

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Transportation Policy Alternatives Committee (TPAC) Workshop
Date: Wednesday, September 14, 2022
Time: 9:00 a.m. to 12:00 p.m.
Place: Virtual meeting held via Zoom
[Connect with Zoom](#)
Passcode: 515676
Phone: 888-475-4499 (Toll Free)

9:00 a.m.	Call meeting to order and Introductions <ul style="list-style-type: none">Committee input on creating a Safe Space at TPAC	Chair Kloster
9:10 a.m.	Committee & Public communications on agenda items	
9:15 a.m.	Consideration of TPAC workshop summary, July 13, 2022 Consideration of TPAC workshop summary, July 14, 2022 <ul style="list-style-type: none">Edits/corrections sent to Marie Miller	Chair Kloster
9:20 a.m.	Elements of the 2023 Regional Transportation Plan (RTP) Financial Plan <ul style="list-style-type: none">Revenue forecast Purpose: to inform TPAC on the procedures and schedule to develop the 2023 RTP funding forecastEquitable funding research Purpose: to share and gather feedback on the draft Equitable Transportation Funding Research Report	Ted Leybold, Metro Ken Lobeck, Metro Carl Springer, DKS Kevin Chewuk, DKS Lake McTighe, Metro Theresa Carr, Nelson Nygaard
10:50 a.m.	Climate Smart Strategy Update: Kick-off Discussion Purpose: Share background information and seek feedback on proposed approach for updating the strategy.	Kim Ellis, Metro
11:55 a.m.	Committee comments on creating a safe space at TPAC	Chair Kloster
12:00 p.m.	Adjournment	Chair Kloster

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ១ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានពាក្យបណ្តឹងរើសអើងសូមចូលទស្សនាគេហទំព័រ www.oregonmetro.gov/civilrights។ បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

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2022 TPAC Work Program

As of 9/7/2022

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

	<p><u>September 14, 2022 - TPAC Workshop</u> 9:00 am - noon</p> <p>Agenda Items:</p> <ul style="list-style-type: none"> • Elements of the 2023 RTP Financial Plan; Revenue forecast & Equitable funding research (Leybold, Lobeck, McTighe, Metro/ Carl Springer, Kevin Chewuk, DKS/ Theresa Carr, Nelson Nygaard, 90 min) • Climate Smart Strategy Update: Kick-off Discussion (Kim Ellis, Metro, 60 minutes)
<p><u>October 7, 2022 9:00 am - noon</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Creating Safe Space at TPAC (Chair Kloster) • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (K. Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-**** <u>Recommendation to JPACT</u> (Lobeck, 15 min) • Earthquake Ready Burnside Bridge Resolution 22-**** <u>Recommendation to JPACT</u> (Kim Ellis; 20 min) • Regional Mobility Policy Update: Recommended Policy and Action Plan discussion (Kim Ellis, Metro/ Glen Bolen, ODOT/ Susie Wright, Kittelson & Associates; 45 min) • Safe and Healthy Urban Arterials (John Mermin, Lake McTighe (30 min) • 2023 RTP Financial Plan and Equitable Funding (Ted Leybold, Lake McTighe, 60 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>October 19, 2022 - MTAC/TPAC Workshop 9:00 am - noon</u></p> <p>Agenda Items:</p> <ul style="list-style-type: none"> • RTP Needs Assessment Findings (Eliot Rose, Metro; 60 min) • TriMet Forward Together update (Tara O'Brien, TriMet; 30-45 min) • High Capacity Transit Strategy Update: Network Vision (Ally Holmqvist, Metro; 60 min)

<p><u>November 4, 2022 9:00 am – noon</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Creating Safe Space at TPAC (Chair Kloster) • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-**** <u>Recommendation to JPACT</u> (Lobeck, 15 min) • Regional Mobility Policy Update: Recommended Policy and Action Plan <u>Recommendation to JPACT</u> (Kim Ellis, Metro/ Glen Bolen, ODOT/ Susie Wright, Kittelson & Associates; 60 min) • <i>Rose Quarter Project update (Eliot Rose; 30 min)</i> • Carbon Reduction Program Update (Ted Leybold/Grace Cho/Kim Ellis, Metro; 60 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>November 9, 2022 – TPAC Workshop 9:00 am – noon</u></p> <p>Agenda Items:</p> <ul style="list-style-type: none"> • Regional Freight Delay & Commodities Movement Study (Tim Collins/Kyle Hauger, Metro; 75 min) • <i>82nd Avenue Project update (Elizabeth Mros- O'Hara, Metro/ City of Portland TBD; 30 min)</i>
<p><u>December 2, 2022 9:00 am – noon</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Creating Safe Space at TPAC (Chair Kloster) • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-**** <u>Recommendation to JPACT</u> (Lobeck, 15 min) • MTIP Formal Amendment 22-**** <i>Rose Quarter Project</i> <u>Recommendation to JPACT</u> (Eliot Rose, 30 min) • RTP Call for Projects Update (Kim Ellis, Metro; 45 min.) • Climate Smart Strategy Update (Kim Ellis, Metro; 45 min.) • 2023 RTP Financial Forecast (Ted Leybold/Lake McTighe; 30 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>December 21, 2022 – MTAC/TPAC Workshop 9:00 am – noon</u></p> <p>Agenda Items:</p> <ul style="list-style-type: none"> • <i>2024 Growth Management Decision Work Program (Ted Reid, 60 min)</i>

Parking Lot: Future Topics/Periodic Updates

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| <ul style="list-style-type: none"> • Columbia Connects Project • Best Practices and Data to Support Natural Resources Protection • Regional Emergency Transportation Routes Update Phase 2 (John Mermin, Metro & Carol Chang, RDPO) • Cost Increase & Inflation Impacts on Projects | <ul style="list-style-type: none"> • DLCD Climate Friendly & Equitable Communities Rulemaking (Kim Ellis, Metro) • Ride Connection Program Report (Julie Wilcke) • Get There Oregon Program Update (Marne Duke) • RTO Updates (Dan Kaempff) • Update on SW Corridor Transit • Multnomah County Earthquake Ready Burnside Bridge Project |
|---|---|

Agenda and schedule information E-mail: marie.miller@oregonmetro.gov or call 503-797-1766.
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Meeting minutes



Meeting: **Transportation Policy Alternatives Committee (TPAC) Workshop**
Date/time: Wednesday July 13, 2022 | 9:00 a.m. to 12:00 p.m.
Place: Virtual online meeting via Web/Conference call (Zoom)

Members Attending

Tom Kloster, Chair
Karen Buehrig
Allison Boyd
Chris Deffebach
Lynda David
Eric Hesse
Jaimie Lorenzini
Jay Higgins
Don Odermott
Tara O'Brien
Chris Ford
Lewis Lem
Idris Ibrahim

Affiliate

Metro
Clackamas County
Multnomah County
Washington County
SW Washington Regional Transportation Council
City of Portland
City of Happy Valley & Cities of Clackamas County
City of Gresham and Cities of Multnomah County
City of Hillsboro and Cities of Washington County
TriMet
Oregon Department of Transportation
Port of Portland
Community Representative

Alternates Attending

Jamie Stasny
Sarah Paulus
Peter Hurley
Dayna Webb
Glen Bolen

Affiliate

Clackamas County
Multnomah County
City of Portland
City of Oregon City and Cities of Clackamas County
Oregon Department of Transportation

Members Excused

Karen Williams
Laurie Lebowsky
Jasmine Harris
Katherine Kelly
Rob Klug
Shawn M. Donaghy
Jeremy Borrego
Rich Doenges

Affiliate

Oregon Department of Environmental Quality
Washington State Department of Transportation
Federal Highway Administration
City of Vancouver
Clark County
C-Tran System
Federal Transit Administration
Washington Department of Ecology

Guests Attending

April Bertelsen
Brett Setterfield
Courtney Duke
Dave Roth
Erik Havig

Affiliate

Portland Bureau of Transportation
Clackamas County
Portland Bureau of Transportation
City of Tigard
Oregon Department of Transportation

Esther Needham
Francesca Jones
Garet Prior
Gregory Mallon
Jessica Engelmann
John Charles
Josh Channell
Josh Mahar
Mel Krnjaic Hogg
Peter Swinton
Sara Wright
Will Farley

Nelson/Nygaard
Portland Bureau of Transportation
Oregon Department of Transportation

City of Beaverton
Cascade Policy Institute
WSP
Kearns West
Portland Bureau of Transportation
Tualatin Hills Parks & Recreation District
Oregon Environmental Council
City of Lake Oswego

Metro Staff Attending

Kim Ellis, Principal Transportation Planner
Lake McTighe, Senior Transportation Planner
John Mermin, Senior Transportation Planner
Ally Holmqvist, Senior Transportation Planner
Thaya Patton, Principal Researcher & Modeler
Cindy Pederson, Research Center Manager
Daniel Audelo, Resource & Dev. Intern

Ted Leybold, Resource & Dev. Manager
Grace Cho, Senior Transportation Planner
Eliot Rose, Tech Strategic Planner
Chris Johnson, Research Center Manager
Alex Oreschak, Senior Transportation Planner
Connor Ayers, Legislative & Engagement Coordinator
Marie Miller, TPAC Recorder

Call to Order and Introductions

Chair Kloster called the meeting to order at 9:00 a.m. Introductions were made. Reminders where Zoom features were found online was reviewed. Chair Kloster noted the all attendees would be listed as panelists for full viewing and participation for this workshop meeting. The link for providing 'safe space' at the meeting was shared in the chat area.

Committee and Public Communications on Agenda Items - none

Consideration of TPAC workshop summary, May 11, 2022 (Chair Kloster) No edits/corrections were received.

2023 Regional Transportation Plan (RTP): Needs Assessment Approach (Eliot Rose, Metro) The presentation began with an overview of the Needs Assessment Approach planned with input asked from the committee. The Needs Assessment in Chapter 4 of the Regional Transportation Plan provides a snapshot of current conditions and trends within the Portland region and highlights key regional transportation challenges and needs for the plan to address. Each update to the RTP begins with updating the goals of the plan, followed by updating the Needs Assessment based on the latest data available to ensure that the policies and the projects in the RTP address the needs of the region now and in the future based on the updated regional goals.

As the region's transportation needs evolve, so does the structure and focus of the Needs Assessment. Through this process, the RTP Needs Assessment continues to evolve from an inventory of multimodal infrastructure needs to a broader focus on transportation's contribution to systemic issues like climate, equity, safety and mobility (i.e., the currently adopted RTP priorities).

Safety policy guidance: Prioritize safety investments, education and equitable enforcement on high injury and high risk corridors and intersections, with a focus on reducing speeds and speeding.

Key findings from the 2018 Needs Assessment:

- Traffic deaths are increasing and are disproportionately impacting people of color, people with low incomes and people over age 65.
- Traffic deaths are disproportionately impacting people who are walking.
- A majority of traffic deaths are occurring on a subset of arterial roadways

A draft update to High Injury Corridors shown is based on new data (2016-2020 vs. 2011-15) and includes HICs on arterial, collector, and local roads. Other proposed Safety analyses include an analysis of crashes by mode, analysis of crashes by Equity Focus Area vs. other communities, providing detailed corridor-level injury scores, exploring how High Injury Corridors overlap with other transportation investments, and analyzing current progress toward Vision Zero.

Equity policy guidance: Use engagement and data to understand the transportation needs and priorities of historically marginalized communities, with a focus on communities of color and people with low income, and prioritize meeting these needs.

Metro has heard from these communities that they need:

- More fast, frequent and reliable transit service
- More affordable transit that connects people to the places and things they need to thrive.
- Better conditions for walking and biking.

The updated draft equity focus areas map shown is based on new data (2016-2020 American Community Survey and 2020 Census vs. 2011-15 ACS). Other proposed equity analyses include highlight gaps in the transit and active transportation system within Equity Focus Areas, map how access to jobs via transit varies throughout the region and within Equity Focus Areas, and overlay Equity Focus Areas with other maps to highlight opportunities to advance both equity and other priorities.

Mobility policy guidance: The Regional Mobility Policy update, now in progress, will guide the assessment of mobility-related needs. Four performance measures are currently being explored:

- Vehicle miles traveled (VMT) per capita
- System completeness
- Travel speed on throughways
- Equity (comparing results between equity focus areas and non-equity focus areas)

We expect to recommend a draft policy and performance measures in September.

Gap maps (System Completeness) and (Draft Transit Network) were shown. Other proposed mobility analyses include a full set of current network gap maps, base year information for recommended Regional Mobility Policy performance measures (e.g., maps of VMT per capita, travel speeds on throughways), and maps highlighting gaps in bike/ped access to transit and other inter-modal connections.

Climate policy guidance: The Climate Smart Strategy establishes a plan to meet greenhouse gas reduction targets set by the State. It identifies high- and moderate-impact climate actions. The 2018 RTP made satisfactory progress implementing Climate Smart and increased transit service as planned, but it did not meet VMT reduction targets.

It was noted it's a busy time for climate action due to Changes to the climate happening more rapidly than expected, the State has adopted new climate and VMT reduction requirements through the Climate Friendly and Equitable Communities rules, Agencies are advancing congestion pricing policy and implementation, the State has adopted new policies and programs to speed adoption of clean vehicles and fuels, and USDOT is in a rulemaking process for evaluating GHG emissions from transportation.

Proposed climate analyses include:

- Updated forecasts of regional GHG emissions, taking into account new state, regional and local policies.
- Map showing how VMT/capita varies throughout the region.
- Progress report on Climate Smart Strategy implementation to date.
- Discussion of opportunities to further reduce GHG emissions.

Other proposed elements of the Needs Assessment include: general changes in population, demographics, employment and travel patterns, freight and goods movement, and infrastructure conditions. Mr. Rose noted he will be returning in September to share draft results of the needs assessment and collect feedback. We plan to focus on the proposed analyses that we have discussed today – as well as other ideas that emerge from this conversation.

Comments from the committee:

- Don Odermott noted earlier safety slide was very telling on the plethora of rural crashes in Washington County as urban demand uses rural routes to avoid urban congestion and seeks the fastest path to their destinations.
- Chris Deffebach asked if you could explain again why local roads are included in a regional transportation plan. Local roads are generally not in a RTP. Lake McTighe noted looking at the crash data, there are some collectors that have a high concentration of serious crashes (e.g Jackson School Road). The thinking is that it is consistent with a Safe System approach to include all streets in the HIC analysis regardless of functional classification. Federal HSIP and safety funds can be spent on all roads regardless of ownership and functional classification. And, there are local roads on the regional pedestrian, bicycle and transit networks.

