	Washington County	Canyon Road and 110th Bike Lanes	11926	Beaverton-Hillsdale Hwy.	91st Ave	Completes 7,000 feet of bike lanes.	\$5,700,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Tigard	Tigard	Tigard Neighborhood Greenway Bicycle Improvements	11221	City-wide	City-wide	Make spot improvements on key low-volume, low speed through-routes to facilitate bike & pedestrian travel; identify them as bike/pedestrian neighborhood greenway routes.	\$9,800,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Tualatin	Tualatin	Nyberg Rd Bike Lanes: Tualatin-Sherwood Rd to 65th	10739	Tualatin-Sherwood	65th	Add bike lanes on Nyberg from Tualatin-Sherwood to 65th.	\$8,100,000	\$0	\$0	2031-2045	No
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Washington County Neighborhood Bikeways (Ph. 2)	12049	Washington County	Washington County	9 miles of neighborhood bikeways (bike boulevards) on low-traffic streets throughout unincorporated urban Washington County, including enhanced at-grade crossings of arterials.	\$13,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	King City	King City	OR 99W Plan and Pedestrian Improvements: SW Beef Bend to Tualatin River	12153	SW Beef Bend Rd	Tualatin River	Study the OR 99W Corridor through King City, along with Tigard and other neighboring agencies, to develop a corridor-wide improvement plan. Construct pedestrian facilities and buffer from the vehicle travel way. Provide enhanced crossings at key intersections.	\$15,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	ODOT	Hillsboro	OR 8: SW Baseline St Sidewalk Gaps	12145	SW 17th	Dennis	Complete missing north side sidewalks and curbs; south side gaps included in ODOT 2021-2024 STIP (project 21608)	\$2,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	ODOT	Hillsboro	OR 8: SW Oak St Sidewalk Gaps	12147	SW 17th	Dennis	Complete missing sidewalks and curb	\$2,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	Sherwood	Sherwood	Pedestrian Links to Schools & Town Center	10703	Various	Various	Pedestrian upgrades, new sidewalks, sidewalk infill at: Sunset, Division, Edy, Elwert, Meinecke, Pine, Roy, Ladd Hill, Timbrel, Washington, Willamette, Old Pacific Hwy.	\$16,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	Tigard	Tigard	Pedestrian Improvements	11226	Multiple locations	Multiple locations	Fill gaps in sidewalk & pedestrian network.	\$20,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	Tualatin	Tualatin	Sagert St I-5 Overpass Sidewalks Safety Improvements	11429	I-5	I-5	To improve safety for residents and employees, add sidewalks on I-5 bridge overpass.	\$8,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	111th / Rainmont Rd / 113th Avenue Sidewalks	11473	McDaniel Rd	Cornell Rd	Construct sidewalks.	\$21,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Leahy Road Sidewalks	11575	Cornell Rd.	Barnes Rd.	Construct sidewalks.	\$6,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Blvd: OR 217 to Western (ped/bike/signals/turn lanes)	10633	OR Highway 217	Western Avenue	Add sidewalks, street trees, bike lanes, traffic signals, and turn lanes along Allen Boulevard, from OR217 to Western Avenue.	\$15,300,000	\$0	\$0	2031-2045	No



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Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Hall Boulevard to King Boulevard	12112	Hall Blvd.	King Blvd.	Construct complete street along Allen Boulevard, between Hall Boulevard and King Boulevard. Project includes sidewalks, street trees, bike lanes, lighting, signals, turn lanes where needed.	\$38,900,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Menlo Drive to Hall Boulevard	12111	Menlo Dr.	Hall Blvd.	Construct complete street along Allen Boulevard, between Menlo Drive and Hall Boulevard. Project includes sidewalks, street trees, bike lanes, lighting, signals, and turn lanes where needed.	\$38,900,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Cedar Hills Blvd: Walker to Farmington (ped/bike/turn lanes)	10634	Walker Road	Farmington Road	Construct sidewalks, bike lanes, and turn lanes where needed, along Cedar Hills Boulevard, between Walker Road and Farmington Road.	\$46,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Denney Rd: Hall Blvd to OR 217 (Ped/Bike/Turn Lanes)	12118	Hall Blvd.	OR 217	Construct bike lanes, sidewalks, and turn lanes where needed along SW Denney Road, between Hall Boulevard and OR 217.	\$17,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: 5th Street – Watson to Hall	12119	Watson Avenue	Hall Boulevard	Construct complete street on 5th Street, between Watson Avenue and Hall Boulevard, with wider sidewalks and protected bike lanes to make bikeway to bikeway connection. Plant street trees.	\$3,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop: Watson/Hall - Crescent St to Millikan Ave	12124	Crescent Street	Millikan Way	Construct complete street on Watson Avenue and Hall Boulevard, between Crescent Street and Millikan Way with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks. Remove third lane on Hall Blvd.	\$32,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Millikan Way: 141st to Hocken (turn lanes, bike, sidewalks)	10636	141st Avenue	Hocken Avenue	Add buffered bike lanes, sidewalks, turn lanes, and signalize as warranted along Millikan Way, from 141st Avenue to Hocken Avenue.	\$6,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Washington County	206th Ave Bike/Ped Improvements	11158	Baseline Rd	Rock Rd	Complete sidewalk gaps and construct bike lanes.	\$7,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Beaverton Creek Trail	10850	Reedville Trail (North Segment)	SW 194th Ave	Design and construct Hillsboro segment of multi-use trail.	\$9,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Bronson Creek Trail	11889	Beaverton Creek Trail at 206th Ave	185th Ave	Design and construct Hillsboro segment of multi-use trail.	\$4,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Crescent Park Greenway	11485	Jackson School Rd	Cornelius Pass Rd	Multi-use trails and bike/ped crossings connecting North Hillsboro industrial area, Hillsboro stadium, Fred Meyer, Rock Creek Trail, Oregon Electric Railway Trail and Cornelius Pass Road multi-use path; part of larger Crescent Park Greenway plan.	\$29,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Jacobson Rd Turn Lanes and Bike/Ped Improvements	11150	Helvetia Rd	Century Blvd	Complete three-lane cross section with center turn lane, sidewalks, and bike facilities; restrict intersection at Helvetia Rd to right-in, right-out with future connection and improvement to Schaff.	\$14,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Minter Bridge Rd Bike/Ped Improvements	11282	River Rd	Morgan Rd (UGB)	Improve west side to complete two-lane urban standards; include intersection improvement at Minter Bridge & River	\$12,900,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Reedville Trail (North Segment)	11461	Wilkins St	Tualatin Valley Highway	Construct multi-use trail along BPA Pearl-Keeler power line corridor.	\$15,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Rock Creek Trail Extension	10851	Rock Creek Trail at River Road	Rock Creek Trail at Wilkins St	Design and construct multi-use trail; connect to existing segments of Rock Creek Trail.	\$13,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Rood Bridge Rd Bike/Ped Improvements	11161	River Rd	Pipers Dr (UGB)	Improve to two-lane urban standards with sidewalks and bike facilities	\$16,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Tualatin Valley Trail (Turf-to-Surf Trail)	11483	Century Blvd	Shaw St	Construct South Hillsboro/Reedville segment of Tualatin Valley Trail along south side of Portland & Western Railroad corridor.	\$13,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	Tualatin River Trail: River Lane to OR 99W	12159	SW River Lane	OR 99W	Construct a shared-use path from the planned S. Kingston Terrace Trail to SW River Lane. Connect path through King City Community Park to SW River Lane. Construct a shared-use path from OR 99W to SW 131st Avenue.	\$11,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Tigard	Hunziker & Sandburg sidepath to Kruse Way Bike/Ped Bridge	12016	Hunziker Rd and Sandburg St	Kruse Way Trail	Bike/Ped Trail and bridge from Hunziker Rd and Sandburg St to Kruse Way Trail in Lake Oswego.	\$11,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Hillsboro	OR 219: S 1st Ave Complete Street Improvements	12141	Railroad	Wood St/Jackson Bottom Entrance	Construct sidewalks and bike facilities	\$8,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd - Cedar Hills to Hall Blvd (Complete Street)	12114	Cedar Hills Blvd	Hall Blvd	Construct complete street on OR 8, between Cedar Hills Boulevard and Hall Boulevard. Include wider sidewalks with street trees, bikes lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	\$32,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd – Hall Blvd to 117th Ave (Complete Street)	12116	Hall Blvd	117th Ave./Broadway St.	Construct complete street on OR 8, between Hocken Avenue and 117th Avenue. Include wider sidewalks with street trees, bike lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	\$81,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd – Hocken to Cedar Hills (Complete Street)	12115	Hocken Ave.	Cedar Hills Blvd	Construct complete street on OR 8, between Hocken Avenue and Cedar Hills Boulevard. Include wider sidewalks with street trees, bike lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	\$40,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	121st Ave Complete Street - phase 2	12006	Walnut St	North Dakota St	Build complete street with bicycle and pedestrian facilities from Walnut to N Dakota.	\$13,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Buffered Bikeways and Sidewalks: Bonita to Durham	10757	Bonita Road	Durham Road	Complete street upgrade with buffered bikeways and complete sidewalks.	\$13,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Improvements - Dartmouth to OR 217	12163	Dartmouth	HWY 217	Widen to 4/5 lanes, with one travel lane in each direction, one flex travel/parking lane, protected bike lanes and sidewalks.	\$26,000,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Improvements - Hwy 217 to Bonita	10756	Hwy 217	Bonita Road	Widen to 3 lanes with bikeways and sidewalks.	\$26,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Ash Ave Ped/Bike Bridge	12165	Burnham Street	Commerical Street	Design and construct grade-separated pedestrian and bicycle bridge connecting Ash Ave across railroad.	\$16,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Ash Ave Trail Connection	12166	Walnut Place	Fanno Creek Trail	Creates new active transportation connection from Walnut Pl east of Pacific Highway (OR99W) to Ash Ave, connecting to the Fanno Creek Trail.	\$14,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Bull Mountain Rd Sidewalks	12002	Roshak Rd	Hwy 99W	Complete gaps in sidewalks and bike lanes from Benchview Terrace (Tigard City Limits) to Hwy 99W.	\$11,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Neighborhood Trails & Regional Trail Connections	11227	Multiple locations	Multiple locations	Construct high priority neighborhood trails to regional trails, sidewalks & transit.	\$8,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	OR 217 Ped/Bike Overcrossing	12169	Tigard Triangle	Downtown	Construct a new Highway 217 overcrossing for active transportation users connecting the Tigard Triangle with Downtown Tigard. May be coordinated with the Southwest Corridor Light Rail and the Red Rock Creek Trail planning efforts.	\$17,900,000	\$0	\$0	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Regional Trail Gap Closure and Improvements	12172	Multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Infill gaps and improve deficiencies in regional trail network. Affected trails include Fanno Creek, Washington Square Loop, Tigard-Lake-O, and Westside Trails.	\$16,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard Safe Routes to School Projects	12000	City-wide	City-wide	Pedestrian upgrades, new sidewalks, new bike lanes, sidewalk infill on Tigard Streets facilitating walking and biking to school.	\$6,800,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard-Lake-O Red Rock Creek-Fanno Creek Rail Overcrossing	12175	Wall St	Tigard Public Library	Construct new bike and pedestrian overcrossing.	\$16,300,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Washington Square Regional Center Greenbelt Shared Use Path	10763	Hall Blvd.	OR 217	Complete WSRC shared-use path.	\$4,400,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Washington Square Regional Center Pedestrian Improvements	10749	Washington Square local street connections	Washington Square local street connections	Improve sidewalks, lighting, crossings, bus shelters, and benches in the Washington Square area.	\$4,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Forest Grove	Council Creek Regional Trail: North-South Segment	11479	Banks	Forest Grove	Multi-use trail from Forest Grove through Washington County, the City of Banks, connecting to the Banks-Vernonia State Trail. The project or a portion of the project is outside the designated urban growth boundary.	\$61,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Tualatin Valley Trail (Turf-to-Surf Trail)	12185	SW 160th Ave.	198th Ave.	Design & construct a 12' wide regional multi-use trail on north side of Shaw St. includes half-signals at crossings of 160th Ave, 170th Ave and 185th Ave.	\$38,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	108th Avenue Pedestrian and Bicycle Bridge	10742	Tualatin River Greenway Trail - South Bank of the Tualatin River	Tualatin River Greenway Trail - North Bank of the Tualatin River	Pedestrian/bike bridge over Tualatin River and connecting paths.	\$18,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	I-5 Shared-use Path (Lower Boones Ferry to Norwood)	11432	Lower Boones Ferry Road	Norwood	Construct shared-use path parallel to I-5.	\$34,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segments 12 and 13)	11597	Cipole	Tualatin River	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan. The project or a portion of the project is outside the designated urban growth boundary.	\$35,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segments 18 & 19)	12190	112th	Tualatin / Boones Ferry	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan.	\$36,600,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Saum Creek Greenway (Sagert St to Tualatin River)	11433	Sagert	Tualatin River	Construct a shared-use path.	\$5,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Westside Trail Pedestrian and Bicycle Bridge	11435	Cipole	North of Tualatin River	Multi-use trail and bridge over the Tualatin River connecting Westside Trail and Ice Age Tonquin Trail. The project or a portion of the project is outside the designated urban growth boundary.	\$20,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	Bronson Creek Trail (Community)	10809	Bronson Creek Park Cornell Rd. (THPRD)	NW Laidlaw Rd. at NW Saltzman Rd.	Design & construct a 10'-12' wide, community trail connecting Cornell Rd at 173rd Ave to the Westside Trail that will serve historically marginalized communities and improve access to 2040 Centers, jobs, transit & other regionally significant trails.	\$19,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	South Cooper Loop Trail	11944	SW Grabhorn Rd. just north of Scholls Ferry Rd.	SW 175th Ave	Design and construct a 12' wide regional multi-use trail serving the emerging South Cooper Mountain community.	\$8,900,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	South Johnson Creek Trail Seg. 5	12072	S.W. Davis Rd at S.W. 152nd Ave.	S.W. Hart Rd at Lowami Hart Woods	Construct a 10' wide community trail to provide road separated connections with in the community.	\$4,100,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & Recreation	Tualatin Hills Park & Recreation	Tualatin Valley Trail Seg. #3 to #5 (Turf to Surf Regional Trail)	11941	160th Ave./Westside Trail	Beaverton Creek Trail at SW 5th St & SW Lombard Ave	Plan, design, & build three 12' wide regional multi-use trail segments connecting Washington County's surf-to-turf trail to Downtown Beaverton; improving safety, serving historically marginalized communities, & increasing access to jobs & transit.	\$15,500,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Barnes Road Ped/Bike Overcrossing	12070	North of Barnes	Sunset Transit Center	Grade separated pedestrian/bicycle over-crossing at Barnes Rd.	\$13,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Bike lanes and sidewalks on collectors and arterials (Wash Co)	12039	Countywide	Countywide	Complete 35 miles of bike lanes and sidewalks on County arterials and collectors.	\$143,200,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Wilsonville	Elligsen Road Urban Upgrade	11798	Parkway Center Drive	65th	Reconstruct street to 3 lanes with buffered bike lanes and sidewalks. The project will install sidewalks and bike lanes to remove bikes and pedestrians from vehicle travel lanes. The project has had two serious crashes. The project or a portion of the project is outside the designated UGB.	\$13,700,000	\$0	\$0	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Hillsboro	Oregon Electric Railway Trail: US 26 Crossing	11913	Cornelius Pass Rd Multi-Use Path at US 26	Power Line Trail at Rock Creek Blvd	Construct US 26 trail over-crossing near Cornelius Pass Rd interchange; include connecting trail segments at either end to connect to Cornelius Pass Rd multi-use path and Rock Creek Trail ("Power Line Trail") at Rock Creek Blvd.	\$11,400,000	\$0	\$0	2031-2045	No
Bridge (Capital)	Washington County	Washington County	Washington County	Shackelford Rd Bridge	11457	add extent	add extent	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany. The project or a portion of the project is outside the designated urban growth boundary.	\$35,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	141st Ave/142nd Ave: TV Hwy to Farmington Rd (Realignment)	10631	Tualatin Valley Highway	Farmington Road	Realign intersection of 141st Avenue/142nd Avenue and OR 8: Tualatin Valley Highway. Add signals and turn lanes as warranted. Construct sidewalks and bike lanes on 142nd Avenue (Tualatin Valley Highway to Farmington Road).	\$16,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Center St: Hall Blvd to Cabot St (turn lanes and sidewalks)	10628	Hall Boulevard	Cabot Street/OR Highway 217	Add turn lanes where needed along Center Street, between Hall Boulevard and Cabot Street. Construct sidewalks on the south side of the 113th Avenue and Cabot Street.	\$14,200,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Millikan Way Extension: Lombard Avenue to 114th Avenue	12130	Lombard Ave.	114th Ave.	Construct new two-lane street from Lombard to 114th Avenue with protected bike lanes, sidewalks and street trees.	\$12,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Rose Biggi Ave Extension: Tualatin Valley Highway to Broadway St	10625	Tualatin Valley Highway	Broadway Street	Extend Rose Biggi Avenue, between OR 8/Tualatin Valley Highway and Broadway Street, by constructing a new two-lane collector street with on-street bikeway, on-street parking, sidewalks, and street trees.	\$7,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Cornelius	Cornelius	N. 29th Avenue	11251	3F Railroad	Baseline	Improve to collector standards including sidewalks.	\$10,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Forest Grove	Cornelius	Holladay Street Extension - West	10795	4th Ave	Yew St	Construct new collector.	\$6,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Extension and Over-Crossing at US 26	10831	Bennett St	Wagon Wy	Construct 3-lane, grade-separated over-crossing across US 26; cost estimate based on 3-lane bridge structure; design bridge abutments to accommodate five travel lanes if needed, reconstruct segment to Wagon Drive as 3-lane Commercial Collector	\$64,100,000	\$0	\$0	2031-2045	No

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOY dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Dennis Ave Emergency Access Extension	12146	Wood	UP Railroad ROW (north side)	Construct Dennis Ave extension and railroad crossing to serve as emergency secondary access for Wood St	\$5,200,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Hazeltime Ave	12143	Brookwood Extension	WHVS southern boundary	Construct three-lane road (two alignments based on Brookwood alternatives); cost estimate represents higher total cost WHVS alignment option (Alternative 1)	\$6,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Meek Rd Improvements, Phase 1	11387	Sewell Rd	Starr Blvd	Construct three-lane road; include intersection improvements at Evergreen and Huffman	\$41,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Schaaf Rd Reconstruction	11147	Helvetia Rd	New north-south collector	Reconstruct gravel road to three-lane collector	\$17,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Starr Blvd Reconstruction and Improvements, Phase 2	11364	Huffman St (future extension)	Meek Rd	Complete three-lane improvements to interim two-lane road with center turn lane, sidewalks, and bike facilities; include intersection improvements at Starr & Evergreen, Huffman, and Meek	\$28,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Wilkins St Extension	10829	Amberglenn Pkwy	Stucki Ext.	Construct three-lane extension with new intersections at Amberglenn Pkwy and Stucki extension	\$7,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tualatin	Boones Ferry Rd Widening (Martinazzi to Lower Boones Ferry)	10712	Martinazzi	Lower Boones Ferry	Reconstruction/widen to 5-lanes from Martinazzi to Lower Boones Ferry Road.	\$16,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Washington County	OR 10: Oleson Rd. Improvement Ph. 2	11460	Beaverton-Hillsdale Ferry	Oleson Rd. and Scholls Ferry	Beaverton-Hillsdale/Oleson/Scholls Ferry Phase 2 improvements to project 10545 to address safety and reduce crashes.	\$91,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ B St. Intersection Improvements	11662	OR 47	B Street	Construct intersection improvements (e.g. lighting and improved traffic control) to address safety issues at high crash intersection. The project or a portion of the project is outside the designated urban growth boundary.	\$4,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tigard	OR 99W Improvements Design Phase	10770	64th Ave.	King James Pl.	Intersection improvements to maintain or improve mobility and safety for TPR compliance and upgrading pedestrian crossings.	\$11,400,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tigard	Pacific Highway (OR99W) Corridor Plan Construction	11666	64th Ave.	King James Pl	Safety and mobility improvements, ETC treatments, boulevard treatments, improved sidewalks and bike facilities, pedestrian crossings, and access management from I-5 to King James Pl.	\$62,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Hillsboro	TV Hwy & River Rd Intersection Improvements	11392	TV Hwy & River Rd	TV Hwy & River Rd	Construct eastbound right-turn lane and second northbound left-turn lane; include railroad crossing modification	\$7,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Hillsboro	US 26 & 185th Ave Interchange Refinement and Implementation	11279	US 26 & 185th	US 26 & 185th	Conduct interchange refinement study and implementation.	\$60,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	ODOT, Beaverton	Washington County	Walker Rd (Cedar Hills to OR 217)	12054	123rd	OR 217	Improve to five lanes, including bicycle and pedestrian improvements.	\$56,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Arrow Street Improvements: Langer Farms Pkwy to Gerda Lane	10700	SW Langer Farms Parkway	SW Gerda Lane	Reconstruct 3-lane collector street to TSP standards between SW Langer Farms Parkway and SW Gerda Lane.	\$18,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Cedar Brook Way: Elwert to 99W	10684	99W	Elwert Rd	Construct collector status road between SW Elwert Rd @ Intersection with SW Handley St and SW Pacific Hwy (OR 99W).	\$13,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Century-Langer Intersection Capacity and Safety Improvements	11660	Century Dr	Langer Dr	Improve intersection capacity and safety. Possible roundabout at Century Dr. Restrict Langer movements to right-in/right-out, possible EB left-in. In TSP. Can be combined with RTP 10691.	\$4,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Elwert Road Improvements	10681	SW Handley St	SW Edy Rd	Construct arterial status roadway between new roundabout (~800' NW of Pacific Hwy) and SW Edy Rd.	\$17,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Ladd Hill Road Improvements	10693	SW Sunset Blvd	UGB Southern Boundary (SW Brookman Rd)	Widen SW Ladd Hill Road to 3-lane collector street standards between SW Sunset Blvd and UGB southern boundary, potentially between SW Brookman Rd improvements.	\$14,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Old Town Arterials-Collectors	10689	SW 3rd St	SW Willamette St	Complete arterials and collector streets within old town overlay per City TSP.	\$13,200,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Pine St Phase 2	11614	SW Division St	SW Sunset Blvd	Reconstruct SW Pine St to the 2-lane collector standard per City TSP. Existing street is 2-lanes w/ non-ADA compliant sidewalks and this project will improve storm drainage and address ADA issues, but not add any capacity increasing features.	\$4,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Sunset Blvd.	10698	SW Aldergrove Ave	SW Eucalyptus Lane	Reconstruct road to 3 lane arterial standards in sections not already to TSP section for arterial. Fix vertical crest sight distance issue at Pine St intersection. Possible signal or roundabout at Sunset/Main/Ladd Hill and complete streets to west of SW Main St.	\$18,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	74th Ave extension in Triangle	11999	End of 74th from 99W	Hermosa/Beveland	Extend 74th Ave at 99W south to Hermosa/Beveland. Street to include two travel lanes, bicycle lanes, parallel parking, sidewalks, and street trees with a 70-foot right-of-way.	\$10,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Downtown Circulation Plan Implementation	11225	Downtown Tigard	Between Hwy. 99W, Hall & Fanno Creek	Acquire ROW, construct streets and streetscape improvements in downtown Tigard.	\$9,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Greenburg Road Improvements - N Dakota to Cascade	10748	Hwy 217	North Dakota	Build complete street with separated cycle tracks and sidewalks.	\$35,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Upper Boones Ferry Complete Street and Intersection	10768	Interstate 5	South of Durham Rd	Capital project to implement preferred design resulting from circulation and connectivity study.	\$32,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Washington Square Connectivity Improvements	10746	Washington Square local street connections	Washington Square local street connections	Increase local street connections at Washington Square Center based on recommendations in regional center plan.	\$3,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	To be determined	Sherwood	Edy-Elwert Intersection Improvements	12045	SW Elwert Road	SW Edy Road	Reconstruct Edy/Elwert intersection and approach roads to arterial standards (roundabout or signal, elevate roadway to increase site distance, etc.).	\$5,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	To be determined, OD	Sherwood	Brookman Road Intersection Realignment	12047	SW Pacific Highway	SW Brookman Road	Realigns and relocates the SW Brookman Road intersection with SW Pacific Highway (OR 99W) to accommodate the expansion of SW Brookman Road for future development.	\$35,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	113th Ave	11474	McDaniel Rd	Rainmont Rd	Construct new 2 lane Collector Rd with sidewalks bikelanes and street lighting.	\$14,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	119th Avenue Improvements	11579	McDaniel Rd	Cornell Rd.	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	\$29,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	124th Ave Improvements	11469	Tualatin-Sherwood Rd.	Grahams Ferry Rd	Improve 124th from 2 lanes to 5 lanes with bike lanes and sidewalks.	\$34,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	160th Ave Improvements	11472	Tualatin Valley Highway	Farmington Rd	Improve to three lanes with bike lanes and sidewalks and construct off-street trail between TV Highway and Blanton Street to close gap on Westside Trail.	\$36,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	185th Ave. Complete Street	10582	Farmington Rd.	Blanton St.	Improve as a five-lane complete street with center turn lane, planter strip, lighting, bike lanes and sidewalks	\$29,400,000	\$0	\$0	2031-2045	No

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Roadway (Capital)	Washington County	Washington County	Washington County	185th Avenue Improvements	11478	Shackelford Rd.	Springville Rd.	Improve from two lanes to three lanes with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	\$81,400,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10573	Leahy Rd.	Multnomah. Co. Line	Improve from two to three lanes to address congestion and safety, with bike lanes and sidewalks.	\$42,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10572	St. Vincent's Hosp. entrance	Leahy Rd.	Improve from two to five lanes with bike lanes and sidewalks.	\$21,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Brookman Rd	11930	OR 99W	Ladd Hill Rd	Improve to 4/5 lane arterial standard.	\$45,600,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Brookwood Pkwy Widening	11140	ihly Wy	Cornell Rd	Widen from three to five lanes by adding one general travel lane in each direction; project includes widening bridge over light rail; rebuild bike facilities as cycle track	\$33,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Bull Mountain Rd	11576	Roy Rogers Rd.	OR 99W	Improve to three lanes with bike lanes and sidewalks.	\$82,200,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Butner Rd. Improvements	10580	Murray Blvd.	Cedar Hills Blvd.	Improve to 3 lanes with bike lanes and sidewalks.	\$44,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell Improvements	10559	Hwy. 26	Murray Blvd.	Improve Cornell from three to five lanes with bike lanes and sidewalks.	\$56,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell Road	11574	107th	County Line	Improve from 2 to three lanes with sidewalks, bike lanes, street lighting, and community features.	\$50,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell/Cornelius Pass Intersection	10552	Cornell/Cornelius Pass Intersection	Cornell/Cornelius Pass Intersection	Prioritize near-term TSMO improvements. Intersection improvements (and/or other reasonable replacement improvements) are to be implemented and prioritized as funding allows, following completion of congestion management process documentation.	\$51,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Day Rd Overcrossing	11490	Boones Ferry Rd	Elligsen Rd	Extend new 4-lane overcrossing over I-5 from Boones Ferry Rd to Elligsen Rd. The project or a portion of the project is outside the designated urban growth boundary.	\$106,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	East-West Arterial Overcrossing	11436	Boones Ferry Rd	East of I-5	Extend new 4-lane overcrossing over I-5 from Boones Ferry Rd to 65th and Stafford Rd. The project or a portion of the project is outside the designated urban growth boundary.	\$92,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Evergreen Rd Widening and Bike/Ped Improvements	10836	Glencoe Rd	15th Ave	Widen roadway from three to five lanes to match Evergreen cross section east of NE 15th; sidewalks on UGB side (south) only; include intersection improvements at Evergreen & Glencoe, Jackson School (west), and Jackson School (east)	\$31,200,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Grahams Ferry Road (Helenius to Tonquin)	11923	Helenius St	Tonquin Rd	Improve roadway to 3 lanes, includes sidewalks and bike lanes.	\$9,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Grahams Ferry Road (Tonquin to Day)	11924	Tonquin Rd.	Day Rd.	Improve roadway to 5 lanes, includes sidewalks and bike lanes.	\$13,700,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Helvetia Rd Turn Lanes and Bike/Ped Improvements	11149	Schaaf Rd	West Union Rd	Widen road to three-lane arterial standard; stripe center turn lane at Schaff and Pubols for southbound left turn lane; complete east side sidewalks to Jacobson; sidewalk on UGB side (east) only; preserve five-lane right-of-way for future growth	\$19,000,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	I-5/99W Connector Southern Arterial (ROW and Construction)	10598	OR 99W	I-5	Purchase ROW. Construct 2/3 lane arterial with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	\$318,900,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	I-5/99W Connector Southern Arterial Widening	11340	OR 99W	Boones Ferry Rd.	Improve road from three lanes to five lanes to address congestion. The project or a portion of the project is outside the designated urban growth boundary.	\$232,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	McDaniel Rd sidewalks, bike lanes, turn lanes	11580	119th Ave.	County Line	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	\$50,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Murray/TV Hwy. Intersection	10557	Farmington Rd.	TV Hwy.	Intersection improvement at TV Hwy. and Farmington with Murray Blvd.	\$60,500,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd. Improvements	10596	Hwy. 217	121st Ave.	Widen to seven lanes with bike lanes and sidewalks.	\$47,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11456	185th Ave.	Bridge	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany. The project or a portion of the project is outside the designated urban growth boundary.	\$29,100,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Forest Grove	Thatcher Road Improvement - Phase 2	12191	Purdin Road	Purdin Road	Improve Thatcher Road to arterial design standards.	\$16,300,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	West Union Rd Widening and Improvements	11341	Helvetia Rd	Cornelius Pass Rd	Widen road to three-lane arterial standard from Helvetia to Century and five-lane from Century to Cornelius Pass; preserve five-lane right-of-way from Helvetia to Century; include intersection improvements at Helvetia, Century, and Cornelius Pass	\$67,800,000	\$0	\$0	2031-2045	No
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Java Road Connection and Signal	11809	Grahams Ferry Road	Garden Acres Road	Construct new Java Road with buffered bike lanes and sidewalks; disconnect Clutter Street from Grahams Ferry Road, and install traffic signal at Grahams Ferry Road.	\$3,400,000	\$0	\$0	2031-2045	No
Roadway Operations	Washington County	Washington County	Hillsboro	Cornell Rd Safety and Access Management	10824	Main St	17th	Long-term access management and safety improvements; future intersection improvements and accommodations at Grant and Lincoln to be determined	\$6,500,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	ODOT	I-5/OR 217 Interchange Phase 2	11302	I-5/OR 217 Interchange	N/A	I-5/OR 217 Interchange Phase 2 - southbound OR 217 to southbound I-5 entrance ramp; southbound I-5 exit to Kruse Way loop ramp. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$105,000,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Capacity Improvements	11582	US 26 (Sunset Hwy)	I-5	Construct a 6-lane freeway with aux lanes between entrance and exit ramps and complete interchange reconstruction with ramp and overcrossing improvements per 2000 OR217 Corridor Study and 2005 Metro Highway 217 Corridor Study. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$814,000,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Interchange, Safety, and Operational Improvements	11978	US 26 (Sunset Highway)	I-5	Design and construct improvements to OR 217 between US 26 and I-5 interchange to improve safety, reliability and mobility. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$148,000,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Northbound Auxiliary Lane Extension Scholls Ferry to Allen/Denney	11976	Scholls Ferry Road	Allen/Denney Interchange	Extend OR217 auxiliary lane from Scholls Ferry to Allen/Denney by filling in the existing auxiliary lane and modifying related ramp connections. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	\$99,000,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	Washington County	OR 217/72nd Ave. Interchange Improvements	10599	OR 217/72nd Avenue	OR 217/72nd Avenue	Complete interchange reconstruction with additional ramps and bridge structure replacement.	\$48,500,000	\$0	\$0	2031-2045	No
Throughways	Washington County	ODOT	Hillsboro	US 26 Widening - Brookwood to Cornelius Pass	11393	Brookwood Pkwy/Helvetia Rd	Cornelius Pass Rd	Widen Sunset Hwy from four to six lanes by adding one general travel lane in each direction; include interchange ramp improvements at Brookwood eastbound and westbound ramps	\$79,600,000	\$0	\$0	2031-2045	No

**Exhibit B to Resolution No. 23-5343**  
**2023 Regional Transportation Plan**  
**Draft Project List**



RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Amt funding dedicated via legislative action	Amt dedicated funding avail to use before 2024	Time Period	Financially Constrained
Transit - Better Bus	Washington County	ODOT	Tigard	ETC: OR 99W Transit Supportive Treatments	12176	SW 64th Ave	Durham Road	Support existing high frequency bus service on the Pacific Highway (OR99W) corridor by implementing transit treatments such as bus queue bypass lanes and transit signal priority at key intersections.	\$9,800,000	\$0	\$0	2031-2045	No
Transit - Better Bus	Washington County	ODOT, Tigard	Tigard	ETC: Tigard Transit Access and Signal Priority Improvements	12012	City-wide	City-wide	Access to transit and other improvements such as improved stations and station access; possible queue jumps and signal preemption.	\$6,200,000	\$0	\$0	2031-2045	No
Transit - Better Bus	Washington County	TriMet	Washington County	Transit Priority on Frequent Service Routes (Washington County)	11970	County-wide	County-wide	Enhanced transit priority spot treatments (queue jumps, bypass and BAT lanes) along planned frequent service routes.	\$113,900,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	Hillsboro	Hillsboro	HCT: AmberGlen/North Hillsboro Streetcar, Phase 1	11278	Quatama MAX Station	Proposed "Evergreen Transit Center" (at Evergreen & 194th)	Construct high capacity transit from Quatama MAX station through AmberGlen/Tanasbourne Regional Center; provide local match funding to leverage federal funds; also see project 11573.	\$173,600,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	Hillsboro	Hillsboro	HCT: AmberGlen/North Hillsboro Streetcar, Phase 2	11573	Proposed "Evergreen Transit Center" at Evergreen & 194th	Hillsboro Stadium, Intel Ronler Acres, Orenco Station	Extend high capacity transit from AmberGlen/Tanasbourne Regional Center to Hillsboro stadium, Intel Ronler Acres, and Orenco Station; provide local match funding to leverage federal funds; also see project 11278	\$86,900,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	ODOT	Hillsboro	HCT: Sunset Highway High Capacity Transit	11912	Sunset Transit Center	Fair Complex/Hillsboro Airport MAX Station	Study and implementation of high capacity transit from Sunset Transit Center to Fair Complex/Hillsboro Airport MAX Station via US 26.	\$113,900,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Beaverton-Hillsdale Highway Corridor High Capacity Transit	12290	Beaverton	Portland	Project development of high capacity transit options and construction and implementation of high capacity transit from Beaverton to Portland on the Beaverton-Hillsdale Highway corridor.	\$162,700,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	TriMet	Forest Grove	HCT: Forest Grove HCT Extension	10771	Hillsboro	Forest Grove	Assess high capacity transit options including BRT connecting Forest Grove with Hillsboro. Identify and evaluate alternatives, prepare preliminary design options and cost estimates, begin initial environmental review for preferred alternative, acquire necessary ROW, construct initial facilities such as transit signal priority and enhanced bus stops.	\$68,300,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Southwest Corridor: Capital Construction	11587	Bridgeport Village, Tualatin	Downtown Portland	Capital construction of High Capacity Transit project between Portland and Tualatin via Tigard.	\$4,000,000,000	\$0	\$0	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: SW 185th Corridor High Capacity Transit	12289	Bethany	Beaverton	Project development of high capacity transit options and construction and implementation of high capacity transit from Bethany to Beaverton on the SW 185th/Farmington corridor.	\$162,700,000	\$0	\$0	2031-2045	No
Transit Capital - Other	Washington County	TriMet	Hillsboro	Hillsboro Central Transit Center Expansion	12134	Hillsboro Central TC/SE 3rd Ave	Hillsboro Central TC/SE 4th Ave	Expand Hillsboro Central/SE 3rd Ave Transit Center	\$4,100,000	\$0	\$0	2031-2045	No
Transportation Demand Management	Washington County	Cornelius	Cornelius	Cornelius Park & Ride	10807	10th Ave	26th Ave	Build park & ride facilities at 10th and 26th Avenue.	\$4,100,000	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Washington County	ODOT, Beaverton	Beaverton	OR 10: Beaverton-Hillsdale/Farmington Rd (access/signals)	11894	Murray Boulevard	Scholls Ferry Road	Combine and or close approximately 100 driveways, and upgrade/add approximately 19 adaptive traffic signals along OR: 10 Beaverton-Hillsdale Highway/Farmington Road.	\$7,500,000	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Washington County	Tigard	Tigard	Tigard Triangle Adaptive Signals	12174	Tigard Triangle	Tigard Triangle	Upgrade signals throughout the Tigard Triangle with adaptive signal coordination technology.	\$5,700,000	\$0	\$0	2031-2045	No
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS/TSMO (Strategic)	11446	County-wide	County-wide	Conduct project development, preliminary/system engineering, design, construct, and integrate ITS projects Countywide on key freight, transit, and commuter corridors.	\$36,400,000	\$0	\$0	2031-2045	No



# **DRAFT High Capacity Transit Strategy Update**

May 2023





# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

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**Metro is the federally mandated metropolitan planning organization** designated by the governor to develop an overall transportation plan and to allocate federal funds for the region.

The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council. The established decision-making process assures a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds. JPACT serves as the MPO board for the region in a unique partnership that requires joint action with the Metro Council on all MPO decisions.

**Project web site:** [oregonmetro.gov/rtp](https://oregonmetro.gov/rtp)

The preparation of this report was financed in part by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. The opinions, findings and conclusions expressed in this report are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration

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## INTRODUCTION

### Renewed commitment

The Portland metropolitan area is an incredible place. Our region has vibrant communities, neighborhoods with distinctive personalities, and a world-class transit system. The communities of the Portland metropolitan region have worked together over the past decades to create one of the most livable regions of the country and strive to make our region the greatest place to live, work and play.

Since Portland's MAX light rail Blue Line service from Portland to Gresham began in 1986 and the 2040 Growth Strategy was adopted in 1995, high capacity transit (HCT) has served as the backbone of the region's growth and prosperity.

Despite periodic downturns in the economy, competition for resources among many regional needs, and most recently a global pandemic, HCT continues to play a vital role in achieving the region's goals. With many investments completed and continued work needed to achieve regional land use, economic, climate and safety goals, the region is doubling down on its commitment to HCT. HCT is a proven tool for achieving thriving, compact communities, furthering equity goals, and connecting people to opportunity every day. **This 2023 HCT strategy update reaffirms our regional commitment to HCT as a cornerstone of community development** and provides an actionable vision and plan for advancing HCT across the region. This strategy update recognizes that the region needs to adapt its approach to HCT investments — **rapid bus is a newer approach in this region that presents major opportunities to achieve HCT outcomes in a funding-constrained environment.**

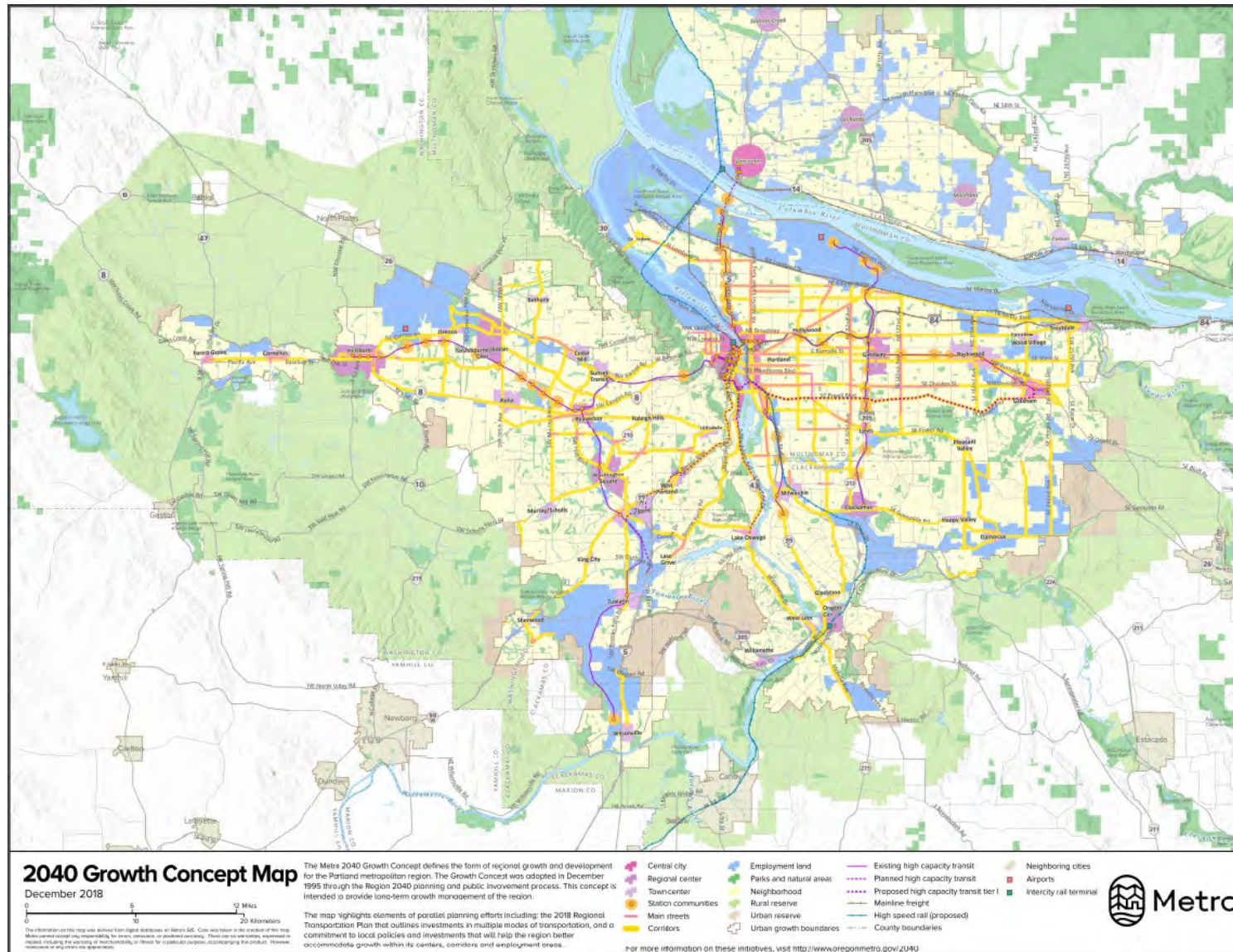
HCT helps the greater Portland region grow in a way that supports healthy, vibrant communities and that preserves farmland and forestland. As envisioned in the 2040 Growth Concept (Figure 1) — the blueprint for how the Portland region grows — HCT plays a key role in connecting people with services, places to shop, work and school. High-quality transit connections also provide viable and affordable alternatives to driving, thus creating better transportation options and making greater Portland more equitable and climate friendly.

#### Rapid bus

This term refers to rubber-tired HCT modes that include bus rapid transit (BRT) and frequent express (FX)-style HCT services. In general, these services offer the core elements of HCT including exclusive guideways, enhanced amenities, and frequent, branded service. Rapid bus is distinct from "better bus" improvements that focus on spot treatments for speed and reliability.

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Figure 1. Regional 2040 Growth Concept





# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

This HCT strategy update is part of the Metro Regional Transportation Plan (RTP), which is being updated in 2023. This strategy update:

- summarizes the regional vision for HCT investment, strategies for moving HCT corridors forward, and a shared policy framework for supporting and implementing HCT
- identifies and prioritizes corridors to envision where a higher quality of transit service would provide the most benefit to the greatest number of people
- provides a roadmap for realizing the vision for HCT investment to guide near- and long-term decision-making related to HCT investments
- takes into account how the region has grown, how communities and their needs have changed, how transit and travel are different, and how the funding landscape has evolved
- establishes a pipeline of corridor investments helping the region to be competitive for federal funding for HCT
- identifies the steps needed to advance corridor investments working in close partnership with local agencies.