Kim Ellis noted we also have included local connectivity (collectors) in 2040 centers and 2040 industrial areas and employment centers. Ms. McTighe added there are not that many local roads that have been identified as HICs, but there are some. It was a policy decision in the 2018 RTP to not include local roads even if they had a high number of serious crashes per mile. With a better understanding of the Safe System Approach the thinking has changed and we are proposing to include all roads in the analysis. Some local roads function more as regional roads because of their location, lack of connectivity, etc. and may have safety issues as a result. Local roads means/equals roadways not identified on an RTP regional network. All streets in centers and station communities are considered regional.

- Chris Deffebach asked for the definition in this report regarding infrastructure. Was it operations and maintenance, bridges or something else? Mr. Rose noted the bridge conditions are in part of the NEPA assessment in the 2018 RTP. Asked where landslides and resiliency as part of seismic inventory fell with the arterials, it was noted information regarding resiliency is on p. 4-60 and 4-61 of the RTP, and pavement condition info begins on 4-40. Ms. Ellis added this is part of Federal reporting which Metro will use from data collected from ODOT as part of the 2017 legislature. The resiliency reporting is a new Federal requirement just beginning. It will be developed as part of phase 2 next year in Emerging Transportation Routes.
- Don Odermott suggested workshop on infrastructure that would include engineers and planners in the region. It was noted a safety improvement project on Jackson School Road referenced earlier was having a ribbon cutting on this section addressing safety issues here. It was noted in the presentation: The RTP must “*confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends.*” - 23 Code of Federal Regulations §450.324. It was suggested to better calibrate our modeling to

capture emissions and key points in bottleneck areas, and help merge the data in modeling to truly reflect travel models.

Regarding the draft transit network gap map, the recent Washington County transit system study highlighted gaps in transit and bike routes as well. It would be helpful to share this information as part of the RTP. It was suggested to include a metric on the hours of operation with vehicles with climate action. Hybrid workforces are changing commute travel and may need to be included in forecasting models. Mr. Rose noted this was part of the emerging trends scenario with the model providing a better accountability for telework that may not be reflected in the surveys totally.

- Eric Hesse noted the purpose of actionable and clear understanding is important. Also important is connecting outcomes to performances. Overlaying maps with project lists is good, but more help and understanding on how this information is assessed with performance measures and accountability may be needed. Further discussion on how the policy questions work together may be helpful also. Mr. Rose noted staff want to give good basis on the current state of performance measures that is closely aligned to future best targets on reaching goals, which are related to the policies in the RTP. Mr. Hesse added he recognizes the challenge balancing growth management with maintenance on roads and bridges addressing resiliency as the Emergency Transportation Routes are developed. Several other questions related to safety would be followed up offline with Mr. Rose and Ms. McTighe.
- Karen Buehrig has glad the things at the beginning of the chapter were kept, that established our topics and purposes. Regarding mode share, it would be helpful to understand progress made as we try to reduce miles traveled; are we shifting away from vehicle travel? It was suggested to report on successes such as high crash corridors where fewer crashes are being reported. The transit gap map was found to be confusing with a lot of data shown. It was suggested to show local work done in help identifying gaps. It was noted there is a how are we achieving our plans vs. needs. It was asked how the equity analysis is being influenced by the Climate Friendly and Equitable Communities Rules with requirements around equity analysis. It was noted the emerging trends work fits in well with this needs assessment and could be integrated into Chapter 4.
- Tara O'Brien noted it was helpful and useful to understand the approach in the RTP with the needs assessment. TriMet is finding the NEPA analysis useful in transit planning in the same way, planning for future transit service for more benefits in locations and reasons why the services are planned there. Much work with the Forward Together project process can be incorporated into this work.
- Glen Bolen acknowledged the great job on a lot of work with this project. Appreciation to the focus on safety was given. Agreement on the multi-modal gap being noted and modeled. Not much has been heard about the appropriate use of facilities regarding the right trips to the right facilities. More work on this may come from the Regional Mobility Policy update work and bring into the NEPA analysis. It was suggested to include bottleneck areas in modeling. Have they been identified in the last analysis? Mr. Rose noted bottleneck info was in the 2018 RTP, beginning p. 4-48.
- Chris Deffebach noted simple follow up to be sure to include hours of congestion by facility type so we track how our throughways are doing. Per safety upgrades, note the improvements underway on OR 217 to reduce weave/merge and improve safety. Finally would be good to include VMT more broadly to pick up diversion in rural areas but I understand that may be difficult. Ms. McTighe added any projects completed prior to 2016 are of particular interest.

Regional Transportation Plan (RTP) Congestion Pricing Policy Development (Metro) and Oregon Highway Plan Tolling Policy Amendment and Low Income Toll Report (ODOT) (Alex Oreschak, Metro and Garet Prior & Erik Havig, ODOT) Alex Oreschak began the presentation with a review of where this project is in the timeline; developing and refining RTP language policy through Sept. 2022. A reminder on the summary of recommendations was provided.

- NEW Ch. 3 congestion pricing section
- UPDATE definitions for pricing terms
- NEW congestion pricing policies (Mobility, Equity, Safety, Diversion, Climate, Emerging Technologies)
- Additional information
- UPDATE other RTP Goals, Objectives, and other sections to include pricing
- REVIEW approach to congestion pricing in mobility corridors
- NEW Equitable Funding work; incorporate pricing

Heard from TPAC addressed:

- Create new section in Chapter 3 for congestion pricing
- Refine definitions and terms
- Safety and diversion should have separate policies, and there should be additional detail/clarity on diversion
- Address revenue reinvestment in the policies
- Further clarify the motor vehicle network policies
- Include additional language on partnerships and pricing obstacles

Heard from TPAC not yet addressed:

- Reference economic impacts from pricing, and role of freight
- Address role of pricing as revenue generation tool
- Consider other types of pricing programs (i.e. Multnomah Falls timed-use permits) and other spatial contexts (i.e. river or airspace travel)
- Consider a vision or strategy for applying multiple pricing tools in a coordinated manner

Summary of revised recommendations:

- Safety and Diversion are now separate policies
- Revised new policies & other goals, objectives, policies and sections
- Added new draft action items for each new policy
- Revised definitions/terms and new definitions/terms:
 - Section 166
 - Low-carbon travel options
 - Transit-supportive elements
 - Diversion

The congestion pricing policies were reviewed, starting with mobility. This was defined as improve reliability and efficiency by managing congestion, reducing VMT, and increasing transportation options through investments in modal alternatives, including transit-supportive elements and increased access to transit. Transit-supportive elements include programs, policies, capital investments and incentives such as Travel Demand Management and physical improvements such as sidewalks, crossings, and complementary land uses.

Comments from the committee:

- Tara O'Brien suggested including the Better Bus investments and other such programs, and ensuring that pricing doesn't negatively impact transit travel time on other roadways.

- Eric Hesse highlighted one of the recommended actions regarding net revenues in Attachment 1, 3rd bullet, that would require more work done on this: *Reinvest a portion of net revenues from congestion pricing in modal alternatives both on and off the priced facility that encourage mode shift and VMT reduction, including transit improvements as well as bicycle and pedestrian improvements and improvements to local circulation.*

Mr. Oreschak agreed that more work is needed to be done. The net revenue terms carry over into other action items. Discussions with ODOT have been taking place with this in the amendment language as well.

- Karen Buehrig noted the action items are very detailed, and adequate time and space is needed for discussion. It was suggested to have the description of action items that jurisdictions can think about in terms of when the action items should be used or take place, and how they might be implemented. Asked where further discussion on action items is planned, Mr. Oreschak noted this was listed in next steps of the presentation and offered to meet with anyone for greater detailed discussion.

It was noted there might be conflict between how action items are implemented if not fully described, between expectations and timelines of Metro, ODOT and different regional jurisdictions. Chair Kloster noted consistency with policy language and planning projects would help, and possible appendices on these items in the RTP.

- Chris Deffebach noted the complexity with these action items. It was asked if the mobility policy defined here means we can't use any net revenue of funding to adding capacity to the freeway system or on safety improvements. Mr. Oreschak stated this was not the intent, and if it reads as such, there is more work to be done. Action item one under Mobility reads "Set rates for congestion pricing at a level that will manage congestion and reduce VMT on the priced facility while limiting diversion to nearby unpriced facilities, including arterial, collector, and local streets in the project area." Revenue to achieve this action item is the goal which can include freeway and safety improvements.

The next policy was equity, defined as to integrate equity and affordability into pricing programs and projects from the outset. Karen Buehrig noted it would be helpful to address how and if the EMAC committee recommendations influenced the equity actions. Mr. Oreschak noted future work on cross checking our equity actions with the EMAC recommendations and see where they overlay is planned.

Karen Buehrig noted she believes that the OHP Amendment is clearer that one of the purposes of tolling/congestion pricing is to raise revenue for improvements while the Metro congestion pricing policies are more silent on that, with more of a focus on the need to invest net-revenues in alternative modes and safety etc. Mr. Oreschak noted this was one point of previous TPAC discussions we have not yet addressed yet. It was noted pricing and tolling are tools, with tolling a subset of pricing to raise revenue, and pricing part of the congestion management strategy.

The safety policy was defined as to ensure that pricing programs and projects reduce overall automobile trips and address traffic safety and the safety of users of all modes, both on and off the priced system. Diversion is now separate from safety, to minimize diversion impacts before, during, and after pricing programs and projects are implemented, especially when diversion is expected on the regional high injury corridors. Further definition: 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.

It was noted that this new definition of diversion is different in the OHP amendment. Work between Metro and ODOT is being done for clarification. Ms. Buehrig echoed agreement on the difference in how diversion is defined. As we move into conversations with elected officials that will make a difference on explaining why and how they work together. It was noted that past discussions around tolling have helped build the foundation for these definitions.

Climate was described as reduce greenhouse gas emissions and vehicle miles travelled while increasing access to low-carbon travel options when implementing a pricing program or project. It was noted that Low-carbon travel options include walking, rolling, biking, transit, and electric vehicles. Lewis Lem asked if climate policy was looking broadly at resiliency issues, or more narrowly with climate emissions reduction policy. Mr. Oreschak thought the later. Mr. Lem suggested a more refined definition. Kim Ellis noted staff can look at the different ways to label this, such as pricing strategy, in the RTP while staying within the priorities and working on other issues related to climate.

Emerging technologies was described as coordinating emerging technologies and pricing programs to create an integrated transportation experience for the users of the system. Ms. Buehrig noted the last two bullet points of action in this policy:

- *Weigh existing and emerging equipment and technological advancements when making technology choices, balancing what is time-tested versus what may become obsolete soon. Technology and programs which do not require users to opt-in or track miles manually, for instance, are more likely to see greater compliance.*
- *Review existing laws and regulations to confirm the ability and authority to enforce the selected program and install the selected technology. Technology and enforcement methods must not be in violation of existing laws or city codes, such as prohibition of certain equipment on sidewalks or within city boundaries.*

It was asked when does best practices rise up to be a policy, which are thought to be these. It was important to give guidance but more policies may not always be needed. It was suggested to make sure the actions rise up in importance in the RTP.

Regional Motor Vehicle Network Policies (3.5), policies 6 and 12 had been edited. These revisions were shown and explained why changes proposed. Chris Deffebach noted the questions on who and how decisions are made, how these policies are measured, and asked if projects will be evaluated this way before consideration of going into the RTP. Kim Ellis noted that technically we should be doing this as we develop the transportation system, with consistency in the RTP as capacity is developed. Layers between plans and requirements will force closer scrutiny as we build toward the complete system.

Mr. Oreschak noted Metro's coordination with ODOT on the Oregon Highway Plan Tolling Policy Amendment Concurrent including updates to Metro committees on RTP + OHP, and aligning language and policy goals to the extent possible.

Garet Prior presented information on the Oregon Highway Plan amendment. The OHP overview notes this is Oregon's guiding document for highway and road system that provides vision for the system, reflects the Oregon Transportation Plan, and guides decision making. It provides framework for policies and actions, classifications, designations and targets. Goal 6 on tolling was adopted in 2012 and is need of update.

It was noted the OHP Toll Amendment purpose was to define terms and types of road pricing, clarify the need and goals, address evolving equity, climate, safety, modernization, and funding goals, and provide guidance on rate setting and use of revenues. With the initial analysis of state and regional congestion pricing strategies there are many areas of agreement:

- Why we need congestion pricing
- Mobility goals are addressing the same factors
- Collaboration with regional and local agencies, equitable engagement, and working with transit and multimodal alternative providers
- Interoperability between payment services and transportation service providers
- Program with benefits to address impacts to people experiencing low-incomes (cash-based option)
- Designing for an accessible system, with knowledge of different abilities, languages, and access to technology
- Coordination with new technology and other demand management technologies or strategies

The areas of difference that have yet to be clarified include:

- Dedication of revenues (5 different areas identified in Metro proposed policies)
- Rate setting outcomes
- Monitoring and evaluation

Mr. Prior described some areas of fine tuning.

- Define terms and types of road pricing
- Transit investment language and increased transit and transportation options
- Need to fund infrastructure is missing
- Unsure how these policies will apply to non-roadway types of congestion pricing
- Definitions need some work – diversion and congestion pricing

Comments from the committee:

- Karen Buehrig noted that with Clackamas County in the center of recent tolling discussions they are interested in the various toll policies being discussed. Key to elected are having more time to review these policies. It was suggested to lead discussions with the timeline because of the significance. It was a concern to hear of public hearings soon that could give impressions to possible changes in policy soon. It would be better to emphasize the hearing is to collect information that could then change the draft before public comments.

It was good to see the crosswalk that showed the EMAC recommendations being filtered into this OHP amendment, but concern on not being able to view these recommendations until recently. The importance for timing and reviews was stressed. The definitions of diversity may be confusing from past discussions and cause conflicts with policies. It was not clear if the corridor investments were defined as part of the NEPA process. Some specific measures within the OHP amendment were not explained on how they were identified and if having correct tolerances. In section 6.13 it lists the OTC as the toll authority. It was noted this could be an opportunity to reflect the importance statewide as different toll projects move forward, and encouraged more definition with local engagement and local advisory committees providing feedback and comments. It was noted that Metro's policy directly mentions safety but find it harder to see in the OHP amendment, which could be better incorporated.

Mr. Prior noted the technical input with engagement started the process but they will incorporate more with the public for further input. It was agreed that safety importance with the plan amendment needs more incorporation as well.