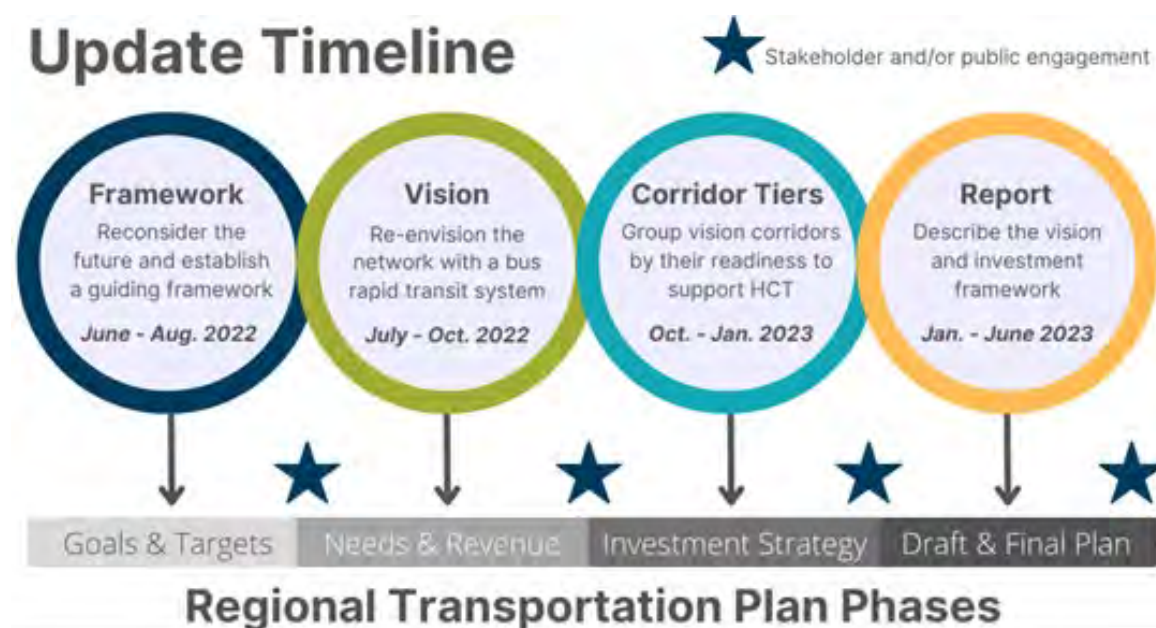
This HCT strategy update is not a comprehensive review of the regional transit structure or its management or a complete service analysis of the existing HCT system. Rather, it provides a vision for continued HCT investment that aligns with the RTP and the regional 2040 Growth Concept. Much future work and commitment are needed to advance the investments described in this strategy.

## **Project process and timeline**

Metro began the HCT strategy update process in the summer of 2022. Figure 2 describes the overall timeline for the project. Metro and TriMet co-led development of this strategy update with significant participation from a working group composed of regional stakeholders: Clackamas, Multnomah, and Washington Counties; Clark County Public Transit Benefit Area Authority (C-TRAN); Oregon Department of Transportation; City of Portland; Portland Streetcar; South Metro Area Regional Transit (SMART); and Southwest Washington Regional Transportation Council.



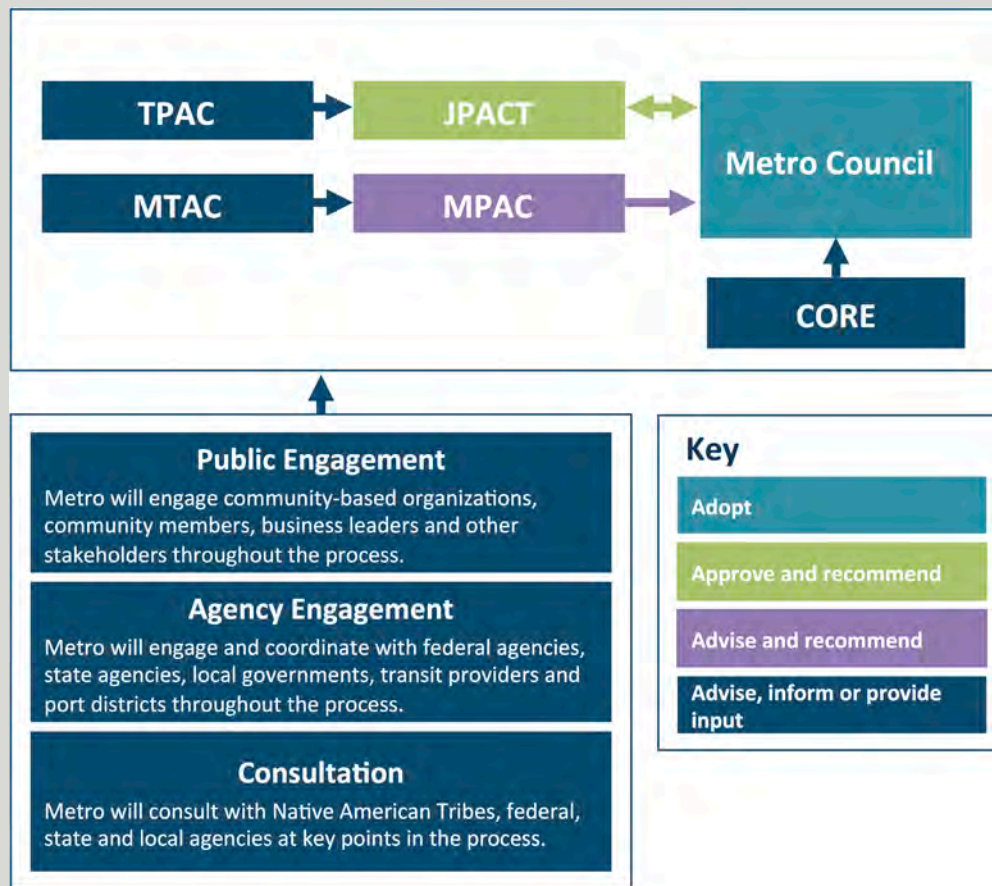
Figure 2. Update timeline



This strategy update was informed throughout by public engagement through tools such as online surveys and open houses, presentations and discussions at dozens of local meetings, and community-led events and workshops. Appendix A includes a summary of this outreach and the input provided. Metro committees were also informed by public and agency engagement when providing input and advising at each milestone in the process.

## Decision-making process

The chart below shows how different groups guided the HCT strategy update process. Ultimately, the Metro Council approves the final 2023 Regional Transportation Plan, which this strategy is a component of.



CORE = Committee on Racial Equity; JPACT = Joint Policy Advisory Committee; MPAC = Metro Policy Advisory Committee; MTAC = Metro Technical Advisory Committee; TPAC = Transportation Policy Alternatives Committee

## **Engaging community**

Community input influenced all major milestones for this strategy through the following activities.

### Surveys

- RTP)summer MetroQuest survey
- winter storymap survey.

### Focus groups and forums

- two joint events: RTP Community Leaders Forum and Westside Multimodal Improvement Study Business Forum
- two meetings with both TriMet's Transit Equity Advisory Committee and Committee on Accessible Transportation
- two meetings with Clackamas County small transit providers
- two agency lessons learned focus groups: Metro/TriMet and C-TRAN
- one small business focus group and one presentation to the Washington County Chamber of Commerce.

### Public events

- nine tabling events held at various locations throughout the region
- three community events and activities held by community-based organization partners such as Centro Cultural, The Street Trust and Verde.

### Advisory committee meetings

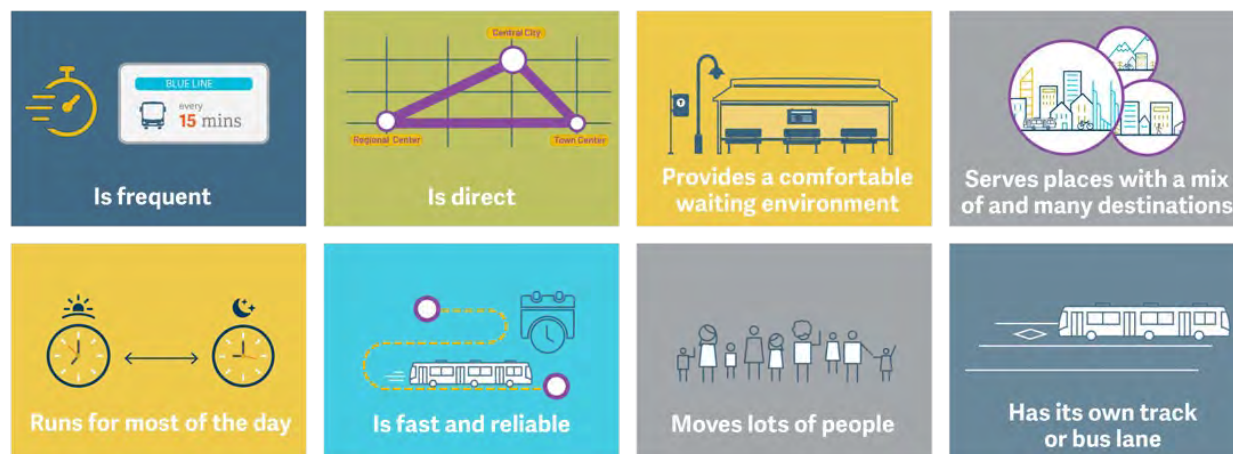
- six meetings with the HCT Working Group
- nineteen meetings with partner jurisdictional staff (Transportation Policy Alternatives Committee; Metro Technical Advisory Committee; Clackamas, East Multnomah, and Washington County Technical Coordinating Committees)
- nineteen meetings with elected officials (Metro Policy Advisory Committee; Joint Policy Advisory Committee; East Multnomah, and Washington County Policy Coordinating Committees).

## HIGH CAPACITY TRANSIT

### Defining high capacity transit

HCT is a type of public transportation that moves a lot of people quickly and often. It provides a higher quality of service with greater benefits to more people with improved convenience and travel time. See Figure 3 for the characteristics of high capacity transit.

**Figure 3. Characteristics of high capacity transit**



### High capacity transit modes

Train-based HCT includes:

- rapid streetcar and streetcar (depending on context)
- light rail transit
- commuter rail and heavy rail.

Rapid bus-based HCT options include:

- bus rapid transit (BRT)
- corridor-based BRT

Bus rapid transit is a strategy for serving high-volume corridors with rail-like capacity for a smaller investment. These systems feature distinctive branding, a majority of dedicated bus-only lanes, and passenger amenities such as real-time information systems.

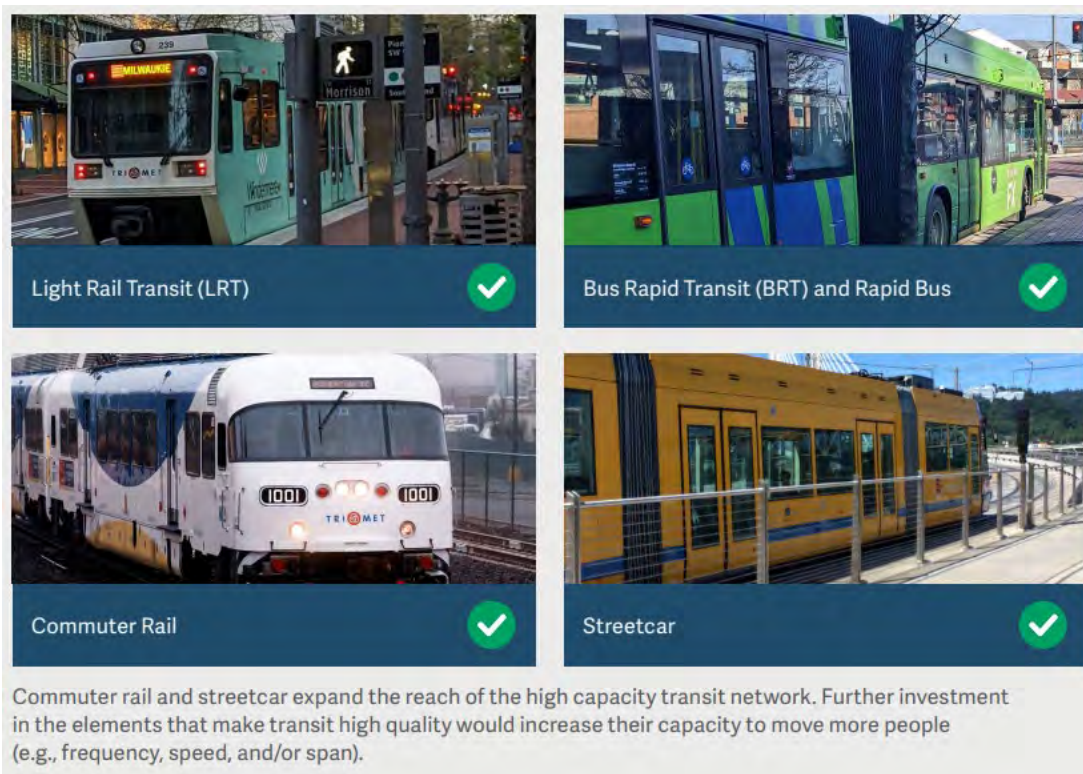
Regardless of mode, HCT investments include:

- some degree of roadway priority
- fast boarding due to off-board payment and multiple-door boarding
- comfortable waiting spaces with real-time information

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- limited stops
- improvements to the surrounding streetscape for better pedestrian access.

**Figure 4. High capacity transit modes**



Additionally, this strategy update encompasses other system elements including:

- light rail transit operations improvements
- existing HCT corridor “state of good repair” investments.

While not defined as HCT, TriMet’s Better Bus program (also known as enhanced transit corridor investments), as well as investments in operating the regional frequent service bus network are closely related to and support HCT. These investments include elements of HCT such as high frequency service or speed and reliability improvements, but they are not directly addressed by this strategy update. Many frequent transit corridors and better bus corridors are candidates for HCT investments.



## **Elements that make a transit investment high capacity**

High capacity transit has both a level of enhanced amenities and transit priority — which work together to move more people more comfortably than other types of regional or local transit — that are implemented as part of a corridor-level capital project. The type or mode varies and can include light rail, commuter rail, rapid streetcar, bus rapid transit or corridor-based rapid bus.

Enhanced amenities are features that improve efficiency and enhance the user experience. These include vehicles that are larger and allow boarding from all doors, stations with near level boarding, and frequent service (15 minutes or better). It also refers to amenities such as covered waiting areas, real-time bus or train arrival information, schedules, ticket machines, enhanced lighting, benches, bicycle parking, and even civic art and commercial services. Together, these features make high capacity transit more convenient and comfortable.

Enhanced priority investments are a package of physical features along much or most of a corridor that get people to destinations faster and on time. These include dedicated transit space or lanes in the street, also known as “exclusive guideway.” In our region, MAX light rail vehicles operate on tracks with exclusive guideway while rapid buses operate in a mix of dedicated and shared street space. Rapid bus investments provide priority space for buses on the roadway and/or priority at traffic signals to achieve the transit speed and reliability characteristic of high capacity transit. These investments make transit more attractive for current and future riders.

## **History of regional high capacity transit planning**

In 1974, there was a paradigm shift in how the Portland region addressed growth and approached transportation policy. Following public outcry over the expected cost and the destruction of neighborhoods required for its construction, elected leaders rejected the Mt. Hood Freeway project. Instead, the region set aside plans for 54 new highway projects in favor of a robust network of HCT and developed the 1982 Light Rail System Plan. The region’s first light rail line — the MAX Blue Line — opened in 1986 and heralded in this new era in transportation for the region.

After several expansions in the 1990s and early 2000s, including the MAX Red and Yellow Lines, the Regional High Capacity Transit System Plan was developed in 2009 to guide future regional HCT capital investments. The HCT plan provided a framework on where to spend limited transportation dollars: where local jurisdictions had committed to supportive land uses, high-quality pedestrian and bicycle access, management of parking resources, and broad-based financial and political support. As a result, the region has seen the addition of the MAX Green and Orange Lines and will soon see both the MAX Red and Yellow Lines extended through the A Better Red MAX improvements project (under construction) and the Interstate Bridge Replacement Program MAX Yellow Line extension to Vancouver, Washington (planning). At the same time, planning for the new Southwest Corridor MAX line is moving forward.



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The 2018 Regional Transit Strategy (an element of the 2018 RTP) refreshed the region's HCT strategy in advance of a major regional funding measure put to the voters in 2020. This funding measure was ultimately not successful, and funds are still needed to support expansion of the transit network. Since that time, greater Portland's first rapid bus project (FX2-Division) opened, and planning began for two additional rapid bus projects: 82nd Avenue and Tualatin Valley Highway. Rapid bus has provided a new opportunity to think differently about what the region's HCT network could look like in the future. It can be more flexible and cost-effective to implement than light rail and has the potential to move projects more quickly through the federal project development process. Further, it is an opportunity to leverage federal funding. The 2021 Bipartisan Infrastructure Law authorized \$109 billion for transit infrastructure and made more funding available for Small Starts Capital Investment Grant rapid bus projects.

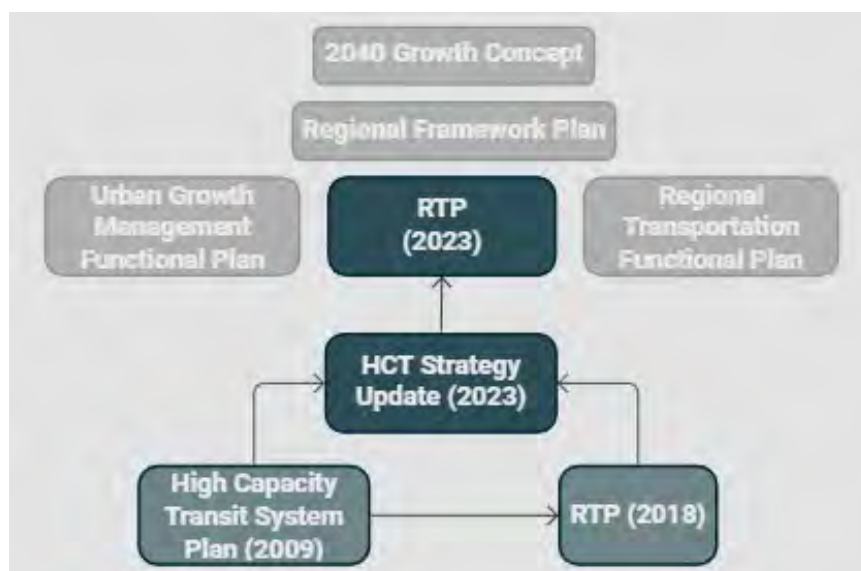
## HIGH CAPACITY TRANSIT POLICY FRAMEWORK

### Role of HCT strategy update within the regional transportation plan process

The Metro 2023 RTP update is the process to refine the region's transportation investment blueprint for the next 20 years and beyond. The RTP process evaluates the available revenues for transportation spending, assesses the region's needs, and presents a list of prioritized projects and programs to achieve the Portland metropolitan region's transportation goals. The RTP recognizes that demand for transportation investments exceeds existing financial capacity; prioritization is necessary to demonstrate fiscal constraint for federal reporting processes and to ensure we take intentional steps in expanding our transportation system.

This HCT strategy update sets the vision and priorities for regional HCT corridors. It falls under the Regional Transit Strategy, which is a part of the RTP that provides the region's overall vision for meeting future transit needs. As shown in Figure 5, the RTP continues to support the 2040 Growth Concept: the region's long-range land use and transportation plan for managing growth. The Regional Framework Plan identifies regional policies to implement the 2040 Growth Concept goals.

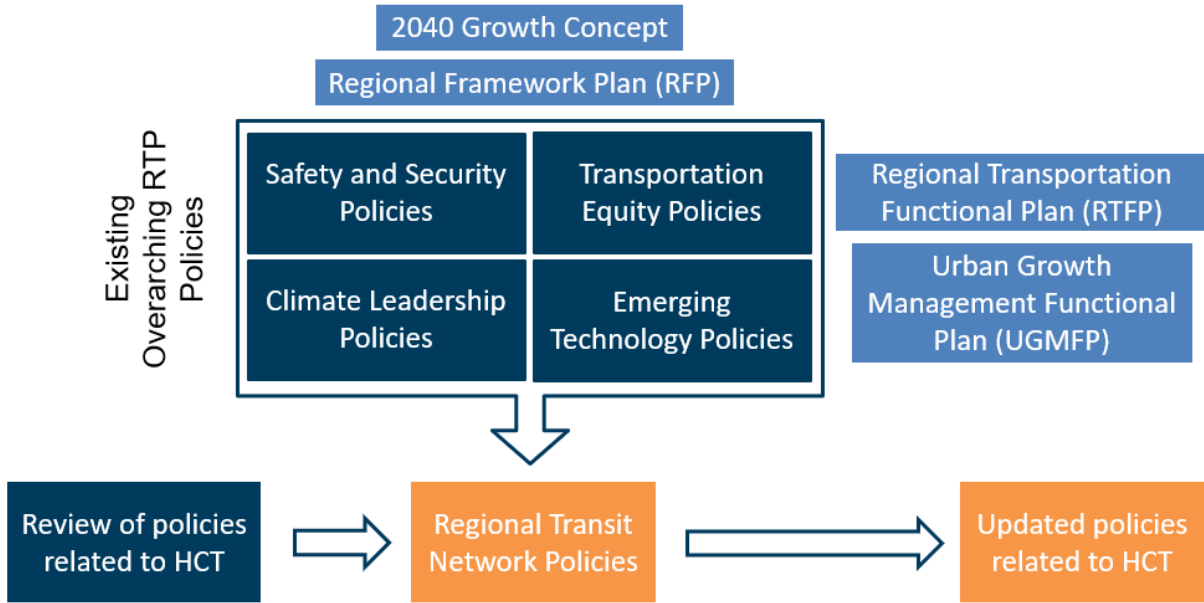
**Figure 5. Related regional plans and policies**



As shown in Figure 6 below, the RTP includes overarching policies that guide the Regional Transit Network Policies.<sup>1</sup> This HCT strategy update recommends updates to these policies; the updates will guide how Metro evaluates transportation projects including identifying and prioritizing investments that will advance the regional HCT network in a fashion that benefits the most people.

<sup>1</sup> Two "functional plans" – the Regional Transportation Functional Plan and the Urban Growth Management Functional Plan – provide additional guidance to local jurisdictions to implement the policies in the RTP.

Figure 6. Regional transit network policies in relation to the RTP and other Metro plans



As part of this HCT strategy update, plans and policies from state and federal agencies; transit providers including TriMet, SMART, and C-TRAN; and cities and counties in the region were reviewed to document relevant policies or efforts. Appendix C, Policy Framework, provides additional detail on the local and regional plans that were reviewed and their respective relationships to the update.

**Regional transit strategy**

High capacity transit is one part — a key part, but still one part — of the broader transit strategy. It plays a specific role in moving many people quickly along major travel corridors. The regional transit strategy is implemented by improving transit service, investing in transit infrastructure, collaborating between transit providers and local jurisdictions, and expanding transit-supportive elements.

**Transit service improvements** Local and regional transit service improvements designed to meet current and projected demand in line with local and regional visions and plans.

**Capital investments in transit** New enhanced transit strategies such as signal priority, dedicated lanes or HCT options such as rapid bus, light rail, commuter rail or high speed rail.

**Transit supportive elements** Includes programs, policies, capital investments and incentives such as travel demand management and physical improvements such as sidewalks, crossings and complementary land uses.

## **Incorporating community feedback in the policy framework**

**Community stability** Strong support for investments in corridors to maintain housing and business affordability and avoid displacement.

**Safe access to transit** Support for safe and comfortable facilities for walking and biking to transit and for waiting at the transit stop (crosswalks, sidewalks, lighting, bus stop amenities).

**Transit service** Support for more frequent and reliable service. Support for expanding service, particularly to growing areas and town centers in the broader Metro region.

**Broaden access** Better serve community members who are older, who do not speak English, who have mobility challenges or other disabilities, who have health conditions, who are travelling with children, or who are in school.

**Priority corridors** for transportation investments include:

- Multnomah: 82nd Ave., Powell Blvd., 122nd Ave., Downtown Portland
- Clackamas: McLoughlin Blvd., 82nd Ave., Highway 212/Sunrise, Clackamas to Columbia/181st Ave.
- Washington: Tualatin Valley Highway, SW 185th Ave., Burnside/Barnes Road.

## **Other related regional work**

Other recent regional studies, planning efforts or work underway informed development of this strategy and include:

- Mobility Corridors Atlas (2014)
- Strategic Plan to Advance Racial Equity, Diversity and Inclusion and Equity Framework (2016)
- Southwest Corridor Equitable Development Strategy (2017) and Locally Preferred Alternative (2018)
- Division Transit Locally Preferred Alternative (2019)
- Designing Livable Streets and Trails Guide (2019)
- Regional Framework for Highway Jurisdictional Transfer (2021)
- Regional Congestion Pricing Study (2021)
- Transportation System Management and Operations Strategy Update (2021)
- Regional Mobility Policy (2019-22)
- Tualatin Valley Highway Corridor Study (2022-23)
- 82nd Avenue Corridor Study (2023)
- Transit-Oriented Development Strategic Plan Update (2022)
- Emerging Transportation Trends Study (2022)
- Climate Smart Strategy Update (2022)

## Challenges/opportunities

This strategy update revisits investment priorities based on new and emerging regional issues, challenges and opportunities including the possibilities presented by rapid bus, the transit priorities identified through recent work by Metro and partners, and the lessons learned from the work of peer regions and in the wake of the COVID-19 pandemic. This strategy update considers and responds to these recent trends through the updated policies and the HCT vision described in later sections.

### What issues were considered in the 2009 plan?

#### *Our Place in the World*

In 2008, Metro developed the document, *Our Place in the World*, which highlighted global issues that were creating challenges for the Portland metropolitan region at the time.<sup>2</sup> While these challenges were central to the 2009 HCT plan, many are still relevant today and to this strategy update:

- Growth has brought opportunity and prosperity to the region, but it has also Brought growing pains.
- Uncertain energy supplies and the rising price of petroleum products affect transportation project costs and household transportation expenses. Increasing costs will make travel more difficult for those of modest means and make it imperative that our transportation system provides affordable transportation choices across the region.
- Expanded transit service will be necessary to reduce the region's impact on climate change and improve air quality.
- Current sources of transit funding are not enough to support system expansions needed to serve the region's rapidly growing ridership.

#### *System design considerations*

The 2009 HCT plan documented a number of considerations regarding the design of the HCT system, many of which continue to be relevant today.

**Grid versus radial system** The 2009 plan identified corridors that would continue to build out a radial HCT network. New cross-region routes that would create a grid connection between markets may become priorities for the region once the radial system is fully realized and/or markets generate enough riders to justify an HCT investment. Grid systems provide additional person-carrying

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<sup>2</sup> Metro, [Our Place in the World](#), October 2008. Pages 23-24 are specific to integrated transportation networks and travel options.

capacity and travel choices but are only feasible if there are enough riders to support parallel lines that are high frequency to minimize transfer time. The FX2-Division line illustrates corridor-based rapid bus as a strategy that can build out the HCT grid.

## **Passenger capacity (network density versus coverage)**

Transit vehicle capacity and frequency determine person-carrying capacity. Light rail provides a higher passenger capacity per hour of service. The MAX system was developed to fit downtown Portland's 200-foot blocks; this limits the light rail trains to two cars. The 2009 plan identified strategies to increase passenger-carrying capacity including increasing frequency on existing lines, adding new lines serving existing corridors, adding parallel lines with minimum one-mile spacing, and considering a tunnel under downtown that would allow longer trains and support faster travel across the region; the region has continued to study a tunnel solution.

**Branching** As the region expands, branching lines from a common route could be considered to serve multiple end-of-line destinations. This strategy remains applicable, particularly for rapid bus lines.

**Rail interoperability** The potential to build streetcar tracks to accommodate MAX trains in specific segments was identified as a consideration to provide system redundancy. Streetcar design standards typically do not allow MAX trains to operate on streetcar tracks. Streetcar and MAX currently interoperate on the Tilikum Crossing bridge, which is also shared with buses. Shared rail and bus segments can maximize the utility of investments in constrained corridors.

**Vehicle features** Low floors, fare payment at stations or on board, multiple wide doorways, and other "universal design" features streamline boarding and alighting and maximize accessibility. As with the frequent express FX2-Division project, an iconic vehicle can become a symbol of the HCT brand that makes it easier for riders to identify and use.

**Service quality** considers the total customer system experience. HCT includes:

- moderate to full transit priority, i.e., speed and reliability
- very frequent service (every 15 minutes or more often)
- long hours of service on weekdays and weekends
- longer station spacing of one-third to one-half mile or more for fast travel time
- high-quality station access is important since HCT stations are farther apart
- high-quality station amenities including shelters and real-time information.

**Appendix B:  
Regional  
Transit Modes**  
summarizes the  
characteristics  
of HCT and  
other regional  
transit modes



**Land use and urban form** Mixed land uses concentrated within walking distances of HCT stations are critical to fostering walkable communities and successful HCT performance. High-quality transit service and pedestrian access must be in place to realize a significant drop in per capita vehicle miles traveled that occurs as neighborhoods and regional centers transition from a character of closer to 10 persons and employees per acre to one of 25 to 50 persons per acre — an environment supporting rapid bus and light rail investment.

**Transit system constraints** The 2009 plan identified that the Steel Bridge, the Rose Quarter Transit Center and at-grade light rail crossings increase transit delay.

## What has evolved since the 2009 HCT plan?

Since 2009, the region's awareness and level of urgency has heightened around issues including social equity-related disparities based on people's race and income, housing affordability and displacement, the impacts of climate change and eliminating traffic deaths and serious injuries through the Vision Zero program. The pandemic brought additional transformation around how and where people travel. It has also resulted in more urgent personal safety and health concerns, and has continued to impact how transit is utilized and delivered. This section summarizes takeaways from several recent efforts that analyzed these trends.

### ***Metro and TriMet Forward Together and Emerging Trends Studies***

In preparation for the 2023 RTP and the Forward Together service plan, Metro and TriMet, respectively, conducted research into current and emerging trends for transportation in the region.<sup>3</sup> Key trends related to HCT that were identified through these efforts are described below.

#### **An evolving approach to high capacity transit**

Since the 2009 plan was adopted, the regional funding landscape has changed. Federal funding now requires a much more significant match than in the past — typically, 50% as opposed to 10% in past decades. With few dedicated local funding sources, funding for major HCT investments presents a substantial challenge. Rapid bus and related “rubber-tire” HCT investments can provide all the benefits of HCT, often at a reduced cost compared to other modes. While each HCT corridor will go through a refinement process that examines the most appropriate HCT mode, the region recognizes that rapid bus and similar investments represent a cost-effective path forward for introducing HCT in the face of uncertain funding.

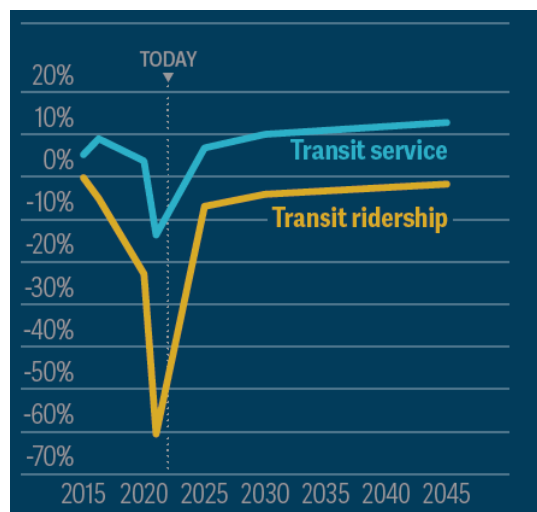
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<sup>3</sup> Metro, Emerging Trends, [Executive Summary](#), October 2022. TriMet, Forward Together, [Existing Conditions and Market Analysis Reports](#), April/May 2022.

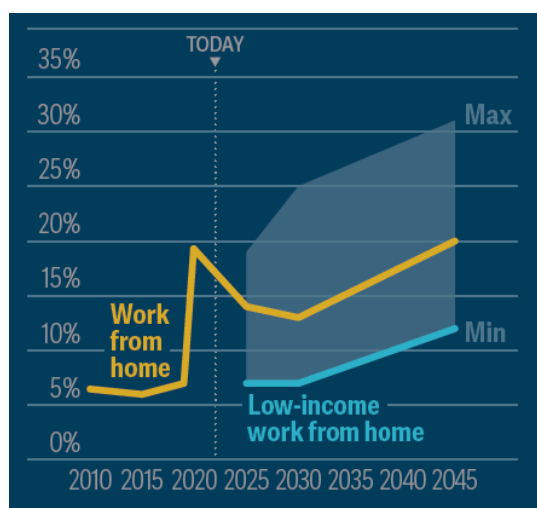
**Declining transit ridership and a gradual recovery** Nationally and on TriMet, transit ridership declined by 4% between 2010 and 2019, although ridership began to increase in the year before the COVID-19 pandemic. Between February and April 2020, regional transit ridership dropped by nearly 70%, and TriMet reduced service by 20%. As of early 2023, ridership is recovering and is expected to be at pre-pandemic levels by 2026 supported by the service plan envisioned in Forward Together (see Figure 7).

**Shifts in when and where transit is needed** Peak commute demand has declined since the pandemic as many people continue to work from home (see Figure 8). But not everyone is able to work remotely, and lower-wage workers are less likely to have that option. The pandemic showed that people in lower-income areas continued to ride transit at higher rates.

**Figure 7. Estimated Service and Ridership Changes, 2021**

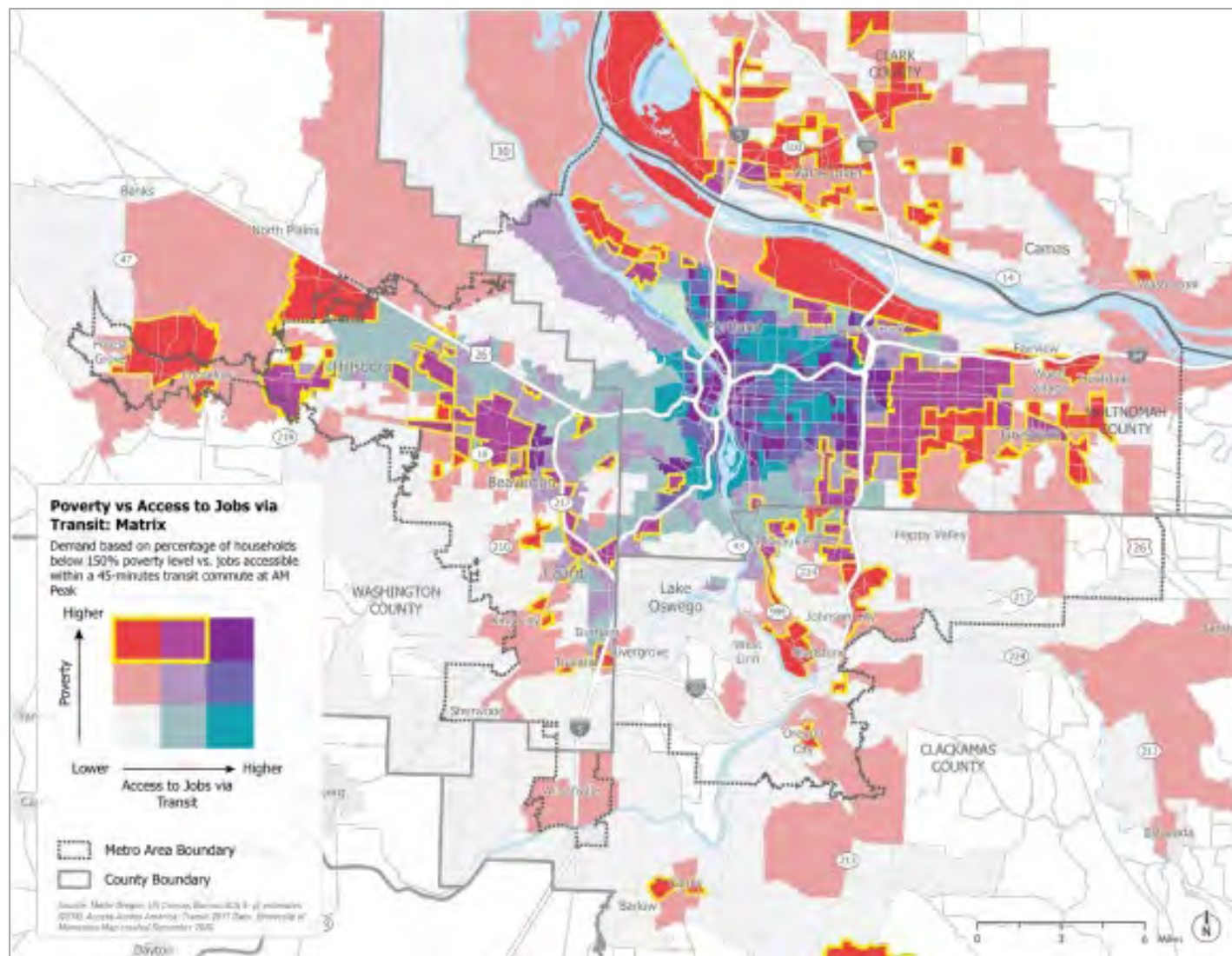


**Figure 8. Oregon Remote Work Levels**



**Disparities in access to jobs and services.** Even before the pandemic, housing costs had pushed lower-income residents and people of color to more affordable outlying areas that tend to be farther from transit and require longer trips to access jobs and services (see Figure 9).

**Figure 9. People with low incomes in relation to transit service (Forward Together<sup>4</sup>)**



<sup>4</sup> <https://trimet.org/forward/>

## Impacts of climate change

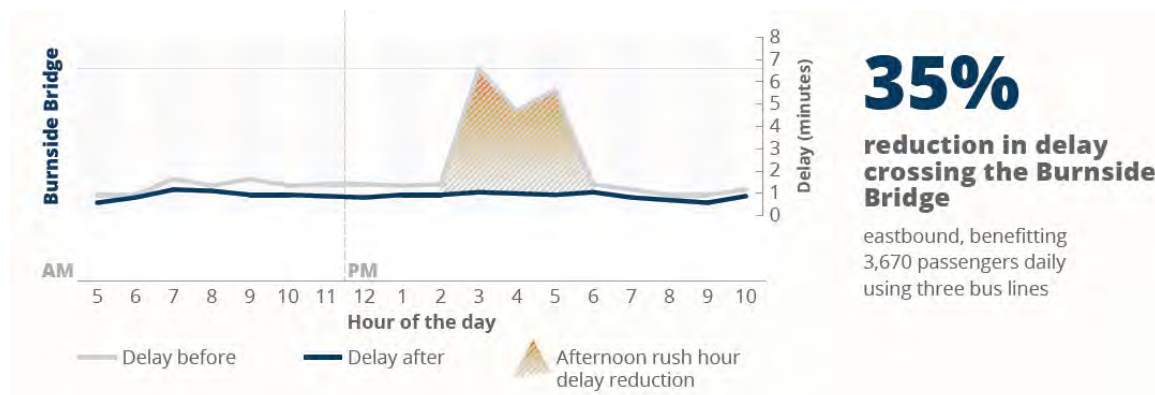
Reducing the impacts of climate change can benefit low-income communities and communities of color who are more likely to live in areas of high flood risk and areas that experience urban heat island effects from a sparse tree canopy.

**Growing and lingering personal safety concerns** Personal safety on transit vehicles is now a top concern of riders. Some potential riders remain concerned about their health and choose not to use transit. The number of people experiencing houselessness has grown, including the numbers of unhoused residents at or near transit stops. Severe injuries and traffic fatalities have also increased in recent years.

Similarly, pedestrian and cyclist safety has declined during and post pandemic. Regional agencies are focused on addressing the root causes, which include an increase in traffic speeding, facility gaps, poor lighting and other issues.

**Improvements to make transit faster, more reliable, and more attractive** TriMet, Metro, the City of Portland (including its Rose Lane Plan) and other jurisdictions have studied hundreds of bus-priority lane and spot improvement projects between 2018 and 2022; more than 50 were implemented. Figure 10 provides an example of the effectiveness of one of these investments: the Burnside Bridge.

**Figure 10. Before-and-after effects of Burnside Bridge bus-priority improvements**



## Safe and Healthy Urban Arterials

In preparing for the RTP, Metro developed this RTP policy brief describing existing conditions, challenges and policy considerations for urban arterials in the region, which are of high importance for transit.<sup>5</sup> Eight of the 10 highest-ridership TriMet

<sup>5</sup> Metro, [Safe and Healthy Urban Arterials Policy Brief](#), October 2022.

bus routes are on urban arterials that carried 25% of TriMet's ridership in 2020. Takeaways from the report are included below.

- Urban arterials represent 5% of roadway miles but have over 40% of serious and fatal crashes, as well as a disproportionate number of serious bicycle and pedestrian crashes and fatalities.
- Two-thirds of urban arterials are in areas with higher populations of people of color and people with lower incomes; fatal and severe injury crashes disproportionately affect these communities.
- Urban arterials are critical for implementing the regional growth concept since they serve many of the region's regional centers, town centers and station communities where the most housing and job growth will occur.
- Existing zoning, design and safety deficiencies, outdated standards, lack of funding, and complex coordination are among the challenges to addressing needs and creating thriving centers along urban arterials.

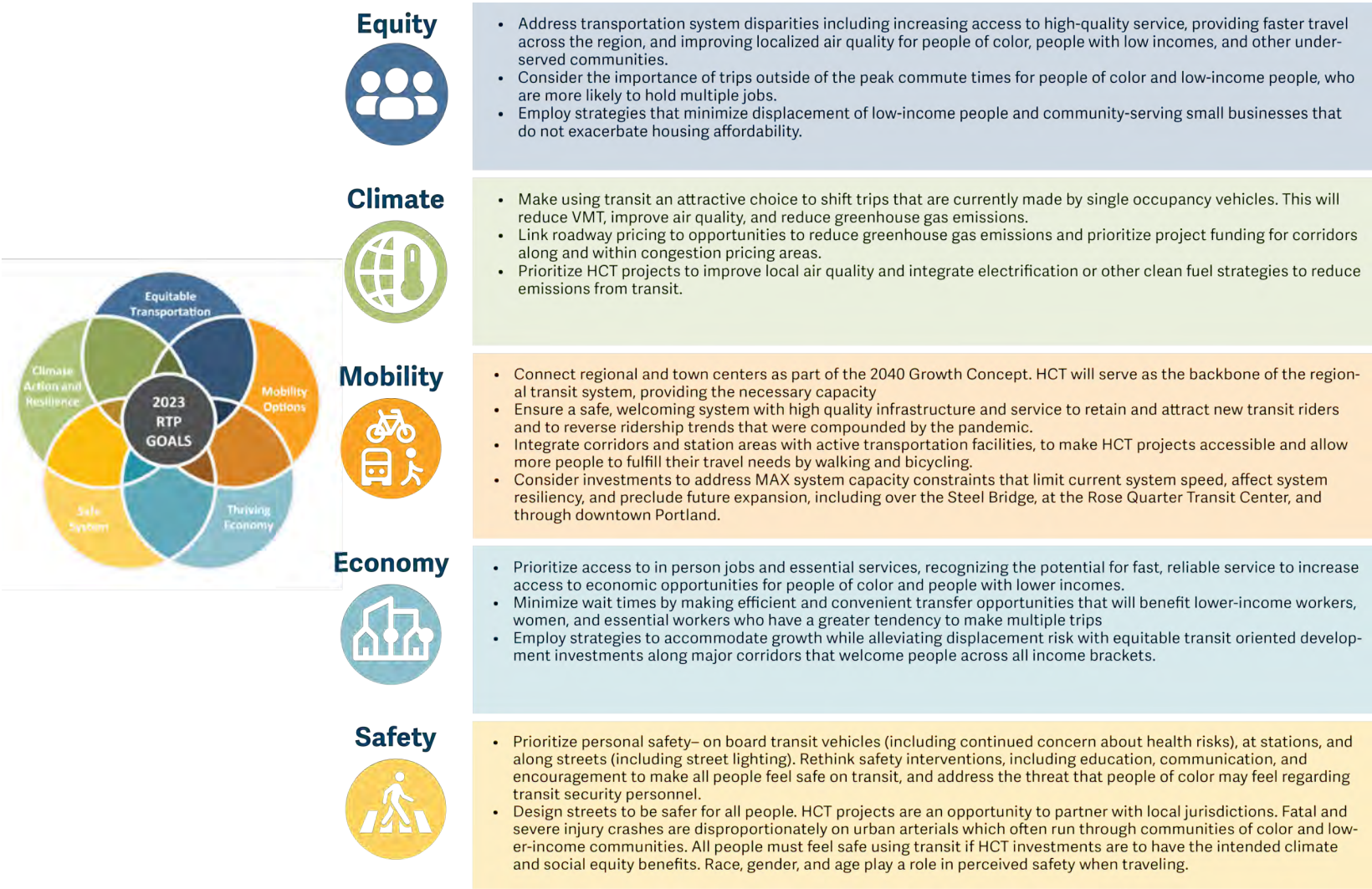
The policy brief identified policy, design and funding challenges for the RTP to address in defining a new approach for urban arterials that addresses equity and safety issues. HCT investments identified for urban arterial corridors could be a key mechanism for coordinating improvements on these streets.

### **Synthesis of challenges and opportunities to be addressed**

Figure 11 below illustrates the five pillars of the 2023 RTP goals and how they relate to HCT opportunities.



Figure 11. HCT opportunities related to 2023 RTP goals





## High capacity transit policy framework updates

High capacity transit is the backbone of both the 2040 Growth Concept and Climate Smart Strategy,<sup>6</sup> as well as the foundation for the transit network in the RTP which is a key tool for implementing both documents. The 2040 Growth Concept sets forth a vision for connecting the central city to regional centers such as Gresham, Clackamas and Hillsboro with fast and reliable HCT; these connections will help greater Portland concentrate development and growth in its centers and corridors.

Based on a review of existing regional, state and federal policies; evaluation of the challenges and opportunities described above; and review of policies in similar regions; this strategy update refined the policy framework to better reflect current and future regional priorities and desired outcomes for HCT. Key considerations included:

- prioritizing social equity in transit investments by emphasizing the importance of high-quality service to make transit work for everyone
- addressing climate change as another key priority for transit investment, recognizing that climate and equity are interrelated challenges for the region
- prioritizing maintenance as key to preserving a resilient and reliable system, and
- more clearly addressing the role of the better bus program as a distinct tool for increasing reliability of the transit system.

A key element of the policy framework is defining what HCT looks like in greater Portland and the role that it plays in the regional transportation network. This strategy update recharacterized high capacity transit to:

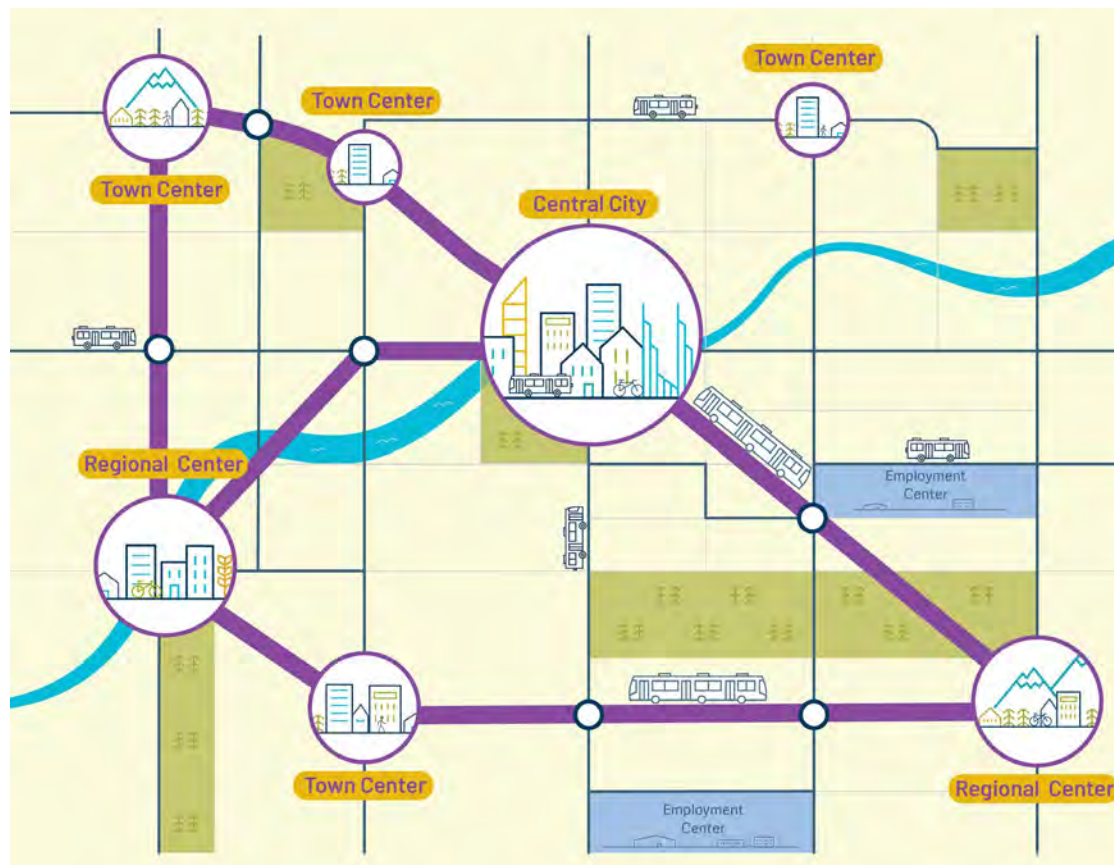
- lead with the *purpose* of HCT, which is to serve as the backbone of the regional transportation (not just transit) network
- expand the *role* of HCT to connecting regional centers and major town centers (see Figure 12)
- integrate *social equity* by emphasizing that HCT should connect people who are marginalized by society (e.g., communities of color), suffer from institutional or structural discrimination or rely on transit (i.e., people of color, limited English proficiency, 18 or under, 65 or over, low-income, differently abled) with high-quality transit
- define the *essential attributes* of high-quality transit as fast, frequent, safe and reliable

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<sup>6</sup> <https://www.oregonmetro.gov/climate-smart-strategy>

- emphasize that HCT provides the needed *capacity* to serve the region's highest demand corridors
- specify the *levels of transit priority*, aspiring to operate in exclusive guideway to the extent possible
- specify the *transit modes* that may be considered, which include corridor-based rapid bus such as the FX2-Division line, that may not have majority exclusive guideway.

**Figure 12. Regional transit network concept**



## **Defining bus rapid transit**

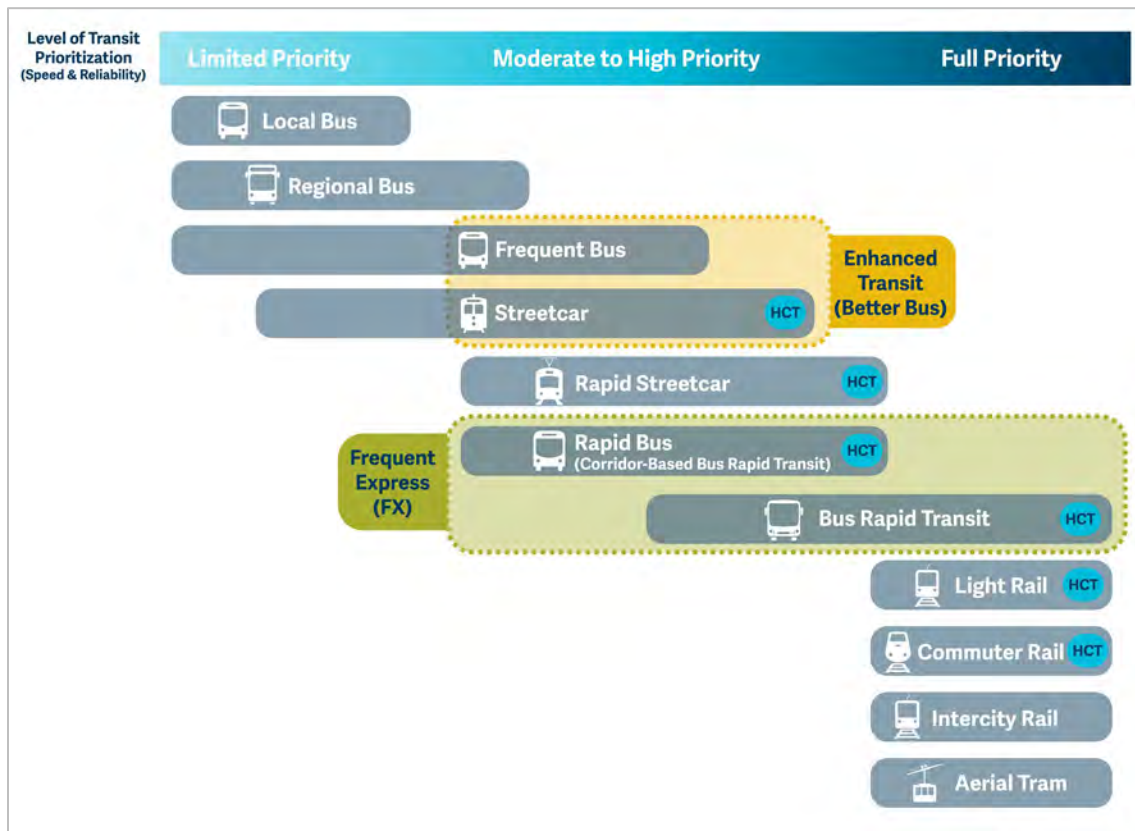
Federal funding has been and will continue to be essential to advancing most HCT corridors. BRT, as defined by the Federal Transit Administration's Capital Investment Grant program, must include:

- more than 50% of the route is in a fixed, separated guideway dedicated for public transportation during peak periods
- defined Americans with Disabilities Act-compliant stations with shelters and route schedules
- solutions for faster travel time at congested intersections
- bi-directional weekday service for at least 14 hours a day arriving at least every 15 minutes all day or 10 minutes at peak and 20 minutes at all other times
- weekend service for at least 10 hours a day arriving at least every 30 minutes all day
- unique branding.

The program also considers projects that are corridor-based BRT. These projects do not have requirements for weekend service, and the corridor does not need to have exclusive guideway. Corridor-based BRT projects must still include the other elements noted above.

Figure 13 below illustrates the modes that are HCT, ranging from light rail or rapid bus (bus rapid transit) with majority exclusive guideway to corridor-based rapid bus with a mix of exclusive and shared right of way (such as the FX2-Division high capacity bus service) to a streetcar mode.

**Figure 13. Spectrum of regional transit modes**



## Better bus: Example of a city-led initiative

Cities all over Greater Portland can work with TriMet to support shared goals.

The City of Portland developed an Enhanced Transit Toolbox that describes many types of speed and reliability improvements that can be implemented as part of better bus enhancements.

Better bus investments complement HCT by improving the speed and reliability of regional transit and improving access to jobs, services, recreation and other essential destinations in the Metro area. Better bus includes spot treatments that enhance bus speed and reliability, but it does not include the comprehensive corridor investments of HCT. The diagram to the right compares common better bus and frequent express (FX) rapid bus treatments.

Street Design	● ● ●
Signal Improvements	● ● ●
Queue Jumps	▶ ● ●
Dedicated Bus Lanes	● ● ●
Distinct Branding	FX ●
Enhanced Stations	●
Specialized Buses	●
All-Door Boarding	●
Transit Signal Priority	●
Street Access Improvements	●
<b>FX</b>	<b>BetterBus</b>

## HIGH CAPACITY TRANSIT VISION DEVELOPMENT PROCESS

### High capacity transit vision

The HCT vision is the comprehensive future network of HCT corridors with enhanced amenities and transit priority that work together to move more people, more quickly than other types of regional or local transit. Well-connected and people focused, the vision will create convenient connections between people and jobs, services, commerce and other major destinations (e.g., colleges, hospitals, affordable housing). The vision prioritizes those who depend on transit or lack travel options, particularly communities of color and other marginalized communities.

The vision builds on prior work and:

- reflects the vision and goals adopted as part of the 2023 RTP Update process, described in the HCT policy framework section
- carries forward regional goals and investment priorities using the 2018 RTP HCT Readiness and Assessment criteria developed based on those priorities in partnership with regional stakeholders
- connects regional and town centers to support the 2040 Growth Concept
- maintains consistency with the Federal Transit Administration's Capital Investment Grant Program project justification criteria
- reflects the greater Portland region's history of success with the Federal Project Development process (advancing one corridor every 3 years)
- considers investments within the RTP horizon and beyond (thinking toward the next growth concept horizon of 2070)
- contemplates optimal network design (e.g., radial, grid, multihub) and character (e.g., coverage, spacing, intensity).

The vision will take years to achieve, but significant progress has been made in the last 35 years. Some HCT corridors identified are not ready to move forward today; they lack the population density or number of jobs to warrant a major transit investment such as HCT. However, the vision recognizes that these places are where future growth is focused and that as time goes on, they will become viable and important corridors for HCT investment. Other corridors are already clear regional priorities — such as the Southwest Corridor project — where all of the

### Reflecting local and community visions

Community feedback show strong support for the following corridors. This feedback was essential to refining the HCT vision:

- Lombard/Killingsworth
- Martin Luther King Jr. Blvd.
- Cesar Chavez
- Clackamas to Columbia
- Halsey
- Burnside
- Powell
- Highway 212/Sunnyside
- I-205
- McLoughlin
- WES/Route 76 - Beaverton to Wilsonville
- Highway 26
- 185th Avenue
- Highway 99W

right ingredients are in place today. The vision combines all of these corridors, representing the full buildout of the region's HCT system.

## Evaluation approach

Metro enacted a two-step process, very similar to the 2018 Regional Transit Strategy process. The first step considered a broad universe of potential future HCT corridors and narrowed to those best aligned with regional goals. The second step focused on readiness, or the ability for a given corridor to move forward in the near versus long term. Once the prioritized short list of corridors was identified, community feedback and discussions with regional stakeholders refined the list of corridors and priorities.

The following sections provide a brief summary of the evaluation process; for more details, please see Appendix D, Level 1 Screening, and Appendix E, Readiness Evaluation. The process is illustrated in Figure 14.

### Core evaluation criteria

**Mobility** Ridership and travel time

**Land use and market support**

Urban form, centers and land use

**People and job density** Cost effectiveness

**Operating and capital project cost per rider** Equity benefit and access to jobs and services

**Environmental benefit** Vehicle miles traveled

Figure 14. Regional HCT plan update process

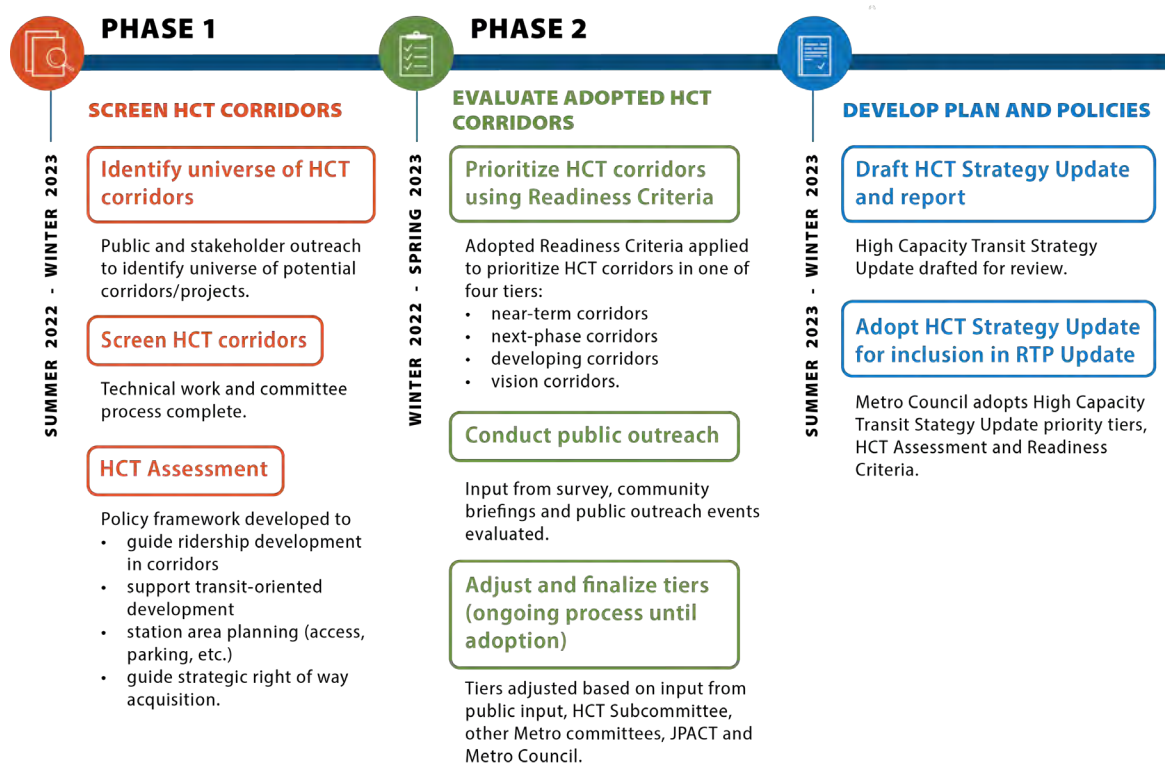




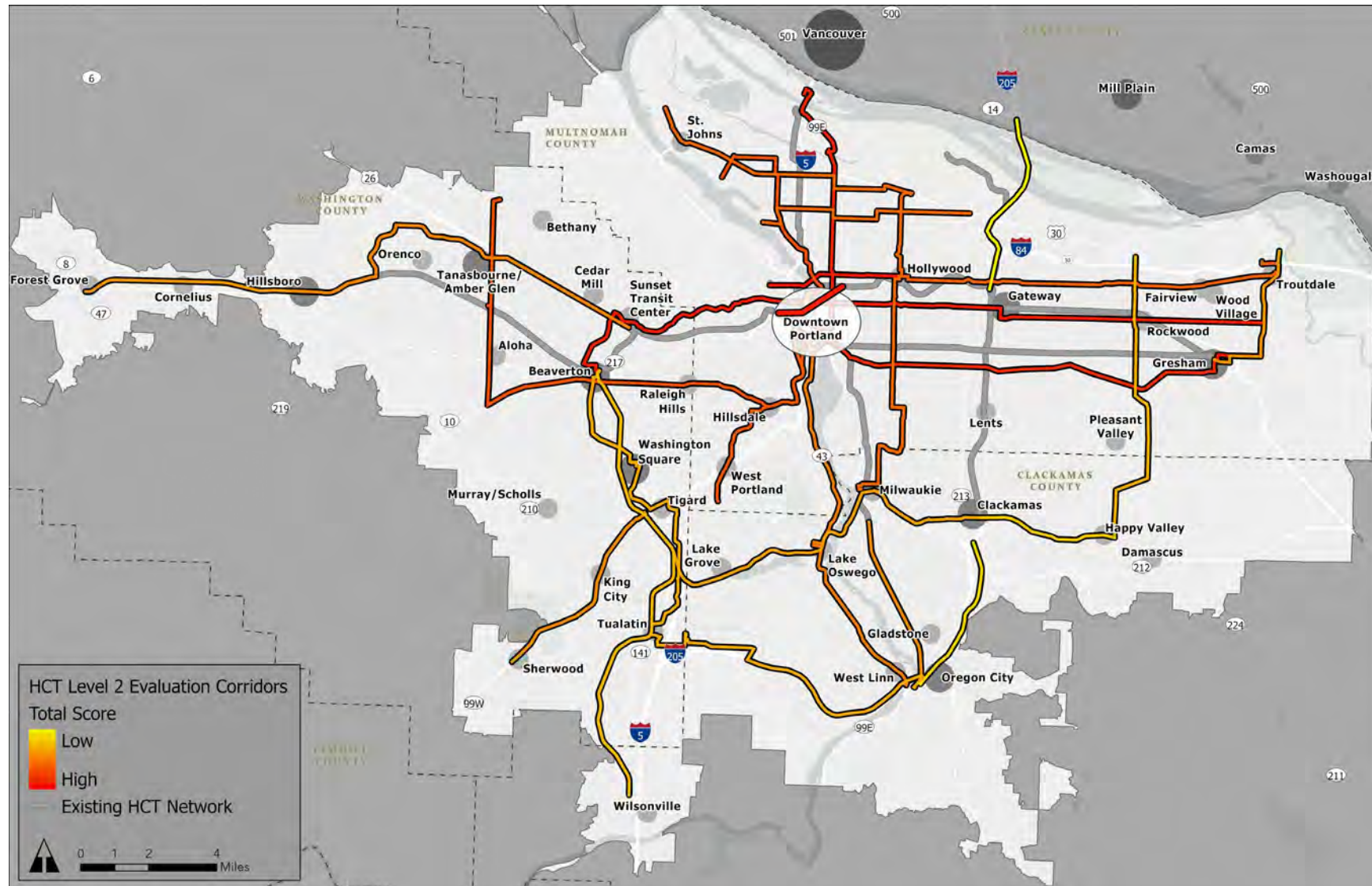
Figure 15 shows the initial scoring from the evaluation which considered the following:

1. Where are more people traveling today and where will they want to travel in the future?
2. What connections link the most people and historically marginalized communities to jobs, essential services and other major destinations?
3. How long does a transit trip in a certain area currently take compared to other travel options? How much could an investment in high capacity transit improve travel?
4. What are the needs and priorities voiced by community members and organizations, businesses, agency partners and elected officials.

The HCT corridors shown are representative; that is, they do not necessarily represent the exact corridor that would advance. Additional work outside of this strategy update is required to define the exact corridor, termini and mode.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

Figure 15. Level 2 evaluation corridor scores



## Readiness assessment

To use resources cost-effectively and consistent with regional mobility, equity and environmental priorities, HCT is a tool for connecting centers of activity where a high number of people live, work, and visit. The readiness assessment considered the following factors that are known to contribute to successful HCT corridor implementation and that reflect federal funding priorities:

- very compact urban form (e.g., grid, small blocks) that places destinations and affordable housing options near transit (with limited parking)
- very dense mix of uses and a balance of jobs and housing that create a place where activity occurs at least 18 hours a day
- mix of many and diverse essential services near transit: grocery stores, medical clinics and educational institutions
- well-designed streets and buildings that encourage walking and rolling
- streets with space to accommodate larger buses or trains and that are designed to include elements prioritizing transit
- good street connectivity with safe, direct and convenient access to walk and roll to, from, and beyond transit stops and stations
- local plans, strategies and partnerships that underpin transit-supportive places.

Table 1 shows the readiness criteria used for corridor evaluation.

**Table 1. Readiness criteria**

Category	Metric
Documented Support	Community support Transit-supportive land use Work completed to date
Physical Conditions in the Corridor	Physical space Miles of sidewalks within one-half mile of the corridor, normalized Miles of street with bike facility present within one-half mile corridor, normalized
Implementation Complexity	Corridor length Freight corridor

## HIGH CAPACITY TRANSIT CORRIDOR INVESTMENT PRIORITIES

The strategy update prioritizes corridors to create a pipeline for implementation over time. In the past 30 years, Metro and TriMet have taken on a major investment analysis about every 3 years. This number has increased in recent years as four regional corridor planning efforts have been initiated since the 2018 Regional Transit Strategy was adopted, including two rapid bus projects. More corridors could potentially move forward if additional resources are devoted.

### Prioritized investments

This strategy update identifies near- and long-term regional HCT investment priorities. Mode decisions will be made as corridors enter into the FTA alternatives analysis process, but most corridors assume rapid bus as the primary investment mode.

To distinguish near-term regional priorities from corridors that will need time to develop, a simple set of priority tiers was established. Funding is a major constraint in moving corridors forward both because of federal funding timelines and requirements, as well as a lack of local funding to move projects forward. Obtaining funding through the FTA Capital Investment Grants program, whether Small Starts or New Starts funded, takes 7 or 8 years or more from initiation of a federal alternatives analysis to completion of a full funding grant agreement and construction. Additionally, only those HCT corridors that meet strict federal funding criteria are eligible for federal funding. In most cases, lower-tier corridors do not have sufficient land use, population, and employment density in place to be competitive for increased investment in the short term.

Table 2 shows the HCT vision corridors ranked by priority tier. Near-term regional priority corridors (Tier 1) should be advanced first and work on these corridors is already underway. However, no corridor is guaranteed advancement, and every corridor has the opportunity for rapid advancement by meeting the High Capacity Transit Assessment and Readiness Criteria in the 2023 RTP.

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**Table 2. HCT regional priority investment corridors by tier**

Tier	Tier description	Explanation	ID	Corridor	
1	Near-term corridors	Corridors most viable to advance into implementation in next 4 years.	Tier 1 corridors include those with adopted locally preferred alternatives or have active work underway. They were <i>not</i> included in the evaluation detailed in the HCT vision development process section above because the region has already identified these corridors as a priority.	C7	82nd Ave
				C16	Tualatin Valley Highway
				C29	Southwest Corridor
				C30	Interstate Bridge Replacement
				C28	Montgomery Park Streetcar
2	Next-phase corridors	Corridors in which implementation may be viable if recommended land use planning and policy actions are implemented.	Tier 2 corridors scored well on Level 2 and Readiness criteria; they are candidates for HCT investment and could be ready to advance toward implementation in the next 5 years.	C14	Central City Tunnel
				C19	Portland to Gresham via Burnside
				C21	Hayden Island to Downtown Portland via MLK
				C23	Bethany to Beaverton via Farmington/SW 185th
				C25	Beaverton to Portland via Hwy 10 (BH Hwy)
				C20	St. Johns to Milwaukie via Cesar Chavez
				C24	Swan Island to Parkrose
3	Developing corridors	Corridors in which implementation may be viable if: 1. There is additional land use investment; and 2. There is a local champion to support corridor development; or 3. There is interest in development, but land use and ridership potential are not yet supportive.	Tier 3 corridors were those in which more work would be needed before they become candidates for investment. Some scored well on Level 2 but not on Readiness criteria, which may mean that corridors may not yet have sufficient population density/land use policies in place. Alternatively they could have scored moderately on Level 2 and Readiness criteria. These corridors have a longer-term path to implementation.	C1	Portland to Gresham in the vicinity of Powell Corridor
				C22S	PCC Sylvania to Downtown Portland via Capitol Hwy
				C18E	Hollywood to Troutdale
				C11	NW Lovejoy to Hollywood via Broadway/Weidler
				C17S	Oregon City to Downtown Portland via Hwy 43
				C5	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen
				C27	Park Ave MAX Station to Oregon City in the vicinity of McLoughlin Corridor
				C4	Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center
				C6	Beaverton - Tigard - Tualatin - Oregon City

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Tier	Tier description	Explanation	ID	Corridor
4	Vision corridors	Corridors in which implementation may be viable when projected land use, policy outcomes and projected ridership is in line with HCT investment.		
		Tier 4 corridors are those that scored lower on Level 2 or Readiness criteria. Additional planning work, and increased land use and population density would be needed to support HCT investment. These corridors may be candidates for other types of investments.	C2	Tigard to Sherwood via Hwy 99W Corridor
			C9	Hillsboro to Forest Grove LRT extension
			C10	Gresham to Troutdale LRT extension
			C15	Happy Valley to Columbia Corridor via Pleasant Valley
			C3	Beaverton to Wilsonville in the vicinity of WES
			C12	Clackamas Town Center to Damascus
			C26	Clackamas Town Center to Oregon City
			C8	Gateway to Clark County in the vicinity of I-205 Corridor

Figure 16 shows the corridors by tier. The corridors shown on this map were used to define and analyze potential HCT investments, but do not necessarily represent the ultimate corridor or termini of any given corridor. Much additional work, described in the next sections of this report, is required to further define and refine these corridors, their HCT modes, and many other components.

## Community priorities

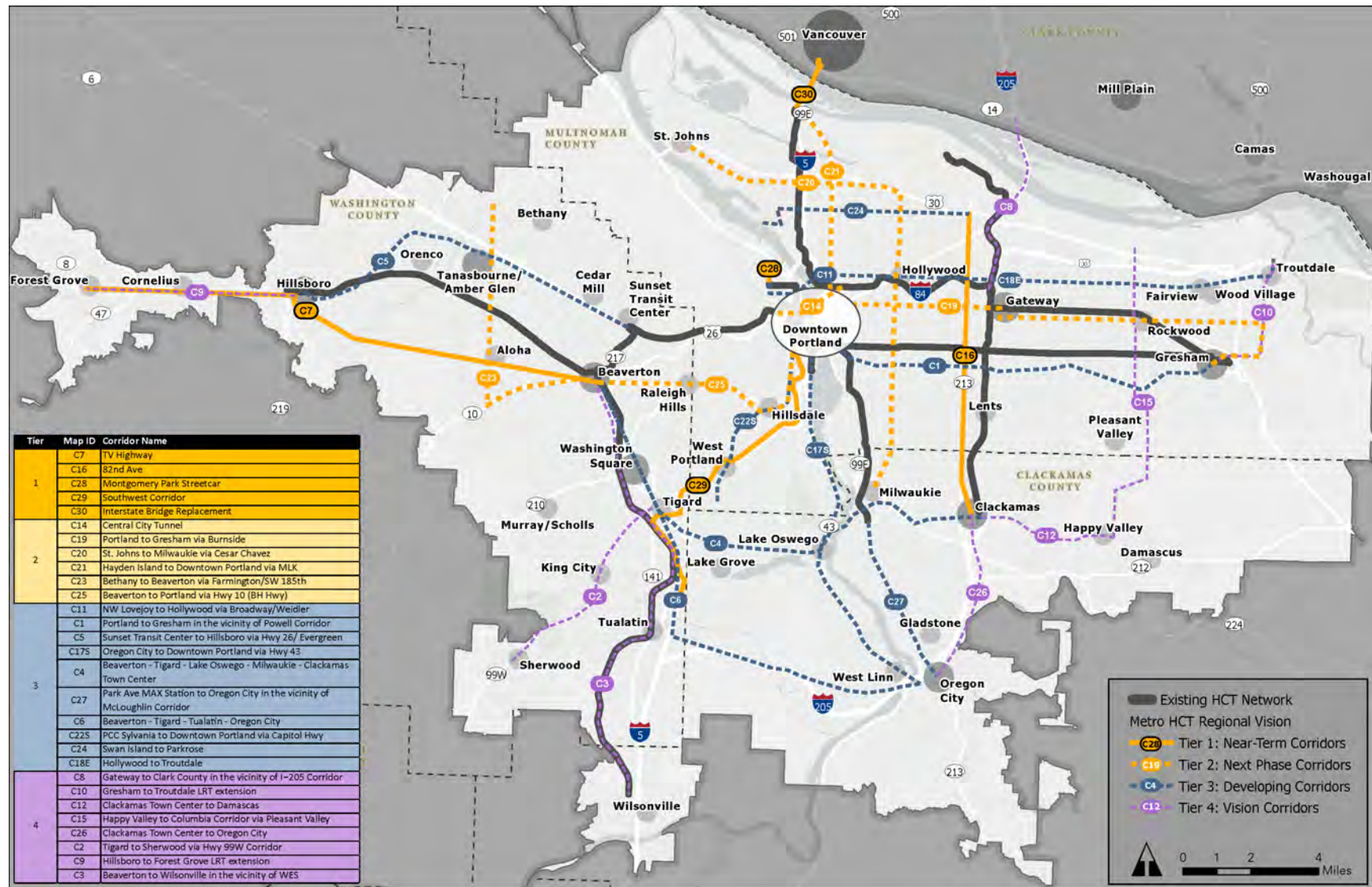
These vision tiers also reflect community investment priorities which indicated clear need for and interest in high capacity transit solutions for near-term and next-phase corridors for better access to neighborhoods, jobs, and community places. Additional community priorities are focused on making high capacity transit for comfortable to use:

- increasing capacity to reduce crowding
- reducing bus travel and waiting time
- providing lighting, especially at the stop
- installing shelters offering protection from the weather
- ensuring stops are safe to access and comfortable to wait at
- increasing feeling of safety and security on the bus.



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Figure 16. HCT regional vision corridors by tier



## IMPLEMENTING THE VISION

### Supporting high capacity transit development

High capacity transit investments take existing strong transit connections to the next level in accessibility and priority on the roadway and at the signal – while shining a light on the corridor in which it travels to improve safety, access and livability for current and future riders. For transit investments to meet success and be utilized to its fullest potential, other elements and improvements around the transit service and infrastructure are needed. The following general types of transit supportive elements factor into creating an environment that encourages transit ridership while meeting regional objectives around equity and affordability:

- land use, urban context, and transit-oriented development
- community stability and resilience
- complete streets: transit access and safety
- transportation demand management policies and programs
- transportation system management and operations
- transit affordability and fare programs.







Figure 17 presents these transit supportive elements and the strategies that can be considered under each.

Figure 17. Overview of transit-supportive elements





# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

						
Element	Land Use, Urban Context, and Transit-Oriented Development	Community Stability and Resilience	Transit Access: Complete Streets, Safety, and Mobility Options	Transportation Demand Management Programs and Policies	Transit Affordability and Fare Programs	Transportation System Management and Operations
Why does it matter?	Density and mixed uses support high-frequency service and modeshare goals	Strategies to ensure existing residents and small businesses benefit from HCT investments	Multimodal streets help people get to and from transit safely	Incentivize alternatives to driving, and increase attractiveness and awareness of transit options	Make transit more affordable and accessible to all people	Make transit a competitive alternative to driving
What does it include?	<ul style="list-style-type: none"> <li>Supportive land uses including mixed use developments</li> <li>Transformation potential through transit-oriented development and higher-density development aligned with 2040 Growth Concept and the community's vision for growth</li> <li>Supportive planning and policies</li> <li>Local commitment to corridor investment</li> </ul>	<ul style="list-style-type: none"> <li>Robust community input and engagement</li> <li>Equitable development and affordable housing strategies</li> <li>Local anti-displacement policies and actions</li> <li>Targeted support for small businesses</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian network completion (sidewalks, crossings, accessibility, lighting, etc.)</li> <li>Bicycle network connections</li> <li>Transit-supportive street design</li> <li>Transit stop and station amenities</li> <li>Mobility hubs</li> <li>Shared mobility options</li> <li>First/last mile connections</li> <li>Shuttles</li> <li>Bicycle parking and storage</li> </ul>	<ul style="list-style-type: none"> <li>Parking policies</li> <li>Education and outreach</li> <li>Employer benefits programs</li> <li>Transportation wallet programs</li> <li>University/school affiliate programs (i.e., student passes, education programs)</li> </ul>	<ul style="list-style-type: none"> <li>Hop fastpass, e.g., enables fare capping and other discount options</li> <li>Reduced Fare Programs: Youth, Low-income, Honored Citizen, and Veterans</li> <li>Free fare grant programs</li> <li>Employer-sponsored transit discount programs</li> </ul>	<ul style="list-style-type: none"> <li>Optimize existing transit system operations and performance</li> <li>Transit-priority treatments</li> <li>Passenger information technology</li> </ul>
When is it done?	All stages	Pre-Project and Ongoing	All stages	Pre-project and ongoing	Pre-project and ongoing	Pre-project, as part of implementation, and ongoing
Who is responsible?	<ul style="list-style-type: none"> <li>Local jurisdictions</li> <li>Metro</li> </ul>	<ul style="list-style-type: none"> <li>Local jurisdictions</li> <li>Metro</li> <li>CBOs (i.e., Community-Based Organizations)</li> </ul>	<ul style="list-style-type: none"> <li>Local jurisdictions</li> <li>Transit service providers</li> <li>ODOT</li> <li>Metro</li> </ul>	<ul style="list-style-type: none"> <li>Local jurisdictions</li> <li>Transit service providers</li> <li>Metro</li> <li>CBOs</li> <li>Employers</li> </ul>	<ul style="list-style-type: none"> <li>Transit service providers</li> <li>Employers</li> </ul>	<ul style="list-style-type: none"> <li>Transit service providers</li> <li>ODOT</li> <li>Metro</li> </ul>

## The role of community engagement

Community engagement is a core priority of Oregon communities; it is the first goal in Oregon's statewide land use goals. Intentional and authentic community engagement conducted throughout the HCT planning process informs project development and can galvanize lasting community support. Engagement improves projects and outcomes by helping hone the problems addressed by HCT corridor investments, avoiding or mitigating impacts, and identifying how the investment can best meet needs.

Buy-in from residents, employees, and other stakeholders living in and around a transit corridor is crucial, underlying each of the six elements presented above. Community engagement creates opportunities for co-creation, giving both agency staff and residents an equal stake in decision-making — jointly designing, planning, and executing project work. A key component of co-creation is centering events designed and led by residents, including **street design workshops, walk audits, and charrettes**. These events cement residents' ownership of the narrative surrounding their communities and the changes they wish to see.

## Land use, urban context, and transit-oriented development

The value of HCT lies in its ability to move large numbers of people at high frequencies. The land uses and development context around station areas are critical to realizing HCT's full potential. Higher density zoning allows for more people to live, work, and play in proximity to transit, while mixed use developments create a variety of destinations for people to access in one place. This makes transit a convenient and attractive option for large numbers of people, effectively reducing the number of trips needed to be taken by car.

There are many considerations when designing transit-supportive land uses and urban contexts, from local community support to government policies.

**Existing conditions and context.** Many communities feel strongly about the character and role of their neighborhood against the wider urban context, especially those who are at risk of displacement. Existing anchor institutions such as major employment centers or regional destinations will also heavily impact ridership potential. Understanding the needs and concerns of existing residents, businesses, and other stakeholders is crucial to project success.

## Future transformation potential as imagined under the 2040 Growth

**Concept and the community's vision for growth.** Planning solely based on the existing land use and urban context isn't enough, especially when considering the time and cost of developing transit infrastructure. Supportive land use decisions should be visionary in their approach, factoring in the unrealized potential for further density or growth. Considering the long-term land use vision helps future-

proof HCT investments, ensuring the infrastructure can accommodate future needs, which can save resources in the long term.

**Supportive local planning and policies.** Local and regional jurisdictions can create the legislative space for transit-supportive decisions to be made. The state's Climate Friendly and Equitable Communities amendments to the Transportation Planning Rule require policies such as eliminating parking minimums with new development. Developing station area plans are an early action in corridor development that help tailor local zoning codes and policies to the local context and community-supported vision.

**Commitment to corridor** HCT delivers economic potential to entire corridors, and local jurisdictions should be on-board with the opportunities and impacts that will cascade along the route that transit services will take. This could mean matching local investments, zoning, and redevelopment opportunities to the rights-of-way and urban streetscape throughout the corridor.

### **Community stability and resilience**

HCT infrastructure brings new and improved travel options to our region. HCT is an important element of our regional transit system and providing people with access to jobs and other opportunities. However, HCT investments can incentivize redevelopment of property along project corridors and have historically led to land value and rent increases. Taking intentional steps to prevent the displacement of local residents and small businesses, particularly those of lower income backgrounds and historically marginalized communities, is an important part of equitably investing in HCT. Building community resilience to change is a complex and multifaceted process and is not limited to one stage of an HCT project's lifecycle. Many elements should be put in motion during early planning, but require ongoing reassessment and engagement.

**Understanding demographic and market trends.** Trends in demographics and market indicators can identify whether a corridor is currently undergoing gentrification and displacement (residential and commercial), and help jurisdictions evaluate the potential risk for further gentrification and displacement that may accompany proposed transit investments, and prioritize policies and programs to mitigate potential impacts.

**Equitable development and affordable housing strategies.** Creating an equitable development framework that guides all land use and development planning in a project corridor helps a community evaluate its guiding principles to ensure that equity is an ongoing part of the planning and development conversation, and includes affordable housing and anti-displacement strategies. The Southwest Corridor Equitable Development Strategy and Equitable Housing Strategy (see callout below) are recent local examples. Metro's transit-oriented



development program is one resource providing funding to stimulate private development of higher-density, affordable and mixed-use projects near transit.

**Local anti-displacement policies and actions** Cities have policy tools that they can deploy to prepare for potential gentrification and displacement. Readiness for HCT includes steps to mitigate that risk through community input, partnerships with local organizations, and allocating funds to support or subsidize projects/programs. Metro is currently scoping an agency-wide, cross-departmental anti-displacement action plan that will also be a resource to regional partners looking to implement local strategies.

**Targeted support for small businesses** As communities change, small businesses benefit from outreach and designated support to ensure they understand the changing market, potential rent changes, and have access to programs that may help them stay in an area. Additionally, support is needed during construction to avoid disrupting local businesses and keep customers coming in the doors.

### [Southwest Corridor Equitable Development Strategy](#) and Equitable Housing Strategy

Thanks to a Federal Transit Administration grant, Metro worked with partners from the community to explore how a proposed light rail and other investments in the Southwest Corridor could support community development and improve the quality of life for people of all incomes and backgrounds. This process built relationships among government and community members, employers, affordable housing providers, business leaders, philanthropic organizations and educational institutions. It established a new group, the Southwest Equity Coalition, and a pilot project grant program to support continued implementation of the strategy. One element nested within the broader effort is the Equitable Housing Strategy. A joint effort between the cities of Portland and Tigard, the strategy laid the groundwork for early actions to prevent displacement, and plan for more housing options and opportunities in the corridor. It also includes actions for building capacity in under-represented communities for advocacy and public involvement — one example being the SW Community Grants Program funding community-based partners to organize and engage low-income tenants related to affordable housing and transit issues.

These innovative tools can be replicated to create more equitable outcomes as greater Portland plans expansions to the HCT network.

## **Planning for transit-oriented development**

Both Metro and TriMet are working on updates to transit-oriented development plans.

Metro's Transit-Oriented Development Strategic Plan Update is exploring opportunities for better implementing regional racial equity strategies and furthering climate mitigation and resilience goals, including contracting and workforce, community-based organization development partnerships, inclusionary investment decision-making, urban heat island mitigation design requirements, energy efficiency standards, and parking ratios and other traffic demand management incentives. The plan guides transit-oriented development program activities to acquire land and provide gap funding for nonprofit and for-profit private developers to support the construction of higher density buildings in areas served by frequent service bus, streetcar or light rail. Similarly, Metro's Affordable Housing Bond Program allocated 10% of its funds to a site acquisition program where access to transit was identified as the top desired nearby amenity by community.

TriMet's draft Regional Transit-Oriented Development Plan builds on the guidelines approved by the Board of Directors in May 2020 to provide clarity and structure to the Transit-Oriented Development Program. The plan includes information and guidelines for the inventory, evaluation and prioritization of TriMet sites in the transit-oriented development program. It details how TriMet promotes transit-oriented development across the region. Most importantly, the plan empowers communities and partners to provide feedback regarding where transit-oriented development projects are located, how sites are selected, and how decisions are made. The plan is designed to provide transparency to all elements of TriMet's transit-oriented development work and is focused on creating equitable transit-oriented development projects for everyone.

## **Transit access: complete streets, safety, and mobility options**

Most transit trips begin and end with active transportation. The quality of access to transit stops and stations can make a marked difference in the usefulness of transit services. This means investing in the streetscape around transit station areas, completing pedestrian and bicycle networks and to HCT stations, and partnering with mobility service providers to ensure people can safely reach HCT services.

**Multimodal and Complete Streets** Completing the local sidewalk and bicycle facility network, providing wayfinding and street lighting will make it safer for all people to access transit. Promoting disability-friendly transit services means committing to Americans with Disabilities Act-compliant crossings, sidewalks, and curb ramps, as well as transit platforms that offer level boarding onto vehicles. Resources including the National Association of City Transportation Officials [Transit Street Design Guide](#) provide guidance on how city streets can be adapted to serve the needs of all people accessing transit facilities. The Oregon Department of Transportation has also developed updated guidance for accommodating all modes on state highways, the [Blueprint for Urban Design](#).

## **First and last mile mobility options**

Bikeshare, carshare, circulator shuttles, and rideshare are all travel options that can be made available at HCT stations, allowing riders to easily switch between modes and complete the first or last part of their trips. Providing secure bicycle storage encourages bicycle owners to consider riding to and from transit. These travel options and amenities can be integrated with Complete Streets efforts and integrated into mobility hubs — locations where transportation services come together providing options for people to access and comfortably make connections to and from transit.

## **Transportation demand management programs and policies**

For many people, driving (alone) is the default means of travel, especially if existing systems and policies incentivize and subsidize driving and parking. Transportation demand management programs seek to shift trips to travel modes such as transit, active transportation (walking and biking), and ridesharing through incentives that make them more attractive and feasible for everyday trips. A lack of knowledge and understanding of transit is a common barrier to transit use, making strategic distribution of transit information and resources an important element of transit success. Transportation demand

## **Safe and healthy urban arterials**

Another focus area for the 2023 Regional Transportation Plan update is developing safe and healthy urban arterial roadways. State and local transportation agencies have been working to enhance safety on urban arterials for decades. While these corridors serve an important regional mobility function in connecting centers, they are typically more dangerous due to higher speeds, volumes and more travel lanes than minor arterials and are the most complicated roads to make improvements on because they require a lot of coordination and planning. Successful high capacity transit projects have illustrated the capacity of regional partners to coordinate effectively to complete complex, multimodal corridor projects. The safe and healthy urban arterial policy brief identifies strategic actions that regional partners can take to support developing urban arterials as complete streets and increase access to current and planned transit routes.

## **Access to transit study**

An emerging trend in local transit services is using smaller vehicles that range from vans and shuttles to small buses with fixed to flexible routes to fill the gap between traditional bus and rail services, as well as local destinations. In some cases, these services use ride-hailing and other new technologies to provide on-demand micro transit services.

In close coordination with public transit service providers in the region, Metro will explore how these emerging trends improve transit access and convenience, and how they might fit into a broader strategy to fill gaps in transit service that connect people in more suburban areas. This study will make recommendations for consideration in the 2028 RTP update.

management programs come in many different shapes and sizes depending on design and context.

**Employer-based programs** Employers can offer commuter benefits such as subsidized transit passes or bikeshare credit instead of parking permits, which encourages employees to make their regular trips without their cars. Employers are also an important stakeholder to partner with in raising awareness of transit options, and encouraging ridership.

**Municipal and agency policies** Jurisdictions can manage parking supply and parking costs to support the competitiveness of transit. Parking policies that support transit include matching parking pricing to demand, shared parking between uses, unbundling parking from rental and for-sale residential and commercial space, and removing minimum parking requirements for new developments. Transportation wallet programs in the City of Portland are another successful example that incentivizes transit and active transportation use over driving and parking. Establishing parking districts around station areas can be a helpful policy and planning tool to achieve transportation demand management goals.

### **Transit affordability and fare programs**

For lower-income people, the cost of transportation can be a substantial if not disproportionate financial burden. Per trip transit fares can be high especially for families and for those making frequent short trips. Part of making HCT accessible lies in establishing fare policy that enable more people to choose transit as a regular option. The following considerations can further help price transit competitively to make it an attractive choice for all riders.