- Jaimie Lorenzini noted that additional clarification on how the OHP amendment will advance local level goals and how these can be tied to accountability to advance the goals would be helpful. It was appreciated to see the definitions of diversity continue to be fine-tuned. It was suggested to look at diversity and what needs to be mitigated with a creative on open-minded perspective as diversity plays out over time and location.
- Eric Hesse noted the importance of alignment with the amendment and other policies in the RTP and planning processes underway in the region. It was agreed more time for discussions would be beneficial, realizing the timelines are tight. More details on next steps would be helpful.
- Tara O'Brien agreed with the need for coordination with a lot of processes happening now. It was acknowledged there are gaps yet to be addressed and the need to understand how they connect to the EMAC recommendations. It was noted there is interest to learn of opportunity for more time to review. It was asked if the OHP amendment was anticipated to be provided with an early draft with incorporated changes.

Mr. Prior noted he would check with ODOT staff on possibilities with more discussion times. OTC meets in Sept. to consider this amendment, then will have rulemaking on rate setting discussions later in the year. The draft policy will take further comments that can revise the draft including public comment period starting August 1. Metro will continue to work with ODOT on details.

Mr. Prior provided information on the Low Income Toll Project. The Draft Low-Income Toll Report for the Oregon Toll Program was conducted by the Oregon Department of Transportation (ODOT) at the direction of the Oregon Legislature. The full report identifies options for consideration on the thresholds and benefits for a low-income toll rate, as well as proposed implementation practices for an equitable, inclusive toll system. The options for consideration ("options") and proposed implementation practices are intended to start on or before day one of tolling, which is planned for the end of 2024. ODOT will finalize the report and present it to the Oregon Transportation Commission (OTC) and Oregon Legislature by September 2022, as required by House Bill 3055.

This report is a culmination of the work ODOT and the OTC have been working on for multiple years regarding how to best address the impacts of the proposed toll projects on people experiencing low incomes. In combination with the Oregon Highway Plan update and coordination and collaboration with the Oregon Toll Program's Equity and Mobility Advisory Committee (EMAC), this report is part of a larger ODOT and OTC effort to initiate the Oregon Toll Program in a way that does not disproportionately burden, but rather benefits, people experiencing low incomes and that recognizes that past land use and transportation investments in the Portland metro area—including highway investments—have resulted in negative cultural, economic, and relational impacts on local communities and populations.

The draft report summarizes the engagement, analysis, and research conducted thus far to inform the options for consideration and implementation practices. Focused engagement with the OTC, stakeholders, and the public will occur throughout summer 2022 to further inform and refine the options for consideration and implementation practices presented in the final report.

Options for Consideration:

- Provide a significant discount (e.g., credits, free trips, percentage discount, or full exemption) for households equal to or below 200% Federal Poverty Level.
- Provide a smaller, more focused discount (e.g., credits or free trips) for households above 201% and up to 400% of the Federal Poverty Level.

- Use a certification process that leverages existing programs for verification and further explore self-certification.

It was noted more work is needed, which includes the Oregon Transportation Commission will establish a rate structure that will include income-based adjustments, more work is needed to identify implementation and operations costs, and wherever possible the Low-Income Toll Program will leverage existing systems to streamline implementation and operations.

Next Steps

- Targeted stakeholder engagement – June and July
- Summarize feedback and refine report – August
- Presentation to Oregon Transportation Commission – September 14
- Deliver report to Joint Committee on Transportation – September 15

Mr. Oreschak also added next steps with the work coordination of the RTP update:

- Friday, July 29 - Provide written feedback
- Wednesday, July 27 - MPAC
- Thursday, July 28 - Joint Metro Council/JPACT workshop
- Return to TPAC this Fall to review revised RTP policy language/guidance
- Early fall: related work on RTP financially constrained revenue forecast and RTP finance chapter, including congestion pricing assumptions and equitable funding background research

Chris Deffebach asked for clarification on the July 28 workshop which Mr. Oreschak noted feedback from this meeting would not be incorporated into, but with the deadline of July 29 comments from the committee are encouraged to receive for compilation. Communication on this would be sent to the committee. It was suggested to incorporate or clarify due dates with all this to help the committee see the bigger picture, not just the focus of the RTP. It was noted the RTP has policies on revenue spending, so that net revenue is not needed to be called out in the pricing policy.

Karen Buehrig noted that rate setting is applicable with the low income report, the EMAC recommendations, the Metro congestion pricing actions and policies and the OHP amendment. They are all linked together. It would be helpful to have a graphic that showed how the policies interact and inform each other.

Introduction to the High Capacity Transit Strategy Update for 2023 Regional Transportation Plan (RTP) (Ally Holmqvist, Metro) The presentation began with an update to the high capacity transit component of the Regional Transportation Plan (RTP) – the framework for guiding regional high capacity transit system investments. The High Capacity Transit (HCT) Strategy identifies and categorizes corridors where a higher quality of service would provide the most benefit to the highest number of people.

The first HCT Plan was developed and incorporated into the Regional Transit Strategy as part of the RTP in 2018. It identified projects currently underway, upcoming, and to be completed in the future based on many factors including how “ready” they were to begin construction. The 2018 RTP also classified enhanced transit corridors where “better bus” improvements increasing speed, frequency and reliability are needed to serve growing regional centers and employment areas – including those supporting bus rapid transit.

This HCT Strategy update will build off of previous work to address new policy questions around the future of high capacity transit in our region, re-envision the network with the addition of bus rapid transit and establish a “pipeline” of corridor investments that will help us develop the future high capacity transit system. It will look to a future regional network that is people-focused – connecting community members with where they need to go – serving transit-supportive equity focus areas, supporting affordable housing along its corridors, and completing an integrated regional transportation system.

High capacity transit is a key element of the 2040 Growth Concept – connecting people with hubs of commerce and supporting development in dense areas with a mix of housing and jobs to support healthy, equitable communities and a strong economy. By moving people efficiently and comfortably over long distances, it promotes the efficient use of land, public facilities and services and protects farms and forests. High capacity transit is also critical to implementing the Regional Transportation Plan investment priorities that support this blueprint for the future – equity, climate, safety and mobility.

Fast, convenient and linked to the broader transit and transportation network – high capacity transit provides a viable, more affordable alternative to driving. This makes our transportation system more equitable for people who rely on transit, including people with low incomes, people of color, people with disabilities, people who are older and single-parent families. Fewer cars on the road leads to less air pollution, more physical activity less time in traffic, fewer crashes and more reliability for moving both people and goods – supporting the health, safety, mobility, economy and quality of life of our region.

Comments from the committee:

- Karen Buehrig noted the large amount of work involved this project. It was noted the bus rapid transit was listed twice in the spectrum; one as bus rapid transit, and bus rapid transit corridors. What is the difference and will both be addressed in the planned strategy. Ms. Holmqvist noted the FTA allows for corridor level distinction with dedicated right-of-way, so both planning efforts for BRT are being considered with opportunities in different places.
- Don Odermott noted this refresh opportunity with the HCT vision was timely given the growth in the region. It was recommended to include an express light rail system from outside Portland to the inner city area for faster transit service. It was noted ODOT has made major strides in their efforts with Bus on Shoulder. Modeling recently shows benefits to strategic park & ride which is still suggested for further development.
- April Bertelsen, PBOT, noted the BRT corridor distinction may need further clarification, as recalled with the FTA capital investments grant to 50% transit way.
- Eric Hesse noted the additions to the broader needs assessment that came for several studies and previous planning. It would be beneficial to bring all this forward to incorporate into this.

Committee comments on creating a safe space at TPAC – No comments received.

Adjournment

There being no further business, workshop meeting was adjourned by Chair Kloster at 11:58 a.m.

Respectfully submitted,

Marie Miller, TPAC Recorder

Attachments to the Public Record, TPAC workshop meeting, July 13, 2022

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	7/13/2022	7/13/2022 TPAC Workshop Agenda	071322T-01
2	TPAC Work Program	6/30/2022	TPAC Work Program as of 6/30/2022	071322T-02
3	Minutes	05/11/2022	Minutes for TPAC workshop, 05/11/2022	071322T-03
4	Memo	07/13/2022	TO: TPAC and interested parties From: Eliot Rose, Senior Transportation Planner RE: Proposed approach to the 2018 Regional Transportation Needs Assessment	071322T-04
5	Memo	07/06/2022	TO: TPAC and interested parties From: Alex Oreschak, Senior Transportation Planner RE: 2023 Regional Transportation Plan Policy Brief – Congestion Pricing Policy Development	071322T-05
6	Attachment 1	July 2022	Metro Regional Transportation Plan – Revised Draft Congestion Pricing Policy Language	071322T-06
7	Attachment 2	July 2022	Feedback from June 2022 TPAC Meeting	071322T-07
8	Attachment 3	June 2022	Draft Oregon Highway Plan Toll Policy Amendment	071322T-08
9	Attachment 4	June 2022	Draft Low Income Toll Report	071322T-09
10	Memo	July 6, 2022	TO: TPAC and interested parties From: Ally Holmqvist, Senior Transportation Planner RE: Introduction to the High Capacity Transit Strategy Update	071322T-10
11	Attachment 1	June 2022	High Capacity Transit Strategy Update Fact Sheet	071322T-11
12	Attachment 2	June 2022	Public Transit 101 Fact Sheet	071322T-12
13	Attachment 3	June/July 2022	HIGH CAPACITY TRANSIT STRATEGY UPDATE Key Meeting Dates and Engagement Activities for Project Milestones	071322T-13
14	Attachment 4	June 2022	High Capacity Transit Strategy Update Work Plan	071322T-14
15	Attachment 5	June 30, 2022	High Capacity Transit Strategy Update: Working Group #1 Agenda	071322T-15
16	Attachment 6	June 30, 2022	High Capacity Transit Strategy Update: Working Group #1 Minutes	071322T-16

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
17	Attachment 7	N/A	RTP Policy 4.3.4 Policy 4 HCT Context	071322T-17
18	Presentation	July 13, 2022	RTP Needs Assessment: proposed approach	071322T-18
19	Presentation	July 13, 2022	RTP Congestion Pricing Policy Development	071322T-19
20	Presentation	July 13, 2022	HCT Strategy Update: Introduction	071322T-20

Meeting minutes



Meeting: **Transportation Policy Alternatives Committee (TPAC) Workshop**
Date/time: Thursday July 14, 2022 | 10:00 a.m. to 12:00 p.m.
Place: Virtual online meeting via Web/Conference call (Zoom)

Members Attending

Ted Leybold, Vice Chair
Karen Buehrig
Allison Boyd
Chris Deffebach
Eric Hesse
Jaimie Lorenzini
Jay Higgins
Don Odermott
Lewis Lem

Affiliate

Metro
Clackamas County
Multnomah County
Washington County
City of Portland
City of Happy Valley & Cities of Clackamas County
City of Gresham and Cities of Multnomah County
City of Hillsboro and Cities of Washington County
Port of Portland

Alternates Attending

Steve Williams
Sarah Paulus
Dyami Valentine
Dayna Webb
Glen Bolen

Affiliate

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

Members Excused

Lynda David
Tara O'Brien
Chris Ford
Karen Williams
Laurie Lebowsky
Idris Ibrahim
Jasmine Harris
Katherine Kelly
Rob Klug
Shawn M. Donaghy
Jeremy Borrego
Rich Doenges

Affiliate

SW Washington Regional Transportation Council
TriMet
Oregon Department of Transportation
Oregon Department of Environmental Quality
Washington State Department of Transportation
Community Representative
Federal Highway Administration
City of Vancouver
Clark County
C-Tran System
Federal Transit Administration
Washington Department of Ecology

Guests Attending

Alan L. Thompson
Brett Horner
Camilla Dartnell
Carla Staedter
Gary P.

Affiliate

Oregon Department of Transportation

Kittelson & Associates
City of Tigard

Guests Attending

Jean Senechal Biggs
 John Williams
 Lance Calvert
 Melissa Johnston
 Will Farley
 One unidentified caller

Affiliate

City of Beaverton
 City of West Linn
 City of West Linn
 City of Troutdale
 City of Lake Oswego

Metro Staff Attending

Lake McTighe, Senior Transportation Planner	Dan Kaempff, Principal Transportation Planner
John Mermin, Senior Transportation Planner	Ally Holmqvist, Senior Transportation Planner
Ken Lobeck, Senior Transportation Planner	Robert Spurlock, Senior Regional Planner
Jodie Kotrlik, Resource Program Coordinator	Marne Duke, Senior Regional Planner
Matthew Flodin, Intern	Miranda Seekins, Intern
Noel Mickelberry, Transportation Planner	Summer Blackhorse, Program Assistant
Marie Miller, TPAC Recorder	

Call to Order and Introductions

Vice Chair Leybold called the meeting to order at 10:00 a.m. Introductions were made. Reminders where Zoom features were found online was reviewed. The link for providing ‘safe space’ at the meeting was shared in the chat area.

Committee and Public Communications on Agenda Items - none**Regional Flexible Funds Allocation (RFFA) / Trails Bond** (Dan Kaempff & Robert Spurlock, Metro)

Mr. Kaempff began the presentation by noting the purpose of the workshop was to discuss sources of available information and funding examples, and gain input used in developing draft recommendations for discussion in August TPAC meeting. The upcoming schedule of RFFA/Bond TPAC and JPACT discussions was reviewed. The process for selecting projects with RFFA and Bond funds was provided.

The risk assessment evaluation considerations was briefly reviewed. The public comments report on proposed projects for 2025-27 regional flexible funds and Metro Parks and Nature trails grants were noted in the packet. Information to be used for project evaluations were described that included Outcomes Evaluation, Risk Assessment, Public Comment, Coordinating Committee Prioritization, RFFA process objectives, Previous RFFA award, and additional considerations.

Funding package examples for discussion and refinement that were provided in the packet showed illustrations of different methods for developing a starting point for funding packages, provide a policy-based rationale for a funding decision, not balanced to available funding, and additional information is not yet factored into these examples, but will be used in recommendations.

Brief descriptions of each example was provided:

1. Overall – This example illustrates the package of projects created by sorting the projects by their overall outcomes ratings. It does not move any of the “Either” projects into one funding source, but shows them in each project group for comparison purposes.
2. Overall, with projects moved – This example is similar to the previous one, but it moves the following projects into the funding sources.

3. Construction emphasis – This example focuses on completing projects. It first funds projects requesting funding up to and including the construction phase, then funds lower cost project development funding requests up to the existing funding amount.
4. Project development emphasis – This example focuses on ensuring there is a pipeline of sufficiently planned and developed projects in order to prepare for upcoming funding opportunities. It funds projects in a manner similar to the Construction emphasis example but prioritizes projects seeking planning or project development funding.
5. Specific outcomes emphasis – This example illustrates how the outcomes ratings in specific criteria areas can be used to develop project packages. The example shown combines the averages of the Equity and Safety outcomes and uses those results to prioritize projects.