**Student and youth fare programs** The majority of students are not in the workforce, and thus lack substantial regular income. Both TriMet and SMART offer reduced fares for students, including community college students. Portland Public School students can ride TriMet free during the school year and there are free summer programs. Partnering with schools, universities, and other community organizations can help publicize fare programs for young people, and encourage more to ride transit and navigate transit.

**Low-income fare programs** TriMet currently offers an Honored Citizen Fare Card, and people with low incomes can apply to use this fare with proof of income and government-issued ID to be submitted either through an online portal or at a designated enrollment location. While TriMet has taken numerous steps to make transit fares more accessible, barriers may still remain particularly those who lack access to a smartphone or availability during weekday business hours. Exploring partnerships with convenience stores and local retailers could help make low-income fare programs more accessible.

## Transportation system management and operations

Improvements to the speed and reliability of transit services is one of the most crucial ways to make transit more competitive with driving. Convenience is a key value for many people, and this can be achieved by reducing bus travel times, making transfers more seamless, and providing real time information for people to plan their trips.

**Optimize existing transit network** Many local bus services connect neighborhoods to key corridors, providing a feeder service for HCT. Timing transfers and right-sizing the amount of line duplication will help increase the transit travelshed, optimizing transit coverage and enhancing the rider's experience.

**Transit priority treatments** The Portland Metro region's framework for speed and reliability spot improvements, known as the Better Bus Program, partners with local jurisdictions to make capital investments. Improvements such as transit signal priority, transit-only lanes, queue jumps, and optimizing bus stops can reduce the amount of delay that transit vehicles experience and improve overall travel times.

**Passenger information technology** Real-time passenger information, either presented in a mobile application or on station displays, allow passengers to know when a transit vehicle will arrive. Information is important in helping people make travel decisions, and reduces the uncertainty faced by passengers who are transferring between services.

## Project development and funding

### Federal funding and eligibility

Federal funding will continue to be an essential component of HCT investment for many corridors in the Portland region. Some rapid bus projects could be delivered sooner and more cost-effectively if new revenues were available. FTA administers several Capital Investment Grants programs including Small Starts, New Starts, and Core Capacity grants. Roughly \$2 billion is allocated annually across all FTA Capital Investment Grant programs:

- Small Starts projects must be less than \$400 million in total cost and seek less than \$150 million in total Small Starts funding
- New Starts projects are greater than \$400 million in total cost and are seeking more than \$150 million in total funding.

Projects must be commuter (heavy) rail, light rail, streetcar, BRT or corridor-based BRT — the primary difference being that rail and BRT projects with fixed-guideway investments must have more than 50% of the route in dedicated transit lanes or other separated right of way. Corridor-based BRT projects do not need to

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have exclusive guideway, but must have other elements. To be eligible investments, projects must:

- involve a “substantial” investment on a single route within a defined corridor
- include defined stations
- include features such as traffic signal priority for buses, off-board fare collection, park and ride facilities, etc.
- have short headways, including a maximum of 15 minute headways all day on weekdays and for BRT only, a maximum 30 minute headways on weekends. Corridor-based rapid bus is not required to operate on weekends
- use a separate and consistent brand identity for the service.

Since 1986, the region has been very successful in obtaining New Starts and Small Starts funding through the FTA 5309 Capital Investment Grants program. Partnerships in the region have resulted in approximately \$4.2 billion in transit investments, which includes \$2.29 billion from the FTA 5309 Capital Investment Grants program and nearly \$500 million from other federal sources. New Starts/Small Starts funding are a key part of the financial plan for major transit capital projects in the region. The FTA Capital Investment Grants program has historically contributed between 50% and 90% of project funding through Full Funding and Small Starts Grant Agreements.

Current assumptions and future projections for the 2023 RTP assume that Capital Investment Grants-eligible projects will pursue approximately 50% of project funding from the FTA 5309 New Starts/Small Starts program. This means that local matching funds must be allocated. Additional federal funding may be allocated to cover project costs through the allocation of financially constrained MPO-directed funding (e.g., Urban Surface Transportation Program, Congestion Mitigation and Air Quality, or Transportation Alternatives Program); however, total federal funding for a project cannot exceed 80% of the total project cost.

The local funding commitment typically includes contributions from state, regional and local projects partners. Contributions are discussed and budgeted during the planning and project development phases and range in type from dedication of right of way, lottery-backed bond proceeds, local improvement districts, general fund contributions and others. Non-federal funding contributions are negotiated project by project and typically consider facility jurisdiction, project needs and benefits and opportunities for partnership.

### **Operations Funding**

Funding to design and construct HCT corridors is only part of the funding story. Long-term funding is also needed for operations of HCT corridors – ongoing dollars to pay drivers, keep systems maintained, and supported. There are several dedicated sources of funding for transit capital projects, but fewer grant sources for ongoing operations. All HCT corridor projects will need to establish a solid

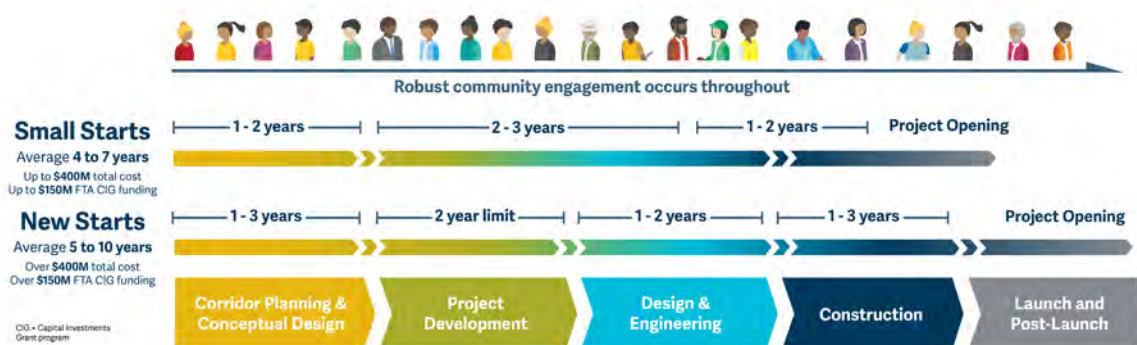


plan, working with TriMet and others, for long term operations and maintenance of these investments.

## Federal funding process

Projects follow a stepwise process to obtain New Starts or Small Starts funding (Figure 18). The first major step in the process is submitting a request to formally enter Project Development to the FTA. Prior to making this request, project sponsors typically have completed early planning work in the corridor, have arrived at a locally preferred alternative, and may have started on the environmental review process. The National Environmental Policy Act process is the environmental review, which evaluates the environmental impacts of a project and documents the required mitigations. There is no specific requirement around completing certain activities prior to entering the project development phase.

**Figure 18. Small Starts and New Starts project development timelines**



The project development phase is when substantial design work and the National Environmental Policy Act process are completed, the Small Starts Rating application is submitted, and the funding commitments finalized prior to award of construction funding. Sponsors must show that they have funds available to complete this phase within a reasonable timeframe. FTA also requires submittal of additional information once preliminary design is completed, including a project management plan, refined cost estimates, identification of needed right of way, and completion of value engineering.

Once project sponsors have submitted information to support rating and evaluation of the project, FTA makes recommendations for which projects to fund in the Annual Report on Funding Recommendations. Funding is not guaranteed until Congress and the president have approved the funding requests. Typically, once a project makes it to the annual report, it will receive funding, though it may take several budget cycles to be allocated funding by Congress.

Project development includes:

- locally preferred alternative and RTP adoption, if not completed
- sufficient design and engineering

- National Environmental Policy Act clearance
- project evaluation and rating
- critical third-party agreements
- Requirement that 50% of non Capital Investment Grants funding is committed within 3 years of entering project development
- risk assessment/readiness.

Figure 18 shows a hypothetical timeline for an HCT project that uses federal Capital Investment Grants program funds after completing the process to get to project development. The process can take a minimum of 5 years to complete and typically extends to 7 or more years.

### Moving corridors forward

Figure 19 illustrates the general actions needed to prepare HCT corridors for and advance them through the development process to construction, categorized into five phases. Timelines for each phase will vary depending on project type and complexity.

1. **Pre-project** actions involve improving readiness.
2. **Corridor planning** including determining a preferred alignment and mode, early concept design, and applying to enter into the federal project development process, if applicable.
3. **Project development** includes advancing design, completing environmental review (e.g., National Environmental Policy Act) and securing project funding.
4. **Final design and construction** will result in a completed project.
5. **Post-project** actions may include fostering transit-oriented development, transit network changes, and anti-displacement actions

#### Elevating local voices

HCT investments don't happen without the leadership and engagement of local jurisdictions and partners. Local champions are needed to see projects through, all the way from "good idea" to station construction. Local partners are needed for the long haul, too – projects take years to come to fruition, meaning consistent engagement is key. Local champions and partners are also critical to ensuring transformative HCT investments maximize benefits to the local community, and to guide approaches to mitigating potential impacts like displacement.

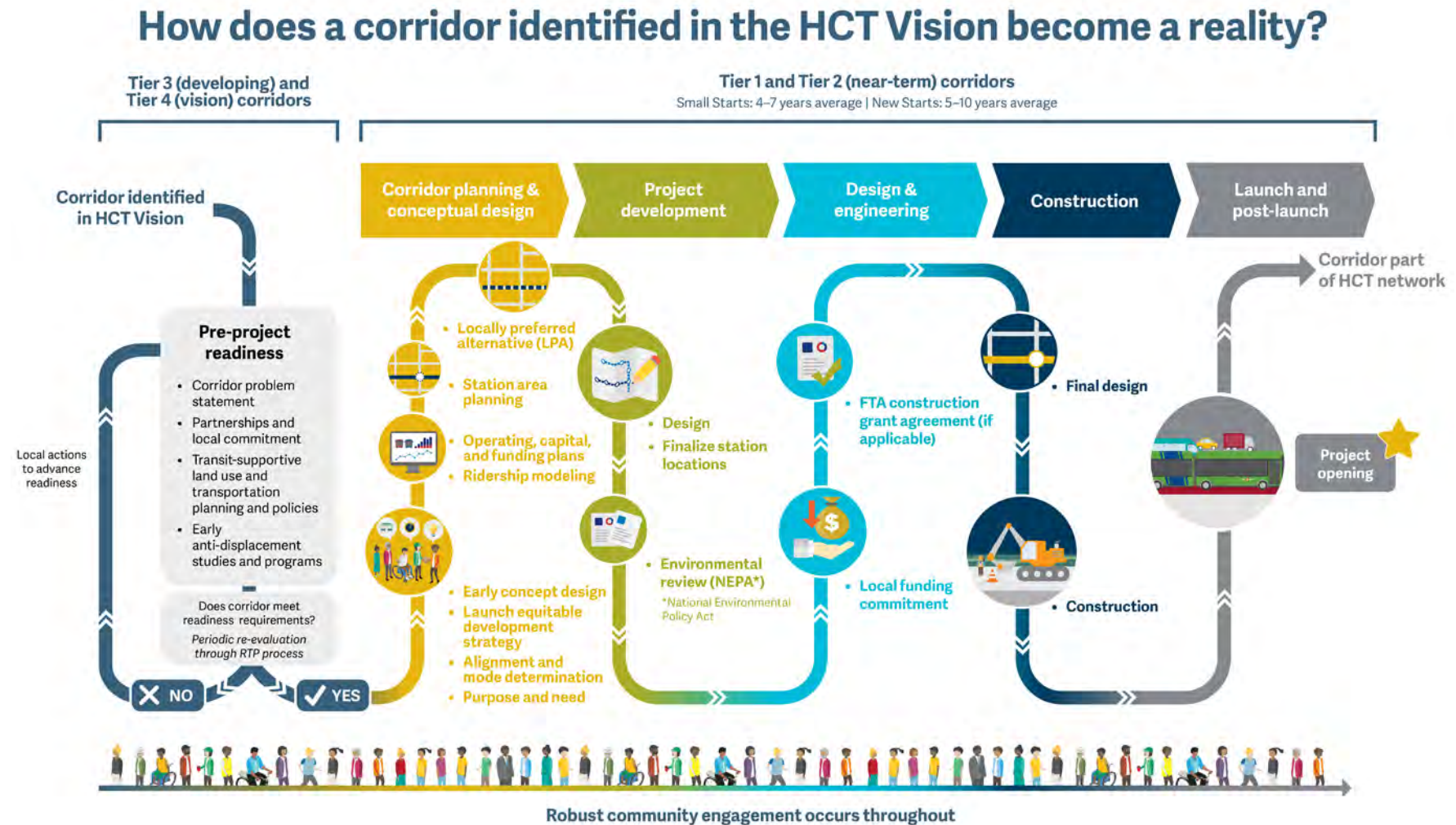
Figure 19 also illustrates conceptually where HCT corridors are in the project development lifecycle based on readiness tier.

**Tier 1** corridors are already in corridor planning and/or early project development actions.

**Tier 2** corridors are generally ready to proceed with HCT corridor studies, although they may be completing some readiness actions.

**Tier 3 and Tier 4** corridors, in general, are not yet ready to proceed. These recommendations focus on actions to increase the readiness of a given corridor including securing commitments from project partners and early land use planning.

Figure 19. HCT project development lifecycle



The general recommendations and actions needed to advance corridors based on readiness tier are broken out by 5-year increments below.

Tier 1 and Tier 2 corridors, in general, are ready to proceed with HCT studies and investment; the recommendations for these corridors are centered on concrete actions to further define the corridors, establish project champions and determine funding.

## Recommendations

### Tier 1 corridor advancement, near term

- Complete alternatives analysis and select locally preferred alternatives as appropriate.
- Complete NEPA process.
- Collaborate with local and regional partners, including Metro and TriMet, to determine funding approach.
- Foster continued community support and interest by providing regular updates to communities about the status of HCT investments.
- Collaborate with TriMet and Metro on sequencing of major HCT capital investments to ensure adequate staffing capacity is available to move projects forward.
- Collaborate with TriMet to determine operating funding and staffing needs to support the long-term operations of new HCT investments.
- Develop an equitable engagement and development strategy with key community stakeholders and Metro's Committee on Racial Equity.

### Tier 2 corridor advancement, near term

- Update functional classifications in transportation system plans to be consistent with the RTP design classifications to support implementing the 2040 Growth Concept and planned land uses. Commit to applying urban design standards (Blueprint for Urban Design, National Association of City Transportation Officials, Metro's Designing Livable Streets Guide, approved local standards) on identified corridors in policies and projects. Apply an outcomes and performance-based process that prioritizes safety, transit, walking and bicycling in trade-offs.
- Identify transit corridors in transportation system plans as candidates for HCT investment. Identify constraints or barriers that would need to be addressed to make the corridor "HCT-ready," such as freight designations, traffic volumes, and presence of cycling and walking facilities.
- Revisit land use plans and zoning to align higher-density uses with planned HCT corridors. Also consider development code and regulations that support transit usage, such as parking standards.

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- Define corridor problem statement, refinement planning, and conceptual design to better understand the specific needs in the corridor and establish a shared vision with partners. There are usually corridor needs beyond the HCT investment – project partners must coordinate with other corridor planning processes to understand how improvements will be coordinated.
- Assess corridor against HCT Assessment and Readiness Criteria and make any needed adjustments to support Capital Investment Grants competitiveness.
- Begin identifying funding sources and/or commitments and engaging community about corridor transit needs.
- Build a coalition of local and regional stakeholders to support continued work on the corridor, including to support development of an equitable development strategy.

## **Tier 2 corridor advancement, medium term**

- Conduct alternatives analysis to develop and vet HCT and related improvements that address the identified problems. Through this process, further define the preferred HCT mode, corridor termini, routing, potential station/stop locations, etc.
- Advance design work in support of alternatives analysis and NEPA.
- Gain further clarity on cost.
- Determine the locally preferred alternative with partners and community.
- Collaborate with Metro, TriMet, and partners to determine the appropriate funding approach. If federal funding is likely, review Capital Investment Grants program criteria and determine areas where the corridor could improve performance with respect to the criteria. This could mean additional changes to development code, adopting policies that encourage development of affordable housing, and others.
- Secure funding and start construction for projects.

Tier 3 and Tier 4 corridors, in general, are not yet ready to proceed. These recommendations focus on actions to increase the readiness of a given corridor.

## **Tier 3 corridor advancement, near term**

- Identify transit corridors in transportation system plans and ensure roadway classification design supports transit-supportive elements. Identify constraints or barriers that will need to be addressed to make the corridor HCT-ready, such as freight designations, traffic volumes, and presence of cycling and walking facilities. As land use or comprehensive plan updates occur, consider how they can focus growth in key corridors to support HCT investment (and vice versa). Consider the presence of access to transit improvements and the mix of uses and destinations that are supportive of density thresholds that are



supportive of HCT and federal Capital Investment Grants funding program criteria. Consider how HCT would support the local land use vision.

- Develop corridor problem statements and corridor extents.
- Assess corridor against HCT Assessment and Readiness Criteria and look for opportunities to support readiness.
- Build a coalition of local and regional stakeholders to support continued work on the corridor.
- Invest in anti-displacement and housing stabilization before major transportation investments add displacement pressure.

### **Tiers 3 and 4 corridor advancement, ongoing**

- Establish project champions, partnerships and political leadership.
- Create ridership development, land use and transit-oriented development plans for key centers and station areas.
- Assess financial feasibility. Conduct early analysis to understand how the corridor aligns with federal Capital Investment Grants funding program criteria and identify areas where improvement or changes are needed.

### **Capital Investment Grants land use criteria**

The Capital Investment Grants program assigns a rating to each project based on multiple criteria, spanning land use to financial performance. In general, a project must achieve an overall “medium” rating to be considered for funding.

Capital Investment Grants funding criteria include specific thresholds for employment and household density that contribute to how well a project scores. Additionally, project sponsors must demonstrate that the investment will create new ridership above and beyond the existing corridor ridership.

## **Lessons learned from Division Transit and The Vine**

Fourth Plain in Vancouver, Washington, and Division Transit in Portland, Oregon, are the first rapid bus routes in the region. As the trailblazers, there is much to learn from these projects in looking ahead to building out the rapid bus network.

**While rapid bus is a catalyst for other much needed investments in the corridor** (e.g., sidewalks, housing), there are trade-offs to consider when packaging these investments. To be most successful, these projects should focus on key gaps and mobility needs to be most competitive for federal funding and efficient with local match dollars. Cost capping can be an effective tool for pursuing rapid implementation. Being clear about these trade-offs when identifying an approach is critical at the outset of the process.

**Understand the problems rapid bus is trying to solve** Is it problems with capacity and full buses or with speed and travel time? Knowing that at the outset will help identify the right tools to focus on in the solution in order to set the project up for success.

**Determine what decisions need to be made and who makes those decisions** early on to improve processes and provide greater transparency. Create a funding strategy and address environmental, right-of-way and utility needs earlier than you think you need to. Engage community-trusted stakeholders in decision-making and provide a clear process of two-way communication to influence the process.

**Be context-specific in the approach used and the solutions considered** Rapid bus along Division may look different than rapid bus along Tualatin Valley Highway. Consider opportunities for bus only lanes that can carry more people, more efficiently on a congested corridor. Consider what future transfers might be needed or leveraged.

**Consider how transitioning to electric buses will factor into the needs of the future transit network** and how the network can respond to and create opportunities for more multi-modal trips (e.g., more spaces for mobility devices and bikes on board).

**Plan for a seamless continuity of service during construction** and identify a traffic control plan early on. Be clear with contractors on specifications and how to manage construction to avoid or minimize impacts to communities and businesses. Reach out early and often to communicate any impacts that are expected or do arise.

## **Looking forward**

The region's multi-decade investment in MAX light rail will continue to be the backbone of the regional transit system, connecting the central city and regional centers. As we look forward to advancing new HCT corridors to serve growing population and employment, while meeting our land use goals, new approaches like rapid bus present major opportunities. Rapid bus provides the benefits of HCT at a cost that is more in line with the current constraints on the regional funding landscape, as well as imparting benefits like lower construction complexity and lower risk of displacement. It provides an opportunity to broaden the network and expand connections to town centers and strengthen connections to regional

centers — allowing us to fill the gap where corridors are indicating a readiness for high capacity transit investment in their ability to further the region’s mobility, safety, equity, climate and economy goals. This framework will inform future updates to the region’s long-standing 2040 Growth Concept as we look toward continuing to support compact urban development.

However, in all cases, the best HCT mode for all corridors will be developed through robust corridor planning. Different HCT tools are appropriate depending on context; streetcar in urban corridors, light rail extensions to serve new centers, and rapid bus in constrained corridors, are a few examples. All of these approaches will be considered in light of evolving regional goals and other priorities, including the recently adopted statewide Climate Friendly and Equitable Communities rules, to influence what HCT tool is determined to best for the needs of a given corridor.

The strategy update renews our regional commitment to HCT as an essential tool for achieving many regional goals. To realize these investments and all the benefits they bring, the region will need strong partnership, local champions, and engaged communities to ensure HCT maximizes value to everyone in our region.

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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

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April 2023

# **Appendix A**

## Summary of Outreach and Input



# Public and stakeholder engagement and consultation summary

High Capacity Transit Strategy Update  
2023 Regional Transportation Plan

DRAFT April 2023



# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

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## INTRODUCTION

This report provides a high-level summary of the public and stakeholder engagement and consultation that was conducted to support the High Capacity Transit (HCT) Strategy Update for the 2023 Regional Transportation Plan (RTP). The project team organized or participated in dozens of outreach activities, and the feedback from these activities was used to shape and refine the HCT Strategy Update. This summary lists these outreach activities, outlines the groups of community members, stakeholders, and regional leaders that were involved, and summarizes the salient points of feedback received through the planning process.

HCT is a key element of the 2040 Growth Concept, a long-range plan adopted by the Metro Council in 1995. As a part of the 2023 RTP, the HCT Strategy will identify priority areas for investments that would provide the most benefit to the most people.

Public and stakeholder outreach for the HCT Strategy Update was closely coordinated with the overall planning and engagement for the 2023 RTP process.

Outreach for the HCT Strategy Update was built on a foundation of recent public and stakeholder outreach initiatives, including the 2009 HCT Plan, the 2018 Regional Transit Strategy, and the 2023 RTP Phase 1 scoping conversations, among others. The project team considered this feedback and engagement when deciding how to tailor outreach efforts for this Strategy Update.

### Engagement Goals

HCT engagement goals were the same as those for the broader 2023 RTP planning process, and are as follows:

- Learn about the transportation needs and priorities of communities across greater Portland.
- Reflect the priorities identified through community engagement and prioritize the input provided by communities of color, the disability community and communities with limited English proficiency, in the elements of the 2023 RTP that guide investment decisions.
- Build support for and momentum to achieve community-driven objectives and build public trust in Metro's transportation planning process.
- Strengthen existing and build new partnerships with local, regional, state and federal governments, Tribes, business and community leaders, academic institutions and historically underrepresented communities including Black, Indigenous and people of color, people with disabilities, people with low incomes and people with limited English proficiency, as well as youth and older adults for sustained involvement in decision-making.

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The public engagement process was organized by four major milestones, which aligned with the development phases of the HCT Strategy Update. These milestones are described here, and detailed further below:

- **Milestone 1** focused on the policy framework for HCT and reflected on changes since developing the 2018 RTP.
- **Milestone 2** refined the network vision and discussed corridor readiness factors.
- **Milestone 3** reviewed the corridor prioritization, organized by “tiers,” and evaluated whether the corridors meet the readiness factors.
- **Milestone 4** will gather feedback on the Draft HCT Strategy.

## PUBLIC ENGAGEMENT OVERVIEW

Feedback through the engagement and consultation process spanned a variety of topics, including general requests for service improvements, suggestions for improving access to transit, and interest in prioritizing specific corridors. However, several overarching themes emerged through the process. These include the desire to:

- **Improve regional HCT connections without routing through downtown Portland.** Demand to travel to the city center has been waning with the reduction in commuter traffic and the growth of other regional centers. Instead, people want to travel between regional centers directly, without passing through downtown Portland.
- **Improve safety and security while accessing and using the transit system.** Responses frequently mentioned concern for personal safety while riding transit, waiting at transit stops, and when traveling on streets and sidewalks to access transit stops.
- **Locate transit corridors and stops convenient for accessing job centers.** Responses affirmed that HCT access to employment opportunities is good for both employers and employees, improving access to talent and jobs.
- **Improve existing transit service.** Faster and more frequent service along existing routes would make transit more attractive to potential riders.
- **Align HCT investments with future tolling.** Feedback suggested HCT could provide an alternative to driving tolled routes, and could be a tool to mitigate traffic diversion.
- **Define clearly what HCT includes and HCT's objectives.** The public may not always understand what “high capacity transit” means or what it includes. A clear definition will help with planning efforts, and understanding its objectives will better frame the priority corridors.

## STAKEHOLDERS

Metro partnered with standing committees throughout the process, including:

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## **Agency Partners**

- City of Portland
- Clackamas County
- C-TRAN
- Multnomah County
- Oregon Department of Transportation (ODOT)
- Southwest Washington Regional Transportation Council (RTC)
- South Metro Area Regional Transit (SMART)
- TriMet
- Washington County

## **Partner Jurisdictional Staff**

- Clackamas Transportation Advisory Committee (CTAC)
- East Multnomah County Transportation Committee Technical Advisory Committee (EMCTC TAC)
- Metro Technical Advisory Committee (MTAC)
- Transportation Policy Advisory Committee (TPAC)
- TriMet Committee on Accessible Transportation (CAT)
- Washington County Coordinating Committee Transportation Advisory Committee (WCCC TAC)

## **Partner Elected Officials**

- Clackamas County Coordinating Committee (C-4)
- Washington County Coordinating Committee (WCCC)
- East Multnomah County Transportation Committee (EMCTC)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Metro Policy Advisory Committee (MPAC)

## **Stakeholder Advisory Committees**

- Active Transportation Return on Investment (ATROI)
- TriMet's Committee on Accessible Transportation (CAT)
- TriMet's Transit Equity Advisory Committee (TEAC)

Included representatives from:

- Africa House
- Join PDX

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- APANO
- Asian Family Center  
(a project of IRCO)
- Bus Riders Unite!
- Central City Concern
- Centro Cultural
- Clackamas Community College
- Clackamas Workforce Partnership
- Immigrant and Refugee Community  
Organization (IRCO)
- Latino Network
- Milwaukie High School
- Multnomah County Youth  
Commission
- Oregon Food Bank
- Portland Community College
- The Street Trust
- TriMet

## STRATEGIES

The project team consulted a broad spectrum of community members through various activities, as listed in Table 1. When practical, outreach for the HCT Strategy Update was integrated with activities for the 2023 RTP, including events, meetings, and surveys. At other times, outreach for the HCT Strategy Update was focused solely on HCT to target feedback related to the HCT vision.

**Table 1. Public and Stakeholder Engagement Overview**

Activity	Events
Online Surveys	<ul style="list-style-type: none"><li>1 Survey as part of an RTP survey (summer 2022).</li><li>1 HCT online open house and survey (winter 2022-2023).</li></ul>
Focus Groups and Forums	<ul style="list-style-type: none"><li>2 Meetings with RTP Community Leaders Forum and Westside Multimodal Improvement Study Business Forum (joint events).</li><li>2 Meetings with Clackamas County Small Transit Providers.</li><li>2 Meetings with TriMet's CAT.</li><li>2 Meetings with TriMet's TEAC.</li><li>2 Agency Lessons Learned Focus Groups (one on Division Transit Project with Metro/TriMet and one on the Vine with C-TRAN).</li><li>1 Business Focus Group <i>with representatives from the Gresham Chamber of Commerce, Tigard Chamber of Commerce, and Westside Economic Alliance.</i></li><li>1 Small Business Focus Group with ATROI.</li><li>1 Meeting with Washington County Chamber of Commerce.</li></ul>

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Activity	Events
Public Tabling Events with TriMet's <i>Forward Together</i>	5 Events in Multnomah County: Rosewood Initiative (2 events), PCC Cascade, St. Philip Neri, and Fairview City Hall.
	2 Events in Clackamas County: CCC Harmony (2 events).
	3 Events in Washington County: Shute Park Library, Washington County Conference Center, and Muslim Educational Trust.
Advisory Committee Meetings	6 HCT Working Group <i>convened with stakeholders from around the region, including Clackamas County, Multnomah County, Washington County, Portland Bureau of Transportation, TriMet, Portland Streetcar, C-TRAN, Oregon Department of Transportation, Southwest Washington Regional Transportation Council (SW RTC), and Metro.</i>
	5 Meetings with WCCC.
	4 Meetings with CTAC.
	4 Meetings with EMCTC
	4 Meetings with EMCTC TAC.
	4 Meetings with JPACT.
	4 Meetings with TPAC.
	4 Meetings with WCCC TAC.
	3 Meetings with C-4.
	3 Meetings with Metro Council Work Sessions.
	3 Meetings with MPAC.
	3 Meetings with MTAC.

## MILESTONE 1: FRAMEWORK

In Milestone 1, the project team introduced the HCT Strategy Update to the public, stakeholders, and leaders in the region. Outreach focused on shaping the HCT policy framework and considering regional transportation changes related to HCT since developing the 2018 RTP. Feedback was used to help shape the HCT policy framework.

### Milestone 1 Feedback Summary

Feedback from Milestone 1 highlighted a desire to strengthen the transit network with HCT connections between regional centers. Suggestions included growing the network to serve areas of expected growth and prioritizing equity areas with BIPOC (Black, Indigenous, and People of Color) communities. Feedback indicated the importance of making HCT accessible to people with mobility impairments and of providing pedestrian and biking connections to HCT stops. Safety and security were mentioned multiple times as a perceived barrier to transit use.



## Access to and from the Transit System

- Stakeholders emphasized how streets, transit stations, and transit vehicles need to be more accessible for people in wheelchairs. Station elevators are often broken, making the station inaccessible to someone using a wheelchair. Improve maintenance with existing elevators and provide ramps instead or to supplement elevators.
- Stakeholders suggested educating the community and Metro employees about disability and accessibility issues.
- Community members expressed concern about the existing biking and pedestrian connections to transit.
- Stakeholders expressed desire to improve transit connections at the ends of transit lines by connecting to other transit providers or to transit hubs.
- Stakeholders suggested improving amenities at transit stops toward the ends of transit lines to make them more comfortable for people who may be waiting a while.

## Environmental Impacts

- Stakeholders and regional leaders were interested in using HCT to help meet the requirements for Climate Friendly Equitable Communities.
- Stakeholders were concerned about transit's negative impacts to air quality and the climate crisis.

## HCT Network

- Regional leaders and stakeholders expressed a desire to connect regional centers without going through downtown Portland.
- Stakeholders suggested growing the transit network to support where people are traveling now and where the region is expected to grow, with a focus on areas zoned for mixed use.
- Stakeholders recommended prioritizing equity areas and areas with BIPOC communities.
- Regional leaders expressed a desire to improve WES Commuter Rail service as an HCT corridor and to extend it to Salem.
- Regional leaders expressed a desire to extend HCT along I-205 to Tigard Triangle, Wilsonville, and Tualatin.
- Regional leaders suggested using bus-on-shoulder (or light rail on ODOT right of way) to make connections on highways. They suggested pursuing funding from the Statewide Transportation Improvement Fund (STIF) and considering how it could align with congestion pricing.
- Stakeholders suggested considering effects from tolling when defining corridors.
- Stakeholders suggested connecting with Clark County.

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- Stakeholders suggested creating an express light rail line to downtown Portland.
- Regional leaders mentioned that Powell Boulevard was not an attractive corridor because it had already been studied for HCT and was passed over.

## **Planning for HCT Investments**

- Regional leaders recommended using this process to position for FTA funding.
- Stakeholders recommended focusing on outcomes as opposed to a specific mode.
- Stakeholders recommended coordinating with concurrent projects, such as the Westside Multimodal Improvements Study and the Climate Smart Strategy.
- Stakeholders suggested Metro incorporate restorative justice and BIPOC leaders in the planning process.

## **Transit Service**

- Regional leaders and the public expressed desire for faster transit service. The public also expressed desire for improved frequency. Survey results revealed that travel time is the primary factor for deciding which transportation mode the public chooses for a given trip.
- Regional leaders suggested improving transit service to destinations as well as improving service in the outer areas of the region.
- Stakeholders expressed a desire for improving night and evening service to help employees get to and from late shifts.
- Stakeholders suggested that this would be a good time to improve transit to entice people back after COVID.
- Feedback was mixed on how to prioritize service improvements. Public comments suggested improving service on existing routes or corridors, while regional leaders emphasized prioritizing new routes where none currently exist.

## **Transportation and Safety Concerns**

- Regional leaders and the public expressed concern about safety and security on transit.
- The public also expressed concern about safety and security while walking or biking.
- The public and stakeholders expressed concern about regional traffic congestion.
- Stakeholders suggested improving curb management to help local businesses. They suggested establishing dedicated loading zones and dedicated parking for mobile businesses and local residents.
- Stakeholders expressed frustration about the cost of transit.

## **Milestone 1 Engagement Activities**

Activities for Milestone 1 were conducted from June through October 2022.

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- June 30 – HCT Working Group #1
- July 6 – EMCTC TAC
- July 7 – WCCC TAC
- July 13 – TPAC Intro and Overview
- July 18 – EMCTC
- July 20 – MTAC Intro and Overview
- July 26 – Metro Council Intro and Overview
- August 4 – Presentation to C-4 TAC
- August 10 – ATROI Small Business Study Listening Session  
*A listening session to assess the transportation needs of BIPOC business owners and business leaders as a follow-up to the ATROI Study conducted in the spring of 2021. Seventeen participants attended the two-hour session to share concerns and suggestions regarding accessibility, public transit, and other issues that affect their ability to do business.*
- August 15 – Presentation to WCCC
- August 16 – HCT Working Group #2
- August 18 – JPACT Intro & Overview
- August 24 – MPAC Intro & Overview
- September and October - RTP Public Survey 2  
*An online survey for the RTP open from September 7 through October 17, 2022. Questions in the survey helped inform the HCT Strategy Update, including questions about transportation needs and priority investment. The survey was available in 5 languages (English, Spanish, Vietnamese, Simplified Chinese, and Russian) and collected input from 1,191 participants.*

## MILESTONE 2: VISION

In Milestone 2, the project team shared the draft vision for the HCT Strategy Update. Outreach focused on refining this vision and better understanding what factors make a corridor ready for an HCT investment. Feedback was used to shape the initial tiers of corridors, which were later shared in Milestone 3.

### Milestone 2 Feedback Summary

Stakeholders, the public, and elected officials often had similar ideas for the HCT vision. Many expressed a desire to expand the transit service area, with a particular focus on more connections in Washington and Clackamas counties. People suggested connecting HCT investments to better serve equity populations and target employment hubs. Many were

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interested in how HCT investments might relate to future tolling. The vision for HCT generally centered around an expanded network that provided faster trips to job centers while strengthening existing connections.

## **Access to and from the Transit System**

- The business community and stakeholders from Clackamas County suggested that shuttles could provide first- and last-mile transit connections.
- The business community raised concerns about congestion slowing drivers and creating problems for private shuttles that transport employees to work.

## **Economic Considerations**

- The business community, stakeholders, and elected officials expressed a desire to locate transit stops near job centers.
- Members of the public and business community mentioned that many people have security concerns on transit, which has led to business losses near the MAX.
- The business community mentioned that transit does not meet the needs of some job fields, such as construction, where workers need to carry tools.
- Stakeholders noted how HCT could act as a lever for future development and potentially aid in reaching the 2040 Growth Concept.
- A stakeholder stated that economic opportunity should be more fully reflected in HCT policies and objectives.

## **HCT Network**

- Elected officials, stakeholders, and the public asked for stronger north-south connections in Washington County and Clackamas County.
- Elected officials, stakeholders, and the public suggested expanding the transit service area to provide more people with the option to take transit.
- Elected officials wanted HCT corridor investments to be balanced through the three counties in the region.
- Stakeholders are interested in aligning HCT with future tolling.
- Stakeholders expressed interest in investing in HCT connections, including:
  - To Montgomery Park.
  - Along NE MLK Jr. Boulevard.
  - Along NE Halsey Street.
  - WES Commuter Rail.
  - To Lents.
  - Between Hillsboro and Wilsonville.
  - Within East Portland and Gresham.
- The public expressed desire for better connections between rail systems, particularly the Yellow Line and Red Line, and the Green Line and Orange Line.

## Planning for HCT Investments

- Stakeholders and elected officials emphasized the need to support people with mobility challenges and People of Color in the planning and implementation process.
- Stakeholders emphasized that the HCT definition and objectives should be clear, and that people should know why HCT is needed in a particular corridor.
- Stakeholders mentioned the importance of partnering with cities early to improve collaboration and the quality of the future investment.
- A stakeholder mentioned that it was important to plan for continued transit service during the construction of HCT projects.

## Transit Service

- The public and stakeholders expressed desire for faster transit speeds and suggested investing in prioritization, such as dedicated lanes, signal priority, bus-on-shoulder, and queue jumping.
- The public and stakeholders were interested in grade separation of transit to provide faster connections, including a tunnel through downtown.
- The public and stakeholders called for further investment in commuter rail.
- The business community and stakeholders raised concerns about insufficient frequency during non-peak hours.
- The business community mentioned interest in having more one- or two-seat rides to reduce transfers and increase ease of access to large campus sites for employees.
- A stakeholder wanted to measure HCT investments to see how they could improve current transit.

## Milestone 2 Engagement Activities

Activities for Milestone 2 were conducted from September 2022 through February 2023.

- September 27 – HCT Working Group #3
- October 4 – EMCTC TAC
- October 6 – WCCC TAC
- October 13 – HCT Working Group #3.5: Vision Workshop
- October 17 – EMCTC
- October 18 – Portland Community College Cascade Tabling
- October 19 – C-4
- October 19 – Rosewood Initiative Tabling
- October 19 – TPAC/MTAC Policy Framework and Vision
- October 20 – Shute Park Library Tabling

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- October 24 – Clackamas County
- October 24 – WCCC PC
- October 26 – Clackamas Community College Harmony Tabling
- October 26 – MPAC Policy Framework and Vision
- October 27 – JPACT/Council Policy Framework and Vision Workshop Feedback
- November 8 – TEAC
- November 9 – Division Transit Project Focus Group
- November 10 – The Vine Focus Group
- November 17 – HCT Working Group 3.5 Vision Review Session
- November 30 – Clackamas County Small Transit Providers Meeting
- February 13, 2023 – Business Roundtable

## **MILESTONE 3: CORRIDOR TIERS**

In Milestone 3, the project team shared the draft prioritization of corridors to the public, stakeholders, and leaders in the region. The prioritization organized HCT corridors in four “tiers,” as follows:

- Tier 1: near-term corridors.
- Tier 2: next-phase corridors.
- Tier 3: developing corridors.
- Tier 4: vision corridors.

Feedback was used to refine corridor priorities and finalize tiers.

### **Milestone 3 Feedback Summary**

Feedback from Milestone 3 was largely centered on corridor prioritization and refining the corridor alignments. Stakeholders and community members also suggested other improvements that would make transit a more viable transportation option, such as improved security, service, and amenities. Public input was largely supportive of the HCT vision, with a majority of survey respondents indicating they would use HCT more often if the vision were implemented.

### **Access to and from the Transit System**

- Stakeholders emphasized how transit vehicles need to be more accessible, particularly articulated buses: not all ramps can be deployed for all-door boarding, these buses cannot accommodate courtesy stops during inclement weather, and they have reduced functionality for mobility devices.



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- Community members suggested using wheel guides at bus stops to make it easier for buses to stop at a consistent location at the edge of the platform.
- Community members expressed a desire for improved pedestrian connections to transit.
- Stakeholders expressed concerns about sidewalk obstructions from people experiencing houselessness.

## Amenities

- Community members expressed interest in amenities, such as better lighting, better ticket vending, real-time traveler information, better shelters, and more seating options for single riders.

## Economic Considerations

- Regional leaders recommended talking to business leaders and thinking about density and jobs.
- Stakeholders recommended focusing on workforce development, especially with young workers who need transit to get from their schools to their jobs.

## Equity

- Regional leaders expressed a desire for more north-south connections to improve options for underserved community members.
- Stakeholders mentioned that honored citizens can have difficulty finding priority seating.

## HCT Prioritization

- Regional leaders suggested elevating the priority of certain corridors, especially:
  - OR 99W corridor.
  - WES Commuter Rail corridor.
- Regional leaders and stakeholders expressed support for the Southwest Corridor.
- Regional leaders and community members expressed desire for prioritizing HCT investments in WES Commuter Rail and for HCT improvements along 82nd Avenue.
- Youth community members prioritized locations and routes to improve transit connections, including:
  - Along 82nd Avenue.
  - To Clackamas Town Center.
  - Downtown Portland to Rockwood/Gresham.
  - Along Killingsworth Street.

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- Public survey feedback indicated the Central City Tunnel, Interstate Bridge MAX, and Southwest Corridor as the top three HCT priorities for respondents.

## **HCT Network**

- Regional leaders, stakeholders, and community members expressed desire for a light rail extension to Forest Grove.
- Regional leaders expressed interest in tolling, and specifically how HCT could align with tolling and expected traffic diversion.
- Regional leaders discussed transit improvements along Sunnyside Road and in Happy Valley.
- Community members expressed interest in improving regional HCT connections. Examples include:
  - A MAX line loop connecting all three counties.
  - Through Milwaukie, Oak Grove, and wider Clackamas.
  - Through Tigard, Tualatin, and Wilsonville.
  - More direct bus connections to Cully and Gresham.
  - Adding an express connection to Forest Grove.
  - Through Milwaukie, Oak Grove, and wider Clackamas.
  - Through Tigard, Tualatin, and Wilsonville.
- Stakeholders expressed interest in improved transit access to recreational facilities, medical facilities, and retirement communities.
- Stakeholders recommended connecting HCT with future housing trends and plans.
- Public survey results indicate strong support for the HCT vision, with 70 percent of respondents stating they would use the HCT network “somewhat” or “much” more often if the network looked like the planned vision.

## **Transit Service**

- Regional leaders expressed an interest in other transit modes, such as shuttle service. They mentioned adding a shuttle service on the OR 99E corridor, as an example.
- Community members expressed desire for more frequent transit service and more FX2 buses.
- Stakeholders emphasized not removing regular transit as rapid transit is implemented.
- Stakeholders would like to evaluate how effective the Division Transit project improvements have been.
- Stakeholders expressed concerns with at-grade rail crossings for HCT, which can create reliability issues, and suggested a tunnel or car-free streets to improve HCT speeds.

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- Community members expressed an interest in roadway improvements to bus lines to allow buses to more easily share the road with cars.
- Stakeholders suggested limiting MAX stops between Hillsboro and Sunset Transit Center to improve time travels.

## **Safety and Security**

- Community members and stakeholders expressed concerns about safety and security. Community members mentioned safety and security is a significant barrier to young people taking transit.
- Community members expressed personal safety concerns eastbound from Hollywood Transit Center.
- Community members encouraged Metro to convene jurisdictions to improve roadway safety.

## **Planning for HCT Investments**

- Regional leaders and stakeholders expressed interest in funding and emphasized being grant-ready.
- Stakeholders were interested in the assumptions used for modeling.
- Stakeholders recommended involving the Halsey business community in the small business focus group.
- Community members suggested Metro reach out to Sandy Area Metro (SAM) and the community in Sandy.
- Stakeholders shared concerns about funding transportation infrastructure.

## **Milestone 3 Engagement Activities**

Activities for Milestone 3 were conducted from November 2022 through February 2023.

- November 16, 2022 – TriMet CAT
- November 23, 2022 – HCT Working Group #4
- December 8, 2022 – TriMet CAT
- January 4, 2023 – EMCTC TAC
- January 5, 2023 – C-4 TAC
- January 5, 2023 – WCCC TAC
- January 9, 2023 – WCCC
- January 10, 2023 – TEAC
- January 11, 2023 – TPAC Workshop
- January 18, 2023 – C-4

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- January 18, 2023 – MTAC
- January 18, 2023 – St. Philip Neri Tabling
- January 19, 2023 – Rosewood Initiative Tabling
- January 24, 2023 – Clackamas Community College Harmony Tabling
- January 25, 2023 – Washington Street Conference Center Tabling
- January 26, 2023 – Fairview City Hall Tabling
- January 30, 2023 – Washington County Chamber of Commerce
- January 31, 2023 – Verde Adult Focus Group
- February 2, 2023 – Verde Youth Focus Group
- February 2, 2023 – Business Focus Group
- January through March 2023 – HCT Online Open House and Survey  
*A public online open house and survey specifically for HCT was open from January 17 through March 15, 2023. The online open house shared the HCT vision and priorities. The survey asked participants if they supported the vision and what they would like to prioritize. The online open house was viewed over 800 times and the survey collected 354 responses.*

## **MILESTONE 4: DRAFT STRATEGY UPDATE**

In Milestone 4, the project team shared the Draft HCT Strategy Update along with the Draft 2023 RTP.

### **Milestone 4 Feedback Summary**

[PLACEHOLDER FOR FEEDBACK FROM MILESTONE 4]

### **Milestone 4 Engagement Activities**

[PLACEHOLDER FOR ACTIVITIES FROM MILESTONE 4]

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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

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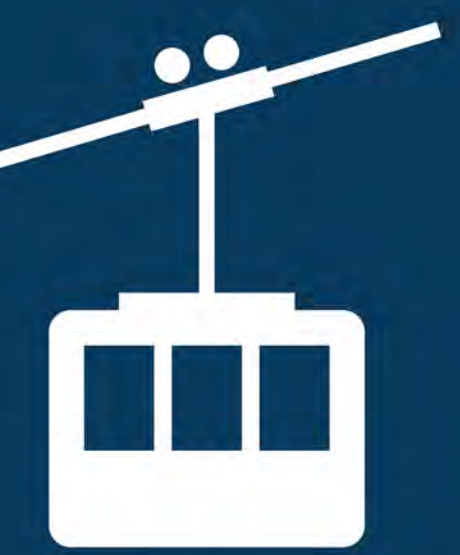





















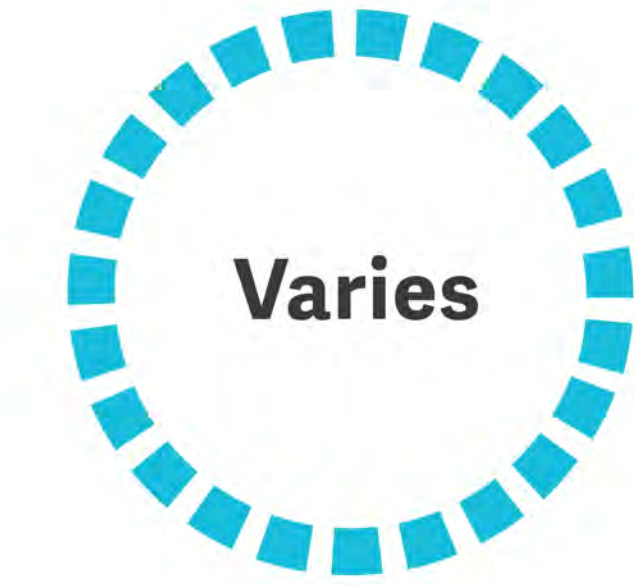





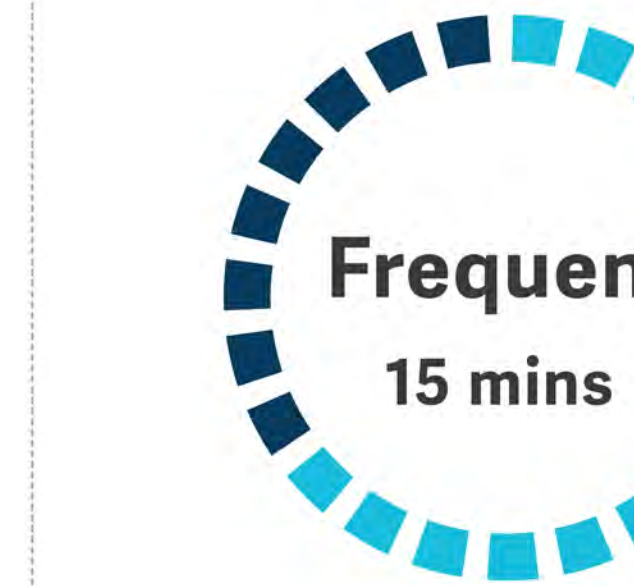
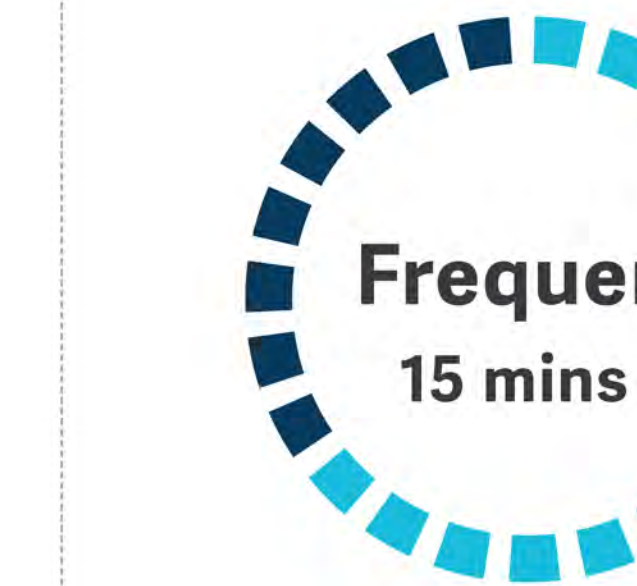

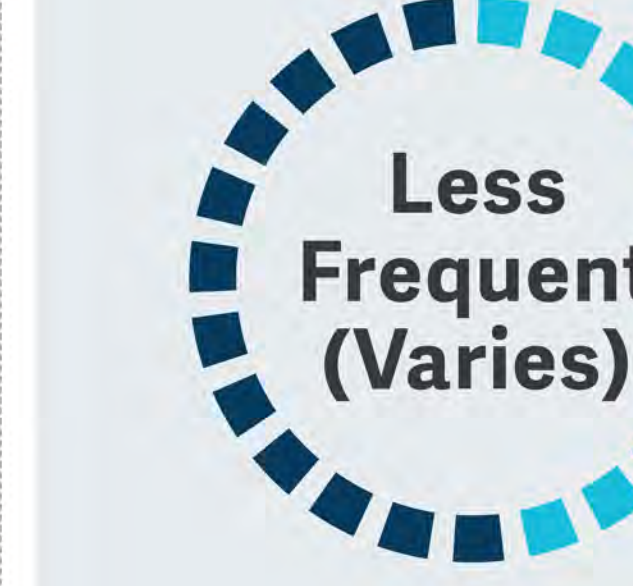

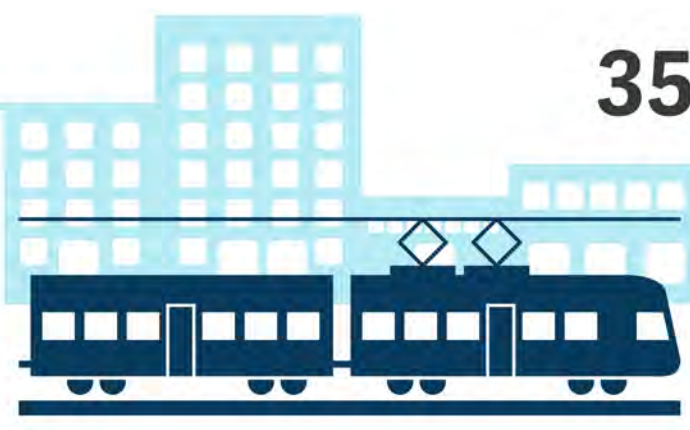

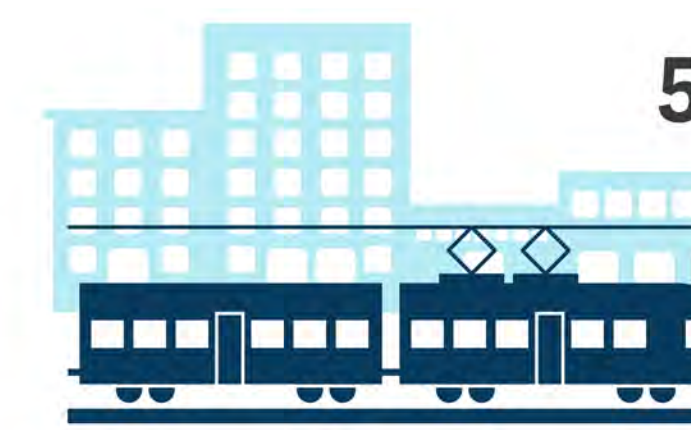


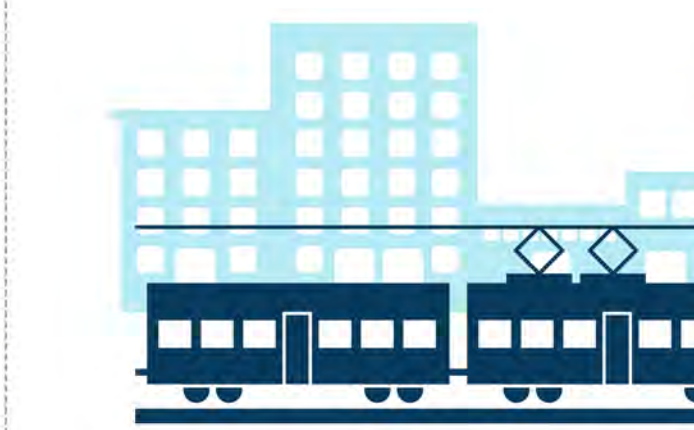













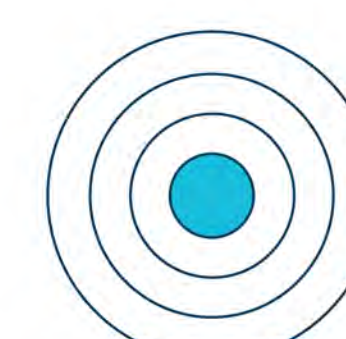
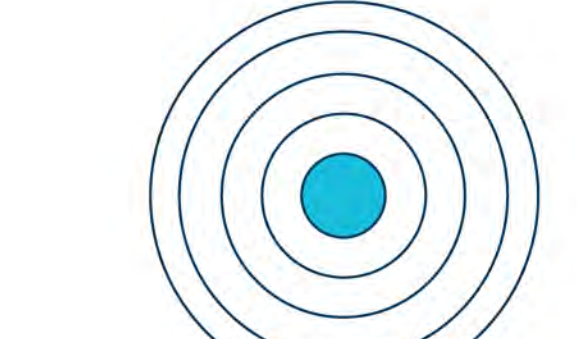
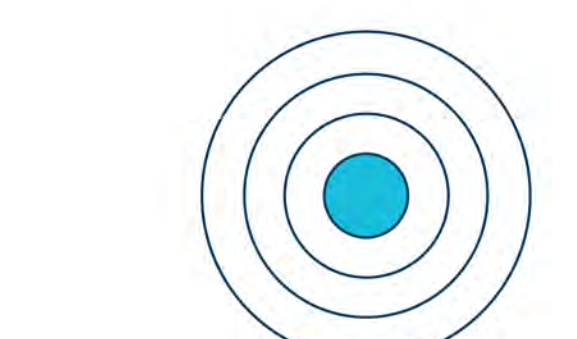
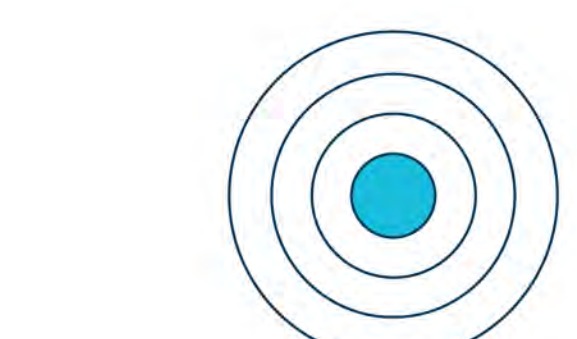
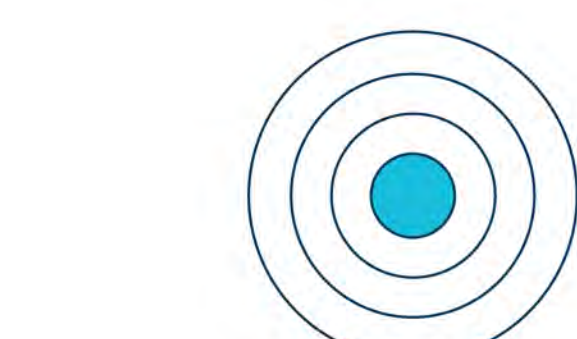
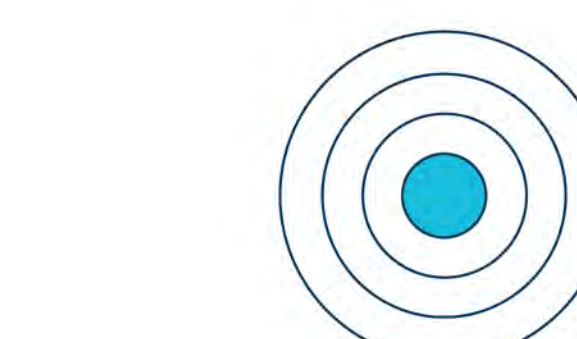
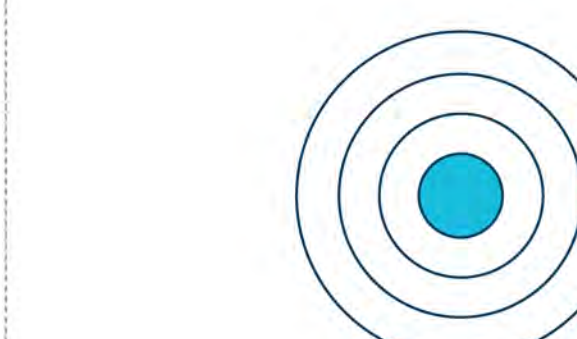


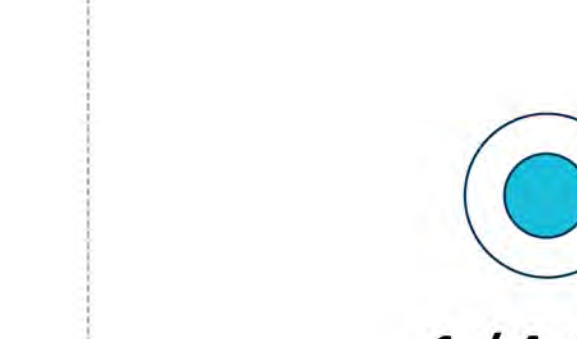





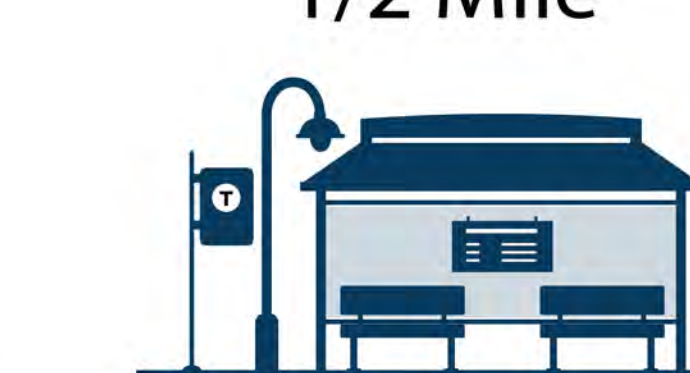
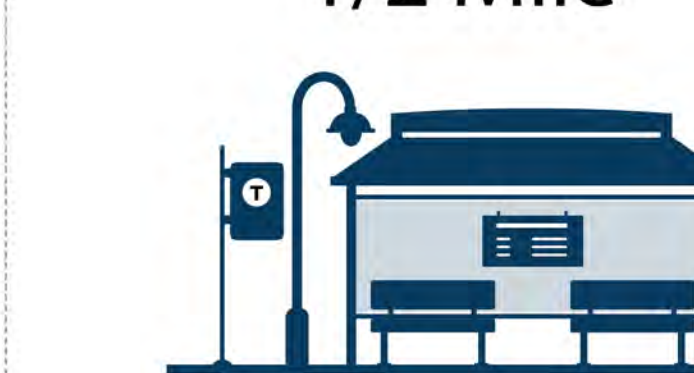
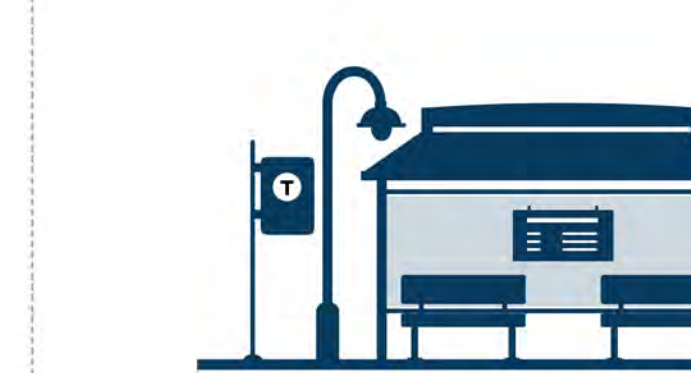










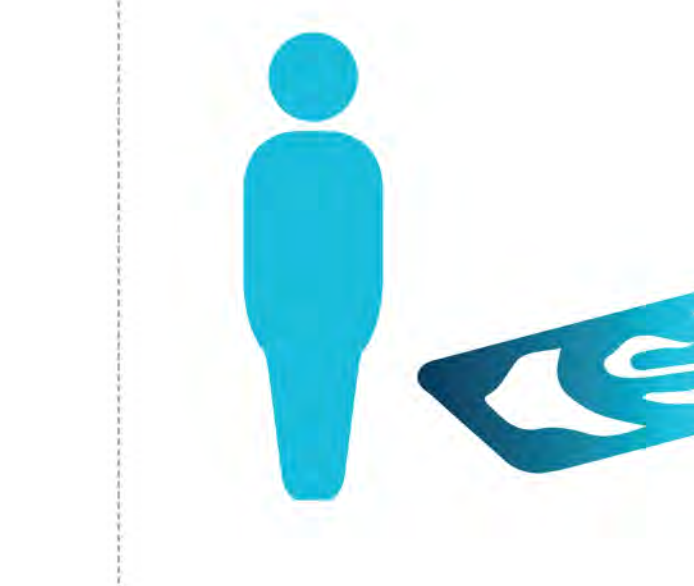

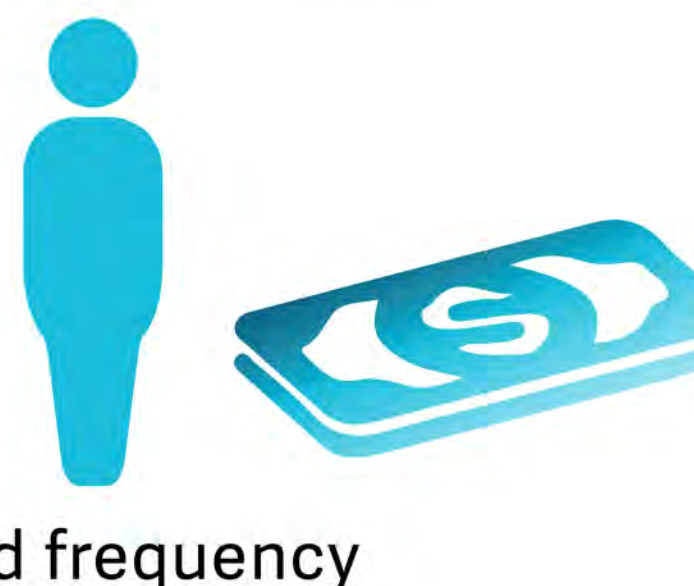





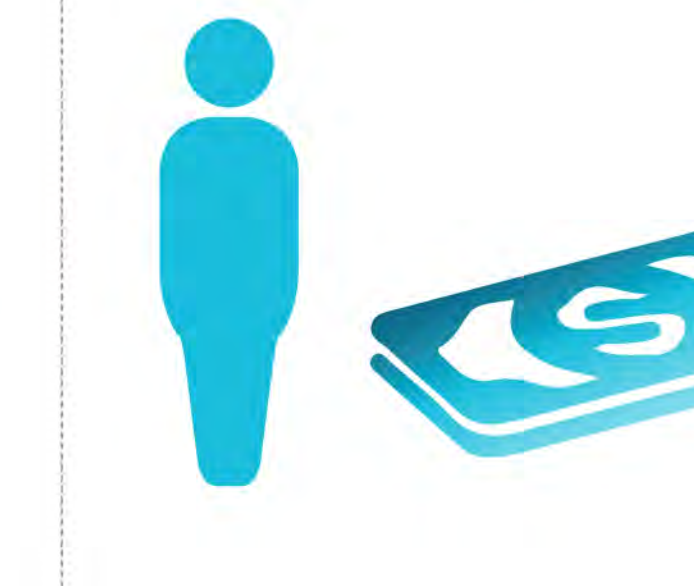
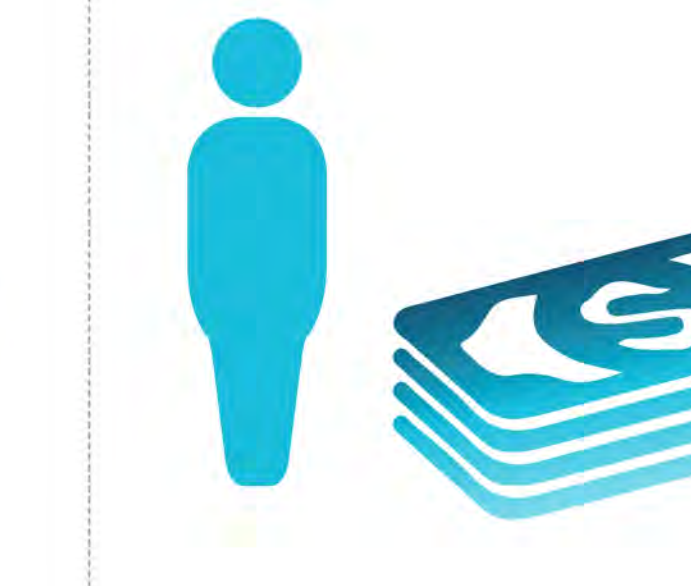
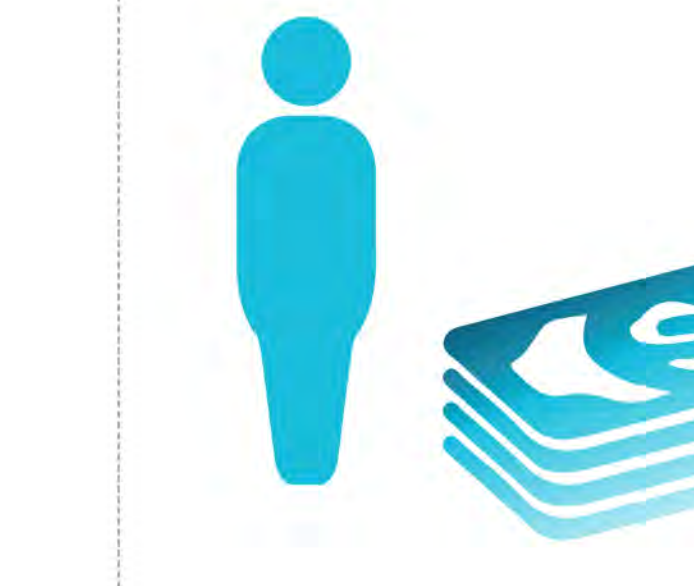
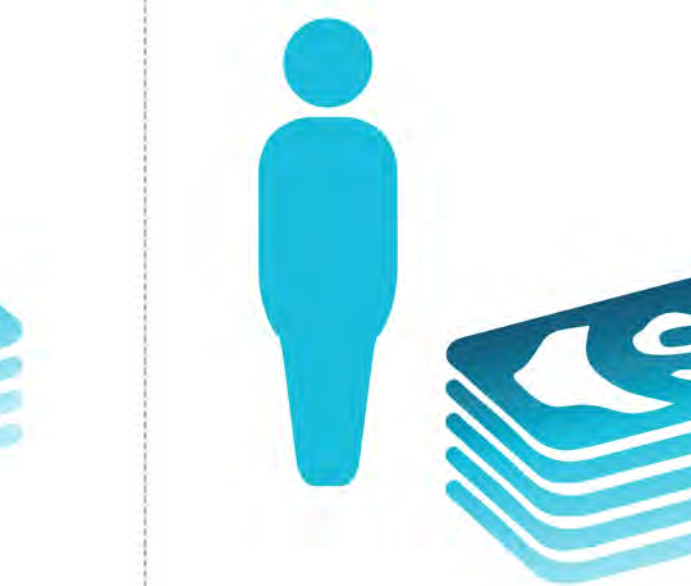
Portland, OR 97232-2736

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# **Appendix B**

## **Regional Transit Modes**



Mode	<div><div>Aerial Tram</div></div>	<div><div>Intercity Rail</div></div>	<div><div>Commuter Rail</div><div>HCT</div></div>	<div><div>Light Rail</div><div>HCT</div></div>	<div><div>BRT</div><div>HCT</div></div>	<div><div>Rapid Bus (Corridor-Based BRT)</div><div>HCT</div></div>	<div><div>Rapid Streetcar</div><div>HCT</div></div>	<div><div>Streetcar</div><div>HCT <sup>4</sup></div></div>	<div><div>Frequent Bus</div></div>	<div><div>Regional Bus</div></div>	<div><div>Vanpool, Microtransit, etc.</div></div>
Level of Transit Prioritization (Speed & Reliability)	<div>Full Priority Fully dedicated space where transit vehicles run/operate that is not shared with general traffic.</div> <div></div>	<div>Full Priority</div> <div></div>	<div>Full Priority</div> <div></div>	<div>Full Priority</div> <div></div>	<div>High Priority (&gt;50% Exclusive Guideway)</div> <div></div>	<div>High to Moderate Priority</div> <div></div>	<div>Full to Majority Priority</div> <div></div>	<div>Moderate to Low Priority</div> <div></div>	<div>Moderate to Low Priority (Spot Treatments)</div> <div></div>	<div>Limited to No Priority</div> <div></div>	
Frequency	<div><div>Most Frequent &lt; 10 mins</div></div>	<div><div>Varies</div></div>	<div><div>Frequent (Peak Hours) 15-30 mins</div></div>	<div><div>Most Frequent ~ 10 mins</div></div>	<div><div>Very Frequent ≤15 mins</div></div>	<div><div>Very Frequent ≤15 mins</div></div>	<div><div>Very Frequent ≤15 mins</div></div>	<div><div>Frequent 15 mins</div></div>	<div><div>Frequent 15 mins</div></div>	<div><div>Less Frequent (Varies)</div></div>	<div><div>Less Frequent (Varies)</div></div>
Market Demand/Activity Density <sup>1</sup>	<div><div>Serves major activity centers</div></div>	<div><div>35+ Connections between cities and regions</div></div>	<div><div>25+ Serves medium or higher volume corridors with commute-oriented demand</div></div>	<div><div>50+ Serves high volume corridors</div></div>	<div><div>25+ Serves medium-high volume corridors</div></div>	<div><div>25+ Serves medium-high volume corridors</div></div>	<div><div>25+ Serves medium-high volume corridors</div></div>	<div><div>25+ Serves dense urban areas</div></div>	<div><div>12.5 Serves medium volume corridors</div></div>	<div><div>Serves low to medium volume corridors</div></div>	<div>To be addressed in Metro Access to Transit Study (2024+)</div>
Passenger Capacity <sup>2</sup>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
Transit Access Shed	<div><div>1/2 Mile</div></div>	<div><div>&gt; 1/2 Mile</div></div>	<div><div>1/2 Mile</div></div>	<div><div>1/2 Mile</div></div>	<div><div>1/2 Mile</div></div>	<div><div>1/2 Mile</div></div>	<div><div>1/2 Mile</div></div>	<div><div>1/3 Mile</div></div>	<div><div>1/4 Mile</div></div>	<div><div>1/4 Mile</div></div>	
Stop/Station Amenities	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
Capital Cost per Passenger <sup>3</sup>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
Operating Cost per Passenger <sup>3</sup>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	

1. people per acre  
2. based on vehicle capacity and frequency  
3. per passenger capacity  
4. depending on context



**Appendix C**  
Policy  
Framework  
Technical  
Memorandum

# **Metro High Capacity Transit Strategy and Regional Transportation Plan Transit Update**

## **HCT Policy Framework – Regional Transit Network Policy Review**

December 2022 - **DRAFT**

**Parametrix**



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# METRO HCT POLICY FRAMEWORK - REGIONAL TRANSIT NETWORK POLICY REVIEW

## INTRODUCTION

In 2009, Metro adopted the first 30-year Regional High Capacity Transit (HCT) System Plan that guided investments in light rail, commuter rail, bus rapid transit and rapid streetcar in the Portland metropolitan region. The 2009 HCT Plan identified and ranked 16 corridors into four priority tiers using a multi-phase evaluation process and created the System Expansion Policy (SEP) framework for prioritizing future system expansion. The SEP framework is a process agreed to by Metro and local jurisdictions to advance high capacity transit projects as a regional priority. The framework:



- Identifies which corridors should move into the federal project development process
- Establishes a process for other corridors to advance toward development
- Measures a corridor's readiness for investment using targets such as transit supportive land use policies, ridership development plans, community support and financial feasibility.

In 2018 as part of the Regional Transportation Plan (RTP) update, the Regional Transit Strategy (RTS) was also updated and provided the following definition of HCT:

*Our high capacity transit (HCT) system operates with the majority or all of the service in exclusive guideway. The high capacity transit system is meant to connect to regional centers and carry more transit riders than the local, regional and frequent service transit lines. HCT could include rapid streetcar, corridor-based bus rapid transit, bus rapid transit, light rail or commuter rail.*

The 2018 RTS also revised the SEP with a streamlined set of HCT Assessment and Readiness Criteria and updated the corridors included on the Regional Transit Network map. Finally, the 2018 RTS introduced the Enhanced Transit Concept (ETC), which improves transit speed and reliability on the

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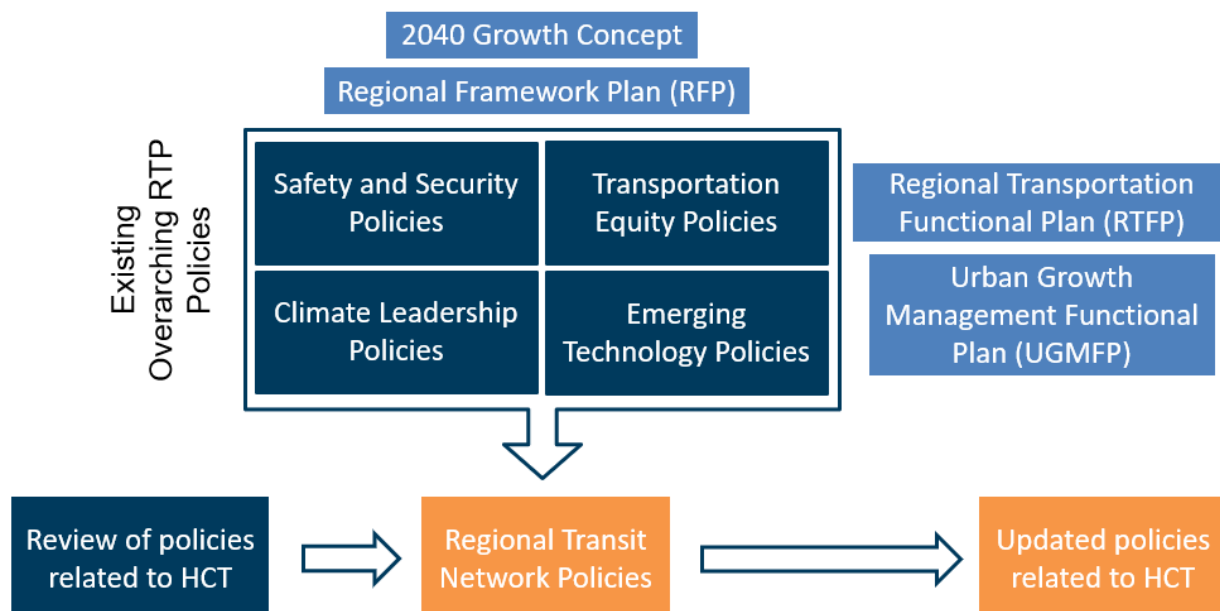
most congested existing and planned frequent service bus or streetcar lines. ETC is now known as “Better Bus.”

As part of the 2023 Regional Transportation Plan update, **this HCT Policy Framework memo** provides an important first step in updating the Regional High Capacity Transit Strategy, a component of the Regional Transit Strategy. This memo focuses on a review of local, regional, state and federal policies as they relate to High Capacity Transit and suggests policy updates to reflect the region’s current and future priorities and desired outcomes related to Equity, Safety, Climate and Mobility. To provide context and guidance as part of this policy review, this memo also identifies emerging trends impacting HCT and provides key takeaways from peer regions throughout the country. The suggested policy updates at the end of this memo will ultimately inform the evaluation criteria used to prioritize HCT corridors that will be included in the 2023 RTP update.

This memo focuses on reviewing and updating the existing transit-specific policies included in the Regional Transit Network, which will be an element of the 2023 Regional Transportation Plan. The 2023 RTP update continues to support the **2040 Growth Concept**, the region’s long-range land use and transportation plan for managing growth, and the **Regional Framework Plan (RFP)** identifies regional policies to implement the 2040 Growth Concept. As part of Metro’s code, two functional plans – the **Regional Transportation Functional Plan (RTFP)** and **Urban Growth Management Functional Plan (UGMFP)** – provide additional guidance to local jurisdictions to implement the policies in the RTP.

In addition to the transit-specific policies included as part of the Regional Transit Network, the RTP includes four overarching system policies related to **safety and security, transportation equity, climate leadership, and emerging technologies**. These policies will guide all other policies included in the RTP, including for High Capacity Transit. The relationship of each of the foundational plans that helped frame this policy review is summarized in **Figure 1** below.

Figure 1 Regional Transit Network Policies in Relation to the RTP and Other Metro Plans





The HCT Policy Framework memo is organized into the following sections:

- Existing Regional Transit Network Policies
- Regional, State, and Federal plans and policy review
- Local plans and policies related to HCT
- Current issues and trends, identified through regional, state, or federal plans or initiatives
- Long-range plans and policies in peer regions
- Other key issues and trends impacting transit infrastructure and investments

This memo concludes with suggested updates to the definition of HCT and considerations for updating and expanding the eight existing Regional Transit Network policies as they relate to HCT.

## PLAN AND POLICY REVIEW

### Existing Regional Transit Network Policies

This section provides a brief assessment of the existing RTP Regional Transit Network policies. **Figure 2** identifies:

- **A proposed “Headline” for each policy** that succinctly communicates the theme addressed.
- **Each policy’s relationship to 2023 RTP priority outcomes**, which include Equity, Safety, Climate, and Mobility.<sup>1</sup>
- **Each policy’s relationship to HCT**. The relationships are identified in one of three ways:
  - **Foundational to Role** of HCT in the region and the definition of HCT (Policy 4).
  - **Directs Investments** by directly influencing key evaluation/readiness measure(s) used for HCT decision making.
  - **Influences Outcomes** of HCT system investments.

Examples for how the policies were determined to relate to HCT include:

- Policy 1 can direct HCT investments to address disparities such as travel time for equity priority communities, through the criteria used to prioritize potential HCT projects. Policy 1 can also influence the outcomes of HCT projects through assessing displacement risk and putting into place partnerships and policies to prevent displacement.
- Policy 6 is not identified as directing HCT investments – using existing quality of the pedestrian and bicycling environment to prioritize investments may exclude projects that could help advance improvements. However, Policy 6 can influence HCT outcomes through improvements to walking and biking access around HCT stations in advance of or as part of a project.

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<sup>1</sup> Metro, 2023 Regional Transportation Plan Update Work Plan, May 2022

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Based on this assessment of existing Regional Transit Network policies, those that are most directly relevant to identifying and prioritizing HCT investments – and thus the focus of this memo – include:

- Policy 1: **System Quality and Equity**
- Policy 2: **Maintenance and Resiliency**
- Policy 3: **Coverage and Frequency**
- Policy 4: **High Capacity Transit**

The following two Regional Transit Network policies influence outcomes but are not foundational to the role of HCT nor direct investments:

- Policy 5: **Intercity and Inter-Regional Transit**
- Policy 6: **Access to Transit**

Finally, the last two policies are important to the overall transit network but are neither foundational to the role of HCT, direct investments, nor influence overall outcomes:

- Policy 7: **Mobility Technology**
- Policy 8: **Affordability**

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Figure 2 Existing Regional Transit Policies and Relationship to 2023 RTP Outcomes and to HCT

Existing Regional Transit Network Policy (2018 RTP)	Proposed Policy Headline(s)	2023 RTP Outcomes	Relationship to HCT
<b>Policy 1:</b> Provide a seamless, integrated, affordable, safe and accessible transit network that serves people equitably, particularly communities of color and other historically marginalized communities, and people who depend on transit or lack travel options.	Service Quality and Equity	<input checked="" type="checkbox"/> Equity <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes
<b>Policy 2:</b> Preserve and maintain the region's transit infrastructure in a manner that improves safety, security and resiliency while minimizing life-cycle cost and impact on the environment.	Maintenance and Resiliency	<input type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes
<b>Policy 3:</b> Make transit more reliable and frequent by expanding regional and local frequent service transit and improving local service transit options.	Coverage and Frequency*	<input type="checkbox"/> Equity <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes
<b>Policy 4:</b> Make transit more convenient by expanding high capacity transit; improving transit speed and reliability through the regional enhanced transit concept.	High Capacity Transit	<input type="checkbox"/> Equity <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input checked="" type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes
<b>Policy 5:</b> Evaluate and support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.	Intercity / Inter-Regional Transit	<input type="checkbox"/> Equity <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes
<b>Policy 6:</b> Make transit more accessible by improving pedestrian and bicycle access to and bicycle parking at transit stops and stations and using new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.	Access to Transit	<input type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes
<b>Policy 7:</b> Use technology to provide better, more efficient transit service – focusing on meeting the needs of people for whom conventional transit is not an option.	Mobility Technology	<input checked="" type="checkbox"/> Equity <input type="checkbox"/> Safety <input type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes
<b>Policy 8:</b> Ensure that transit is affordable, especially for people who depend on transit.	Affordability	<input checked="" type="checkbox"/> Equity <input type="checkbox"/> Safety <input type="checkbox"/> Climate <input type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes

Note: \* A proposed change in policies would create a new policy around reliability

## Regional, State, and Federal Plans and Policies Related to HCT

This section identifies regional and statewide plans relevant to the HCT Policy Framework for the region. Similar to the previous section, each applicable policy in these plans is categorized by the Metro RTP outcomes (Equity, Safety, Climate, and Mobility) and its relationship to high capacity transit (HCT).

Other state or federal plans or initiatives that are relevant to the region's HCT Policy Framework were reviewed but were not included in the plan and policy review table:

- **Regional High Capacity Transit System Plan (2009).** This is the previous HCT plan for the Portland region, which is being updated through this effort, and is assumed to be reflected in more recent documents such as the Regional Transit Strategy (RTS).
- **Climate-Friendly and Equitable Communities (CFEC) Rulemaking (Ongoing).** Rulemaking by the Department of Land Conservation and Development (DLCD) to strengthen transportation and land use planning for regions including the Portland Metro area; key outcomes including equity, climate, and housing will be addressed in the issues/trends section.
- **USDOT Equity and Justice40 in Transportation Planning.** Federal initiative to address racial equity and climate priorities, including delivering 40% of federal investments to disadvantaged communities; will be addressed in the issues/trends section.

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Figure 3 Regional, State, Federal Plan Hierarchy and Policy Summary

Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
Portland Metro Transportation System Management and Operations Strategy	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input checked="" type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>Harm reduction</li> <li>Alleviating transportation system disparities</li> <li><b>Connecting people to goods, services, and places</b></li> <li><b>Equitable transit reliability improvements</b></li> <li>Transit system resiliency</li> </ul>
Portland Metro and ODOT Regional Mobility Policy Update	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input checked="" type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>Land use and transit decision-making efficiency in movement of people and goods</li> <li><b>Seamless, well-connected, low-carbon, convenient, and affordable mode share</b></li> <li><b>Transit system travel predictability and travel time reasonableness</b></li> <li>Safe and comfortable mode share; equitable mobility experiences among Black, Indigenous, and People of Color (BIPOC) communities and people with low incomes, youth, older adults, and people living with disabilities</li> </ul>
Portland Metro Regional Freight Strategy	<input type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>Coordinating for seamless movement and better access, with less conflict with transit</li> <li>Delay reduction, with increases in reliability and improvements in safety, for reliable transit planning</li> <li>Integrating issues with planning and communicating movement issues</li> <li>Eliminating traffic fatalities and serious injuries caused with other modes</li> </ul>
Portland Metro Regional Transportation Safety Strategy	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input type="checkbox"/> Climate <input type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>Achieve Vision Zero goals using transit as a safety mechanism</li> <li>Safety investments to reduce speeds and speeding at high-risk areas, increase security, and reduce crime, with prioritization of vulnerable communities</li> <li>Equitable safety investments to benefit people with higher crash risk, such as vulnerable communities</li> <li>Safety increases across modes through planning, designing, constructing, operating, and maintaining the transit system with focus on speed reduction</li> <li>Avoidance of repeating and/or exacerbating safety issues</li> <li>Consideration of safety as an adequacy metric.</li> </ul>
Portland Metro Emerging Technology Strategy	<input checked="" type="checkbox"/> Equity <input type="checkbox"/> Safety <input type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>Accessibility, availability, and affordability of new technologies to progress equity</li> <li>Usage of new technologies to improve transit, providing shared modes regionwide, and supporting transit, biking, and walking</li> <li>Empowering travelers with data for planning, decision-making, and managing transit</li> <li>Advancing public interest by preparing for, learning from, and adapting to new technological developments</li> </ul>

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Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
Portland Metro Strategic Plan to Advance Racial Equity, Diversity and Inclusion (Racial Equity Framework)	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input type="checkbox"/> Climate <input type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>▪ Engaging communities of color</li> <li>▪ Hiring, training, and promoting a racially diverse workforce</li> <li>▪ Creating safe, welcoming services, programs, and destinations</li> <li>▪ Allocating resources to advance racial equity</li> </ul>
Portland Metro Climate Smart Strategy	<input type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input checked="" type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>▪ <b>Making transit convenient, accessible, and affordable</b></li> <li>▪ Making walking and biking safe and convenient</li> <li>▪ Making streets safe, reliable, and connected</li> <li>▪ Using technology to manage transit</li> <li>▪ Providing information and incentives to increase mode share</li> <li>▪ Securing funding for transit</li> </ul>
Portland Metro Regional Active Transportation Plan	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>▪ Making walking and biking the most convenient, safe, and preferable choices for trips less than three miles</li> <li>▪ Developing well-connected regional pedestrian and bicycle routes integrated with transit to prioritize safe, convenient, accessible, comfortable pedestrian and bicycle access for all ages and abilities</li> <li>▪ Ensuring that regional transit and active transportation intersections equitably serve all people</li> <li>▪ Complete the regional active pedestrian and bicycle networks where transit transfers are common</li> <li>▪ Use data and analyses to guide transit and active transportation investments</li> </ul>



# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
ODOT Strategic Action Plan 2021-2023	<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>▪ Supporting equitable operations and policies and establishing an informed and inclusive culture</li> <li>▪ Promoting opportunities through transit investments, such as by working with BIPOC communities, women, and other historically and/or are currently marginalized communities</li> <li>▪ Utilizing the perspectives of people who reside in communities served by Metro and who are likely to be affected by Metro decision-making</li> <li>▪ Investing in the protection of vulnerable communities from environmental hazards</li> <li>▪ Preserving, maintaining, and operating a multimodal transportation system and achieving a cleaner environment</li> <li>▪ Ensuring the safety of transit riders and operators</li> <li>▪ Providing greater transit access and broader range of mobility options while addressing climate change</li> <li>▪ Investing in transit as a mechanism to manage and reduce congestion</li> <li>▪ Enhancing multimodal options</li> <li>▪ Implementing road usage charging to ensure revenue to maintain and improve the transit system and manage congestion</li> </ul>
ODOT Climate Action Plan 2021-2026	<input type="checkbox"/> Equity <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Climate <input checked="" type="checkbox"/> Mobility	<input type="checkbox"/> Foundational to Role <input checked="" type="checkbox"/> Directs Investments <input checked="" type="checkbox"/> Influences Outcomes	<ul style="list-style-type: none"> <li>▪ Integrating climate change and emissions reductions considerations in policy and investment frameworks</li> <li>▪ Providing transit options to manage demand and reduce congestion</li> <li>▪ Transitioning to an efficient transit fleet, supporting adoption of alternative fuels</li> <li>▪ Maintaining and operating transit and recovering from climate impacts by using sustainable funding</li> <li>▪ Increasing efficiency through investments in safety, and operations practices</li> <li>▪ Utilizing sustainable products and fuels</li> <li>▪ Reducing energy consumption, and reducing Metro's carbon footprint</li> </ul>

## Local Plans and Policies Related to HCT

In addition to reviewing regional, state, and federal plans and policies, relevant plans from or related to Metro area cities and/or counties were reviewed at a high level to document any policies that should be considered as part of the HCT Policy Framework. As shown in **Figure 4**, these plans included local transportation system plans (TSPs), comprehensive plans, or transit development/master plans (TDPs/TMPs), or HCT-specific plans, including the Clark County/CTRAN High Capacity Transit System Plan.