Comments from the committee:

- Alan Thompson noted that when talking about equity we often think of benefits to historically marginalized communities with lack of investment opportunities, but we should also look at the dis-benefits that affect these communities such as gentrification or other dis-benefits that may occur from these developments.
- Jean Senechal Biggs asked what the thinking was behind including the archeological investments in projects, which are not typically a factor in planning. They would be addressed in design and construction of projects. Why factor archeological in with the evaluation? Robert Spurlock noted the range of probability within the planning project where this factor may fall, which could be useful for grant recipients working with the tribes who would be concerned addressing human remains in future work that would cause harm.

It was asked how much of this has gone into the project risk assessment. Camilla Dartnell noted the cultural resource assessment was not included in the criteria. It's a consideration, but not part of the project evaluation. Mr. Kaempff added the cultural resource assessment was more advisory on how applicants could revise their project scope. If projects are funded they are funded for all considerations.

- Don Odermott asked how the formulation for the risk assessment scores were developed. Ms. Dartnell noted the risk assessment had 2 levels; what could be controlled or the inherent risk with less control on project factors. Asked if there was a worksheet on specific projects for this, it was noted the memo had this, which provides every criteria, how it was weighted and different factors, and scored low, medium, and high for each criteria. Vice Chair Leybold added that initial ratings were provided to all applicants who had time to reply back with clarifying questions or further feedback. TPAC can choose to include the risk assessments as part of project evaluations in their recommendation to JPACT.
- Karen Buehrig expressed interest in the outcomes emphasis application tab in the spreadsheet and interest in how TPAC may apply the RFFA objectives. In the outcome emphasis trials bond project it appears they would fall above the line for funding with the exception of the Cornfoot Road project. With the RFFA projects the above the line leaves about \$6m still unallocated. Approval was given for the allocation mix of project types in the outcome analysis.

Vice Chair Leybold summarized that it was generally support of outcomes based approach but taking into account some broader RFFA objectives to hold a conversation on what remaining projects get included in funding projects throughout the region. Ms. Buehrig agreed, noting the context of RFFA objectives is not specifically woven into the scoring, so still open to a conversation about certain projects moving into the funding category.

- Chris Deffebach asked for clarification on overall projects moved, and if ranked by how much funding. Does the overall include funding in both categories? The reality is that some projects will need to move and will not get double funded. If projects are put in the trails pot do we need to know if Metro Council will support this, or otherwise we are making assumptions?

It was noted the emphasis on construction of fund development, and whether this was fair or not, since the direction for what was applied for didn't say one way or the other would be prioritized. The submissions might have been different. It was important to see the differences for project deliveries. It was noted that regarding outcomes analysis and projects moved to not leave anything on the table.

Vice Chair Leybold noted he heard abdicating against an emphasis on construction or development, and just let this play out without emphasis on either one. Mr. Kaempff added that specific to the Council Crest Trail project they requested from both funding pots specific amounts totaling \$5.5m. That was example one. In the second example we put all their requests into the RFFA category. One may be more appropriate for the recommendation.

Mr. Spurlock further clarified the projects moved and noted that the bond funding is a Council decision. It was noted that when we went through the program direction with RFFA we talked about the four priority outcomes from the RTP, and if these would be weighted. The decision was made to not predetermine or weigh outcomes, but provide outcomes analysis for decision makers to consider.

- Allison Boyd asked if we are waiving safety and equity from decision makers and where would that fall in the process determining our recommendations from TPAC to JPACT and Metro Council. Is TPAC coming up with several options for JPACT? Vice Chair Leybold noted typical of the process is have TPAC recommend one option to JPACT. Mr. Kaempff added the input and direction we hear from TPAC provides this recommendation to JPACT. The question on focus for particular criteria we could share with JPACT. If projects have strong focus on certain criteria these would be noted.

Ms. Boyd agreed on the focus just on safety and equity with all other criteria kept equal as has been from the beginning of the process. Regarding the emphasis on construction and fund development it was agreed to not change direction at this point, but would advocate previously funded RFFA project investments that have proven effective and moved forward. It was noted that we make the last bit of that funding work for balance of RFFA objectives.

- Cindy Dauer noted the outcomes based approach was good, timely and relevant, and all criteria is important and selected for that reason. Safety and equity have emerged as significant importance with regional support for these investments.
- Don Odermott noted the spreadsheet with summarizing data. It was asked what the highlighted projects on the project emphasis sheet meant. Mr. Kaempff noted this indicates projects in 2 categories. The decision is needed on which package/category this would be funded. Mr. Odermott noted that at the bottom of pages there are tables that list counties and cities with percentage of dollars funded. Is there a method to see projects in 100% or 150% comparisons across the region? With the five different options of priorities, it was asked if a merge of these could be created. It was recommended to finish with previously funded RFFA projects to complete projects. Mr. Kaempff noted that with regional funding distributions the table and examples show project numbers and how much money of distribution. Different

types of projects are asked among jurisdictions, but more information on distribution across the region can be developed.

- Dyami Valentine noted an error in the spreadsheet under overall projects moved, with a Washington County project missing work credited that was missing. The recalculation in the spreadsheet will be corrected.
- Eric Hesse asked that in terms of projects eligible for both funding pots, is it appropriate for the coordinating committees to recommend funding from the two sources of funding. Mr. Kaempff noted the examples in the spreadsheet for reference, with staff interested in hearing of questions on the information.
- Karen Buehrig noted it would be helpful for TPAC's recommendation that if a project is in a proposed recommendation for funding, it shows more clearly which project funding source this is coming from. Mr. Kaempff noted that part of this discussion helps in making determination between funding sources leading to the recommendation to JPACT.
- Chris Deffebach asked for clarification on projects in planning development and construction. Mr. Kaempff noted way it shows in the spreadsheet is per criteria project sorting, and just because projects are shown in the 100% list or gray areas of examples doesn't mean these projects are not being considered. Additional information is being used for moving projects up or down for consideration. Vice Chair Leybold noted it appeared the project development emphasis and construction wasn't favored for factoring into consideration. Rather, let outcomes drive the decision. Mr. Kaempff added a summary of project construction vs project development projects can be added to the spreadsheet as more discussion takes place.
- Cindy Dauer noted that zip codes were not part of the survey results in the public engagement report. The demographics showed a disproportionate slant in race and income, with diverse voices not represented in the report, showing why equity should be more prioritized. It was noted culturally equitable organizations are asked to respond many times, but are not involved or have burnout for multiple asks. Mr. Kaempff noted that page 37 of the report shows a map of respondents rather than zip code. And agreed it's a challenge to gain information from diverse populations and organizations to reflect critical responses.
- Don Odermott agreed with the struggle to get diverse voices heard from public engagement. It was noted that information from project development and construction projects for ranking is insightful and should stay part of the consideration leading to the recommendation of funding.

Vice Chair Leybold noted it appeared the project development vs construction information could stay included with consideration in the materials, but it's not specific to the ratings outcome. What is not supported is bringing back a project package option that emphasizes either, but having information still wanted with maybe a balance between them. Mr. Odermott agreed, noting that when we melt the 5 criteria we may see common threads and trends.

Mr. Kaempff paraphrased for a recap on comments:

There is a desire for a deeper look at the outcomes based approach with additional information regarding regional distribution as well as how we're funding project development vs construction. With regard to the #2 overall approach with the same details, when placed together projects may rise in ranking from common threads.

Vice Chair Leybold added to the recap, with the common threads ranking also using the overall RFFA criteria to balance in the remaining funding to make sure we are funding projects across the region.

- Karen Buehrig agreed as accurate, but wanted to see both project objective outcomes and overall projects moved to show comparisons. Mr. Kaempff agreed this information would be moved forward.
- Jean Senechal-Biggs agreed with the outcomes with project moved, but also adding some more variations to scenarios such as equity and safety that provide a clearer picture. Combinations of factors could be considered.
- Don Odermott would like to see across the entire package which projects we already put Federal fund into. The purpose of this is to avoid projects not completed and having to pay back funding. We have commitments to local jurisdictions and assigned Federal money, which should be completed.
- Jean Senechal-Biggs noted a column for previous RFFA funding, but could have other Federal funding sources not included in the column. It would be helpful to highlight this gap in project funding if possible.
- Chris Deffebach noted importance of caution about past projects and weighing successes. Past cycles began to predetermine project funding and limit options. This highlights the risk assessment.
- Vice Chair Leybold noted other factors yet to weigh in and how strongly we should have them influence a package of options. One of these factors is the sub-committees regional priorities that may change priorities when consideration is made across the region with projects.
- Karen Buehrig noted that at TPAC individual jurisdictions could make these corrections with project priorities if needed.

Mr. Kaempff provided closing remarks. If the committee had any other comments or questions they could reach out to either himself or Mr. Spurlock. The next steps will be summarizing this discussion to add to the presentation to JPACT and Metro Council work session. Coordinating committee input will be added to this, and the recommendation for funding will be coming to TPAC at the August meeting.

Committee comments on creating a safe space at TPAC – none received.

Adjournment

There being no further business, workshop meeting was adjourned by Vice Chair Leybold at 11:44 a.m.

Respectfully submitted,

Marie Miller, TPAC Recorder

Attachments to the Public Record, TPAC workshop meeting, July 14, 2022

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	7/14/2022	7/14/2022 TPAC Workshop Agenda	071422T-01
2	TPAC Work Program	7/12/2022	TPAC Work Program as of 7/12/2022	071422T-02
3	Memo	7/12/2022	TO: TPAC and interested parties From: Dan Kaempff, Principal Transportation Planner RE: Development of Regional Flexible Funds/Trails Bond Funding Options	071422T-03
4	Memo	7/7/2022	TO: Dan Kaempff, Ted Leybold, and Robert Spurlock Metro From: Camilla Dartnell, PE, Russ Doubleday, and Hermanus Steyn, PE, Kittelson & Associates RE: 2025-27 Regional Flexible Funds and Trails Bond Risk Assessment	071422T-04
5	Letter	7/11/2022	From: Clackamas County Coordinating Committee Re: Prioritization of the Regional Flexible Funds Allocation (RFFA) and Metro Parks Trail Bonds	071422T-05
6	Report	Updated July 5, 2022	Regional Funding Allocation: Outcomes Evaluation Report 2025-2027 Regional Flexible Funds Parks & Nature Trails Bond funding	071422T-06
7	Links to spreadsheets	N/A	RFFA / Bond examples for TPAC discussion, updated	071422T-07
8	Report	July 2022	Engagement report: Public comments on proposed projects for 2025-27 regional flexible funds and Metro Parks and Nature trails grant	071422T-08
9	Appendices	July 2022	Appendices: Public comments on proposed projects for 2025-27 regional flexible funds and Metro Parks and Nature trails grant	071422T-09
10	Presentation	July 14, 2022	Developing funding recommendations for 2025-2027 Regional Funding: RFFA + Trails Bond	071422T-10



Memo

Date: September 7, 2022
 To: TPAC and interested parties
 From: Ted Leybold, Lake McTighe
 Subject: Elements of the 2023 Regional Transportation Plan (RTP) Financial Plan: Revenue Forecast and Equitable Funding Research

Purpose

The purpose of this memo and the TPAC Workshop is to share two elements that will contribute to the 2023 Regional Transportation Plan (RTP) Financial Plan:

- Revenue Forecast: Initiate and discuss the process to update the local, regional, state and federal revenue forecast for the financial plan of the 2023 RTP.
- Draft Equitable Transportation Funding Research Report: Share and discuss draft findings of equitable funding research to prepare final draft.

Questions for Discussion

- What questions or comments do you have on the Work Plan to develop the RTP Revenue Forecast that will support the Call for Projects?
- How would you like to see the findings and recommendations from the Draft Equitable Transportation Funding Research Report inform the update of the RTP Financial Chapter?
- What questions or comments do you have on the Draft Equitable Transportation Funding Research Report that should be considered as the report is finalized?

RTP Financial Plan

The purpose of the RTP financial plan is to understand and document the funds available to fund the region’s transportation needs. This financial plan will also address corrective actions identified in Metro’s 2021 Federal certification review.

The figure below illustrates the elements of the 2023 RTP Financial Plan, which is captured in Chapter 5. This memo, attached materials, presentation and discussion at the Sept. 7, 2022 TPAC workshop primarily address the first two elements of the financial plan: understanding how transportation is funded and revenue forecast and assumptions.



Revenue Forecast and Assumptions

Cooperatively updating the RTP’s financial assumptions will include working with transportation providers to document and forecast the amount of local, regional, state and federal funding expected to be available to address current and future transportation needs, including adequately maintaining and operations of the existing transportation system. This will include documenting existing revenue sources (i.e., fees, taxes, fines, fares) collected at the local, regional, state and federal levels, documenting historic levels of funding by revenue source, forecasting “reasonably expected” revenue for the plan period (i.e. financially constrained revenue forecast or “constrained budget”) and identifying potential new funding mechanisms. A “Constrained RTP” near-term (2024-2030) and long-term (2031-2045) revenue forecast will be developed consistent with federal requirements.

This information will be used to support a policy discussion on the sources and levels of funding needed to implement the region’s project and program priorities in the near- and long-term and meet federal requirements for demonstrating fiscal constraint in the RTP. This work will be informed by regional congestion pricing policy development and coordinated with ODOT’s Tolling Program, and may inform other concurrent funding discussions happening at the local, regional, state and federal levels. In order to be eligible for federal or state transportation funding, a project must be included on the “constrained” list.

Defining terms

Constrained budget

The combined federal, state and local funds the greater Portland region can reasonably expect through 2045 under current funding trends – presumes some increased funding compared to current levels.

Constrained list

Projects that can be built by 2045 within the constrained budget.

Strategic list

Additional priority projects that could be achieved with additional resources.

Understanding How Transportation is Funded: Findings from the Equitable Transportation Funding Research Report

Findings from the Draft Equitable Transportation Funding Research Report will inform the “Understanding How Transportation is Funded” section of Chapter 5 of the RTP which describes the Financial Plan. The research report provides an inventory of existing, emerging and potential revenue sources for transportation, and an assessment of the equity impacts of current RTP revenue collection and disbursement on people with lower income and communities of color. This information is intended to provide information, it does not set policy in the RTP.

The research report, attached to this memo as Attachment 3, was developed to support the RTP’s focus on equity. This work helps build an understanding of how the regional system is funded today, illuminating how revenue collection and disbursement may contribute to transportation inequities, and providing more transparency and clarity about how the regional transportation system is funded. It is also intended to be used to inform future discussions as agencies consider potential new revenues.