Specific plans that have recently been completed (or are currently underway) that relate to HCT and/or ETC include:

- Clackamas County completed its TDP in 2021.
- Washington County is conducting a Transit Study (completion anticipated in 2023), which will integrate the County's recent TDPs and shuttle planning study.
- The City of Portland developed the Rose Lane Vision in 2020 and the Enhanced Transit Corridors Plan in 2018, which are advancing projects to provide bus and streetcar lines with additional transit priority and help achieve the City's climate and transportation justice goals.
- TriMet is conducting the Forward Together Comprehensive Service Analysis, which will recommend a revised bus network concept to reflect shifts in ridership and travel demand that have occurred since the COVID-19 pandemic. TriMet also completed an Express and Limited Stop Bus Study (2021) to identify where these services could improve ridership and access to jobs, including for equity priority populations. These studies will shape the agency's FY2023 Service Plan.
- TriMet is also completing its first FX (Frequent Express) line in the Division Street corridor; Metro, TriMet, and the City of Portland are working on planning for the 82<sup>nd</sup> Avenue corridor; and TriMet is leading the Tualatin Valley (TV) Highway BRT Study, connecting Beaverton, Hillsboro, and Forest Grove, where TriMet's Line 57 operates today.
- The Southwest Corridor project, connecting downtown Portland with SW Portland, Tigard and Tualatin, has a Locally Preferred Alternative and Record of Decision from the FTA.
- Metro and TriMet are continuing the ETC program, now known as Better Bus, to improve transit speed and reliability across the region. Where the previous implementation of this program focused on the most congested locations on the system with the highest ridership, the next phase will look at other locations across the region to improve bus operations.

Outside of the TriMet service district:

- The Interstate Bridge Replacement's Locally Preferred Alternative recommends a MAX Yellow Line extension from Expo Center across the Interstate Bridge to Evergreen in Vancouver, connecting to C-TRAN's Vine Bus Rapid Transit system.
- The City of Wilsonville (SMART) is updating its TMP (completion anticipated in 2023).

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

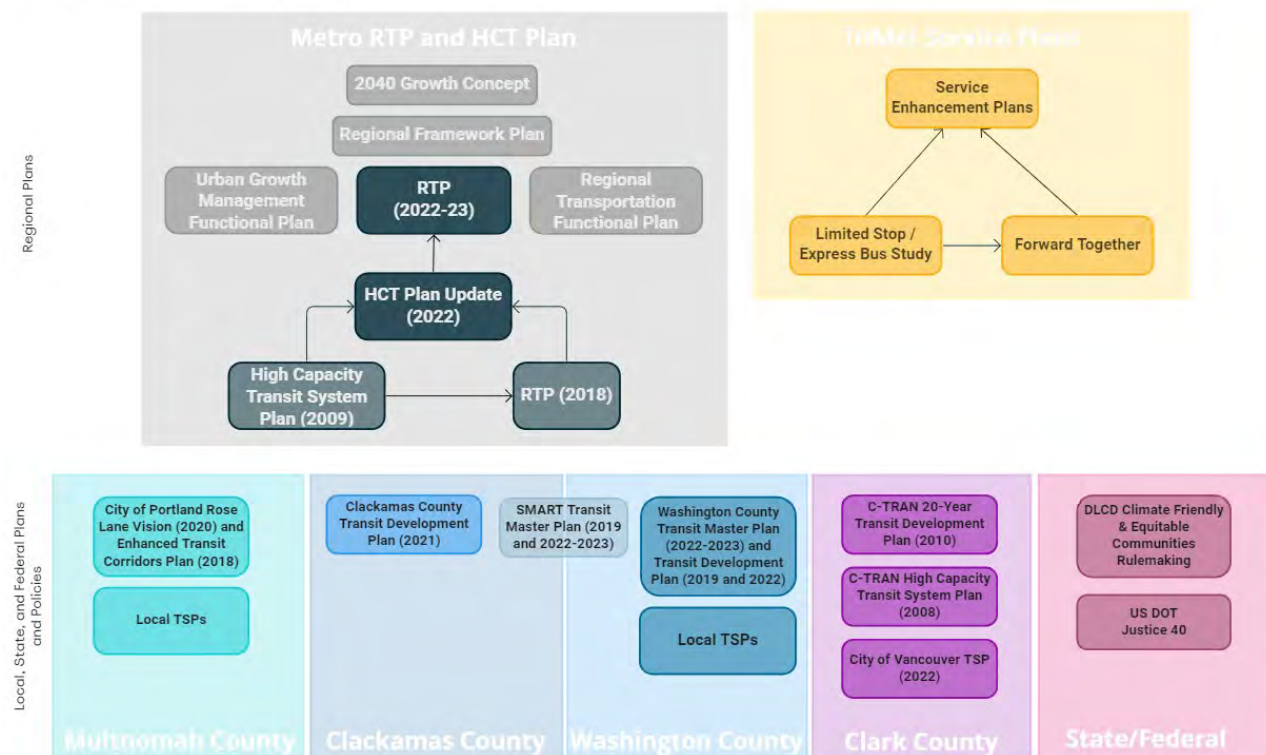
- The Clark County (C-TRAN) High Capacity Transit System Plan was completed in 2008; a TSP update for the City of Vancouver, which includes Enhanced Transit Corridors, is underway (completion anticipated in late 2022).
- C-TRAN has also completed development of several BRT corridors in recent years and others are in the planning stages.

As noted above, the Department of Land Conservation and Development (DLCD) has been conducting Climate-Friendly and Equitable Communities (CFEC) [rulemaking, filed on August 22, 2022](#), to help local governments revise plans to reduce greenhouse gas emissions. Similarly, the US DOT has undertaken the Justice 40 initiative with a goal of delivering 40% of the overall benefits of federal investments in climate and clean energy, including sustainable transportation, to disadvantaged communities.

In addition to informing the HCT policy framework, these plans and studies can also be consulted to validate the universe of potential HCT projects considered in the HCT Plan update as well as inform criteria used in the evaluation.

Figure 4 Regional Plan Hierarchy and Policy Summary

Local, State, and Federal Plans informing the Regional HCT Plan



RTP = Regional Transportation Plan, TDP = Transit Development Plan, TSP = Transportation System Plan

## Review of Plans and Policies from Peer Regions or other Agencies

This section includes a high-level review of long-range planning documents from peer regions. The purpose of the peer review is to inform the HCT Policy Framework, but key findings from the peer review could also be utilized in other dimensions of the HCT Plan and/or RTP updates, such as the development of corridor evaluation criteria.

### Peer Identification

Key criteria for selecting the peer regions or agencies included:

- Preference for plans/policies developed after 2020 that address current issues and trends such as recovery from the COVID-19 pandemic.
- Identify high capacity transit in their goals and policies.
- Include/address multiple HCT modes (e.g., rail and bus).
- Potential HCT lessons learned related to RTP investment priorities (safety, equity, climate and mobility).
- Geographic distribution.

Thirteen regions were identified in **Figure 5** below (See also **Figure A-1 in Appendix A** for more detail). These were narrowed to seven for high-level consideration and the project team then focused on four peers for more detailed review.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

Figure 5 Selected Peers

Region	Agency	Document	Year Published	HCT Modes
Seattle	Puget Sound Regional Council (PSRC), and/or Sound Transit (ST)	<a href="#">Regional Transportation Plan (2022-2050)</a>	2021	Link and RapidRide
	King County Metro	<a href="#">Metro Connects Long-Range Plan</a>		
San Francisco	Metropolitan Transportation Commission (MTC) and/or SFMTA/ConnectSF	<a href="#">Plan Bay Area 2050</a>	2021	BART, LRT (e.g., Muni Metro), BRT and RapidBus (e.g., Muni Rapid)
Los Angeles	LA County MTA (Metro)	<a href="#">Long Range Transportation Plan</a>	2020	BRT and LRT
Minneapolis-St. Paul	Metropolitan Council	<a href="#">Transportation Policy Plan</a>	2020	LRT and BRT
Austin	Capital Area MPO (CAMPO)	<a href="#">2045 Transportation Plan (and Regional Transit Study)</a>	2020	LRT MetroRail) and BRT (MetroRapid)
Boston	Metropolitan Area Planning Council (MAPC), Massachusetts Bay Transportation Authority (MBTA), The Greater Boston BRT Study Group	<a href="#">MetroCommon 2050</a>   <a href="#">Better Rapid Transit for Greater Boston</a>   <a href="#">Focus40</a>	2015-2021	BRT (Silver Line and additional prioritized corridors) and LRT and Heavy Rail (Commuter Rail, Blue, Green, Orange, and Red Lines)
Philadelphia	Delaware Valley Regional Planning Commission	<a href="#">Connections 2050</a>   <a href="#">StoryMap</a>   <a href="#">Policy Manual</a>   <a href="#">Process and Analysis Manual</a>   <a href="#">Major Regional Projects</a>	2021	BRT, Streetcar, LRT, Heavy Rail, High-Speed Rail
	City of Philadelphia, Southeastern Pennsylvania Transportation Authority	<a href="#">The Philadelphia Transit Plan</a>		

## Summary of Common Themes and Key Takeaways

Common themes and notable examples from the peer review are summarized below, organized by the four RTP priority outcomes. Examples include cases where policy shifts had a clear impact of prioritization criteria and plan outcomes.

- **Equity considerations for vulnerable communities and transit riders**
  - All peer regions have goals or objectives regarding the transit needs of women, people of color, people with low incomes, or people experiencing houselessness.
  - Direct feedback from community groups representing vulnerable populations (such as the Equity Cabinet for King County Metro) was critical in identifying specific policy areas to address in plan updates.
  - Many regions are also addressing affordability, such as through implementation of a means-based fare for low-income transit riders in the Boston region, funded with legislative support for consistent funding for operations.
  - All regions address how equity can be achieved by transit investments for priority communities, such as how communities access transit and destinations via transit.
  - In the City of San Francisco's ConnectSF program, the pandemic refocused investment priorities on serving essential trips citywide, including through quick-build capital improvements to maximize scarce resources. Model-based criteria used to prioritize investments (including access to jobs and services, ridership, cost-effectiveness, and travel time) looked at both equity priority communities and at low-income households earning below 200% of the federal poverty level, in addition to overall performance citywide.
- **State of good repair and safety / HCT system maintenance and reliability**
  - All regions seek to achieve safety goals in terms of how people wait for, access, or experience transit, some with a focus on Vision Zero targets systemwide.
  - 6 of 7 regions emphasize the need for transit infrastructure maintenance, preservation, reliability, or lifecycle expansion.
  - Prioritizing equity outcomes in the greater Philadelphia region included universal design and user experience, such as implementation of full ADA access, all-door boarding, safer and cleaner services, and better amenities at stops and for passengers.
- **System-level climate goals or objectives**
  - All regions specify climate goals or objectives that are part of other climate-related goals, such as stewardship or safety. Five regions prioritize a net-zero emissions transit fleet, such as procuring battery-electric buses and implementation of associated charging infrastructure, with a policy goal to achieve procuring 100% renewable electricity.



# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

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- All regions prioritize VMT reduction goals, with Los Angeles and Philadelphia introducing concepts for VMT fees to generate revenue for transit investments and lower the dependence on the federal gas tax.
- The urgency of addressing climate change was an impetus and key message around prioritizing transit improvements and related programs and initiatives, to attract additional trips to transit and other sustainable modes. For example, greater Boston has a goal to achieve a net-zero carbon region, which has an objective that all land travel is by carbon-free modes, such as walking, biking, and electrified public transit
- **Quality of service and mobility improvements for bus or rail**
  - All regions are pursuing bus or rail expansions or infrastructure improvements; for example, Seattle, Los Angeles, Boston, and greater Philadelphia have specific HCT and ETC enhancement goals, such as increasing the capacity of the transit fleet for new and existing services, expanding the HCT network to meet and respond to changing needs, or adding bus lanes and other features to speed up service and eliminate delay.
  - All regions emphasize the importance of transit and transportation system integration to expand travel choices and mode share; enhance local and regional transit connectivity; or improve transit frequencies, operations, or safety.

## Peer Review Details

Please see **Appendix A** for additional peer review details.

## Additional Key Issues and Trends

In addition to exploring how peer regions have structured their long-range transportation plans focused on HCT, it is important to note that several recent issues and trends have emerged over the past five years that are directly impacting local, state, and federal transportation policies. Metro and TriMet have recently summarized some of these issues and trends in separate but related memos: Metro Emerging Trends and TriMet Forward Together Emerging Trends. In addition, very recent policies related to climate change and the economy continue to shape how regions will adapt their transportation policies in the coming years.

The following is a summary of these issues and trends that were considered when conducting the HCT Policy Framework analysis:

- Transit service and ridership declines, including the decrease in peak commute demand
- Inequities and social justice
- Sustained reliance or preference for remote work
- Continued expansion of e-commerce
- Continued advancements in vehicle electrification (EVs and e-bikes)
- Issues with personal safety, especially for BIPOC riders
- Increases in severe and fatal crashes
- Increases in recreational cycling
- Challenges associated with agency recovery and innovation
- Continued gentrification and affordability issues, including people experiencing houselessness
- Inflation and increases in fuel prices
- Staffing shortages across many industries, including transit

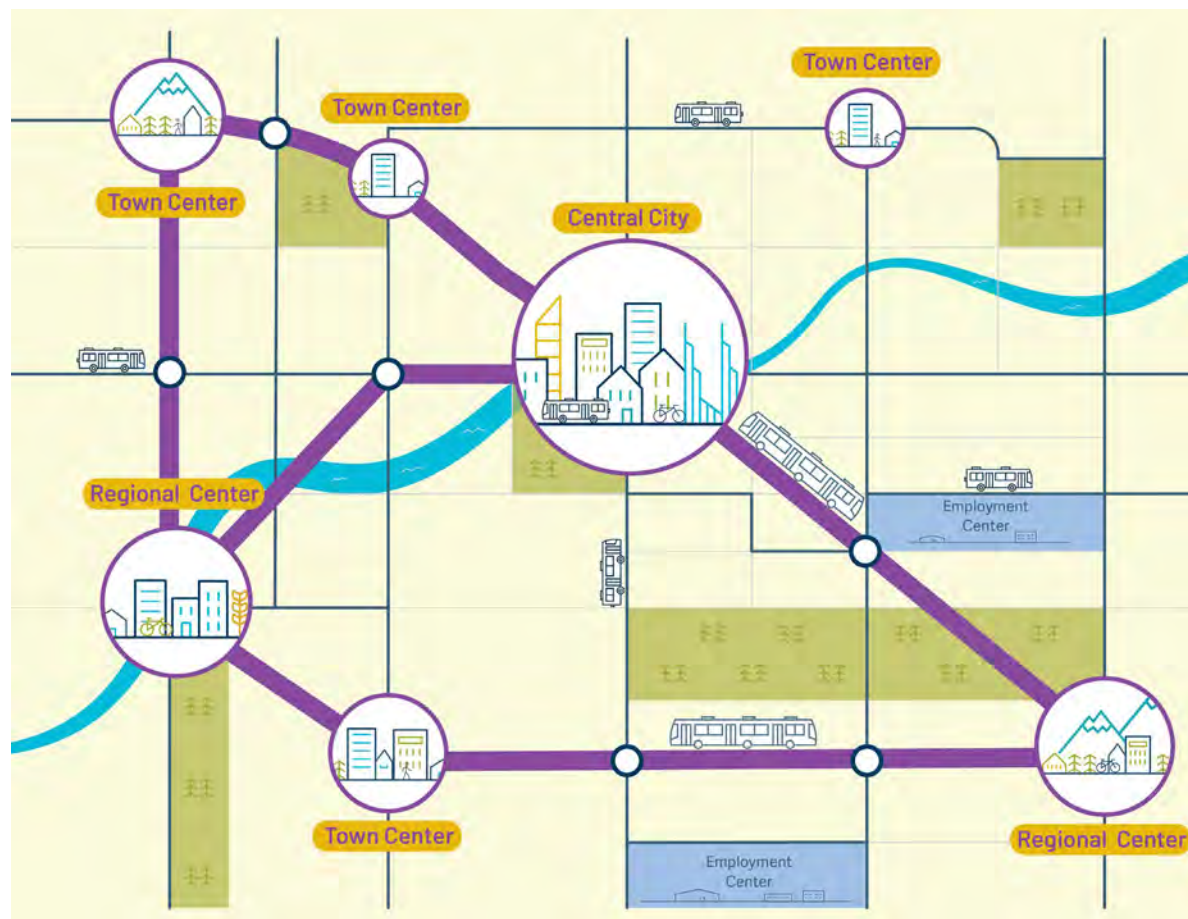
## HCT DEFINITION AND POLICY GAP ANALYSIS

The HCT Policy Framework Analysis concludes with considerations for how High Capacity Transit is defined in our region as well as considerations for updating the eight Regional Transit Network policies. This analysis considers not only the review of local, regional, state, and federal policies, but also key findings from the peer regions, as discussed above.

### High Capacity Transit Definition Considerations

The 2040 Growth Concept sets forth a vision for connecting the central city to regional centers like Gresham, Clackamas, and Hillsboro with fast and reliable high capacity transit (HCT), helping the region concentrate development and growth in its centers and corridors. High capacity transit carries high volumes of passengers quickly and efficiently, and serves a regional travel market with relatively long trip lengths to provide a viable alternative to the automobile in terms of convenience and travel time.

Figure 6 Regional Transit Network Concept



# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

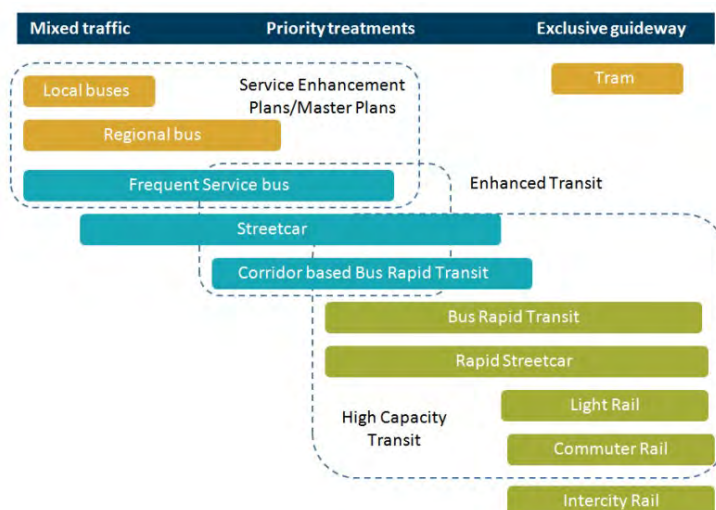
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High capacity transit is defined in multiple places in the 2018 Regional Transportation Plan, including in the System Policies chapter (pages 3-77, 3-88), in Glossary of Terms (page G-4), and in the multiple sections of the separate Regional Transit Strategy. While there are minor differences in how HCT is defined, the following introductory paragraph is perhaps the most direct at defining HCT (from page 4-10 of the Regional Transit Strategy):

**“Our high capacity transit (HCT) system operates with the majority or all of the service in exclusive guideway. The high capacity transit system is meant to connect to regional centers and carry more transit riders than the local, regional and frequent service transit lines. HCT could include rapid streetcar, corridor-based bus rapid transit, bus rapid transit, light rail or commuter rail.”**

As illustrated in the following graphic (from page 4-6 of the Regional Transit Strategy), there is also some overlap between

Enhanced Transit and HCT, where some streetcar or corridor-based Bus Rapid Transit applications could be considered either High Capacity Transit or Enhanced Transit. Other modes, including Commuter Rail, Light Rail, Rapid Streetcar and Bus Rapid Transit are exclusively defined as HCT. It is important to note that the term “corridor-based Bus Rapid Transit” is not fully defined in the 2018 RTP.



To clarify how we define High Capacity Transit, the following considerations are offered for this update of the High Capacity Transit Strategy:

- Consider leading with the *purpose* of HCT in the regional transit network, and to integrate equity into the definition by emphasizing that it connects *people* to regional centers
- Consider stating that HCT is *high-quality transit* (i.e., fast, frequent, safe, and reliable) before its physical attributes (operating with the majority or all of the service in exclusive guideway)

The first half of the HCT definition in **blue** could be updated as follows:

**“The high capacity transit system is meant to serve as the backbone of the transportation network, connect people to**

**regional centers and major town centers with high-quality service (fast, frequent, safe and reliable), and carry more transit riders more comfortably than the local, regional and frequent service transit lines. HCT operates in exclusive guideway, to the greatest extent possible, and could include light rail, commuter rail, rapid streetcar, streetcar, bus rapid transit, and corridor-based bus rapid transit”**

The last half of the definition in **green** emphasizes that HCT provides the needed capacity to serve the region’s highest demand corridors with a variety of modes and levels of transit priority, ranging from light rail or BRT with “majority exclusive guideway” to corridor-based BRT or streetcar modes that have a mix of exclusive and shared right of way (such as the FX2-Division high capacity bus service).

### Enhanced Transit Concept (ETC) / Better Bus

Another important part of defining High Capacity Transit and reviewing the Regional Transit Network policies related to HCT is clarifying the role of the Enhanced Transit Concept (ETC), now known as Better Bus. ETC was introduced in the 2018 Regional Transit Strategy and is defined as follows (from page 4-9 of the RTS):

***The purpose of ETC is to improve transit speed and reliability on our most congested existing and planned frequent service bus or streetcar lines.***

The RTP Glossary further clarifies that:

- “Enhanced transit is a set of street design, signal, and other improvements that improve transit capacity, reliability and travel time along major Frequent Service bus lines...” (RTS page G-9)
- “...Enhanced Transit encompasses a range of investments comprised of capital and operational treatments of moderate cost. It can be deployed relatively quickly in comparison to larger transit capital projects, such as building light rail.” (RTS page G-9)

While no changes to how ETC is defined are suggested, several policy considerations are provided to strengthen and clarify the role of ETC in the Regional Transit System.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

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## Transit Mode Characteristics and Relationships to Land Use

The graphic below identifies the transit modes that are part of the regional transit system, including their general service quality characteristics, and the land use density that is typically appropriate to warrant a capital investment in building a HCT project. The graphic identifies the characteristics of regional transit modes (both HCT and other modes serving the region) and shows which modes fall into the high-capacity transit category. It includes:

- **Transit Modes:**
  - HCT Modes: Commuter Rail, Light Rail, BRT, Corridor-Based BRT (e.g., RapidBus), Rapid Streetcar, and Streetcar; Streetcar may be considered HCT depending on the context
  - Non-HCT Bus Modes: Frequent Bus, Regional Bus
  - Other modes:
    - Aerial Tram, Intercity Rail
    - Vanpool, microtransit, etc. are included as potential modes to be considered in the future Metro Access to Transit Study.
- **Transit Characteristics:**
  - Level of Transit Prioritization (e.g., Speed & Reliability), Frequency, Market Demand, Passenger Capacity, Transit Access Shed, Stop/Station Amenities, Capital Cost (per passenger), Operating Cost (per passenger)

The following graphic illustrates the essential characteristics of high-capacity transit that work together to provide high-quality connections around the region, consistent with the HCT definition and vision.

Figure 6 What is High Capacity Transit?

### High Capacity Transit...

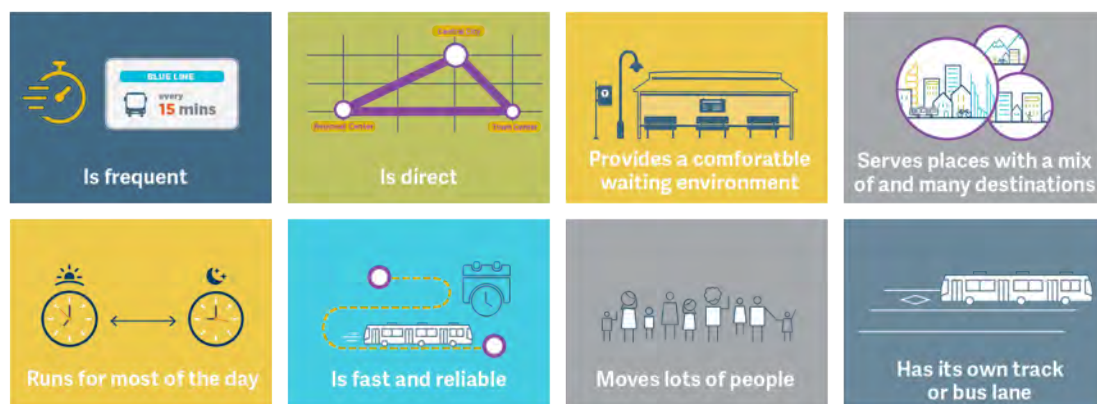
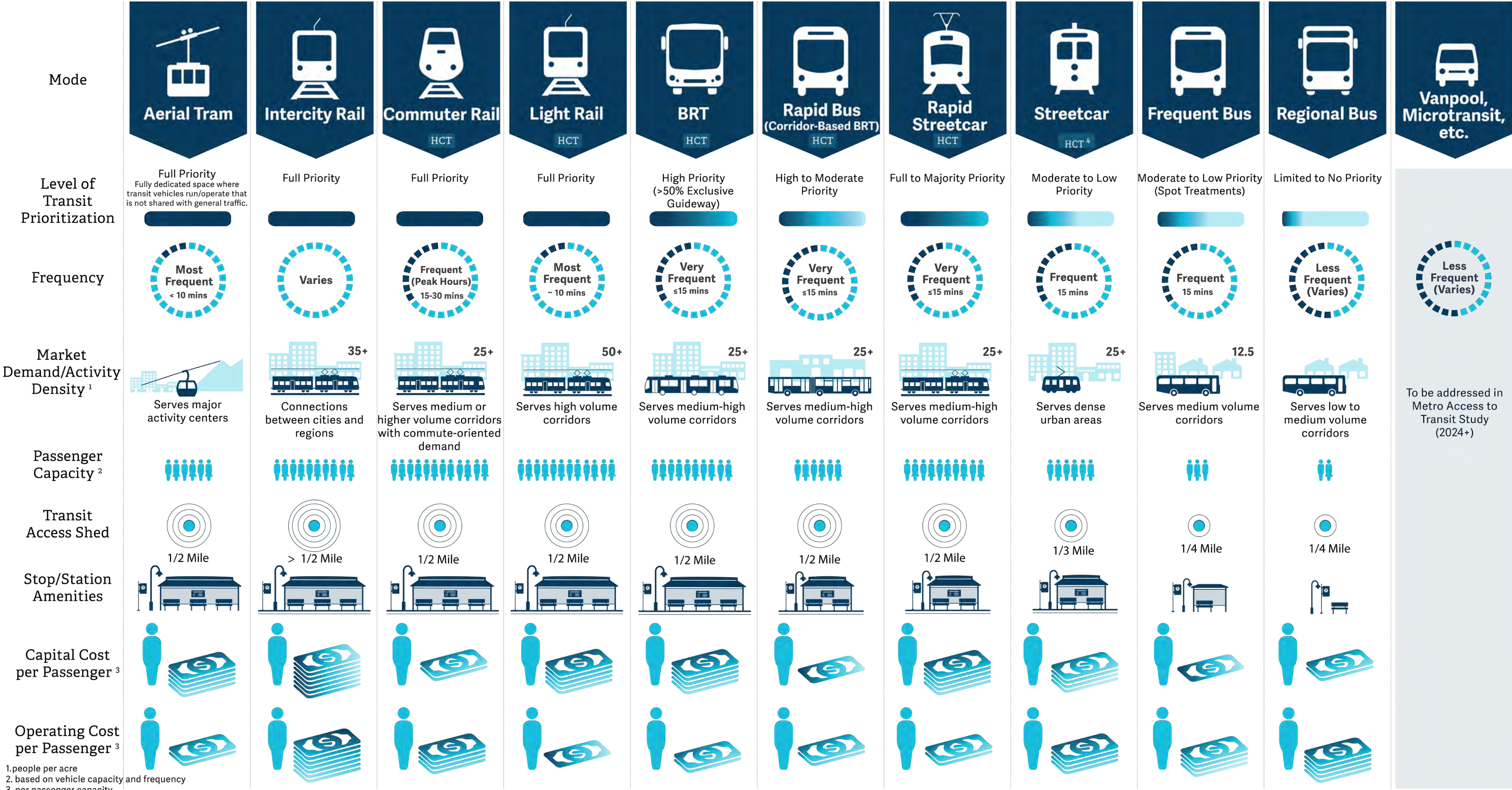




Figure 7 Characteristics of High-Capacity Transit



1. people per acre  
2. based on vehicle capacity and frequency  
3. per passenger capacity  
4. depending on context

## Regional Transit Network Policy Considerations

Based on the review of local, regional, state, and federal plans and policies, as well as the peer review and overview of key issues and trends, several areas have emerged as a focus of the Regional Transit Network policy updates:

- **System Quality and Equity.** Equity has long been a priority in making transportation planning decisions in the region and was one of the overarching policies included in the 2018 RTP. The 2023 RTP includes equity as one of the four desired outcomes and all network policies will be updated to further strengthen equity as a regional priority. The importance of dignified, high-quality service should also be emphasized to make transit work for everyone. As such, **Policy 1: Service Quality** is updated and clarified; **Policy 2: Equity** is updated and separated into a new policy.
- **Climate change.** While climate leadership is one of the overarching policies from the 2018 RTP, and one of the desired outcomes for the 2023 RTP update, there are no specific Regional Transit Network policies focused exclusively on sustainability and the environment. A new policy (**Policy 3: Climate Change**) is proposed focusing on how the Regional Transit Network should address climate change.
- **Maintenance and Resiliency.** Reliability is integrated into **Policy 4: Maintenance and Resiliency** to better integrate it as a key outcome of a system that is preserved and maintained in a state of good repair.
- **HCT and ETC.** The current **Policy 4: High Capacity Transit** (renumbered to Policy 5) includes both HCT and ETC in a single policy. To strengthen and clarify the role of both HCT and ETC in the regional transit network, creating **Policy 7: Reliable and Enhanced Transit** addresses the separate role of ETC as a tool for increasing reliability of the transit system.
- **Clear policy headlines.** All of the suggested modifications to the Regional Transit Network policies focus on a primary theme, so simple headlines are offered for each.

**Figure 8** below lists each of the 2018 Regional Transit Network policies and provides suggested updates to the policies most related to high capacity transit.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

Figure 8 Policy Framework Gap Analysis

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
1	1	System Quality	<i>Provide a seamless, integrated, affordable, safe and accessible transit network that serves people equitably, particularly communities of color and other historically marginalized communities, and people who depend on transit or lack travel options.</i>	<ul style="list-style-type: none"> <li>Separated existing Policy 1 into two policies</li> <li>Aligned with overarching Transportation Equity Policy 3</li> <li>Integrated quality of service into policy language</li> </ul>	Provide a high-quality, safe, and accessible system that makes transit a convenient and comfortable transportation choice for everyone to use.
	2	Equity			Ensure that the regional transit network equitably prioritizes service to those who rely on transit or lack travel options; makes service, amenities, and access safe and secure; improves quality of life (e.g., air quality); and proactively supports stability of vulnerable communities, particularly communities of color and other historically marginalized communities. <sup>2</sup>
N/A	3	Climate Change	N/A	<ul style="list-style-type: none"> <li>Strengthen policies to focus on transit's role in addressing climate change</li> </ul>	Prioritize our investments to create a transit system that encourages people to ride transit rather than drive alone and to support transitioning to a clean fleet that aspires for net zero GhG emissions, enabling us to meet our state, regional, and local climate goals.
2	4	Maintenance and Resiliency	<i>Preserve and maintain the region's transit infrastructure in a manner that improves safety, security and resiliency while minimizing life-cycle cost and impact on the environment.</i>	<ul style="list-style-type: none"> <li>Incorporated reliability into State of Good Repair</li> </ul>	Preserve and maintain the region's transit infrastructure in a manner that improves safety, reliability, and resiliency while minimizing life-cycle cost and impact on the environment.

<sup>2</sup> Historically marginalized communities are areas with high concentrations (compared to regional average) of people of color, people with low-incomes, people with limited English proficiency, older adults and/or young people.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
4	5	High Capacity Transit	<i>Make transit more convenient by expanding high capacity transit; improving transit speed and reliability through the regional enhanced transit concept.</i>	<ul style="list-style-type: none"> <li>Align with equity and climate outcomes and HCT definition</li> <li>Reframe “convenient” around equity</li> <li>Revise description of capacity</li> </ul>	Complete and strengthen a well-connected high capacity transit network to serve as the backbone of the transportation system. Corridors should generally be spaced at least one half-mile to one mile or more apart and serve mobility corridors with the highest travel demand. High capacity transit prioritizes transit speed and reliability to connect regional centers with the Central City, link regional centers with each other, and link regional centers to major town centers. <sup>3</sup>
3	6	Coverage and Frequency	<i>Make transit more reliable and frequent by expanding regional and local frequent service transit and improving local service transit options.</i>	<ul style="list-style-type: none"> <li>Moved reliability and the Enhanced Transit Concept to a new policy (see Policy 7)</li> </ul>	Complete a well-connected network of local and regional transit on most arterial streets – prioritizing expanding all-day frequent service along mobility corridors and main streets linking town centers to each other and neighborhoods to centers.
3 and 4	7	Reliability	<i>See Policy #4</i>	<ul style="list-style-type: none"> <li>Created a separate policy focused on reliability that clarifies the role of ETC in the regional transit network</li> </ul>	Through the Better Bus program, prioritize capital and traffic operational treatments identified in the Enhanced Transit Toolbox in key locations or corridors to improve transit speed and reliability for frequent service.
5	8	Intercity / Inter-Regional Transit	<i>Evaluate and support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.</i>	<ul style="list-style-type: none"> <li>No proposed changes</li> </ul>	

<sup>3</sup> The regional “mobility corridor” concept refers to a network of integrated transportation corridors that moves people and goods between and within subareas of the region. These transportation corridors influence the development and function of the land uses they serve and are defined by the major centers set forth in the Region 2040 Growth Concept. High capacity transit, along with frequent bus service and pedestrian/bicycle connections to transit, play an important role in moving people in these corridors. (2018 Regional Transportation Plan, Section 3.4.1)

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## High Capacity Transit Strategy Update | Policy Framework – Regional Transit Network Policy Review - DRAFT

Portland Metro

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
6	9	Access to Transit	<i>Make transit more accessible by improving pedestrian and bicycle access to and bicycle parking at transit stops and stations and using new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.</i>	<ul style="list-style-type: none"> <li>▪ No proposed changes</li> </ul>	
7	10	Mobility Technology	<i>Use technology to provide better, more efficient transit service – focusing on meeting the needs of people for whom conventional transit is not an option.</i>	<ul style="list-style-type: none"> <li>▪ No proposed changes</li> </ul>	
8	11	Affordability	<i>Ensure that transit is affordable, especially for people who depend on transit.</i>	<ul style="list-style-type: none"> <li>▪ No proposed changes</li> </ul>	

Notes:

Green – proposed update or addition

# **Appendix D**

## **Level 1**

## **Screening**



## DRAFT TECHNICAL MEMORANDUM

**DATE:** August 23, 2022; Revised August 31, 2022; Revised September 7, 2022; Revised October 10, 2022

**TO:** Ally Holmqvist, Metro

**FROM:** Eddie Montejo, Parametrix  
Ryan Farncomb, Parametrix  
Kelly Betteridge, Parametrix  
Sam Erickson, Parametrix  
Oren Eshel, Nelson/Nygaard

**SUBJECT:** Revised Corridor Evaluation Criteria

**CC:** Project file

**PROJECT NAME:** Metro High Capacity Transit (HCT) Strategy Update

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### 1 INTRODUCTION

The High Capacity Transit (HCT) System Strategy Update (HCT Update) project is reviewing and updating the region's HCT network vision. The original HCT Plan was developed in 2009 and has been updated several times since then, with the most recent review of HCT corridors occurring in 2018 as part of the Regional Transit Strategy. This memorandum documents the existing regional HCT corridor vision and proposes potential additional corridors for inclusion. The project team proposes evaluation criteria for screening candidate HCT corridors for inclusion in the regional HCT system vision as well as results of the initial screening.

#### 1.1 Defining High Capacity Transit

For purposes of this project, "high capacity transit (HCT)" refers to the following modes and/or services:

- Bus Rapid Transit (BRT)
- Rapid Streetcar
- Light Rail Transit (LRT)
- Commuter Rail/Heavy Rail

Additionally, the HCT Update encompasses other high capacity or enhanced system elements including:

- Enhanced Transit Corridor (ETC) and "better bus" enhancements that enhance bus speed and reliability
- Frequent Service fixed route bus investments
- LRT operating improvements
- Other existing HCT corridor "state of good repair" investments

## 2 HCT CORRIDOR NETWORK UPDATE

The region's HCT system vision was established in 2009 in the original HCT System Plan. HCT corridor investments were identified and prioritized based on their readiness to proceed. This framework was updated as part of the 2018 Regional Transit Strategy. The HCT corridor investments identified in 2009 and updated in 2018 form the initial baseline of corridors that are considered as part of the 2023 HCT Strategy Update. The Strategy Update effort will retain corridors previously advanced, but will

- Update the “readiness” evaluation of each (see separate memorandum on readiness evaluation),
- Remove corridors from the Vision that have been constructed or are currently advancing, and
- Consider new corridors for inclusion in the Vision.

The project team then developed a comprehensive “universe” of potential HCT corridors that included the 2009 and 2018 corridors, as well as corridors identified as part of the T2020 regional ballot initiative. Finally, the universe of potential corridors also includes those proposed for future frequent bus service in the 2018 Regional Transit Strategy Vision. Frequent Service corridors operate at service levels of “15 minutes of better” much of the day and experience high transit travel demand. Frequent Service corridors represent natural corridors for considering HCT investments. Figure 1 shows TriMet's current Frequent Service network.

Figure 1. TriMet Frequent Service Network

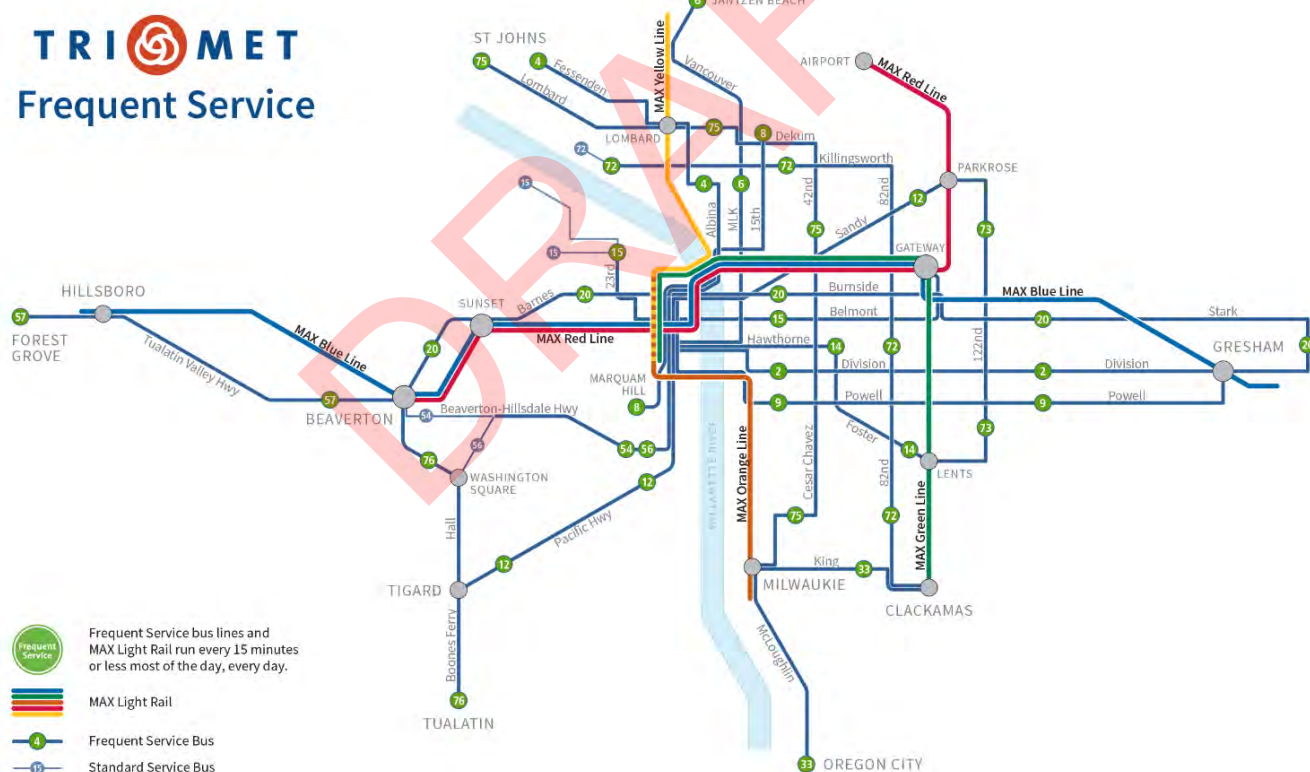


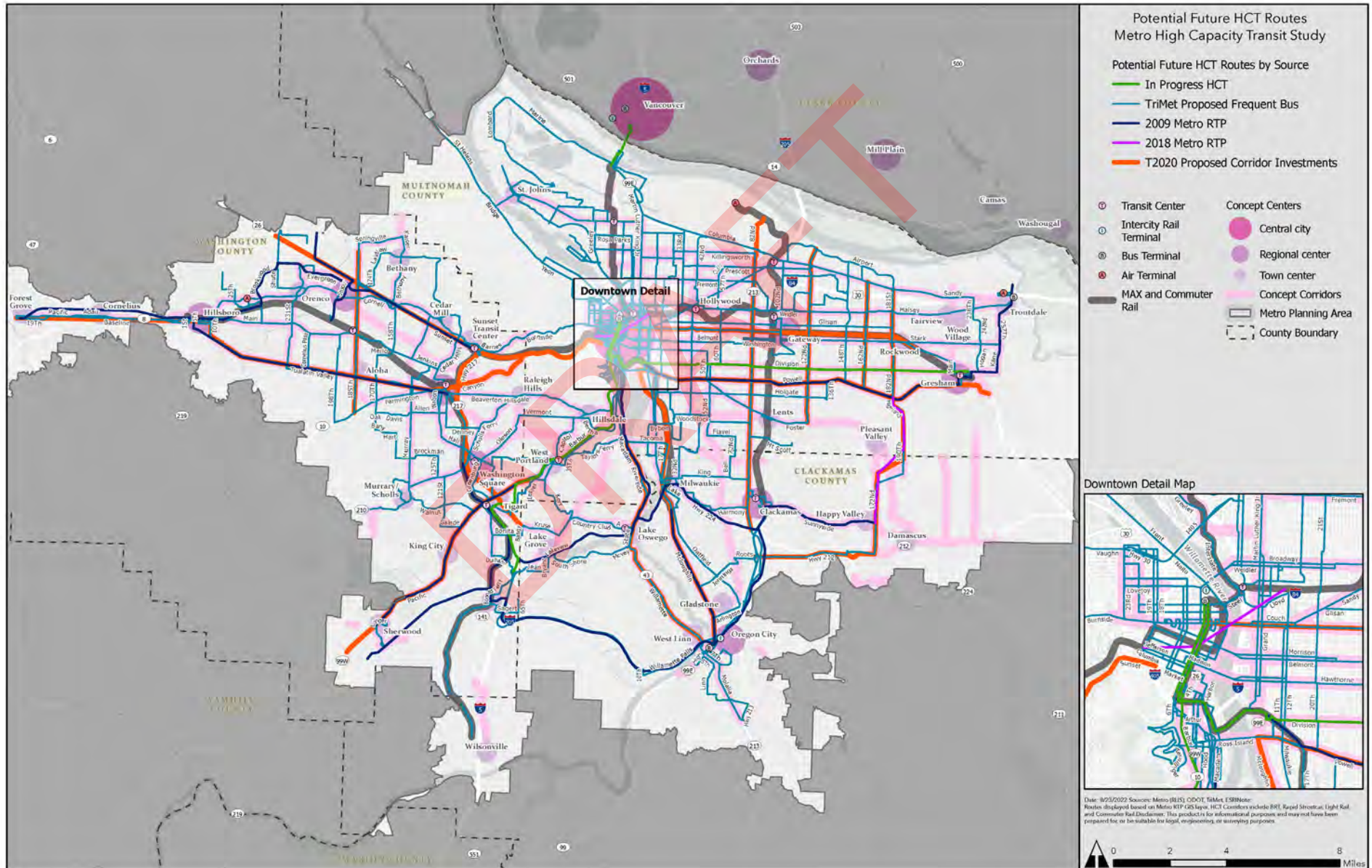
Figure 2 shows all potential HCT candidate corridors in the region. The corridors included in this figure represent the first draft of the HCT network vision that will be evaluated through the process described in this memorandum. In addition to the corridors shown in Figure 2, the project team will apply a standalone “big moves” analysis to identify additional corridors that should be considered for advancement.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

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Figure 2. HCT Network - "Universe" of Corridors





### 3 APPROACH TO CORRIDOR EVALUATION

#### 3.1 Draft Policy Framework

The corridor evaluation builds upon work completed to date for the Regional Transportation Plan (RTP) 2023 Update, which developed a draft updated policy framework based on a review of existing regional transit network policy as well as peer agency policies to identify gaps and priorities for HCT now and in the future. Building from this work, the corridor screening and evaluation criteria were developed to reflect the updated 2023 RTP policy framework to ensure that the analysis reflects current and future regional priorities and desired outcomes for HCT. Some of the key policy areas and drivers influencing the development of screening and evaluation criteria include focus on:

- **Developing specific policies to address equity and climate.** The screening and evaluation criteria evaluate corridor-level impacts to equity and climate based on the RTP draft policy framework. These equity and climate criteria will be used to prioritize investments in the HCT plan.
- **Connecting regional centers.** As part of the 2040 Metro Growth Concept, current RTP network policy focuses on HCT with a majority or all of the service in exclusive guideway connecting Regional Centers and City Centers. With the additional consideration of corridor-based HCT that includes many of the same elements, but without the majority exclusive guideway, an expansion of the network policy was proposed to connect Regional Town Centers to Regional Centers and the Central City. In that case, the evaluation criteria include a policy screen to ensure HCT investments connect Regional Town Centers to Regional Centers and the Central City.
- **Higher capacities.** The RTP currently defines HCT as carrying more transit riders than local, regional, and frequent transit lines. The screening and evaluation criteria consider a range of ridership and operational factors to identify corridors with the highest potential for needing greater transit capacity.
- **Frequency and reliability.** The draft policy framework is also focused on improving access to the regional network by making local transit more frequent, faster, and more reliable through the Enhanced Transit Concept (ETC). Although Enhanced Transit or “better bus” improvements may not always qualify as corridor-based HCT investments, ETC investments supports complimentary investments to HCT by improving access to regional transit, jobs, services, parks, and other essential destinations in the Metro area.