Timeline and Process

9/14/22	TPAC Workshop: RTP Financial Plan and Equitable Funding
10/7/22	TPAC: RTP Financial Plan and Equitable Funding
10/20/22	JPACT: RTP Financial Plan and Equitable Funding
11/17/22	JPACT: RTP Financial Plan and Call for Projects Approach

Next steps

- Confirm agency contacts for RTP Financial Plan work
- Provide agency revenue forecast data (to be led by DKS Consultants)
- Provide comments and input on Draft Equitable Transportation Funding Research Report

Attachments

1. 2023 RTP Update Revenue Forecast and Costs Scope of Work
2. List of agency contacts for RTP Financial Plan
3. Draft Equitable Transportation Funding Research Report, Sept. 7, 2022, TPAC review

2023 RTP Update

Revenue Forecast and Costs

Scope of Work

The 2023 Regional Transportation Plan (RTP) includes a 22-year planning horizon covering the 2023 to 2045 time period. Per federal requirements, the RTP must be financially constrained to satisfy the requirements identified by 23 CFR §450.322.¹ This means the plan must include a financial plan that documents information on how much funding the region can “reasonably expect” to have available to implement recommended projects and programs, as well as operate and maintain the system as a whole, over the life of the plan.

A Consultant will provide assistance to Metro in engaging ODOT, TriMet, South Metro Area Regional Transit (SMART), the Port of Portland, Tualatin Hills Parks and Recreation District, North Clackamas Parks and Recreation District, the region’s 24 cities, and Clackamas, Multnomah and Washington counties and to compile, document and analyze relevant financial data to support development of the 2023 RTP financially constrained revenue forecast. The financially constrained revenue forecast will reflect the funding that is reasonably anticipated to be available² for two time periods - 2023-2030 (near-term) and 2031-2045 (long-term). The forecast is anticipated to include revenues from the U.S. Department of Transportation, State of Oregon, regional and local sources, the private sector, and other sources identified through the process, consistent with FHWA/FTA *Guidance on Financial Plans and Fiscal Constraint for Transportation Plans and Programs*, released April 17, 2009.³

This work will serve as a technical foundation for developing a financing strategy to equitably fund current and future transportation needs, including adequately maintaining and operating the region’s transportation system. This work will also help address FHWA’s Corrective Actions for the 2018 RTP, including:

- Document revenue and cost estimates in Year-Of-Expenditure (YOE) dollars;
- In revenue estimation, develop one consistent process for all agencies and separate out ODOT revenues from Federal funding; and
- Define operations and maintenance for regional streets, highways and transit to use in the RTP and TIP financial planning processes.

This work will be the basis for the investment level to be assumed for updating the “financially constrained” project list during the RTP Project Solicitation process in January 2023. A “strategic” level of investment is anticipated for the 2023 RTP that would allow the region to accelerate implementation of the financially constrained projects and programs and construction of additional project and program priorities the region would pursue with more funding.

¹ In addition to requirements in the federal code ([https://www.ecfr.gov/current/title-23/chapter-I/subchapter-E/part-450#p-450.324\(f\)\(11\)](https://www.ecfr.gov/current/title-23/chapter-I/subchapter-E/part-450#p-450.324(f)(11))), statewide Climate-friendly Equitable Communities rulemaking is underway that may provide further direction to the 2023 RTP finance plan.

² “Reasonably available” is a federal term that refers to the likelihood of a funding source to be available during the plan period.

³ Additional supporting information can be found here: https://www.fhwa.dot.gov/planning/guidfinconstr_qa.cfm

TASK 1 PROJECT MANAGEMENT

The Consultant PM and the Metro PM will maintain regular contact throughout the project to ensure day-to-day management is smooth and coordinated. The Consultant will work with Metro to set up standing 30-minute biweekly project management team calls from July 2022 through June 2023. The Consultant will submit monthly invoices and progress reports throughout the project.

Consultant Deliverables:

- Biweekly meeting agendas and summary notes (assumes 24 meetings)
- Assumes all meetings are by video conference
- Monthly invoices and progress reports (assumes 12 months)

TASK 2 DEVELOP TRANSPORTATION REVENUE FORECAST

2.1 Prepare Statewide Revenue Forecast of federal and state funding

- Coordinate with ODOT Finance Office and a statewide committee on the forecast
 - Define eligibility of funds for use on capital, operations, maintenance, or flexible to multiple uses
- Apply the MTIP framework to define a portion of the statewide forecast available to the Metro area
- Define approach to estimating tolling revenues, in coordination with ODOT
 - Forecast methods and the amount estimated to be generated
 - Financially constrained vs. Strategic
 - Use of revenues for off-facility projects/programs
- Identify revenue types and amounts for ODOT projects, RFFA projects, transit projects, and local projects from the statewide forecast
- Define approach for use of federal revenues
- Define forecasted revenues already committed to projects in MTIP (through FFY 2027), subtract from the amount available for new projects
- Define forecasted revenues available during component parts of the planning periods of 2023-2030 and 2031-2045.

Metro Deliverables:

- Statewide revenue forecast of federal and state-generated revenues (in excel format)
- Methodology for the forecast of existing federal and state revenues for the Metro area (in word format)
- Revenues already allocated and committed in the MTIP through 2027 (in excel format)

Consultant Deliverables:

- Convene up to four (4) meetings with Metro, ODOT staff, and other stakeholders to develop a revenue forecast
- Excel workbook that applies methodology provided by Metro for use in forecasting federal and state revenues available for transportation projects for the Metro area
- Forecast of federal and state revenues available for transportation projects during the plan period for the Metro area
- Prepare meeting summaries for each meeting

Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work TPAC Workshop 9-7-22

2.2 Federal, state, and local agency transit revenue forecast methods documented, collected, and projected to plan period in cooperation with TriMet, SMART, C-Tran, and Oregon Public Transit Division

- Identify existing and future revenue sources available for transit projects and define forecast methods to project the funds available during the planning time periods
- Define ODOT-administered transit funds available to TriMet and SMART
- Develop locally developed revenue forecast by TriMet and SMART
 - Define revenue eligibility/use for capital, operations & maintenance, or either
- Forecast federal and state discretionary funding programs – assumptions on “reasonably expected” revenues for Financially Constrained Project List vs. “Strategic” revenues for the Strategic Project list and link to New Starts/Small Starts development strategy
- Define forecasted revenues already committed to projects in MTIP (through FFY 2027), subtract from amounts available for new projects

Metro Deliverables:

- 2018 RTP transit revenue forecast to use as a starting point for updated forecast
- 2018 RTP New Starts/Small Starts project development strategy to use as a starting point for updated forecast

Consultant Deliverables:

- Convene up to four (4) meetings with Metro, TriMet, SMART, C-Tran, Oregon Public Transit Division, and other stakeholder staff to develop a transit revenue forecast
- Excel workbook that is used to forecast revenues available for transit projects for the Metro area
- Forecast of revenues available for transit projects during the plan period for the Metro area
- Prepare meeting agenda and summary for each meeting

2.3 Develop a forecast of new sources of regional funding

Forecast of revenues from potential new sources of regional transportation funding. These funds may be forecast for use as a match to leverage federal funding (e.g., FTA New Starts funding) or for use on targeted transportation purposes. Depending on the source and scale of funds, they may be defined as “reasonably available” and could be included in the financially constrained revenue forecast or as “illustrative.” In the case of new funding sources, strategies for ensuring their availability will be identified.

Metro Deliverables:

- Revenue data from the 2020 regional transportation funding measure
- Direction on the possible new referral of regional transportation funding measure
- Historic regional transportation funding measures (e.g. TriMet Westside LRT)

Consultant Deliverables:

- Convene up to three (3) meetings with Metro staff to develop a forecast of potential new sources of regional funding

Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work TPAC Workshop 9-7-22

- Prepare meeting agenda and summary for each meeting

2.4 Develop Local agency revenue forecast approach and methods documented, collected, and projected for the plan period

- Define forecast method based on consistency with and that provides direction to local TSP revenue forecasts
- Develop local agency revenue submission materials
 - Update local revenue template for local governments
 - Ensure consideration/documentation of revenue growth rates
 - For “shared” local revenues between local agencies (e.g. Washington County MSTIP), document agreement on method of sub-distribution of forecasted revenues
 - Develop guidance for any proposed new revenue sources to define what is “reasonably expected”
- Define forecasted revenues already committed to projects in MTIP and CIPs through FFY 2027, subtract from available for new projects
- Work with agencies to collect their forecast data and perform quality control on submissions
 - Resolve unique issues (collection rates, growth assumptions, newly proposed sources, etc.) with local proposals
- Organize all local submissions into a comprehensive/consolidated “local revenue forecast”

Metro Deliverables:

- 2018 RTP local agency revenue submission forms as a starting point for updated forecast
- 2018 RTP local agency revenue forecasts as a starting point for updated forecast
- Provide overall direction on methods and approach for developing updated forecast

Consultant Deliverables:

- Convene up to 2 regional workshops and 8 sub-regional coordinating committee meetings with local agency staff to develop local agency revenue forecast coordinated with local Transportation System Plans and local CIPs
- Consultations with individual agency staff as needed to provide guidance or clarity on forecast methods as relevant to that agency (up to 30 hours)
- Consultations with Metro staff as needed to address methodology questions raised and clarifications needed to address questions as part of project management check-ins
- Prepare an updated local agency revenue submission form with instructions and guidance
- Prepare meeting agenda and summary for each meeting

2.5 Document the Revenue Forecasting Outcomes and Summarize Key Findings

- Prepare technical memorandums for each funding category in Task 2.
- Prepare factsheet summaries for each forecast in Task 2.
- Prepare PPT slides presentation of the forecast process and factsheet summaries

Consultant Deliverables:

Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work TPAC Workshop 9-7-22

- Prepare technical memorandums (up to 3 revisions) that describe the methods and the resulting revenue forecasts prepared for each funding category (as described in Tasks 2.1 through 2.4) for transportation projects during the plan period, defined as:
 - Eligible for use on capital, operations, preservation, maintenance use, or flexible to multiple uses.
 - Financially constrained (reasonably expected to be available) or strategic (additional efforts needed); and
 - available during the time periods of 2023-2030 and 2031-2045
- Prepare 2023 RTP Forecast Factsheets for each of the revenue forecast categories
- Prepare a PPT slide series highlighting the Factsheets for each of the revenue forecast categories

TASK 3 DEVELOP PROJECT/PROGRAM COST METHODOLOGY AND GUIDANCE

General

- Develop and provide guidance and approach for accounting for inflation to costs through the plan period.
- Develop process and approach for coordinating with other agencies

3.1 ODOT Cost Methodology

- Capital Projects Costs
 - Work with ODOT to document cost methodology.
 - Work with Metro and ODOT staff to define programmatic buckets for routine, non-capacity capital (lighting, culverts, etc.) that may have corresponding TIP programming buckets to allow for efficient MTIP processing.
 - Identify projects with committed revenues that cover costs per the TIP (through FFY 2027).
- Preservation and Maintenance Costs
 - Work with ODOT to document cost methodology.
 - Define programmatic buckets for preservation activities (pavement, etc.).
 - Define cost for optimal and policy objective levels of preservation.
 - Define a method to describe preservation status at financially constrained investment levels as defined by the planning process.
- Operations Costs
 - Work with ODOT to document cost methodology and account for costs in the planning process.
 - Work with ODOT and Metro staff to define programmatic buckets for TSMO project/programs that improve transportation system efficiency (e.g. ITS projects) that may have corresponding MTIP programming buckets to allow for efficient MTIP processing.
- Prepare approach to ensure planning process meets and documents federal regulation of “adequately maintaining and operating the system” for ODOT portion of National Highway System (NHS) network.

3.2 Transit Cost Methodology

- Capital Project Costs
 - Work with transit agencies TriMet and SMART to document cost methodology

Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work TPAC Workshop 9-7-22

- Include facilities and rolling stock for expansion of service
- Identify projects with committed revenues to cover costs per the TIP (through FFY 2027)
- Operations and Maintenance Costs
 - Work with transit agencies to document cost methodology
 - Define approach for transit agencies located outside the region that provide service within the region (C-Tran, Sandy Express, etc.)
 - Update/refine programmatic buckets for maintenance activities (bus replacements, etc.)
 - Define approach to working with travel demand modeling during the planning process to provide service to meet demand while managing operating costs.
- Prepare approach to ensure planning process meets and documents federal regulation of “adequately maintaining and operating the system” for the regional transit system.

3.3 Metro Region-wide Programs Cost Methodology

- Work with Metro staff to prepare an approach to defining costs for region-wide programs: Transit-Oriented Development, Regional Travel Options, Transportation System Management & Operations, Investment Areas, Project Development, and Planning.
- Prepare approach to ensure planning process meets and documents federal regulation of “adequately maintaining and operating the system” for the region’s TSMO and TDM activities and any associated capital asset management.

3.4 Local Agencies Cost Methodology

- Capital Project Costs
 - Update cost methodology guidance based on coordination with local TSPs. The guidance could include different methods/approaches based on progress/stage of project development.
 - Share approaches to ODOT programmatic buckets for routine, non-capacity capital projects and ongoing ITS investments as an option for local agencies.
 - Identify projects with committed revenues to cover costs per the TIP (through FFY 2027).
- Refine 2018 RTP project cost submission materials for local agencies to complete for each project nominated during the RTP Project Solicitation process
- Operations, Maintenance, and Preservation Costs
 - Propose a cost methodology that utilizes local reporting to ODOT per HB 2017 to the extent practicable.
 - Define a method to describe preservation status at financially constrained investment levels defined by the planning process.
- Prepare an approach to ensure the planning process meets and documents federal regulation of “adequately maintaining and operating the system” for the local portion of the National Highway System (NHS) network and any regionally significant transit service (e.g. Portland Streetcar).

Task 3 Metro Deliverables:

- 2018 RTP Project submission forms and cost methodology guidance as a starting point for updated forms and guidance

Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work TPAC Workshop 9-7-22

- Current and proposed updated definitions of programmatic buckets of ODOT, Transit and Regional Programs
- Current federal and state funding awards (and local match if known) to projects and programs in the region to identify projects with committed revenues (through FFY 2027)
- Contact information and links to ODOT and Transit agency staff and existing Asset Management reports for development of materials related to defining and documenting investments for meeting the federal planning requirement to “adequately maintain and operate” the federal-aid roadways and public transportation system
- Review consultant draft deliverables and provide consolidated comments

Task 3 Consultant Deliverables:

- Convene up to two (2) meetings with Metro staff to develop a proposed refinement of the 2018 project cost information and documentation of project cost methods to be submitted into the RTP Hub by all agencies during the project solicitation process.
- Prepare updated template for documenting project cost information for use by ODOT, Transit agencies and local agencies, which are expected to be unique by type of agency (e.g. ODOT, Transit, Local agency) and by project/program type (e.g. Capital, Operations, Preservation & Maintenance).
- Prepare cost estimation guidance for ODOT, Transit agencies and local agencies, which are expected to be unique by type of agency (e.g. ODOT, Transit, Local agency) and by project/program type (e.g. Capital, Operations, Preservation & Maintenance). This guidance will be used to update existing project costs (to account for increasing levels of inflation) and develop cost estimates for new projects.

Convene up to two meetings each with ODOT staff, Transit agency staff and Local agency staff workshops (up to six meetings total) to develop/refine transportation project/program cost methodologies coordinated with local Transportation System Plans or Capital Improvement Programs.

- Consultations with individual agency staff as needed to provide guidance or clarity on forecast methods as relevant to that agency as that agency prepares cost estimates (up to 40 hours)
- Prepare meeting agenda and summary for each meeting

TASK 4 COORDINATION WITH PROJECT SOLICITATION PROCESS

- 4.1 Develop guidance on the use of forecasted revenue for nominating projects during the Project Solicitation Process
- a. Develop guidance for ODOT for the nomination of projects relative to available federal and state revenues
 - b. Develop guidance for transit agencies for the nomination of projects relative to available transit-related revenues
 - c. Develop guidance for a local agency for the nomination of capital projects relative to available local revenues
 - d. Develop project funding allocation approach of Step 2 RFFA revenues available in the plan period

Metro Deliverables:

- Review of draft deliverables and provide consolidated comments
- Provide direction on the process for use of forecasted MPO allocated funds (Step 2 RFFA) on the nomination of projects
- Communication to agencies on the project solicitation process and use of the supporting guidance and project nomination materials developed by the consultant
- Maintain database of project submissions with cost data

Consultant Deliverables:

- Prepare RTP Project Solicitation Funding Memo documenting
 - financially constrained project cost targets for:
 - ODOT utilizing available federal and state revenues
 - TriMet, and SMART utilizing available transit-related revenues
 - Local agencies, including the city of Portland, Clackamas County and the cities in Clackamas County, Multnomah County, and the cities of Multnomah County (outside the city of Portland) and Washington County and the cities in Washington County utilizing local revenues and potentially RFFA Step 2 revenues
 - Strategic project list cost targets for additional projects to be considered for inclusion on the RTP Strategic Project list for ODOT, TriMet, SMART, and local agencies identified above
- 2023 RTP Cost Targets Factsheet and supporting graphics to be included in RTP Project Solicitation materials
- 2023 RTP Cost Targets PowerPoint presentation

TASK 5 PREPARE 2023 RTP FINANCIAL ANALYSIS AND REVENUE FORECAST REPORT

Compile all technical memoranda, with supporting graphics and data, from earlier work tasks to create a final report and appendices that document the financial analysis and revenue forecast for the 2023 Regional Transportation Plan. The report will draw from previous tasks and document all cost estimation methodologies, and forecast assumptions used in the forecast with assurances and/or disclaimers, in the opinion of the Consultant and Metro, as to the accuracy of data collected and confidence in forecasted numbers provided. The report will also document the collaborative planning process used to develop the revenue forecast. The revenue forecast shall be presented in the current year (in 2022 dollars) and the year of expenditure dollars.

Metro Deliverables:

- Review draft deliverables and provide consolidated comments
- Provide direction on the year of expenditure dollars to assign to projects

Consultant Deliverables:

- 2023 RTP Financial Analysis and Revenue Forecast Technical Report (up to 3 revisions), including:
 - Revenue forecast consolidating documentation of source data, methods, and forecast of revenues available for transportation described above.
 - Consolidated project/program costs, documenting the source of data and cost methodologies
 - Documentation of how the plan demonstrates system costs and revenues available to “adequately maintain and operate” the federal aid transportation system in the region
 - Tables and data for the demonstration of the financial constraint of the plan
- 2023 RTP Financial Analysis and Revenue Forecast Factsheet
- RTP Financial Analysis and Revenue Forecast Factsheet PPT
- Presentation of materials for up to four (4) TPAC, JPACT, and Metro Council meetings

Jurisdiction	Name of RTP Update Planning Lead Staff	Email	Other staff for Revenue or Cost Information
Beaverton	Jean Senechal-Biggs Jessica Engelmann	jbiggs@beavertonoregon.gov jenngelmann@beavertonoregon.gov	
Cornelius	Terry Keyes	terry.keyes@corneliusor.gov	
Durham	Linda Tate	cityofdurham@comcast.net	
Fairview	Sarah Selden	seldens@ci.fairview.or.us	
Forest Grove	Gregory Robertson	grobertson@forestgrove-or.gov	
Gladstone	Jim Whynot	whynot@ci.gladstone.or.us	
Gresham	Jay Higgins	jay.higgins@greshamoregon.gov	
Happy Valley	Jaimie Lorenzini	jaimiel@happyvalleyor.gov	
Hillsboro	Joseph Auth Don Odermott	don.odermott@hillsboro-oregon.gov Joseph.Auth@hillsboro-oregon.gov	
Johnson City			
King City	Mike Weston	mweston@ci.king-city.or.us	
Lake Oswego	Will Farley	wfarley@ci.oswego.or.us	
Maywood Park			
Milwaukie	Jennifer Garbley	GarbelyJ@milwaukieoregon.gov	
Oregon City	Dayna Webb	dwebb@orcite.org	
Portland	Eric Hesse Zef Wagner	eric.hesse@portlandoregon.gov zef.wagner@portlandoregon.gov	
Rivergrove			
Sherwood	Jason M. Waters	watersj@sherwoodoregon.gov	
Tigard	Dave Roth	daver@tigard-or.gov	
Troutdale	Melissa Johnston David Berniker	melissa.johnston@troutdaleoregon.gov	
Tualatin	Cody Field	cfield@tualatin.gov	

Jurisdiction	Name of RTP Update Planning Lead Staff	Email	Other staff for Revenue or Cost Information
West Linn	Lance Calvert	lcalvert@westlinnoregon.gov	
Wilsonville	Zach Weigel	weigel@ci.wilsonville.or.us	
Wood Village	Greg Dirks	gregd@woodvillageor.gov	
Clackamas County	Steve Williams Karen Buehrig	SWilliams@clackamas.us KarenB@clackamas.us	Diedre Landon
Multnomah County	Allison Boyd Jessica Berry Miletich Paulus Emily Sarah	allison.boyd@multco.us jessica.berry@multco.us emily.miletich@multco.us sarah.paulus@multco.us	
Washington County	Erin Wardell Steve Kelley Julie Sosnovske	Erin_Wardell@co.washington.or.us stevel_kelley@co.washington.or.us julie_sosnovske@co.washington.or.us	
Oregon Department of Transportation (ODOT)	Glen Bolen	glen.a.bolen@odot.oregon.gov valerie.egon@odot.state.or.us daniel.r.porter@odot.oregon.gov vaughan.rademeyer@odot.oregon.gov	Daniel Porter Vaughan Rademeyer Valerie Egon

Jurisdiction	Name of RTP Update Planning Lead Staff	Email	Other staff for Revenue or Cost Information
TriMet	Tara O'Brien	obrienta@trimet.org turneye@trimet.org snookj@trimet.org DohnM@TriMet.org	Michael Dohn Erika Turney Jamie Snook
South Metro Area Regional Transit (SMART) district	Eric Loomis Kelsey Lewis	loomis@ridesmart.com kLewis@ridesmart.com	
Port of Portland	Lewis Lem	Lewis.Lem@portofportland.com	
Tualatin Hills Parks and Recreation District (THPRD)	Peter Swinton	pswinton@thprd.org	
North Clackamas Parks and Recreation District (NCPRD)	Heather Koch	hkoch@ncprd.com	



Metro

Equitable Transportation Funding Research Report

Analysis and recommendations developed in support of the 2023 Regional
Transportation Plan update

TPAC Packet Version: September 7, 2022

Prepared by:
Nelson\Nygaard Consulting Associates



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Executive Summary

Metro and its jurisdictional partners recognize that there are severe disparities in access to transportation and opportunities in the greater Portland region and have an ongoing, lasting commitment to advancing equity by removing barriers to transportation experienced by people with low income, Black, Indigenous and other people of color, and others that are disproportionately impacted.

Transportation planning and funding practices disproportionately burden and harm low-income households, communities of color, and people with disabilities. Transportation funding can lead to different outcomes for different communities, therefore, it is critical for regional partners to examine the varying impacts and implications of existing and future funding strategies prior to implementation.

The key questions being asked are:

Who does revenue collection burden and benefit the most?

How can the revenue collection and disbursement be balanced to address inequities?

Metro and its partners strive to advance the quality of transportation through prioritizing investments that will provide the most benefit while avoiding, minimizing, and mitigating negative impacts. The purpose of this report is to analyze existing, emerging, and potential revenue sources through a racial equity and income lens and recommend strategies to equitably transform transportation funding while increasing revenues. This background report will update *Chapter 5: Our Transportation Funding Outlook* of the 2023 Regional Transportation Plan and will be used to inform future discussions as policymakers and transportation providers consider potential new revenues.

This research report identified several recommendations that we believe will be helpful to policy makers and transportation providers. These are organized by foundational principles, fair and equitable public outreach, equitable revenue collection, and equitable revenue disbursement.

Recommendations to Improve Equity Outcomes

Transportation needs in the greater Portland region exceed existing revenue capacity. This work utilized an equity lens to explore the benefits and costs of the funding sources that the greater Portland region relies on; it considered how revenues are collected and who pays, and how revenues are distributed and who benefits. We have identified several recommendations that we believe will be helpful to policy makers and transportation providers:

Laying a Foundation to Advance Equity Outcomes

- **No one solution.** Equitable transportation funding is not something that one solution can fix, so it should be broken down into numerous smaller, tenable goals, which contribute to achieving the overall goal of improving equitable outcomes in transportation funding.
- **Transparency is key.** Publishing the agency's goals so that they are viewable by the public in an easily accessible location is crucial to positive public perception and building strong community and regional partnerships.
- **Elevate community voices.** Continuing to strengthen the existing partnerships with local community organizations can provide more individuals with voices that may not have had the platform to be heard. This can be beneficial when establishing goals and receiving meaningful input during the early planning phases of policy initiatives or developments.
- **Put it into policy.** The establishment of policy helps to determine how revenues are collected and what they can be spent on; policy can be used to achieve more equitable outcomes. Adopting a policy stating that future revenue collection and disbursement should lead to more equitable outcomes is a central recommendation to this work, and establishing standards for revenue collection that does not disproportionately burden marginalized and low-income groups is one of the key starting points to equitable revenue collection.

Offering Fair and Accessible Opportunities for Meaningful Public Engagement and Input

- Offering ample opportunities for meaningful public engagement and input is critical to hearing diverse perspectives on equity-based goals, projects, and policies. Opportunities should be offered in-person and online, at a variety of locations and times, and available for individuals of varying English proficiency and non-English speakers.

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- Public outreach and involvement must be meaningful and intentional. Working with the community organizations that the agency has relations with will impact trust and participation.
 - Include a broad array of community members before, and during, the early planning phase; this builds trust and ensures that more voices are heard.
 - Utilize the relationships that the agency has with community-based organizations, groups, and trusted figures.
 - Hire trusted community members to do engagement work. Make sure to recruit several community members who are active in different areas.
- Communities affected by specific policies, funding efforts, or developments must be key contributors to the planning process. This results in an inclusive and iterative process where the communities affected by and benefiting from initiatives—like congestion pricing—are helping shape the program.

Equitable Revenue Collection

- The systems currently in place to raise revenues for transportation have been built over decades of policy decisions. There are twice as many regressive revenue sources than those with equitably distributed costs. These decisions have disproportionately placed a large burden on the most vulnerable people. Revenue collecting should be restructured to be more equitable. This can take many forms and should not end after one change. Several restructuring revenue collection suggestions are listed below:
 - Restructuring fines so they are non-compounding and do not impact credit scores or employment eligibility
 - Prorating (based on income or item value) payment structures for parking, license and registration fees, violation fines, and tolling and congestion charges
 - Providing alternatives to paying violation fines and split-repayment plans
 - Restructuring fare evasion programs to be more lenient and offer repayment plans or alternative forms of payment
 - Allowing license and registration renewal with unpaid fines

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- Removing barriers to acquiring Honored Citizen Fare Cards can make it possible for individuals with limited access to documents, identification, or internet able to get a card¹
- Reducing reliance on regressive tax strategies and encourage more progressive taxes and fees, such as TNC fees to ease the burden on transit users.
- Adjust the gas tax according to inflation and dedicate any additional revenue to maintenance, operations, and capital investment improvements in equity focus areas.
- Explore unified financial assistance system models for low-income households that could be applied to pricing programs and transportation services.²

Equitable Revenue Disbursement

- Equitably redistributing revenue gained from congestion pricing to emphasize investments focused on safety, transit, and active transportation in equity focus areas.
- Major investment can often lead to an increase in cost of living and rent rates; incorporating anti-displacement policies can help mitigate the potential for displacement.
- Explore using revenues from new funding sources to offset taxes and fees for low-income households. Covering taxes and fees would reduce a significant portion of the cost of living for low-income households, ultimately allowing them greater financial flexibility.
- Tying transit costs to time of day or user to accommodate shift schedules and night/late-shift workers more affordable transportation options that cater specific needs. Additionally, encouraging employers to participate in transit passes or bikeshare programs can make transportation to and from work more affordable for their employees.
- Encouraging and incentivizing environmentally friendly investments in mid- and low-income households can have financial benefits for the household and can reduce the

¹ Currently, obtaining an Honored Citizen Fare Card requires proof of income and government-issued ID to be uploaded to an online portal for the card to be mailed to them upon approval. Alternatively, enrollment locations are available for on-the-spot visits and the applicant can receive a card at that time, but these locations are only open during business hours on weekdays. For someone that may not have a valid license due to unpaid violations, or works throughout the day and week, or someone with limited internet access this card may be difficult to obtain.

² [City of Portland. \(2021\). "Pricing Options for Equitable Mobility."](#)

overall carbon footprint. Offering discounts and rebates for households that want to invest in electric vehicles could be a step towards decreasing the up-front cost.

Next Steps

Improving equity in transportation is a key concern in the greater Portland region. Inequities in how transportation revenues are collected and disbursed is wide-ranging and systemic. Leaders around the region may use the findings from this study to inform policies, including the development of the 2023 RTP and future RTPs and support transportation providers as they discuss current and future funding programs.