#### 3.2 Two-Phase Corridor Evaluation Process

The HCT Plan update will replicate the two-phase analysis process done in the 2018 HCT Plan. Level 1 refers to a corridor screening process, which applies criteria to sort and organize the initial universe of potential HCT corridors. As a first step, the screening process is intended to refine the universe of potential HCT corridors by identifying the lowest-performing corridors. The remaining corridors will then be evaluated using the Level 2 criteria and readiness evaluation. The Level 2 criteria and readiness evaluation will prioritize corridors into “tiers” based on the technical analysis and corridor readiness criteria. The following subsections summarize the draft Level 1 criteria; Level 2 screening and readiness criteria are documented separately.

##### 3.2.1 Level 1 Corridor Screening Criteria

The Level 1 Corridor Screening Criteria is intended as a broad analysis step for sorting and screening out potential HCT corridors based on key evaluation criteria. The Level 1 analysis intentionally uses few criteria to home in on the most important characteristics for successful HCT corridors according to the draft policy framework. The Level

1 Screening also includes a “Policy Screen” that refers to qualitative determinations about where to invest in future HCT based on feedback from the Project Management team and Working Group. For example, the Policy Screen pulls out corridors that are already substantially underway (i.e., advanced design or environmental work underway) such as the I-5 Interstate Bridge Replacement Program and Division Transit Project. Table 1 below summarizes the proposed Level 1 Screening Criteria.

**Table 1. HCT Level 1 Corridor Screening Criteria**

Criteria	Approach to measurement	Data Source/Notes	Methodology
Existing Ridership	<ul style="list-style-type: none"> <li>Average Daily Boardings by Route (2019)<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>TriMet ridership data</li> <li>Meets HCT Plan (2018) Core Criteria</li> <li>Only applied to existing routes</li> </ul>	<ul style="list-style-type: none"> <li>Assess TriMet Average Daily Boardings by TriMet Route IDs</li> <li>Aggregate route-level boardings and classify using 20th percentile breaks</li> </ul>
Future Ridership	<ul style="list-style-type: none"> <li>2040 Person Productions + Attractions of TAZs within ½ mile of corridors</li> <li>Average 2040 Person Productions + Attractions of TAZs within ½ mile of corridors<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Metro Travel Model</li> <li>Meets HCT Plan (2018) Core Criteria</li> <li>Applied to existing and proposed routes</li> <li>Person trips account for all modes</li> <li>Productions + Attractions is a proxy measure for total activity</li> </ul>	<ul style="list-style-type: none"> <li>Select TAZ boundaries within ½ mile of corridors as baseline geography for calculation</li> <li>Sum existing 2040 Person Productions and 2040 Person Attractions for selected TAZs as a proxy for total future activity for corridors;</li> <li>Calculate the average of the sum of 2040 Person Productions and Attraction by TAZ to account for shorter corridors</li> <li>Aggregate route-level future productions and attractings using 20th percentile breaks</li> </ul>
Equity	<ul style="list-style-type: none"> <li>Metro Equity Focus Areas (EFAs) – EFAs within ½ mile of corridors</li> </ul>	<ul style="list-style-type: none"> <li>Metro RTP Update (2022)</li> <li>Meets HCT Plan (2018) Core Criteria</li> <li>Metro Equity Focus Areas are measured at the Census Tract Level</li> </ul>	<ul style="list-style-type: none"> <li>Select Census Tracts within ½ mile of potential HCT corridors</li> <li>Identify Metro Equity Focus Areas (EFAs) within ½ mile of potential HCT corridors</li> <li>Aggregate route-level EFAs based on 20th percentiles</li> </ul>

<sup>1</sup> The Level 1 Corridor Screen will screen existing routes and planned/proposed routes separately to account for the fact that planned/proposed routes do not yet have ridership. Existing average weekday corridor ridership (2019) was only factored into the scoring for existing routes.

<sup>2</sup> Summing the *total* productions and attraction of all TAZs within a ½ mile of corridors accounts for longer corridors with higher potential demand for trips along the length of the route. Using the *average* of the sum of productions and attractions by TAZ within a ½ mile of corridors accounts for shorter corridors that may have concentrated activity but lower total person trips.

Criteria	Approach to measurement	Data Source/Notes	Methodology
Policy Screen (Qualitative)	<ul style="list-style-type: none"> <li>• <i>Supports Metro Regional Concept:</i> Connects at least one (1) Town Center to a Regional Center/Central City.</li> <li>• <i>Remove Duplicity:</i> Remove corridors where HCT improvements are already planned such as Interstate Bridge Replacement Program and Southwest Corridor.</li> <li>• Remove C-TRAN routes, tram, and existing streetcar. Remove Division Transit since revenue service will start soon.</li> </ul>	<ul style="list-style-type: none"> <li>• Policy screens are conditional checks to qualify potential HCT routes from the starting universe of corridors.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative assessment. Corridors are not scored based on the policy screen, but some candidate corridors will be eliminated based on the application of this criterion.</li> </ul>

The “Big Moves” analysis complements the approach for screening candidate HCT corridors (HCT Screening) for inclusion in the regional HCT system vision. The HCT Screening process analyzed existing and planned frequent service corridors as well as corridors identified through the original HCT Plan in 2009. However, since the screening is primarily based on corridors aligned with the existing TriMet service network, it may not identify travel “desire lines” where the existing transit network does not provide a convenient connection that people would choose for their trip. Applying another lens allows for assessing additional connections that may not have been identified through the screening process:

- where current and future travel demand are strong and
- where the current transit system does not provide a high quality connection.

This approach is documented in a separate memorandum.



# **Appendix E**

## **Level 2 and Readiness Evaluation**

## TECHNICAL MEMORANDUM

**DATE:** November 17, 2022  
**TO:** Ally Holmqvist, Metro  
**FROM:** Ryan Farncomb, Kirsten Pennington (KLP Consulting), Oren Eshel (Nelson\Nygaard)  
**SUBJECT:** Approach to assessing HCT corridor readiness, modes, and tiering  
**CC:** Metro High Capacity Transit (HCT) Strategy Update

This memorandum documents the proposed approach to determining high capacity transit (HCT) corridor “readiness,” corridor ranking, and discussion of factors that will influence future mode choice in each corridor. Metro will use this assessment to shape the HCT Strategy update, including identifying which corridors are priorities for implementation. The approach in this memo builds on the evaluations conducted previously for the 2009 and 2018 iterations of the HCT Strategy.

### CORRIDOR READINESS EVALUATION

The prior *Revised Corridor Evaluation Memorandum* describes the overall approach to identifying the preliminary vision of possible HCT corridors and evaluating them through a two-step process. Corridors that emerge from this “Level 1” screening, including previously identified corridors from 2009 and 2018 HCT system planning work that have not yet advanced, will be evaluated with this Level 2 screening. The Level 1 evaluation identified the preliminary HCT vision corridors that are subject to further screening and evaluation. Corridors with existing regional commitments – such as Southwest Corridor LRT, 82<sup>nd</sup> Avenue, and the Interstate Bridge Project, will not be evaluated further and are assumed to be included in the final vision as “Tier 1” corridors (see Corridor Ranking section below).

This memo describes the Level 2 screening which focuses on corridor “readiness,” meaning, whether the right conditions are in place to support advancing a given corridor for HCT investment. The Level 2 criteria are shown in Table 1. Attachment A shows an example evaluation using these criteria. These criteria are refined based on the 2018 evaluation and include criteria related to climate and equity, among other RTP policy priorities, and federal funding. The project team added these criteria to reflect regional policy priorities.

The federal funding criteria are based on the Federal Transit Administration’s (FTA) Capital Investment Grants (CIG) program. This program is the most substantial non-local source for HCT funding in the Portland-Vancouver region and has funded many HCT investments, including much of the existing LRT system. Because of the outsize influence this program has on funding viability, the Level 2 screening criteria were revised to reflect the CIG program’s criteria, thereby helping to ensure readiness of project corridors.

**Table 1. Level 2 Corridor Evaluation Criteria**

Criteria	Measure	Data Source/Notes	Methodology
Transit Travel Time Benefit	Ratio of personal vehicle travel time to transit travel time	HCT Plan (2018) Core Criteria Meets Section 5309 Capital Investments Grants (CIG) Small Starts Program “Mobility Improvements”	The team will compare the average travel time at 3:00 PM on a typical weekday for personal vehicles versus transit; the higher this ratio, the greater the opportunity to improve transit travel times.

Criteria	Measure	Data Source/Notes	Methodology
		Travel model data	
Productivity + Cost Effectiveness	Existing boardings per revenue hour in a given corridor	HCT Plan (2018) Core Criteria	Boardings per revenue hour will be calculated based on 2019 and modeled 2040 boardings and transit revenue hours.
	Capital Cost per Rider (range to account for modal options)	Input to 5309 Capital Investments Grants (CIG) Program "Cost Effectiveness" measure	Capital cost per rider will be presented as a range, based on average per-mile costs for two HCT modes (LRT and BRT).
Environmental Benefit	Change in GHG emissions associated with HCT investment in a given corridor.	"Reduction in emissions" meets HCT Plan (2018) Core Criteria VMT used as key performance measure in Metro 2021 TSMO Strategy	Using established transit elasticities, estimate the change in ridership that is likely occur in a given corridor by investing in HCT and the corresponding change in auto VMT that would be expected. Convert this change in VMT to GHG emissions using an average fleet emissions factor for year 2030.
Equity Benefit	Access to employment – Essential Jobs and Essential Services by Census Block within ½ mile of corridors	TriMet and Metro Essential Destinations data.	The team will rely on data from TriMet's Forward Together program. Forward Together included location analysis of in-person jobs in the Metro region. The team will assess the relative number of in-person jobs within ½ mile of corridors using 20th percentiles.
	Relative proportion of historically marginalized populations in each corridor, based on Metro's Focus Areas	Remix Online Tool for Existing Routes Consider specific impact to in-person jobs in the region (data from TriMet <i>Forward Together</i> project)	The relative proportion of historically marginalized populations within ½ mile of each corridor will be reported.
Land Use Supportiveness and Market Potential	2040 Population Density by TAZ within ½ mile of corridors	Metro Travel Model	Using existing 2040 Metro travel model data, the team will develop population densities within ½ mile of each corridor and rank by 20 <sup>th</sup> percentiles. The project team will also provide for purposes of comparison the average density within 1/2 mile of (1) the average existing frequent service bus line and (2) average light rail line.
	2040 Employment Density by TAZ within ½ mile of corridors Presence of higher education institutions, multi-family and affordable housing	HCT Plan (2018) Core Criteria "Land Use Supportiveness and Market Potential" Meets Section 5309 Capital Investments Grants (CIG) Small Starts Program "Land Use" and "Economic Development" criteria	The same approach will be applied for total employment within ½ mile of the corridors. The presence of multi-family and affordable housing, and higher education institutions will be applied as an additional land use check.

## Jurisdictional Readiness Evaluation

After screening the corridor with the quantitative criteria, the project team will conduct a “jurisdictional readiness” evaluation to provide additional context. This next evaluation will be conducted on those corridors that score highly on the quantitative evaluation. This evaluation will be qualitative and based on the following factors:

- **Documented community support**, as determined by inclusion of a given corridor in local plans, supportive language in local Comprehensive Plans, etc.
- **Political support**, as determined by an identified jurisdictional “champion” for a given corridor. HCT corridors require strong political support and usually a local agency(s) that is strongly supportive of the project and that will maintain that support over the long-term.
- **Transit-supportive local policies**, such as those encouraging multifamily housing, minimum land use densities, mixed uses, affordable housing, employment, and other areas.
- **Local anti-displacement strategies or policies**
- **Identified local funding** for implementation (either as match or as a locally-funded project).
- **Physical conditions in the corridor**, looking at the likely availability of ROW broadly within a given HCT corridor or the need for mobility solutions that could require additional ROW within a high travel and constrained corridor; known environmental constraints, and presence of sidewalks and cycling facilities. Corridors with major physical constraints would score lower relative to this criterion. However, a major influx of funding could influence the readiness of corridors with major physical constraints.
- **Assessment of work conducted to-date**, meaning, the level and amount of planning, design, environmental, or other work that has been completed to define and advance the HCT investment in a given corridor.

## CORRIDOR RANKING

After both evaluation steps have been completed, the project team will conduct an initial sort of corridors into one of four tiers based on their performance. These tiers are based on the original 2009 HCT System Plan Report:

- **Tier 1 – Regional Priority Corridors**: these include corridors with an adopted Locally Preferred Alternative (LPA) under the National Environmental Policy Act (NEPA), or those where determination of the LPA is already underway (such as 82<sup>nd</sup> Avenue). These corridors are likely to score well with respect to the Federal Transit Administration’s (FTA) Capital Investment Grant (CIG) program. These corridors already have regional consensus and so were not evaluated with the Level 2/readiness criteria described above.
- **Tier 2 – Emerging Regional Priority Corridors**: Tier 2 includes corridors that score highest based on the quantitative and qualitative assessment where additional policy or planning actions may elevate the corridor to advance within the next five years. With steps taken to advance regional discussion on these corridors and/or some changes in the corridor itself, Tier 2 corridors may score well with respect to the Federal Transit Administration’s (FTA) Capital Investment Grant (CIG) program.
- **Tier 3 – Developing Corridors**: corridors that scored in the middle relative to others based on the quantitative evaluation and where the qualitative assessment shows multiple issues or needs that must be addressed, or where land use or employment and population density is marginal for HCT investment. These corridors likely require more time before advancing.
- **Tier 4 – Future Corridors**: these corridors score lowest on the quantitative and qualitative evaluation and lack policy or land use conditions that warrant near-term HCT investments.

**Funding considerations will be an important “lens” applied to the initial tiering that emerges from this assessment.** Available funding is fundamental to the number of corridors the region is able to advance in the

near-term and as such is an important final screen on the initial tiering. The project team will also conduct a final “policy check” to ensure the corridors that emerge from the analysis align with the HCT policy framework and the intended regional outcomes. The final funding and policy check reviews are qualitative in nature; limited modifications, additions, removals, or changes in assigned Tier may result.

Finally, the project team will describe conditions that are likely to influence future discussions on the appropriate HCT mode for each corridor. A specific mode may not be assigned to corridors, given that further study and evaluation is required to determine the appropriate mode in each corridor, as well as the final corridor routing, as part of further studies outside of this process. The team will review the following factors that contribute toward mode selection, including:

- Existing corridor ridership.
- The personal vehicle to transit travel time ratio, determined for each corridor previously (Table 1). The greater this ratio, the greater the need for corridor investment in transit priority or other interventions (e.g., stop consolidation) to improve travel times.
- Existing roadway capacity and available right-of-way: this qualitative assessment will look at the likely availability of ROW broadly within a given HCT corridor or the need for mobility solutions that could require additional ROW within a high travel and constrained corridor. This assessment aims to understand the relative difficulty of implementing HCT.

These criteria will be used to determine if they likely require <50% priority or >50% priority.

However, the project team will assign a **representative corridor and mode** for purposes of modeling corridors only to understand the high-level impacts of HCT investments on regional transit ridership and mode split. The project team will determine these representative modes based on ridership and connections to the existing HCT system. Future corridor refinement studies will make alignment and mode determinations.

## AREAS SUBJECT TO FURTHER REFINEMENT

This evaluation will result in high-level information useful for confirming the vision for HCT and ranking corridors based on readiness to advance. However, identifying and tiering corridors is the first step toward advancing HCT. Detailed study and public involvement is required to advance corridors through the various phases of project development, design, construction, and implementation. An **important early step** in advancing corridors is a detailed look at alignments, potential termini, and segmentation to further define the corridor and project; it may be that only part of a corridor is ready to proceed, or that segmenting a given corridor is the preferred approach to move forward. Additional work that would occur outside of the HCT Strategy Update process and would define elements of the project further includes:

- Mode and vehicle type
- Exact alignment and termini
- Level of transit priority needed
- Station locations
- Roadway design
- Pedestrian and bicycle facilities
- Integration with the broader transportation system, including first/last mile considerations, park and rides, traffic impacts, etc.

## DRAFT TECHNICAL MEMORANDUM

**DATE:** November 17, 2022

**TO:** Ally Holmqvist, Metro  
Metro HCT Strategy Update PMT

**FROM:** Chad Tinsley, Parametrix  
Ryan Farncomb, Parametrix  
Kelly Betteridge, Parametrix  
Oren Eshel, Nelson/Nygaard  
Tomoko Delatorre, Nelson/Nygaard  
Paul Lutey, Nelson/Nygaard

**SUBJECT:** HCT Corridor Analysis Approach to Identify “Big Moves”

**CC:** Project file

**PROJECT NAME:** Metro High Capacity Transit (HCT) Strategy Update

---

### 1 INTRODUCTION

This memo describes an approach to identify “Big Moves” as part of the corridor identification and screening process for the High Capacity Transit (HCT) System Strategy Update (HCT Update) project. This analysis would complement the Level 1 screening to identify candidate HCT corridors (HCT Screening) for inclusion in the regional HCT system vision, as described in previous memos. The HCT “Level 1” Screening process analyzed existing and planned frequent service corridors as well as corridors identified through the original HCT Plan in 2009 to help identify the universe of corridors to consider in the HCT Evaluation. However, since the screening is primarily based on corridors aligned with the existing TriMet service network, it may not identify travel “desire lines” where the existing transit network does not provide a convenient connection that people would choose for their trip. The project team is proposing an approach to help confirm needs identified through the screening process and assess additional connections that may not have been identified through the screening process:

1. Where current and future travel demand are strong
2. Where the current transit system does not provide a connection or a high quality connection

Connections with strong demand and lower-quality transit may be high priorities to evaluate for HCT, or other types of transit service (HCT may not be the most suitable mode for all areas). This analysis could confirm the need for corridors already identified through the screening process as well as suggest additional connections that should be evaluated as part of the HCT Strategy Update. Connections with strong demand and a low-quality transit connection could suggest additional corridors to evaluate for HCT. HCT projects could also be identified to strengthen existing parts of the HCT system that are only of moderate quality.



## 2 “BIG MOVES” CORRIDOR IDENTIFICATION APPROACH

### 2.1 Travel Demand Analysis Zones

Analysis zones were developed based on the following approach:

- Start with Metro Concept Analysis Center (2040) geographies
- Include City of Portland Town Center designations, based on the City of Portland [Centers GIS layer](#) and/or the map in Chapter 3 of the Comprehensive Plan (page 30): Belmont-Hawthorne-Division, Interstate/Killingsworth, Midway, and Northwest District
- Select Transportation Analysis Zones (TAZs) overlapping with the above geographies
- Identify additional TAZs as either additions to the above geographies or as additional geographies, including:
  - Major institutions (major hospitals, universities, etc.), such as OHSU.
  - Major employment areas, based on Longitudinal Household Employment Dynamics (LEHD) data and Metro model 2040 projections, using a threshold of 4,000 jobs in a TAZ and grouping adjacent TAZs with employment at or close to the threshold.
- Portland Central City Zones were disaggregated as follows for initial analysis, given the high concentration of trips, but could be reaggregated at a later stage of the process or for representation purposes.
  - Downtown – South, Central, and North
  - West of Downtown (west of I-405, north of Burnside)
  - Northwest Portland – Northwest District (corresponding to the City of Portland Town Center), Outer Northwest, and Northwest Industrial area
  - South Waterfront (with the OHSU Marquam Hill Campus as a separate geography)
  - Central Eastside – South and North
  - Rose Quarter/Albina West
  - Lloyd District
  - Albina East

Figure 1 shows the analysis zones.

### 2.2 Travel Demand

Travel demand data was aggregated to the above centers-based travel demand zone structure. The data was normalized using the area of the zones to account for the varying geographic size (and density of travel demand) of each area.

The primary travel demand measure used was future travel demand from the Metro model:

- Future (2040) Person Trips, both directions, Total and Normalized for area of the zone (per square mile)

Secondary travel demand measures were used to provide an understanding of more recent changes to travel demand, including effects of the pandemic:

- Fall 2021 person trips from Replica data,<sup>1</sup> both directions, Total and Normalized for area of the zone (per square mile), including trips by people earning less than 200% of the federal poverty level and estimate transit person trips
- Fall 2019 person trips for comparison with current (baseline) person trips from the Metro model

Travel demand measures were classified into five categories.

### 2.3 Service Quality

For purposes of this analysis, travel time was used as a proxy for service quality. Transit travel time was compared to auto travel times to understand the relative convenience of making a particular trip by transit versus driving.

- A representative point was selected for each analysis zone. If existing high capacity transit service was present, a HCT station was selected so that access time to/from destinations was not considered in evaluating how well a geography is generally served by the HCT system.
- Google Maps was used (via an automated query) to determine: 1. Auto travel time and 2. Transit travel time for each zone-to-zone connection. A trip time of 3 pm on a weekday (Wednesday) was specified. Analysis was run in both directions and the highest ratio used.
- A ratio of the transit travel time to the auto travel time was calculated. A ratio of 2.0 would mean that a transit trip takes twice as long as a trip made by driving.

The transit to auto travel time ratio was classified into five categories using the following breakpoints:

- Up to 1.1 (Transit competitive with auto)
- > 1.1 to 1.5
- > 1.5 to 2.4
- 2.5 to 3.9
- 4.0 or more (Transit takes significantly longer than driving)

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<sup>1</sup> Replica is an activity-based transportation model in which travel demand is derived from people's daily activity patterns, including de-identified mobile location and demographic data sources.

Figure 1 Map of Analysis Zones

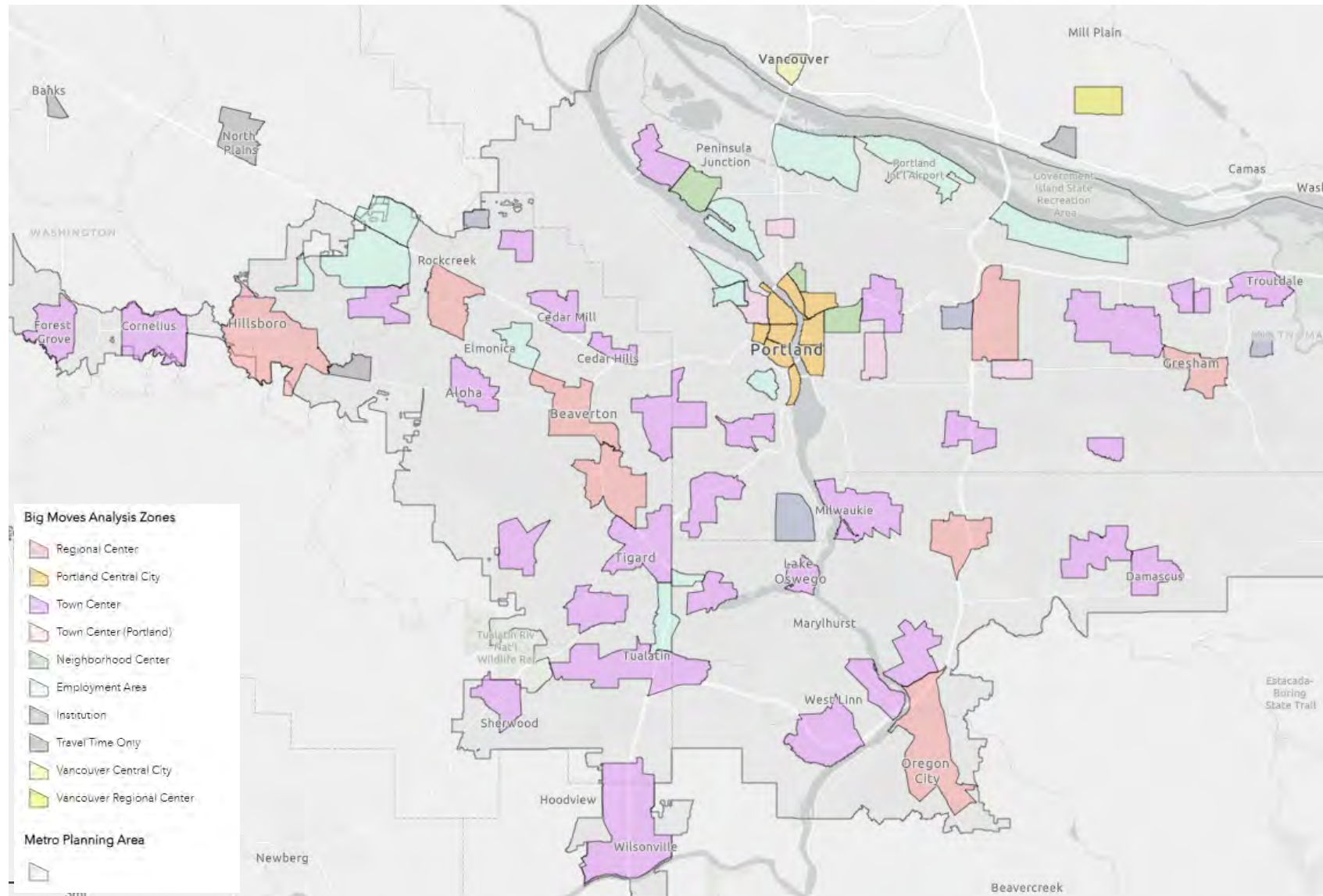
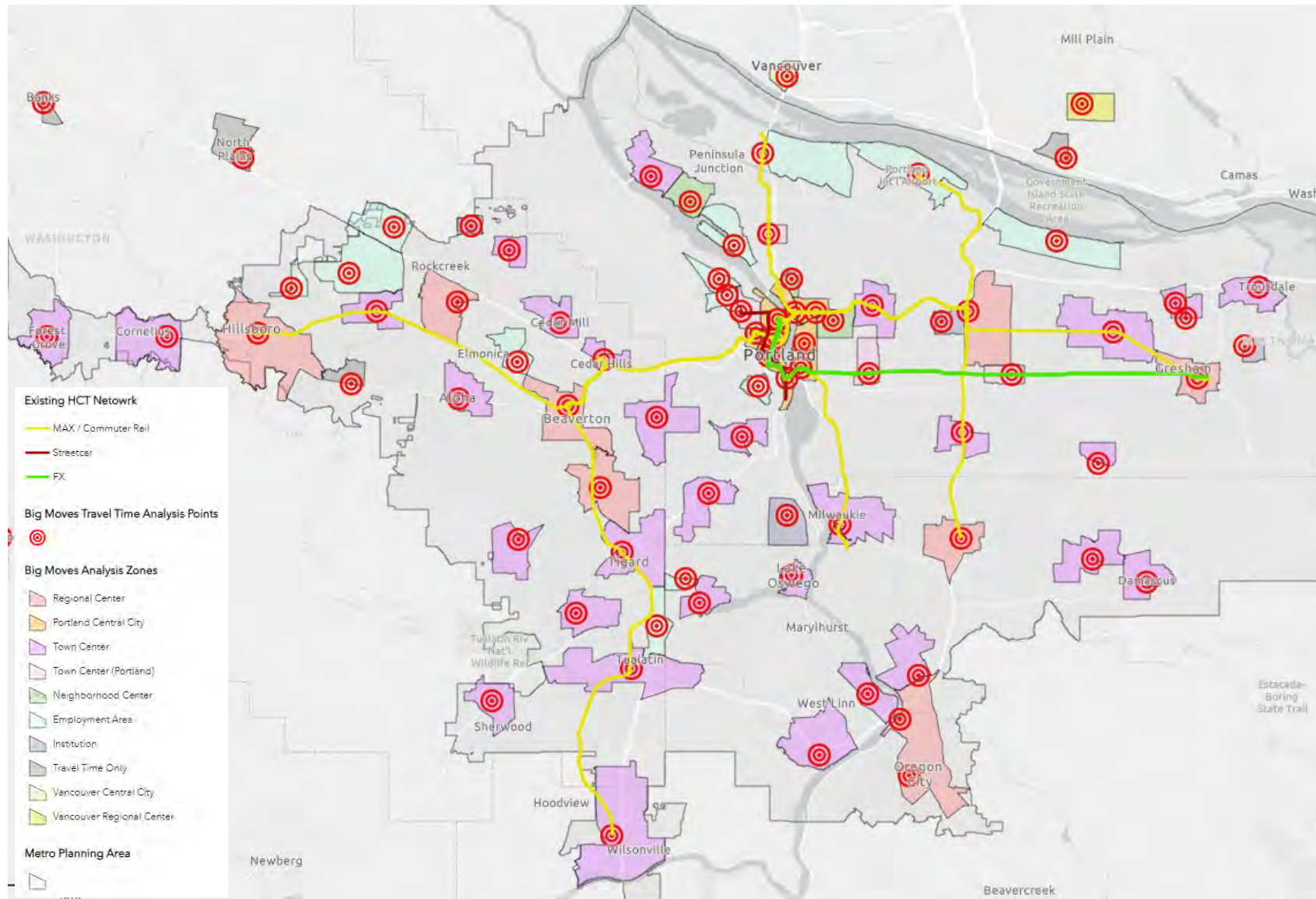


Figure 2 Map of Analysis Zones, Travel Time Analysis Points, and Existing HCT Network





### 3 ANALYSIS RESULTS

#### 3.1 Analysis Results

The analysis was utilized as a tool to further explore and understand possible additional connections identified through the Level 1 Screening analysis and identify additional connections to consider in the next phases of the evaluation (e.g., Level 2 and Readiness Evaluation). **Figure 3** illustrates travel demand and the transit to auto travel time ratios for a representative set of connections between regional and town centers, including the additional employment and major activity centers included in the analysis. Line color illustrates the travel time ratio. Line weight illustrates travel demand. Travel demand in this schematic representation reflects only the demand between the specific centers connected, not the total travel demand between multiple centers that might utilize a particular connection (aggregating that demand was beyond the scope of this analysis). This analysis also did not consider demand outside of these centers.

- Connections shown in **dark or lighter blue** have a transit travel time that is competitive with driving. These include many parts of the existing light rail network, such as:
  - Between Gresham, Gateway, Hollywood, and Lloyd District
  - Between Clackamas and Gateway
  - Between Downtown Portland, Beaverton, and HillsboroThey also include some centers connected by bus links today.
- Connections shown in **yellow, orange, and red** range from moderately less competitive by transit to significantly longer.

The regional high capacity transit system is intended to be the backbone of the transit system. As such, this analysis focuses on longer-distance connections between regional centers, major town centers, and central cities with the highest travel demand and person capacity needs, that have gaps in service quality identified through this analysis. Focusing on these types of connections, this analysis identified the potential to improve transit travel times for corridors such as the following:

- Between multiple town and regional centers in a generally southeast to northwest arc through the Hwy 217 corridor between south and north/northwest Washington County, including connections from southwest Clackamas County. Since WES commuter rail operates between Wilsonville, Tualatin, Tigard, and Beaverton, but only during AM and PM peak hours, there is a gap in HCT service quality.
- The Tualatin Valley (TV) Highway corridor, between Beaverton, Hillsboro, Cornelius, and Forest Grove. There is an active planning project in this corridor (TV Hwy BRT).
- The Beaverton-Hillsdale (BH) Highway corridor, between Beaverton, Raleigh Hills and Hillsdale
- The Hwy 99W corridor, including Tigard, Tualatin, and Southwest Portland
- In South Clackamas County, between Oregon City and Clackamas Town Center (CTC) as well as along the Hwy 99E and Hwy 43 corridors, and between CTC and both Milwaukie and Happy Valley
- Town centers in East Multnomah County, including Troutdale, Fairview, and Wood Village, both east-west and north-south
- Across the Columbia River to/from Clark County

- Between St. Johns and various parts of Multnomah County

**Figure 4** summarizes the connections identified above, along with existing HCT in these corridors, existing HCT priorities that were identified (in the 2009 HCT Plan/RTP or 2018 RTP), and active HCT planning efforts.

The analysis also highlights additional connections that are shorter in length or affect smaller or more isolated town centers. Examples of these types of gaps include:

- Employment areas north of Hillsboro, including along Evergreen Pkwy and Cornelius Pass Road.
- Town Centers in Washington County that are not along major travel corridors, such as Bethany, Murray/Scholls, and Sherwood.
- Columbia Corridor Employment Area in Multnomah County
- Between Midway and Gateway

However, these connections may be better addressed through other transit investments, such as frequent service fixed route, Better Bus enhancements, or enhanced connections to existing HCT service, and/or first and last mile improvements. These connections are likely outside the primary focus of the HCT system in connecting regional and major town centers and creating the backbone of the transit network.

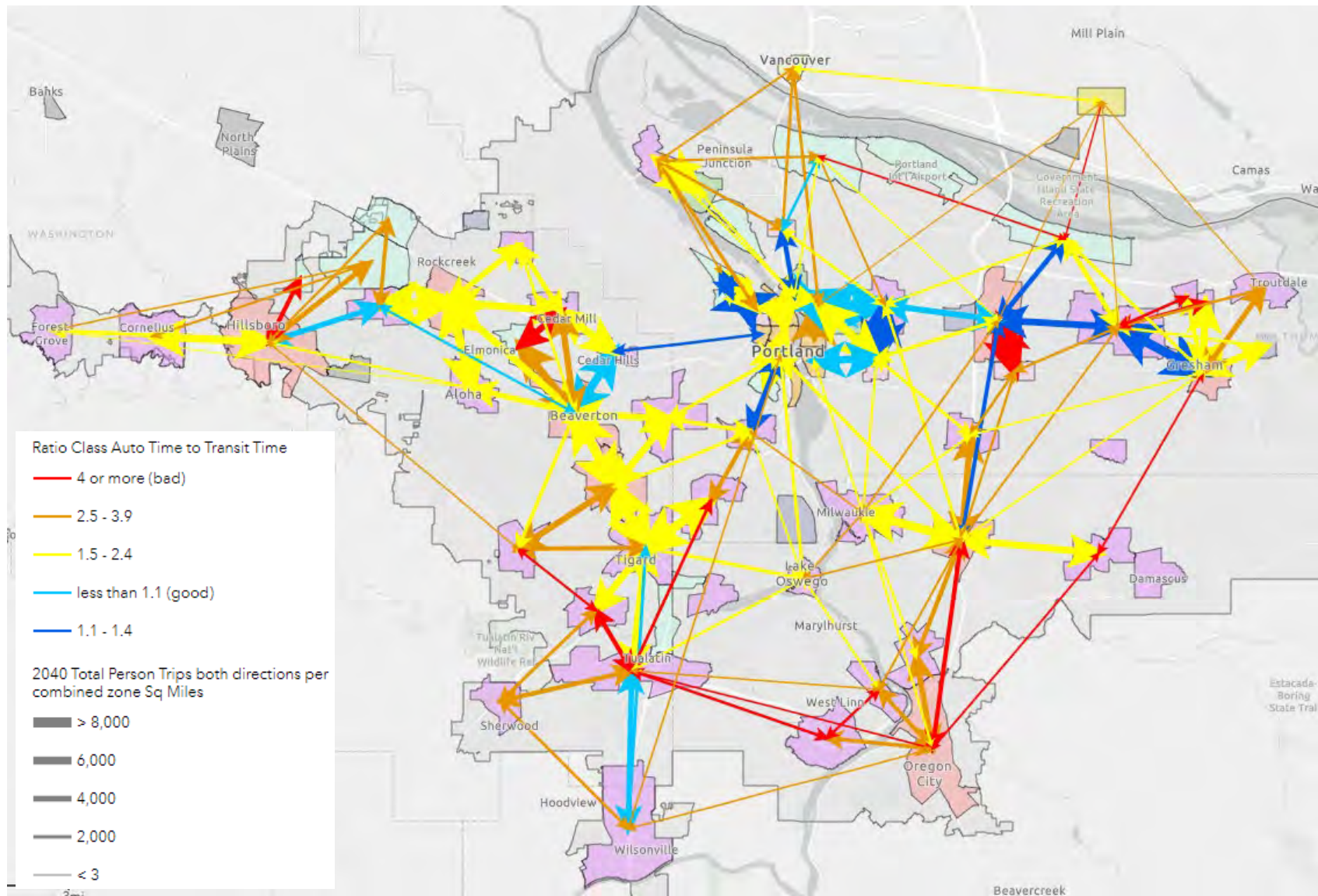


# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

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Figure 3 Illustration of Travel Demand and Travel Time Ratio for Regional Zone-to-Zone Connections



### 3.2 Summary of Potential System Gaps and Previous/Active HCT Planning

Figure 4 Summary of Identified Major HCT Service Quality Gaps and Previous/Active HCT Planning

Major Travel Corridor / Connections	Counties	Existing HCT	Previously Identified HCT Priorities	Active HCT Planning
<b>OR 217 Corridor (SW Clackamas Cty and SE Washington County – N/NW Washington County)</b>	Washington, Clackamas	WES Commuter Rail (Peak Hours Only)	<ul style="list-style-type: none"> <li>Upgrades to WES, Wilsonville-Beaverton</li> <li>Clackamas Town Center to Washington Square</li> <li>Oregon City to Washington Square</li> </ul>	-
<b>TV Hwy Corridor</b>	Washington	-	<ul style="list-style-type: none"> <li>TV Hwy BRT</li> </ul>	TV Hwy BRT Study
<b>US 26 Corridor (Sunset TC – Hillsboro)</b>	Washington	-	<ul style="list-style-type: none"> <li>US 26 Corridor, Sunset TC – Hillsboro</li> </ul>	-
<b>BH Hwy Corridor</b>	Washington, Multnomah	-	<ul style="list-style-type: none"> <li>2010 Mobility Corridors Atlas</li> </ul>	-
<b>Hwy 99W / I-5 Corridor</b>	Washington, Clackamas, Multnomah		<ul style="list-style-type: none"> <li>Southwest Corridor LRT</li> <li>Sherwood – King City – Tigard</li> </ul>	Southwest Corridor LRT Project
<b>Hwy 43 Corridor</b>	Clackamas, Multnomah		<ul style="list-style-type: none"> <li>Lake Oswego – Portland (Rapid Streetcar)</li> </ul>	-
<b>Hwy 99E Corridor</b>	Clackamas	MAX Orange Line (north of Park Ave)	<ul style="list-style-type: none"> <li>Milwaukie – Oregon City (Extension)</li> </ul>	-
<b>I-205 Corridor</b>	Clackamas		<ul style="list-style-type: none"> <li>CTC – Oregon City – Washington Square</li> </ul>	-
<b>Hwy 224/Sunnyside Road Corridor</b>	Clackamas	-	<ul style="list-style-type: none"> <li>CTC- Milwaukie – Washington Square</li> <li>CTC – Happy Valley</li> </ul>	-
<b>East Multnomah County (Troutdale / Fairview / Wood Village)</b>	Multnomah	MAX Blue Line (south of identified communities)	<ul style="list-style-type: none"> <li>LRT Extension, Gresham – Troutdale</li> </ul>	-
<b>St. Johns</b>	Multnomah	-	<ul style="list-style-type: none"> <li>2010 Mobility Corridors Atlas</li> </ul>	-
<b>I-5 (Interstate Bridge)</b>	Multnomah, Clark	-	<ul style="list-style-type: none"> <li>Interstate Bridge</li> </ul>	Interstate Bridge Replacement Project
<b>I-205 Corridor</b>	Multnomah, Clark	-	<ul style="list-style-type: none"> <li>2010 Mobility Corridors Atlas</li> </ul>	-

### 3.3 Portland Central City Analysis Results

Although the focus of this analysis is trips around the region, regional transit trips are affected by service quality through downtown Portland. **Figure 5** illustrates travel demand and the transit to auto travel time ratios for a representative set of connections within the Portland Central City. Although the transit is relatively time competitive for some trips, HCT system speed into and through the Central City is slow, which affects travel time competitiveness both for transit trips into downtown and for transit trips that cross the region through downtown Portland. **Figure 6** summarizes these connections along with existing HCT lines, existing HCT priorities that have been identified (in the 2009 HCT Plan/RTP or 2018 RTP), and active HCT planning efforts.

**Figure 5** Illustration of Travel Demand and Travel Time Ratio for Portland Central City

Figure 6 Summary of Identified Major HCT Service Quality Gaps and Previous/Active HCT Planning – Portland Central City

Major Travel Corridor / Connections	Counties	Existing HCT	Previously Identified HCT Priorities	Active HCT Planning
<b>MAX into downtown and through Portland Central City</b>	Multnomah	MAX	<ul style="list-style-type: none"> <li>Central City Tunnel Study</li> </ul>	
<b>Central Eastside (north-south and between Downtown)</b>	Multnomah	Streetcar	<ul style="list-style-type: none"> <li>2010 Mobility Corridors Atlas</li> </ul>	-
<b>Northwest Portland and parts of Downtown</b>	Multnomah	Streetcar	<ul style="list-style-type: none"> <li>2010 Mobility Corridors Atlas</li> </ul>	-

## 3.4 Next Steps

This analysis provides additional information about the potential HCT connections identified in the Level 1 HCT Screening and helps identify additional gaps in regional transit connections and/or service quality (travel time). This analysis was used to shape the set of HCT corridors that will be considered in the Readiness step of the HCT Evaluation.

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

## 12/8/22 Revised DRAFT Level 2 and Readiness Assessment Addendum

The following provides more details on the analysis conducted as part of the Level 2/Readiness Assessment for the HCT Strategy Update. This addendum is subject to revision as the evaluation approach and results are refined based on agency and stakeholder feedback.