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List of Abbreviations

FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HTF	Federal Highway Trust Fund
ODOT	Oregon Department of Transportation
PBOT	Portland Bureau of Transportation
PGE	Portland General Electric
POEM	Pricing Options for Equitable Mobility (an Oregon Metro Task Force Report)
ROW	Right-of-Way
RTP	Regional Transportation Plan (cited as the Portland Metro Regional Transportation Plan)
TDM	Transportation Demand Management Program
TDT	Transportation Development Tax
TriMet	Tri-County Metropolitan Transportation District of Oregon
TSDC	Transportation System Development Charge
VMT	Vehicle Miles Traveled

Purpose and Overview

Metro and its jurisdictional partners recognize that there are severe disparities in access to transportation and opportunities in the greater Portland region and have an ongoing, lasting commitment to advancing equity by removing barriers to transportation experienced by people with low income, Black, Indigenous, and other people of color, and others that are disproportionately impacted.

Existing transportation planning and funding practices disproportionately burden and harm low-income households, communities of color, and people with disabilities. The transportation funding structures in place impact different communities in different ways, based on factors such as their identities, or even geographic location and property values. Therefore, it is crucial for regional partners to consider the breadth of impacts and implications of existing and future funding strategies prior to implementation.

The key questions being asked are:

Who does revenue collection burden and benefit the most?

How can the revenue collection and disbursement be balanced to address inequities?

Metro and its partners strive to advance the quality of transportation through prioritizing investments that will provide the most benefit while avoiding, minimizing, and mitigating negative impacts. The purpose of this report is to analyze existing, emerging, and potential revenue sources through an income and racial equity lens and recommend strategies to equitably transform transportation funding while increasing revenues.

This background report will update *Chapter 5: Our Transportation Funding Outlook* of the 2023 Regional Transportation Plan and will be used to inform future discussions as agencies consider potential new revenues.

How We Talk About Equity and Project Goals

Transportation equity is generally understood to be the elimination of barriers and disparities relating to transportation. Addressing inequities in access to safe, affordable, convenient, and reliable transportation and opportunities requires listening to and working with the communities that have little power to change systems; systems that continue to exclude them and impact their everyday life and wellbeing. It also means committing to future equitable actions. Taking equitable action is to provide thoughtful, accommodating, and sensible support to these overlooked and exploited communities to achieve fairer outcomes.

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Equitable transportation funding considers the collection and disbursement of revenues in relation to a larger community context with goals of addressing past harms and avoiding further burdens for people with lower income and improving mobility options for all. Leading with race recognizes that racism is the foremost, deeply pervasive factor contributing to unequal access, opportunities, and health outcomes that persist today.³

Recognizing and empowering these communities paves the way for them to thrive. The State of Oregon defines these concepts in the Equity Framework.⁴ Metro's Strategic Plan supports the same objectives and identifies racial equity as the highlighted strategic direction, as people of color experience the greatest inequities.⁵

The aim of this report is to be a resource document for Metro, the Joint Policy Advisory Committee on Transportation (JPACT), the Transportation Policy Alternatives Committee (TPAC), and the Metro Council for updating the 2023 Regional Transportation Plan (RTP) and future updates to the RTP. It draws from the existing literature on a diverse range of transportation funding sources and provides a robust equity evaluation. This resource can then aid and inform policy design and decision making as we reconsider the way transportation systems are funded.

Defining Equity as a Metric for Transportation Funding

The Equity Assessment (Appendix A) evaluated the impacts of the way the transportation system is currently funded on low-income households and people of color. Six measures were developed to evaluate revenue sources that fund the Regional Transportation Plan with a focus on sources that collect revenue from individuals, businesses, and commercial operations. The results of this evaluation are available on a revenue-by-revenue source in Appendix A and summarized throughout this report.

Equity Assessment Measures

- **Share:** Do lower-income households pay a higher share of their income?
- **Burden:** Does the source provide subsidies or exemptions to alleviate unfair burdens?
- **Tiered:** Is the fee or tax graduated based on the value of the item?
- **Benefits:** Are low-income households and people of color directly benefiting?
- **Payment:** Are unbanked or underbanked individuals unfairly penalized?
- **Penalties:** Do unpaid fines, fees, or taxes trigger penalties and legal repercussions?

³ [City of Portland. \(2021\). "Pricing Options for Equitable Mobility."](#)

⁴ [State of Oregon. \(2020\). "State of Oregon Equity Framework in COVID-19 Response and Recovery."](#)

⁵ [Oregon Metro. \(2016\). "Strategic plan to advance racial equity, diversity and inclusion."](#)

Report Organization

This report is comprised of five main sections.

- The sociocultural and historical contexts in which transportation agencies plan and to highlight the pervasive issues that inhibit equity in communities.
- An overview of foundational plans that led to, and supports, the creation of this report.
- The technical side of fees, fines, and fares, and explaining the processes that differentiate revenue sources from funding allocations.
- The equity impacts of both revenue collection and funding allocations upon people of color and lower income households.
- The wide array of emerging and potential future revenue sources, and a set of recommendations to improve equity in the way we conduct transportation funding.

Outcomes of Discriminatory Planning

The greater Portland region has been shaped by historical national and local planning and population trends. Discriminatory planning practices were enacted in the region, like much of the country, and shaped how and where people of color were able to live, travel, purchase property, or make a living. The region experienced a World War II population boom, as did much of the west coast, as workers flocked to industrial and manufacturing jobs to support the war effort. Many of these jobs restricted Black workers from skilled labor jobs and union protections.⁶ The post-war federal support for national highway expansion along with decisions made by local planners destroyed Albina, a Black neighborhood in Portland, and changed the way funding and transportation investments were made. This is the regional context in which today's transportation planning and funding decisions and strategies for a more equitable system are made.

Regional Demographics Today

The greater Portland region is growing. By 2040, 600,000 new residents are expected to move into the region, and the BIPOC population is growing at an even faster rate. In 2015, 10% of people living in the average Census tract were people of color⁷ and that number grew to 12% in 2020.⁸ Population growth puts new pressures on housing and infrastructure. New development and gentrification can lead to displacement, of which people of color and low-income households are disproportionately affected by. As housing and transportation costs increase, households are being forced to move to areas with less transit service and other transportation options.⁹

The transportation cost burden in the greater Portland region differs across race and income divisions. In 2019, Black commuters living below 100% of the federal poverty level had commutes that were 20% longer than their white counterparts at equivalent income levels.¹⁰ Furthermore, analysis from the U.S. Bureau of Transportation Statistics reveals that the lowest 20% of income earners spend 28.8% of their after-tax income on transportation, almost 20% more than the proportion which the wealthiest Americans pay. The direct and recurring costs

⁶ [Linder, John. \(2019\). "Liberty Ships and Jim Crow Shipyards." OHQ 120:4.](#)

⁷ American Community Survey. (2022). "2011-2015 American Community Survey 5-year estimates."; [Oregon Metro. \(2018\). "2018 Regional Transportation Plan."](#)

⁸ American Community Survey. (2022). "2016-2020 American Community Survey 5-year estimates."; [Oregon Metro. \(2022\). "2023 Regional Transportation Plan Update: Work Plan."](#)

⁹ [Rose, Eliot. \(2022\). "Memo to TPAC: Proposed approach to the 2018 regional transportation needs assessment." July 13th, 2022.](#)

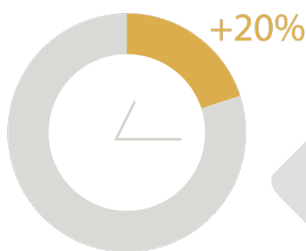
¹⁰ [National Equity Atlas. \(2019\). "Commute time: All workers should have reasonable commutes."](#)

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of car ownership comprise a sizeable portion of spending, which suggests that living in areas with less viable transportation options severely impacts financial outlooks, social mobility, jobs access, and other opportunities.¹¹ Figure 1 summarizes these findings:

Figure 1: Transportation Cost Burden and Commute Times

In the Portland region, the average commute time for Black commuters living below the federal poverty level is 20% longer than white commuters.



The lowest income households spend 28.8% of their income on transportation.

Those with the highest income spend 9.5% or less.

Moreover, it is well established that proximity to heavily auto-centric infrastructure is correlated with worsened health outcomes; the National Equity Atlas rated Black households in the greater Portland region with an air pollution exposure index of 73, 6 points higher than white households at 67. This index indicates the exposure risk to both carcinogenic and non-cancerous air pollutants, and Black households here in Portland face a higher risk than 73% of census tracts nationwide.¹² One can only imagine the 'hidden' cost burden of transportation that results from this exposure, in the form of medical bills and chronic illness treatments. The way the transportation system is funded can play a key role in reshaping how infrastructure and its associated upkeep can help narrow this disparity in health outcomes.

Portland's History of Discriminatory Planning

People of color and low-income households have historically 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. Decisions like this split neighborhoods, displaced families, permanently damaged communities, and even led to higher rates of air pollution and chronic illness.¹³

Exclusionary zoning, which excluded Black, Indigenous, and other people of color from owning property and growing wealth, was common practice in the greater Portland region. Single-family zoning, racially restrictive covenants, and other discriminatory planning and

¹¹ [Bureau of Transportation Statistics. \(2020\). "Household Spending on Transportation." U.S. Department of Transportation.](#)

¹² [National Equity Atlas. \(2019\). "Air pollution: Healthy neighborhoods are free of pollution and toxins that undermine safety, health, and well-being."](#)

¹³ [Oregon Metro. \(2022\). "2023 Regional Transportation Plan Update: Work Plan."](#)

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lending tactics were used to restrict multi-family developments in white neighborhoods, forcing multi-family development into segregated neighborhoods.¹⁴ The 1930s, 1940s, and 1950s saw a boom in single family zoning, and by the end of this period, multi-family zones accounted for only 5% of residential development. These trends clustered together minority and low-income households, creating neighborhoods that were vulnerable to disinvestment, industrial uses, infrastructure development, and urban renewal plans.¹⁵

Urban renewal, a way for governments to exploit 'blighted' areas in their jurisdictions, swept across the United States in the mid-twentieth century. Fundamentally, this gave localities the power to fund developments on top of marginalized, and often Black, communities. This could take many forms: transportation infrastructure, large-scale multi-family housing, event centers, parks, office buildings, etc. When this occurred, those living in the neighborhood were completely displaced, and the owners of any property were bought out for a fraction of their property's value. Portland, like many other cities across the U.S., has a long history of urban renewal practices.¹⁶

Portland's Albina neighborhood became a haven and area of opportunity for Black people living in the city and developed into a thriving business district after the population boom throughout World War II. 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 lives and forcing residents to relocate, many of whom moved to Albina. In the 1950s, planners decided to build the Interstate 5 freeway through Albina, destroying homes and businesses, forcing displacement, and tearing the fabric of the neighborhood apart.

Events like these shaped the context of transportation and land use planning in Portland. Exclusionary zoning and racial segregation still influence where people live and work today, Gentrification, population growth, and increasing demands on housing threaten to further destabilize people of color and low-income communities.

Exclusive single-family zoning has now been 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 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.

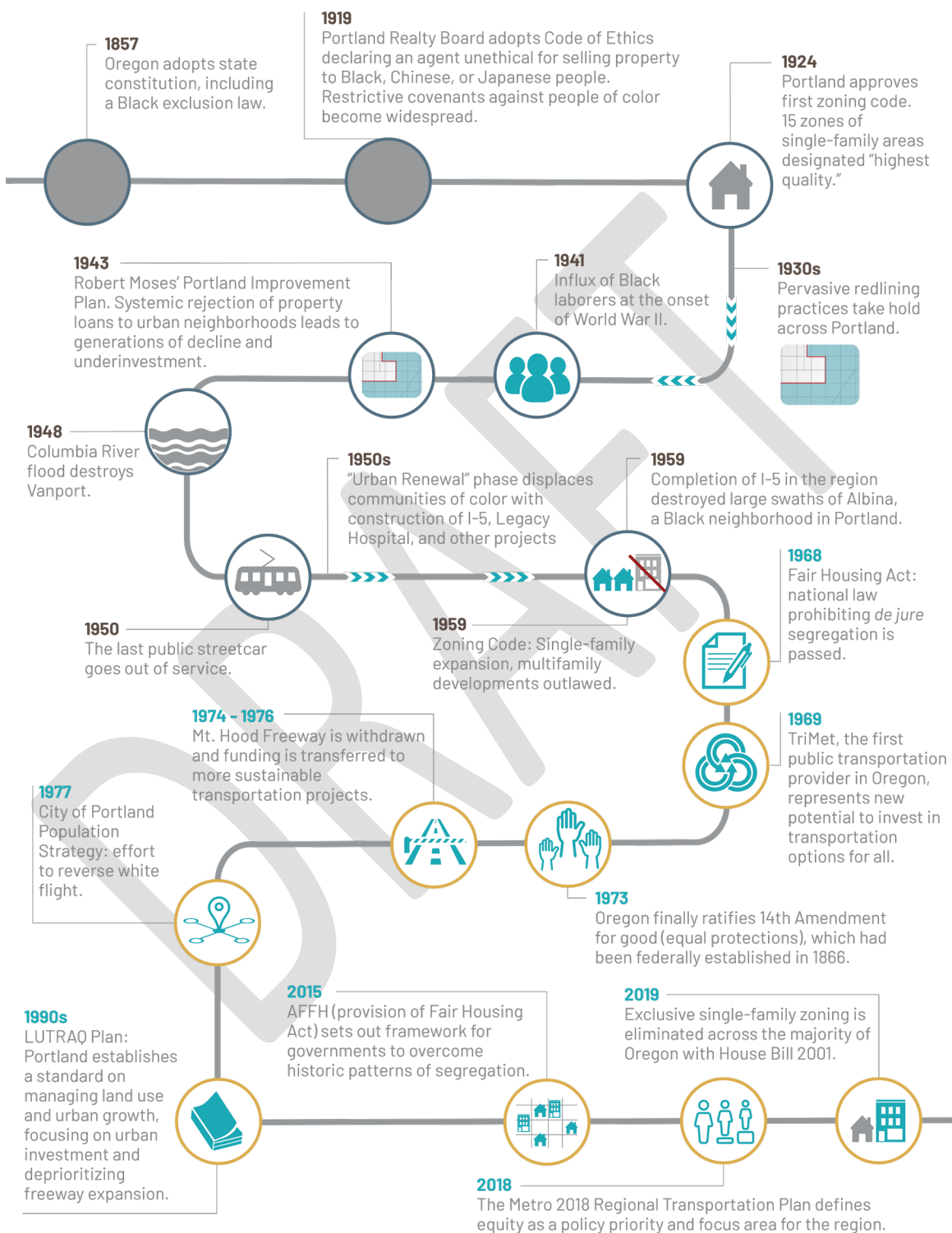
¹⁴ [Department of Land Conservation and Development. \(2022\). "Housing Choices \(House Bill 2001\)."](#)

¹⁵ [Hughes, Jena. \(2019\). "Historical Context of Racist Planning." *Bureau of Planning and Sustainability*.](#)

¹⁶ [Killen, John. \(2015\). "Throwback Thursday: 60 years ago, Portland began urban renewal plan for South Auditorium district." *Oregon Live*.](#)

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Figure 2: Timeline of Discrimination and Planning in the greater Portland region



Foundation of Current Work

Development of this report drew from regional and local documents and plans. This section provides a brief description of each of these documents and how they relate to this report.