### Level 2 Evaluation

Metric	Approach
Transit-Auto Travel Time Ratio	<p>Results represent the estimated ratio of transit travel time to personal car travel time in a given corridor. This ratio is calculated using Google Maps travel times during the same hour for all corridors (trip departing at approximately 3:00 PM on a Wednesday), average of both directions, including transfer time (if applicable).</p> <p>Corridors were scored relative to each other based on quartiles.</p>
Productivity and Cost Effectiveness	<ul style="list-style-type: none"><li>• <b>Boardings per revenue hour:</b> calculated based on 2019 fall quarter average ridership and revenue hours on TriMet lines associated with each corridor. For those corridors where no transit line exists today, the team used the following assumptions:<ul style="list-style-type: none"><li>○ Corridor 14, Central City Tunnel: productivity estimated using combined MAX Red and Blue line boardings and revenue hours. This project would affect corridor-wide travel times, and therefore the team used the corridor-wide ridership for this factor.</li><li>○ Corridor 8, Parkrose to Clark County: the team was not able to develop a ridership estimate for this route.</li></ul></li><li>• <b>Capital cost per rider:</b> this metric was estimated similarly to how it would be estimated as part of the FTA CIG program evaluation. It represents the <i>annualized federal capital cost per rider</i>. Because the HCT Strategy Update is not going to assign a specific mode to most corridors, the team developed a range of capital cost estimates based on BRT and LRT costs to feed into this metric. A low and high capital cost was generated for each corridor as follows:<ul style="list-style-type: none"><li>○ Low: using the per-mile capital cost for the Division BRT project, multiplied by the representative corridor length to yield a total corridor cost.</li><li>○ High: using the per-mile capital cost for the SW Corridor LRT project, multiplied by the representative corridor length to yield a total corridor cost.</li></ul>To align with CIG criteria, the cost was then annualized based on an average annualization factor of 30 years and 50 years for the low-end and high-end, respectively. These factors represent the average lifespan of all of the capital elements of a representative BRT and LRT project; some elements have shorter life spans (e.g., vehicles) while others have longer life spans (e.g.,</li></ul>

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

Metric	Approach
	<p>trackway). Finally, the project team assumed that each corridor would receive 50% federal funding, such that effectively half of the capital cost for each corridor contributes to the federalized share. This annualized federal cost share was then divided by the number of annual riders on transit in each corridor, based on 2019 ridership data. Exceptions to the above methodology include:</p> <ul style="list-style-type: none"> <li>○ Corridor 14- Central City Tunnel: assumed a single capital cost based on the capital cost developed as part of Metro’s Central City Transit Capacity Analysis project (2019).</li> <li>○ Corridor 18W- Montgomery Park to Hollywood: this corridor is assumed to be “streetcar.” The project team used the per-mile cost of the eastside streetcar project (from 2011), inflated using the construction cost index to 2022 dollars.</li> <li>○ Corridor 6- Beaverton to Oregon City: no existing service on this line. Used the estimate of new riders that was modeled as part of the TriMet Express and Limited Stop Study (2020) for this corridor.</li> <li>○ Corridors 3, 9, 10, 27 were assigned LRT as representative mode based on prior planning (2009 HCT Strategy) for purposes of scoring capital cost.</li> </ul>
Environmental Benefit	<p><b>GHG reduction benefit:</b> the methodology uses an assumed change in transit headways and research on transit elasticities to result in an estimated change in ridership based on implementing HCT, a corresponding reduction in VMT based on this increase in ridership, and in turn a reduction in GHG emissions on an annual basis in metric tons. No ridership modeling was conducted for this assessment, so the team used headway elasticities to generate a high-level estimate of change in ridership from implementing HCT in each corridor. Research shows that headway improvements are responsible for a substantial share of the ridership impact of HCT; however, the project team recognizes that this does not account for the other elements of BRT (such as improved stations, etc.) that also contribute to ridership increases. Additional assumptions for the GHG calculation are as follows:</p> <ul style="list-style-type: none"> <li>• Used existing weekday transit ridership, average trip length, and average headways for each corridor based on 2019 TriMet data</li> <li>• Assumed that corridors improved to an average of 12-minute headways all day, based on Division Transit headways.</li> <li>• Headway elasticity is estimated at 0.5 per Victoria Transport Policy Institute (VTPI), meaning every 10% improvement in headway results in a 5% increase in ridership. For some corridors, an estimate of future ridership already exists (e.g., Central City Tunnel) and was used in place of the headway elasticity method.</li> <li>• The assumed increase in ridership was multiplied by the average transit trip length to generate an average increase in transit person miles travelled (PMT).</li> <li>• The increased transit PMT was assumed to result in a corresponding decrease in personal vehicle VMT; however, this VMT change was discounted by 50% to account for induced demand (based on research findings). When people</li> </ul>



## Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

Metric	Approach
	<p>shift to transit from driving, some increase in driving occurs as a result of newly freed up roadway space.</p> <ul style="list-style-type: none"> <li>The reduction in VMT was then converted to a reduction in GHG, based on the average fleet efficiency (23 miles per gallon) and average GHG content of gasoline (9 kg/gallon) in 2020 to yield an annual reduction in GHG emissions.</li> </ul>
Equity Benefit	<ul style="list-style-type: none"> <li><b>Key destinations within a ½ mile of each corridor:</b> this metric looks at the average number of key destinations within ½ mile of each corridor. Key destinations include city halls, community centers, hospitals, libraries, and schools. The total was normalized using corridor length.</li> <li><b>Share of marginalized populations within ½ mile of each corridor:</b> this metric uses Metro equity focus areas based on Census tracts to report the percentage of the population that are marginalized populations in each corridor. Equity focus areas are Census tracts that represent communities where the rate of Black, Indigenous, or People of Color (BIPOC), people with limited English proficiency (LEP), or people with low income (LI) is greater than the regional average. Additionally, the density (persons per acre) of one or more of these populations must be double the regional average.</li> </ul>
Land Use Supportiveness	<ul style="list-style-type: none"> <li><b>Population density:</b> population density, per square mile, within ½ mile of each corridor based on 2040 projections from the Metro model by TAZ. Corridors with a population density above 7,000 persons per square mile are considered most supportive of HCT.</li> <li><b>Employment density:</b> number of jobs, per square mile, within ½ mile of corridor based on 2040 projections from the Metro model by TAZ.</li> <li><b>Number of affordable housing units:</b> number of units, per linear mile of corridor, within ½ mile of each corridor.</li> <li><b>Presence of higher education:</b> scored based on the presence of one or more higher education institutions within ½ mile of each corridor.</li> </ul>

### Readiness Criteria

Metric	Approach
Documented Support	<ul style="list-style-type: none"> <li><b>Community support:</b> this was scored based on whether HCT or similar investment capital project is identified in local TSPs or related documents.</li> <li><b>Local champion/local funding:</b> <i>this criterion requires further discussion and is not scored at this time.</i></li> <li><b>Transit-Supportive Policies:</b> this criterion looks at local jurisdiction policies that support HCT and align with the types of policies identified through the CIG program: <ul style="list-style-type: none"> <li>Local jurisdiction anti-displacement policies</li> <li>Local jurisdiction policies that align with CIG funding criteria, including transit-supportive population and employment policies, housing policies, etc.</li> </ul> </li> </ul>

# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

	<ul style="list-style-type: none"> <li>• <b>Work completed to-date:</b> scored based on whether local jurisdictions and partners have performed work to advance a given corridor, beyond inclusion in long-range plans. This may include additional studies, projects, investments, or recent planning work supportive of advancing a given corridor.</li> <li>• <b>Tolling:</b> <i>this measure requires further discussion and is not scored at this time. The intent of this measure is to identify HCT corridors that overlap with tolling corridors.</i></li> </ul>
Physical Conditions in the Corridor	<ul style="list-style-type: none"> <li>• <b>“Physical space”:</b> the project team determined the share of each representative corridor that is less than or equal to three lanes or greater than three lanes (four or more lanes), in addition to the share of the corridor that is railroad ROW. This criterion provides a high level understanding of how constrained a given corridor is; corridors that are predominantly along roads that are less than three lanes would likely require greater capital investments and/or ROW acquisition in order to achieve transit priority lanes or separate guideways, and in turn, may have more complex planning and design processes that require more time. Corridors that are predominantly along roads that are four or more lanes wide potentially have more opportunity to re-purpose existing roadway space for transit priority lanes/separate guideways, and in turn, may require less complex planning and design processes to advance.</li> <li>• <b>Miles of sidewalks and miles of bicycle facility within ½ mile of each corridor:</b> these metrics look at the density of the existing cycling and walking networks as a way of understanding the robustness of the first-/last-mile network in each corridor. These metrics are normalized by the length of each corridor. Corridors were scored based on whether they are higher or lower than the median across all corridors.</li> </ul>
Implementation Complexity	<ul style="list-style-type: none"> <li>• <b>Length of corridor:</b> based on TriMet experience, lengthier HCT corridors become more complex and take more time to implement. Shorter corridors were assigned a higher score.</li> <li>• <b>Freight corridor:</b> this criterion assigns a score based on whether a corridor is a designated freight corridor or not. Corridors having a freight designation are scored lower, the need maintain freight mobility can present obstacles to developing HCT.</li> </ul>

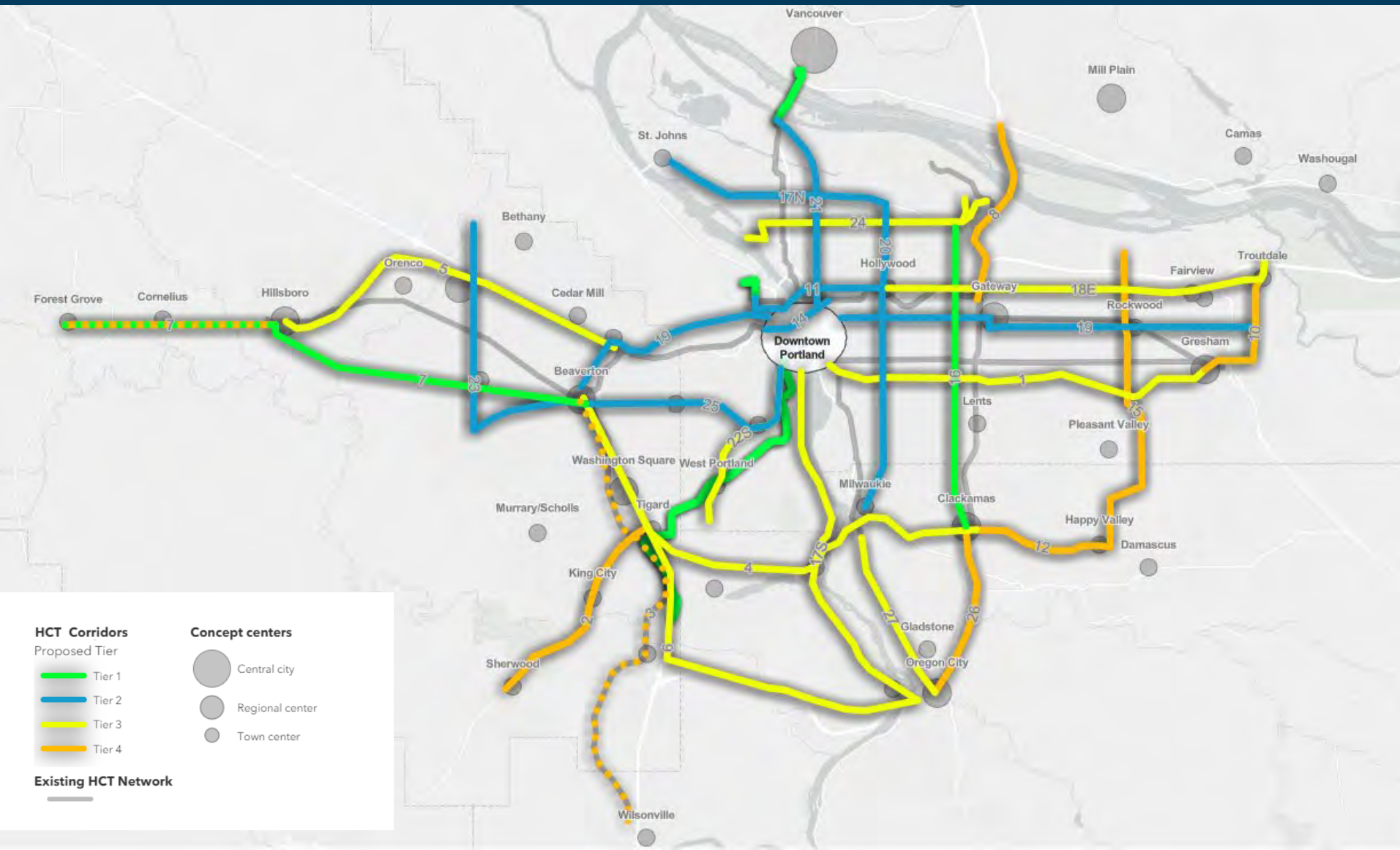
# Exhibit C Resolution No. 23-5343 - DRAFT 2023 HCT Strategy

Map ID	Potential Project and Representative Corridor	Mobility	Productivity and Cost Effectiveness		Environmental Benefit	Equity Benefit		Land Use Supportiveness and Market Potential				Level 2 Evaluation Total Score	Documented Support			Physical Conditions in the Corridor			Implementation Complexity		Readiness Total Score	Total Score	Proposed Tier	Geography / Jurisdiction
		Transit Travel Time to Car Travel Time Ratio	Boardings per Revenue Hour	Capital Cost per Rider	GHG Reduction Benefit, Annual CO2e	Key Destinations within 1/2 Mile, Normalized	Share of Marginalized Populations within 1/2 Mile	Population Density	Employment Density	Number of Affordable Housing Units, Normalized	Presence of Higher Education		Community Support	Transit Supportive Land Use Policies	Work completed to-date	Physical Space	Miles of Sidewalks within 1/2 mile of Corridor, Normalized	Miles of street with Bike Facility Present within 1/2 mile of Corridor, Normalized	Corridor Length	Freight Corridor				
11	NW Lovejoy to Hollywood via Broadway/Weidler	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Portland/Multnomah
14	Central City Tunnel	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Portland/Regional	
19	Beaverton - Portland - Gresham via Burnside	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Washington/Portland/Multnomah	
21	Hayden Island - Downtown Portland via MLK	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Portland	
23	Bethany to Beaverton via Farmington/SW 185th	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Washington	
25	Beaverton to Portland via Hwy 10 (BH Hwy)	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Washington/Multnomah	
22N	St Johns - Downtown Portland via Vancouver/Williams, Rosa Parks	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Portland	
20	St. Johns - Milwaukie via Cesar Chavez	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	2	Portland	
1	Portland to Gresham in the vicinity of Powell Corridor	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Multnomah	
22S	PCC Sylvania to Downtown Portland via Capitol Hwy	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Portland	
5	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Washington	
24	Swan Island to Parkrose	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Portland	
17S	Oregon City to Downtown Portland via Hwy 43	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Clackamas/Multnomah	
18E	Hollywood to Troutdale	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Portland/Multnomah	
27	Park Ave MAX Station to Oregon City via the McLoughlin Corridor	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Clackamas	
6	Beaverton - Tigard - Tualatin - Oregon City	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Clackamas/Washington	
4	Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	3	Clackamas/Washington	
9	Hillsboro to Forest Grove	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Washington	
10	Gresham to Troutdale	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Multnomah	
2	Tigard to Sherwood via Hwy 99W Corridor	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Washington	
3	Beaverton to Wilsonville in the vicinity of WES	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Washington	
15	Happy Valley to Columbia Corridor via Pleasant Valley	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Multnomah/Clackamas	
12	Clackamas Town Center to Damascas	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Clackamas	
26	Clackamas Town Center to Oregon City	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Clackamas	
8	Gateway to Clark County in the vicinity of I-205 Corridor	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	4	Multnomah/Clark	



Proposed Tier	Geography / Jurisdiction
2	Portland/Multnomah
2	Portland/Regional
2	Washington/Portland/Multnomah
2	Portland
2	Washington
2	Washington/Multnomah
2	Portland
3	Multnomah
3	Portland
3	Washington
3	Portland
3	Clackamas/Multnomah
3	Portland/Multnomah
3	Clackamas
3	Clackamas/Washington
3	Clackamas/Washington
4	Washington
4	Multnomah
4	Washington
4	Washington
4	Multnomah/Clackamas
4	Clackamas
4	Clackamas
4	Multnomah/Clark

# Corridor Tiers



# **Appendix F**

## **Corridor- level Needs Matrix**

In development, forthcoming...





# Oregon

Tina Kotek, Governor

## Department of Transportation

Transportation Region 1  
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Transportation Policy Alternatives Committee  
600 NE Grand Ave  
Portland OR, 97232

May 3, 2023

RE: Pricing policies in draft 2023 RTP update

Dear Chair Kloster and TPAC members,

Thank you for the opportunity to comment on the draft policies proposed in Chapter 3 of the 2023 Regional Transportation Plan (RTP). This letter summarizes remaining requested changes from the Oregon Department of Transportation (ODOT) on the **Pricing Policies** proposed at the April 19 TPAC MTAC Workshop. These edits are consistent with prior ODOT comments and reflect a need for regional agency coordination to achieve desired outcomes.

### Pricing Policies

Oregon Revised Statute (ORS) Chapter 383 establishes the Oregon Transportation Commission (OTC) as the body to review and approve tolls for state highways. The statute lists considerations for the OTC when setting rules for the process to establish tolls. ORS 383 also establishes and sets parameters for the Toll Program Fund. Federal requirements, approvals, and a detailed investment grade financial analysis need to be completed before rates are set for toll projects.

Please make the following edits to Metro's latest draft policies for consistency with state statute on toll authority and toll revenue:

*Pricing Policy 1: Use pricing in coordination with other system investments to achieve outcomes such as improve reliability and efficiency of the transportation network, reduce VMT per capita, and increase transportation options.*

*Pricing Policy 1/Action 1. Set rates for pricing ~~at a level that will manage congestion,~~ considerate of project goals, such as ~~reduce~~ VMT reduction per capita, and improved reliability on the priced facilities and in areas affected by diversion. ~~HB 3055~~ ORS 383 delegates authority to the Oregon Transportation Commission (OTC) to set pricing rates for state highways.*

*Pricing Policy 1/Action 3: Consider reinvesting ~~Reinvest~~ a portion of revenues from pricing ~~into modal~~ in ways that support multimodal alternatives both on and off the priced facility that encourage mode shift and VMT reduction per capita consistent with Federal and State law. Examples include, but are not limited to, transit improvements, bicycle and pedestrian improvements, and improvements to local circulation.*

*Pricing Policy 2/Action 7. Consider reinvesting ~~Reinvest~~ a portion of revenues from pricing into communities with high proportions of people with low-income and people of color, and/or in Equity Focus Areas, consistent with Federal and State law. Use of these revenues should meet the transportation-related needs identified by the equity communities and people most impacted. Examples*

*include commuter credits and free or discounted transit passes, or improved transit facilities, stops, passenger amenities, and transit priority treatments.*

*Policy 3/Action 5. Consider reinvesting ~~Reinvest~~ a portion of revenues on the priced system and in areas affected by diversion to address safety issues caused by pricing programs and projects consistent with Federal and State law. For example, through investments in transit, bike, and pedestrian improvements, or other investments in know crash reductions factors.*

*Policy 4/Action 6. Consider reinvesting ~~Reinvest~~ a portion of revenues into areas affected by diversion caused by pricing programs and projects consistent with Federal and State law.*

*Policy 5/Action 3. ~~Reinvest a portion of revenues from pricing into modal alternatives both on and off the priced facility consistent with Federal and State law,~~ Coordinate system improvements with public transportation agencies to work at a regional level to reduce overall emissions by encouraging mode shift and VMT per capita reduction, including transit improvements as well as well as bicycle and pedestrian improvements and improvements to local circulation.*

Sincerely,

A handwritten signature in black ink, appearing to be 'Chris Ford', with a long horizontal line extending to the right.

Chris Ford  
Policy & Development Manager  
ODOT Region 1



# Oregon

Tina Kotek, Governor

## Department of Transportation

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May 3, 2023

RE: Motor vehicle and auxiliary Lane policies in draft 2023 RTP update

Dear Chair Kloster and TPAC members,

I want to express appreciation to Metro staff for their responsiveness to ODOT's letter on the March 8 version of draft Chapter 3 of the 2023 Regional Transportation Plan (RTP) update. The edits on Motor Vehicle Network, Pricing and Mobility policy in the "4/11/23 Track Changes" version largely addressed ODOT's concerns.

The 4/11 version also contains new language on the Motor Vehicle Network, however, with no analysis of the possible effects of the proposed new policies to the system and the RTP goals of economy, mobility, safety, equity and climate. This letter responds to those unanticipated changes by reviewing the intent and application of state and regional policies on the throughway system, and requests specific edits to Metro's proposed language.

Given the substantive and unexpected nature of the Motor Vehicle proposals, please view this letter as an initial response. Additional or adjusted responses may be forthcoming. ODOT is also preparing materials on auxiliary lanes to be shared with TPAC and JPACT soon.

### STATE AND REGIONAL THROUGHWAY POLICIES

The ultimate purpose of the planned regional motor vehicle network is to support the 2040 Growth Concept, which identifies the locations, types and intensities of land use in order to maintain the urban growth boundary even as the region grows its population and economy. An adequate, multi-modal transportation system is necessary to support this planned development, as reflected in Division 12 of the OARs dedicated to transportation planning and applied in TSPs. The regional throughway system must also accommodate statewide and interstate travel needs, as acknowledged in the RTP.

ODOT's throughway investments are guided by Oregon Highway Plan (OHP) Policy 1G: *"It is the policy of the State of Oregon to maintain highway performance and improve safety by improving system efficiency and management before adding capacity."* Policy 1G lists measures to maintain performance and improve safety in order of priority: (1) protect the existing system, (2) improve efficiency and capacity, (3) add capacity, and (4) add new facilities.

ODOT also adheres to and supports the longstanding RTP policies on the build out and operation of the planned regional motor vehicle network. These policies focus on a network that is efficient and effective rather than expansive. The direction in the existing RTP motor vehicle policies is to:

- Preserve and maintain...in a manner that improves safety, security and resiliency (Policy 1)
- Actively manage and optimize capacity (Policy 3)
- Strategically expand....to maintain mobility and accessibility and improve reliability (Policy 5)

- Address safety needs...[through] implementation of cost-effective crash reduction engineering measures (Policy 10)

Policy 12 then restates OHP Policy 1G's measures to protect the existing system, reinforcing that is the first approach.

These measures to protect the existing system are not always adequate to *maintain highway performance and improve safety* (OHP) or *preserve, maintain, optimize and improve safety* (RTP). The OHP directs ODOT to then apply measures to improve efficiency and capacity through "minor improvements to existing highway facilities such as widening highway shoulders or adding auxiliary lane." The existing RTP reinforces this approach in Policy 5: "Strategically expand the region's throughway network up to six travel lanes plus auxiliary lanes between interchanges..." Neither the OHP nor the existing RTP define auxiliary lanes as inherently resulting in new motor vehicle capacity. Instead the existing RTP is in alignment with the OHP in its policy that auxiliary lanes are a measure to *preserve, maintain, optimize and improve* the network.

#### *Climate Friendly and Equity Communities*

In 2022, the state Land Conservation and Development Commission adopted new and amended rules known as Climate Friendly and Equity Communities (CFEC). Among other changes, the new OAR 660-012-0830 calls for enhanced review of select roadway projects, listing facility types as well as a set of exceptions. Metro has proposed RTP updates that would link the definition of capacity to those select roadway projects. Metro's January 25, 2023, letter to DLCD acknowledges that "Metro considers projects in an adopted RTP or TSP exempt from additional review as described by this section [0830]," and Metro staff confirmed that during the April 19 MTAC-TPAC workshop.

## POLICY APPLICATION AND USE OF AUXILIARY LANES

ODOT's approach to *preserve, maintain, optimize and improve safety* in the Portland region has focused entirely on 1G measures 1 (protect) and 2 (improve). ODOT has no planned or anticipated projects that would expand beyond the planned system of six general purpose travel lanes on throughways. The regional population jumped by around 12% between 2010 and 2020 (266,403 new residents in the Portland-Vancouver-Hillsboro MSA) and projections show the Metro area adding substantial population growth by 2040, up to 3 million residents up from 2.5 million today. Even among that growth, ODOT has been able to maintain and improve the throughway system in part by utilizing data-driven strategic investments such as intelligent transportation systems (ITS), HOV lanes, bus on shoulder and soon congestion pricing.

Those measures are not always adequate or appropriate, however. In accordance with state and regional policy, ODOT then considers the application of auxiliary lanes in order to actively manage and optimize capacity of the existing network. An auxiliary lane is an additional lane segment designed to effectively manage and restore existing capacity currently degraded by operational performance. An auxiliary lane is expected to **restore existing system capacity** caused by poor operations and address existing and future safety issues related to unique geometric and operational factors (e.g., intersections, grades, ramp spacing, and queuing build-up). These are locations where ODOT does not expect a statistically significant increase in vehicular capacity to the adjacent roadway system.

In other words, the purpose of freeway auxiliary lanes is to optimize the existing capacity of six through lanes, by providing adequate space for merging, diverging, and weaving traffic without negatively impacting the capacity of the adjacent through lanes that are moving longer distance statewide and regional trips. A freeway auxiliary lane also greatly improves safety (documented through years of studies) by providing the space needed for these movements. Even with auxiliary lanes, the through capacity of the facility does not increase as the number of lanes entering the auxiliary lane section is the same as the number of lanes leaving (3 through lanes in each direction).

Auxiliary lanes can also provide another function, which is to accommodate local trips in constrained locations such as river crossings. This is not a desired function of throughways, but can be the most cost and resource efficient and least impactful option to maintain mobility and accessibility. For example, local traffic uses I-5 to cross the Tualatin River because there is no bridge on the local roadway network at SW 65<sup>th</sup> Avenue. These local trips created congestion on the throughway, impacting regional, statewide and interstate travel. Rather than a city or county constructing a new bridge, the more efficient option for the network was to add an auxiliary lane to I-5, thereby restoring the capacity of the throughway.

Similarly, auxiliary lanes can be used to keep regional trips on the throughway system instead of diverting them to local roadways. These system to system interchange connections currently exist on I-5 between OR-217 and I-205, and is the impetus for the uncommon application of auxiliary lanes that extend beyond one interchange. The intention is not to “add capacity” to the six through lanes, it is rather to serve trips that are traveling from one interchange to another and don’t want to be on the mainline Interstate. In these locations, trips in auxiliary lanes are not seeking through trips in general travel lanes on I-5, but are either local trips trying to cross a river, or regional trips seeking to get from Highway 217 to I-205. Forcing these trips to merge into the through lanes of I-5 in the past created safety and operational impacts.

To better explain the purpose and use of auxiliary lanes, here are answers to some likely questions:

#### *How does ODOT identify and plan auxiliary lanes?*

As explained above, in line with OHP Policy 1G and RTP Motor Vehicle Policy 12, ODOT seeks to first protect the existing system, but may need to also improve the system operations to address bottlenecks and restore capacity of the existing system. The process by which ODOT pursues an auxiliary lane option is to a) apply the regional mobility policy to identify deficiencies on the throughway system and b) to undertake an analysis of system improvement options such as those in the Corridor Bottleneck Operations Study (CBOS).

#### *What conditions degrade throughway capacity?*

The proposed regional mobility policy will be an improved tool to identify locations where an undeniable need exists in the throughway system, using a speed threshold of 35 mph over 4+ hours, to flag locations where congestion has degraded operations. The main causes of these conditions are high volumes and interchange friction.

High volumes are caused by local trips using the throughway network, such as in locations where limited roadway networks are available, substandard interchange spacing, and areas around high demand land uses. Interchange friction occurs where closely spaced interchanges necessitate merging and weaving reduce that capacity, causing crashes and delays. This condition reduces the efficiency of the existing through lanes and forces local traffic to make longer trips on the local system to get where they need to go and avoid freeway congestion – in other words, diversion.

ODOT's highway design manual has interchange spacing standards—a minimum of one mile in urban areas and three miles in rural areas—to minimize this type of friction and maintain safe highway operations and mobility. These standards can be at odds with accessibility demands in dense urban areas, however. In the case of multiple closely spaced interchanges with high demand, or system to system or interstate to interstate connections with local interchanges in between, auxiliary lanes can serve as a strategic intervention to “maintain mobility and accessibility” as called for in RTP Policy 5.

#### *What are the consequences of not maintaining throughway capacity?*

The 2040 Growth Concept relies on the planned transportation network, including the throughway system as well as other modes such as transit, walking and biking. Degraded operations on throughways decreases transportation efficiency for regional, statewide, and interstate travel, and may impact the region's planned land use development. It also diverts regional travel to local roadways which support the bulk of transit, bicycle and pedestrian trips, creating challenges for the safe and effective use of those modes. In other words, when the throughway system is not operating safely and effectively as planned, all travel modes are impacted.

A roadway network that is not functioning as planned also has economic impacts, running contrary to Regional Freight Network policy 2 which says, “Manage the region's multimodal freight network to reduce delay, increase reliability and efficiency, improve safety and provide shipping choices.” Delayed and inefficient freight has effects on statewide and regional economic activities that need to get goods and services to locations throughout the Metro area.

#### *What are alternatives to auxiliary lanes?*

As called for by OHP Policy 1G and RTP Policy 12, the prioritized options for protecting throughways are system and demand management strategies. Examples of these include TSMO and ITS investments and land use regulations such as an interchange area management plan (IAMP). ODOT does not operate transit yet seeks to provide transit facilities when possible—such as our Bus on Shoulder programs with C-TRAN and SMART—and participates in multi-agency planning efforts such as the Southwest Corridor Plan, Interstate Bridge Replacement light rail, and the 82<sup>nd</sup> Avenue bus rapid transit project.

When these options are not effective, ODOT will seek to improve the existing facilities. There are options beyond auxiliary lanes. One option is a collector-distributor, or CD road, that runs parallel to but separate from the general travel lanes. ODOT is currently constructing a CD road along OR-217 between Allen Boulevard and Denney Road, and another exists along I-205 between Division Street and Powell Boulevard. The CD road approach takes up more land and is more expensive than auxiliary lanes.

Another option is to close interchanges to reduce friction between close interchanges and “restore” throughway operations. In some areas, this option is feasible, for example, ODOT's most recent CBOS report identifies possible closure locations along I-405 in downtown Portland. In many areas, however, close interchanges result in longer, less efficient trips and reduced accessibility to 2040 centers.

#### *When does an auxiliary lane become a general purpose travel lane?*

OAR 660-012-0830 calls for enhanced review of new or extended auxiliary lanes with a total length of one-half mile or more, but also exempts “modifications necessary to address safety needs.” ODOT supports Metro's efforts to link RTP capacity definitions to 0830. The pertinent discussion, however, appears to be determining when an auxiliary lane restores capacity and/or improves safety, and when does it add capacity beyond the planned or existing system.

As noted above, some auxiliary lanes address local trips diverted onto the throughway system (as on I-5 at the Tualatin River) or system to system interchange connections (as on I-5 between OR-217 and I-205). These auxiliary lanes do increase the effective capacity at the location of the auxiliary lane by



improving flow efficiency that in turn improves the effective capacity reductions created by congestion. However, while the traffic flow and throughput at the location of an auxiliary lane increase, the effect does not mean there is additional capacity above the maximum capacity of the existing through general purpose lanes – as if there are three lanes approaching and three leaving, there is no additional through lane capacity than what those lanes can provide.

In addition, ODOT has just updated its Analysis Procedures Manual, which has a new sketch analysis tool to evaluate all types of auxiliary lanes (more than just freeways, but it includes freeways too). This tool can help identify situations where more discussion is needed. The analysis process will help document the length that is needed to accommodate the various planned volumes just for a weaving conflict area. This means that if the proposed length of the auxiliary lane is less than required to fully and safely handle the merging, diverging, and weaving traffic then it is only meeting the operational and safety need and not adding through capacity benefit. This analysis will help determine the point where a proposed improvement may act more like a system capacity increase than for addressing point operation and safety. This new section (Appendix 10A) was published and now is available on the APM web site as of 4/6/23: [https://www.oregon.gov/odot/Planning/Documents/APMv2\\_App10A.pdf](https://www.oregon.gov/odot/Planning/Documents/APMv2_App10A.pdf)

## REQUESTED CHANGES TO METRO STAFF PROPOSALS

The 4/11 draft included substantial edits from Metro not previously discussed, and we wish Metro staff had engaged ODOT directly on this possibility. Extensive changes were proposed to the Glossary as well as the policies and text of the Motor Vehicle Network section.

ODOT's general responses to these proposals are:

- We support the RTP utilizing OAR 660-012-0830 for definitions and process.
- The RTP needs to remain factual and not become editorial in the absence of facts, data or analysis.
- Major changes to policy should be requested and discussed by TPAC and JPACT as the MPO policy boards, and not initiated staff without analysis or prior discussion.
- The regional transportation network must nimbly adjust to create improvements in operations and mobility that advance the RTP goals of equity, climate, safety, mobility and economic development. Being overly prescriptive in a way that limits operational responsiveness suggests a lack of trust in the cities, counties, and transportation agencies operating the regional system.

### *Glossary*

Metro staff updated several definitions related to motor vehicle network. Some of the edits directly mirror OAR 660-012-0830, while other changes add value based language that may not be factual.

- **ODOT Response #1:** Linking RTP definitions to OARs is appropriate and helpful, ensuring policy consistency among the OAR, OTP and RTP when following both state regulations and the regional plan. ODOT recommends citing the OAR, in case it is revised, to ensure continued linkage.

The Auxiliary lane definition was updated to include OAR 0830 language. Metro staff also added, “By design, auxiliary lanes add additional motor vehicle capacity and even more capacity is added if auxiliary lanes extend through an interchange.”

- **ODOT Response #2:** Adding language above and beyond 0830 goes against the linkage with state regulations and creates a situation out of sync with the rest of the state. In addition, the statement, “by design, auxiliary lanes add additional motor vehicle capacity” is problematic and not inherently

true, as thoroughly spelled out in this letter. This language fails to account for the type of capacity and the operational impacts to through traffic without such improvements. ODOT requests a simplified definition that cites the OAR:

*Consistent with OAR 660-012-0830, auxiliary lane means the portion of the roadway adjoining the traveled way for speed change, turning, weaving, truck climbing, maneuvering of entering and leaving traffic, and other purposes supplementary to through-traffic movement.*

The Capacity definition was updated to use OAR 0830 language that defines proposed roadway projects that must undergo enhanced review, in Section (1)(a). The glossary however does not cite the exceptions to this review also included in 0830, in Section (1)(b).

- **ODOT Response #3:** ODOT supports tying the definition of capacity to OAR 0830, Section 1, which links together state policy with the regional planning and CMP process. To be fully consistent with state policy, however, the glossary must also cite the exceptions listed for safety, multi-modal and operational improvements. ODOT requests the following addition with the full list of exceptions:

*“...OAR 660-012-0830 includes exceptions for enhanced review for certain motor vehicle facilities, which are therefore exempt from this definition of capacity: (A) Changes expected to have a capital cost of less than \$5 million; (B) Changes that reallocate or dedicate right of way to provide more space for pedestrian, bicycle, transit, or high-occupancy vehicle facilities; (C) Facilities with no more than one general purpose travel lane in each direction, with or without one turn lane; (D) Changes to intersections that do not increase the number of lanes, including implementation of a roundabout; (E) Access management, including the addition or extension of medians; (F) Modifications necessary to address safety needs; or (G) Operational changes, including changes to signals, signage, striping, surfacing, or intelligent transportation systems.”*

The Capacity Expansion definition was substantially updated.

**ODOT Response #4:** This is an unneeded entry in the RTP Glossary:

- The term “capacity expansion” does not appear otherwise in draft Chapter 3.
- The addition of “typically adding a general-purpose through lane or auxiliary lane” is unnecessary given more specific definition of Capacity now included.
- The added language starting with “Section 3.3.4...” belongs in the body of Chapter 3 and not a Glossary of Definitions. In fact, it repeats the text at the start of Section 3.3.4.
- A reference to the Functional Plan is not appropriate, as this policy plan directly influences that implementation ordinance, not vice versa. In other words, it creates a circular reference.

Given the above, ODOT requests deletion of this definition. Barring that, ODOT requests simplification along the lines of, *“Constructed or operational improvements to the regional motor vehicle network that increase the capacity of the system, as defined in OAR 660-012-0830. See Sections 3.3.3 and 3.3.4 for related policies and procedures.”*

## Policies

Metro staff updated several Motor Vehicle Network policies and added a new one.

Policy 3 was altered to include the phrase, “to maintain mobility and accessibility and improve reliability” which was removed from Policy 5. Policy 5 was adjusted to change “strategically expand” to “complete” and clarifies that the planned throughway network is up to six lanes, and now references the 2040 Growth Concept. Metro also removed auxiliary lanes and the reference to “regional, statewide, and interstate travel” which does appear in Policy 3.

- **ODOT Response #5A:** Moving the “maintain” language to Policy 3 is supportive of TSMO strategies. The change highlights the shared desire to make the best use of the network, with strategic investments necessary for active optimization. ODOT also supports the reference to the 2040 Growth Concept in Policy 5.
- **ODOT Response #5B:** Removing “auxiliary lanes where appropriate” is a major policy shift not raised at any other point in the RTP update process over the past year. As explained earlier in this letter, “auxiliary lanes where appropriate” are key to optimizing capacity on the planned throughway system. Degraded operations due to congestion and safety problems means that there are bottlenecks where throughput effectively drops below three travel lanes, and investments are needed to restore capacity as planned and anticipated in the 2040 Growth Concept and in TSPs, and to support the RTP goals. ODOT requests that phrase be restored to Policy 5, or updated to “and auxiliary lanes to restore throughway capacity”.

Metro struck proposed Policy 6 and replaced it with a rewritten Policy 12. The newly proposed Policy 6 keeps the list of “protect” measures from OHP Policy 1G, now specifically calls out auxiliary lanes over one-half mile, and replaces “adequately address throughway deficiencies and bottlenecks” with “adequately address identified needs consistent with the Congestion Management Process and Regional Mobility Policy.” Metro staff have also proposed a new auxiliary lane policy, without prior discussion and not based on JPACT direction or system analysis.

- **ODOT Response #6A:** ODOT appreciates Metro restoring “the planned system” to the policy language, in both Policy 6 and 12, and linking Policy 6 to the Regional Mobility Policy, as requested.
- **ODOT Response #6B:** The proposed language in Policy 6 and the new policy specifically calls out auxiliary lanes and equates them to new capacity. As discussed earlier in this letter, in many circumstances auxiliary lanes are used to restore capacity, improve safety and maintain local accessibility. It is also unclear why Metro is singling out auxiliary lanes and not also addressing other roadway projects listed in OAR 0830 such as interchanges, nor not taking the 0830’s exceptions into account. The reference to “localized safety issues” is unclear and unexplained as well. Overall these changes are puzzling, unanticipated, and inconsistent with other policy approaches within in RTP. Given these challenges, ODOT requests that Metro staff:
  - Remove the phrase, “including adding or extending an auxiliary lane of more than one-half mile” from proposed Policy 6.
  - Engage directly with ODOT on its policy intentions, so that we may work together on a clear, consistent and agreed upon approach in the RTP.

*Other new language*

Metro staff added two paragraphs related to auxiliary lanes to Section 3.3.3.2. Some of the content reflects agreed upon or factual language, but some is speculative and value laden.

- **ODOT Response #7A:** ODOT requests several additions to the first paragraph:
  - Add this language after the second sentence: An auxiliary lane is designed to effectively manage and restore existing capacity degraded by operational performance and to address existing and future safety issues related to unique geometric and operational factors.
  - Add to the list of the uses of auxiliary lanes, “improving the existing system”, “restoring planned capacity” and “maintaining local accessibility” as uses of auxiliary lanes.
- **ODOT Response #7B:** For the second paragraph, it appears Metro did not utilize its modeling group to undertake a traffic analysis, or consult with ODOT roadway or traffic engineers on this issue. Assertions are inappropriate for a document such as the RTP. For example, the statement, “by design, auxiliary lanes add additional motor vehicle capacity” is problematic and not inherently true, as thoroughly spelled out in this letter. ODOT requests that Metro strike the second paragraph and work directly with ODOT, and potentially WSDOT, to further explain its intentions, modeling work and analysis undertaken, and ways to best align 0830 with the Congestion Management Process.

ODOT is hopeful that further discussions on policy and implementation will lead to improved and agreed upon outcomes.

Sincerely,



Chris Ford  
Policy & Development Manager  
ODOT Region 1

# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: Friday, May 26, 2023  
To: Transportation Policy Alternatives Committee and Interested Parties  
From: Grace Cho, Senior Transportation Planner  
Subject: 2024-2027 MTIP Adoption Draft and Public Comment Report

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## **Purpose**

Provide TPAC an overview of the 2024-2027 MTIP adoption draft and report back on the public comment.

## **Background**

As part of Metro's responsibilities as the metropolitan planning organization for the Portland region, the agency must develop a schedule of regionally significant transportation expenditures for the upcoming federal fiscal years, known as the metropolitan transportation improvement program (MTIP). In the development of the MTIP, the document must demonstrate how the MTIP as a package of investments complies with federal requirements, implements the Regional Transportation Plan (RTP), and outline the procedures for administering the MTIP once adopted.

## **2024-2027 MTIP – Adoption Draft**

The 2024-2027 MTIP adoption draft represents the past three years to develop the short-term investment strategy which implement's the region's vision for the transportation system and demonstrate compliance with federal regulations. Activities in which TPAC played an active role in the development of the 2024-2027 MTIP include, but are not limited to:

- 2024-2027 MTIP financial forecast (Spring 2021)
- 2024-2027 MTIP financial forecast updated (Spring 2022)
- 2024-2027 MTIP performance evaluation (Late Summer 2022 – Spring 2023)
- 2025-2027 RFFA (Fall 2021, Fall 2022)
- MPO feedback into the 2024-2027 ODOT administered funds (e.g. ODOT allocation to funding programs, pedestrian-bike strategic, Great Streets, etc.) (2020-2022)
- Annual transit agency budget presentation (2021 – 2023)

Most of the allocation and decision processes for determining which transportation projects and programs are to receive funds finalized around winter of 2022.<sup>1</sup> The 2024-2027 MTIP adoption draft reflects the outcomes of those allocation and decision processes.

For the 2024-2027 MTIP to become effective in federal fiscal year 2024 (beginning on October 1, 2023), the 2024-2027 MTIP must be adopted and submitted to the Governor for inclusion in the 2024-2027 State Transportation Improvement Program (STIP) by summer 2023. Following, the 2024-2027 STIP will be submitted to federal partners requesting approval prior to the start of the federal fiscal year. The adoption draft presented is the version of the 2024-2027 MTIP recommended to move forward through adoption. (Attached to this memorandum as Resolution 23-5335 and the draft staff report with exhibits.)

## **2024-2027 MTIP Summary**

The 2024-2027 MTIP represents an estimate of approximately \$1.3 billion dollars of investment over 130 projects. Just under half (48%) of the investment profile is represented by maintenance and preservation projects. The remaining 52% reflects capital investments (39%), planning (3%),

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<sup>1</sup> Some ODOT funding programs including Great Streets, Carbon Reduction, and others have not finalized their allocation processes and will later request inclusion in the 2024-2027 MTIP through the amendment process.

and (8%) on system management and operations. Around 78% of the 2024-2027 MTIP is made up of federal dollars where the remaining 22% is local match. Just over 8% represents overmatching of local dollars, meaning more than the required minimum match was provided. This ratio of federal to local dollars in the MTIP leans slightly more in local match than the 2021-2024 MTIP cycle, which was closer to 80% federal and 20% local match.

Over \$635 million of the 2024-2027 MTIP is focused on maintenance and preservation investments. The remaining \$687 million are split between capital investments, planning, regional programs, and other transportation activities. Approximately \$191 million of the \$687 million are investments towards active transportation projects, which includes infrastructure in safer pedestrian crossings, new multi-use paths, and filling gaps in the bicycle network. Approximately \$66 million are investments in system management and operations, which are projects to upgrade signals, implement intelligent transportation systems on roadways, and traveler information.

The 2024-2027 MTIP working adoption draft can be found at <https://www.oregonmetro.gov/public-projects/2024-27-metropolitan-transportation-improvement-program>

### **Summary of 2024-2027 MTIP Public Comment**

As part of developing and finalizing the adoption draft of the 2024-2027 MTIP, a public comment period took place from Wednesday, April 5, 2023 to Friday, May 5, 2023. During the public comment period a public review draft of the 2024-2027 MTIP was made available for comment. A public hearing took place on April 20, 2023 at the Metro Council meeting. Comments were further solicited through various communications to community and civic networks.

In efforts to encourage participation and not have the length and detail of the MTIP document serve as a barrier, a public comment survey requesting feedback and comment was made available on Metro's website. The survey focused on communicating a summary of the 2024-2027 MTIP and the results of the performance evaluation. The survey provided a 1 to 5 rating scale asking how well the region was doing to advance the regional transportation investment priorities (i.e. addressing safety, equity, climate, and mobility) and followed up with open ended opportunity to comment.

In total, the 2024-2027 MTIP public review draft received 18 public comments, which is significantly less than previous MTIP cycles. All comments received came through completed public comment surveys. While participation in the public comment for the 2024-2027 MTIP was low, participants provided rankings on a 1 to 5 rating scale asking how well the region was doing to advance the regional transportation investment priorities. Additionally, participants provided feedback through the open-ended sections of the survey. The results of the public comment survey questions combined with open ended comments and other comment received resulted in the following key takeaways:

- For the four regional priorities (i.e. equity, safety, climate, and mobility), participants average score for each area was between 2 through 2.5. Equity, safety, and climate all scored an average less than 2.5 with climate receiving the lowest average score of 2. These results express that participants do not feel the region is doing enough or with enough urgency to address equity, safety, and climate.



- Among the open-ended survey responses, climate change is identified as the priority where there was overall consensus the region needs to do more and faster work to reduce greenhouse gas emissions.
- At an average rating of 2.5, survey responses fell into the middle as it relates to the region's performance around mobility.

Lastly, some project specific or facility specific comments were also received through the open-ended comments. These comments were sent to the agency delivering the project or who owns the facility. In review of the project specific comments, a response from these agencies was not requested, but Metro staff asked agency staff to take into consideration the comment and information for the implementation of the project or the planning for the facility.

A short set of responses was provided to the major themes and comments and provided in chapter 7 of the 2024-2027 MTIP. Additionally, further detail on the public comment and the responses are part of the 2024-2027 MTIP public comment report, which can be found in Appendix V of the 2024-2027 MTIP.

### Next Steps

The following timeline outlines the next steps for the 2024-2027 MTIP.

### Timeline

Activity	Timeline
TPAC preview of 2024-2027 MTIP adoption draft	June 2, 2023
JPACT preview of 2024-2027 MTIP adoption draft	June 15, 2023
Request TPAC recommendation to JPACT	July 7, 2023
Request JPACT approval and recommendation for Metro Council adoption	July 20, 2023
Metro Council adoption	July 27, 2023
Submit 2024-2027 MTIP to Governor for inclusion in the 2024-2027 STIP	Late Summer 2023
Federal partner approval	Anticipated Fall 2020