Regional Desired Outcomes

In 2008, the Metro Council and the Metro Policy Advisory Committee adopted six desired outcomes for the greater Portland region. These outcomes are equity, vibrant communities, economic prosperity, safe and reliable transportation, clean air and water, and climate leadership. The 2018 Regional Transportation Plan (RTP) identifies the next steps to continue working towards achieving these desired outcomes. The 2023 update to the RTP will build upon this. The desired outcomes particularly focus on equity for current and future residents and how people's lives are impacted by transportation planning decisions. They create an outcomes-based framework for Metro's work and set the stage for forthcoming plans and research, including prioritizing equitable transportation system funding.

Metro's Strategic Plan

Metro's 2016 Strategic Plan¹⁷ to advance racial equity, diversity and inclusion demonstrated the plan for ongoing and future commitment to advancing racial equity, diversity, and inclusion in their projects. Through identifying which communities have faced and continue to face greater barriers to access, Metro set the framework for equitable transportation funding. This report builds on the Strategic Plan principles to purposefully engage and account for historic and current disadvantaged populations. Like the Strategic Plan, equitable transportation funding will achieve their objectives by leading with race, targeted universalism, building infrastructure, generating support, partnering with communities of color, and measuring progress. The Metro Planning & Development Department's Strategic Action Plan, updated in 2018, supports the continuous work in equity and in addressing projects through a racial equity lens. The RTP was adopted by JPACT and Metro in 2018 and equity was a core priority, with goals of 44% of total transportation projects to take place in Metro's Equity Focus Areas by 2040.¹⁸

2023 Regional Transportation Plan (RTP) Update

2023 RTP Financial plan

To develop the equitable transportation funding report, RTP finance plans, planned projects, projected revenues, and other relevant sources were reviewed to understand where and how

¹⁷ [Oregon Metro. \(2016\). "Strategic plan to advance racial equity, diversity and inclusion."](#)

¹⁸ [Oregon Metro. \(2019\). "Advancing racial equity, diversity and inclusion in regional planning."](#)

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the transportation system is funded and what the equity implications are as a result. This report will help inform the development of the 2023 RTP financial plan and can be used by decision makers to inform future funding discussions on the mechanisms, revenue sources, and strategies to increase the equitable funding of transportation.

Pricing Policy Work

As part of the 2023 RTP, Metro and its jurisdictional partners identified six pricing policies to advance the region's mobility, climate change, and equity goals. These policies address mobility, equity, safety, diversion, climate and air quality, and technology and user experience. Each policy has a set of action items to guide implementation of pricing programs and projects.

Findings from Public Outreach

Metro has conducted extensive public outreach since the 2018 RTP update.¹⁹ The focus has been on people of color, people with low incomes, and other groups that have historically been excluded from public engagement.²⁰ This outreach has informed the 2020 regional transportation funding measure, the Regional Mobility Policy update, and other processes. The work has consistently found that these groups desire safer and more accessible transportation options. Some of the community themes that rose to the top include:

- Focus on people and address racial, social and economic disparities and historic disinvestment and transportation decisions that have harmed communities.
- Travel options, including a variety of modes, and a well-connected, integrated and seamless system.
- Quality transit service that is fast, frequent, reliable, and serves all types of trips (including off-peak travel times)
- Affordable transportation options, especially more affordable transit that connects people to the places and things they need to thrive.
- Investments in communities underserved by the current transportation system while protecting against involuntary displacement. And investments that are context sensitive and contribute to a sense of place and community identity.

¹⁹ [Oregon Metro. \(2020\). "Regional Mobility Policy.": Portland Metro. \(2022\). "2023 Regional Transportation Plan: Public Input."](#)

²⁰ Groups who have been denied access and/or suffered past institutional discrimination in the United States. This includes people who are Black, Indigenous, multi-racial, and people of color, people who may speak a language other than English, people with low-income, youth, older adults, and people with disabilities, who may face challenges accessing employment and other services ([Oregon Metro. \(2018\). "2018 Regional Transportation Plan."](#)).

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These themes and priorities directly relate to how the transportation system is funded, both in how the revenue is generated and is disbursed. Revenue generation that does not overburden community members with the lowest incomes and investments that provide more affordable options are vital to creating a more equitable system.

Regional Congestion Pricing Study

In 2021, Metro completed the Regional Congestion Pricing Study (RCPS). Directed by JPACT and the Metro Council in the 2018 RTP, the study evaluated a variety of pricing strategies to understand if the region could benefit from pricing. Results from the study demonstrated that pricing can be an effective strategy for reducing drive-alone trips and overall VMT, but its impacts can vary widely by geography and demographics, as well as by what specific strategy is implemented and how it is implemented. The RCPS helps illustrate the limitations and risk to low-income people if pricing programs and projects are implemented without considerations of equity from the outset.

Pricing Options for Equitable Mobility (POEM) Task Force Final Report

Portland Bureau of Transportation's Pricing Options for Equitable Mobility (POEM) explores if and how new pricing strategies could be used in the City of Portland to improve mobility, address the climate crisis, and advance equity for people historically underserved by the transportation system. In October 2021, Portland City Council accepted the POEM Task Force final recommendation report.²¹ This recommendation report includes principles of pricing for equitable mobility, nearer-term pricing strategies, longer-term pricing recommendations, and a suite of complementary strategies to advance alongside pricing. POEM provides guidance to understanding equitable pricing strategies to be used in the Portland area.²²

Equity and Mobility Advisory Committee (EMAC) Shaping an Equitable Toll Program

The Oregon Department of Transportation (ODOT)'s Equity and Mobility Advisory Committee (EMAC) was created to directly advise the Oregon Transportation Commission (OTC) and ODOT on how tolls on Interstate 205 (I-205) and Interstate 5 (I-5), in combination with other demand-management strategies, can include benefits for populations that have been historically and are currently underrepresented or underserved by transportation projects. The purpose of the committee is to address four equity pillars: full participation of impacted populations and communities, affordability, access to opportunity, and community health.

²¹ [City of Portland, Oregon. \(2021\). "Task Force Recommendations and Next Steps."](#)

²² [City of Portland, Oregon. \(2022\). "Pricing Options for Equitable Mobility \(POEM\)."](#)

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EMAC goals specify that equity and mobility strategies must go beyond pricing revenue and show reinvestments into better functioning transportation infrastructure and a decrease in personal car usage. These goals directly align with the goals of equitable transportation funding.

DRAFT

Funding the Transportation System

Transportation involves multiple levels of government, each of which has separate revenue collection and distribution methods. Revenues flow through a variety of programs, redistributions, and formulae before being invested in the greater Portland region's local and regional transportation networks. The chart below provides a snapshot of the Regional Transportation Plan's revenue source flow (Figure 3).

The **left side of chart** shows the different types of funding sources that comprise local, state, and federal revenue for transportation. For example, the gray box denoting "\$57 billion" for Federal Sources describe the total revenues that are collected at the federal level (such as federal income taxes and gas taxes), but these funds are rarely directed by the federal government themselves for spending in the greater Portland region. In reality, these funds are disbursed to state and local governments who then prioritize the projects for funding in the 2018 Regional Transportation Plan.

The **gray arrows** illustrate these transfers of funds between federal, state, and local levels, also known as intergovernmental transfers. Funding from each level combines with their own source revenues to fund the programmed projects, as shown with **blue arrows**.

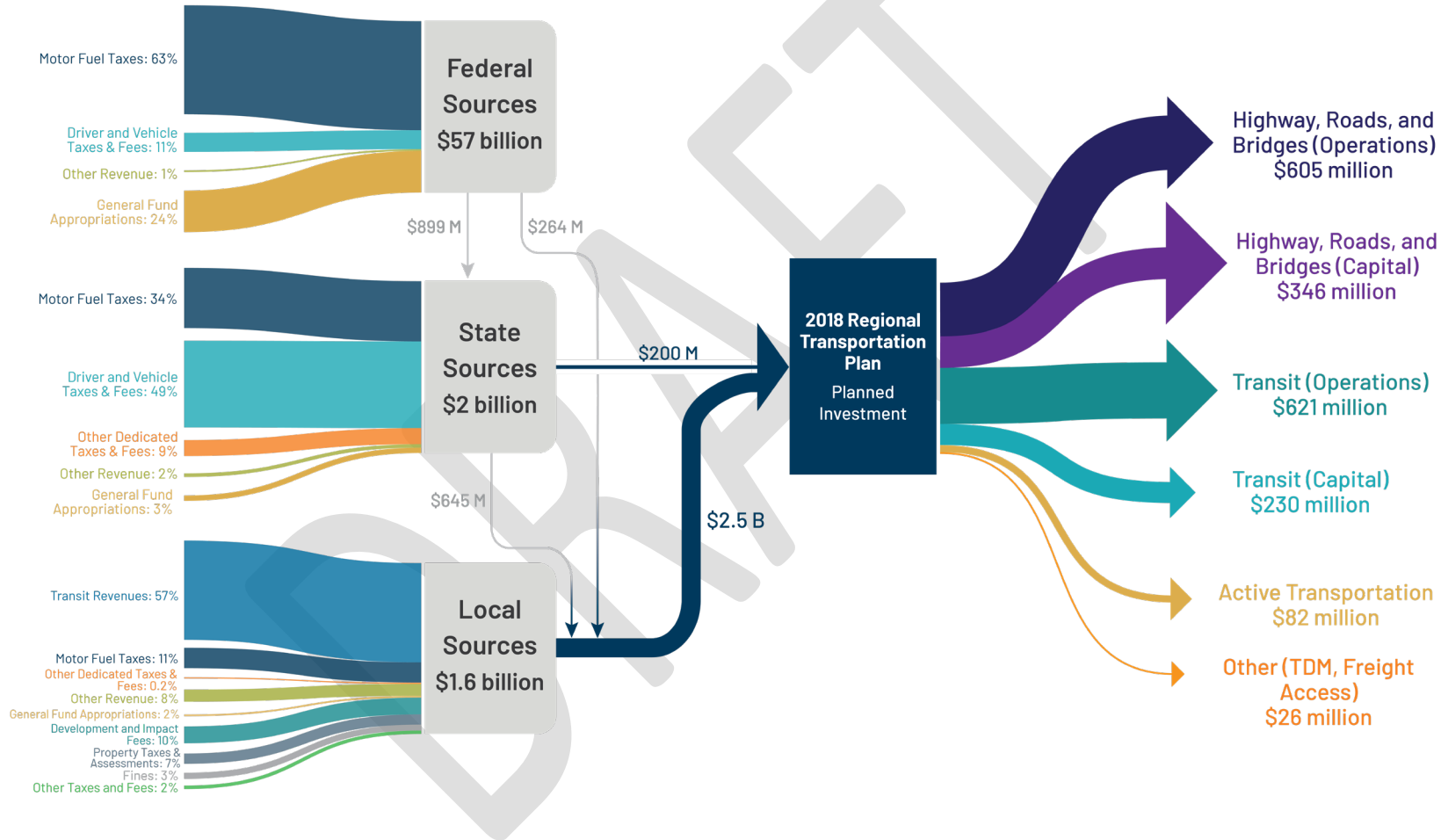
Finally, the **right side of the chart** shows the types of projects that are proposed for funding in the Regional Transportation Plan.

Transportation revenues can be classified along two main categories:

1. **User Fees:** costs that are levied on users of particular goods and services, such as motor fuel taxes (paid by users of motor fuels) and weight-mile taxes (paid by heavy vehicle owners).
2. **General Taxes:** paid to the government as a blanket levy without clear explanation of where the money is distributed. Income taxes, property taxes, and sales taxes can all contribute in some part to transportation funding, but they are subject to extensive policymaking and decisions before allocations are determined.

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Figure 3: The Flow of Transportation Revenue Sources to the 2018 RTP Projects and Programs ²³

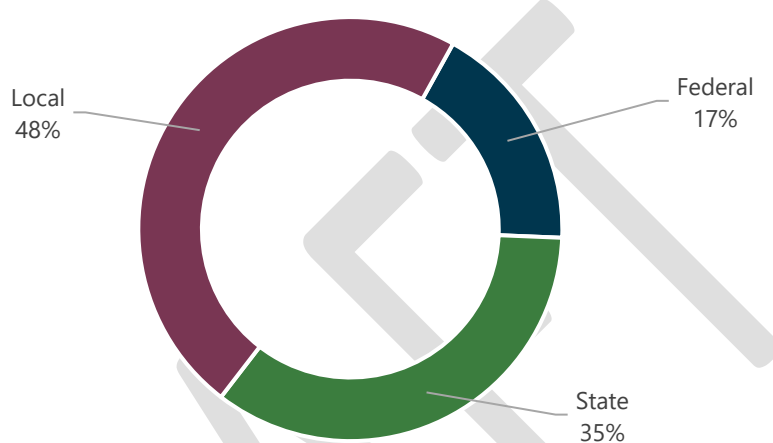


²³ [Tax Policy Center. \(2021\). "Briefing Book: A citizen's guide to the fascinating \(though often complex\) elements of the federal Tax System.";](#) [Oregon Department of Transportation. \(2021\). "2021-2023 Legislatively Adopted Budget report.";](#) [Portland Metro and other agencies. \(2018\). Local Revenue Summary Reports and 2018 Revenue Projections;](#) [TriMet. \(2022\). "Adopted Budget 2022-2023.";](#) [Portland Metro. \(2018\). "2018 Regional Transportation Plan: Chapter 5: Our Transportation Funding Outlook."](#)

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The following charts are by revenue raised, that is the source at which they are collected. Revenues spent in the greater Portland region are collected and allocated at the Federal, State, and Local levels of government. Figure 4 illustrates the breakdown of where revenues spent in the region are initially collected.

Figure 4: Revenue Sources to 2018 RTP Projects and Programs by Government Level²⁴



17% of the revenues in the RTP financial plan are collected at the federal level. The funds are primarily comprised of:

- Funds disbursed by the Federal Highway Administration (FHWA) Highway Trust Fund (HTF) for roadway capital and maintenance efforts
- Funds disbursed by the Federal Transit Administration (FTA) for transit capital and maintenance efforts
- Funds disbursed through the Oregon Department of Transportation (ODOT) for capital projects and improvements
- Funds disbursed through ODOT for roadway maintenance and operations

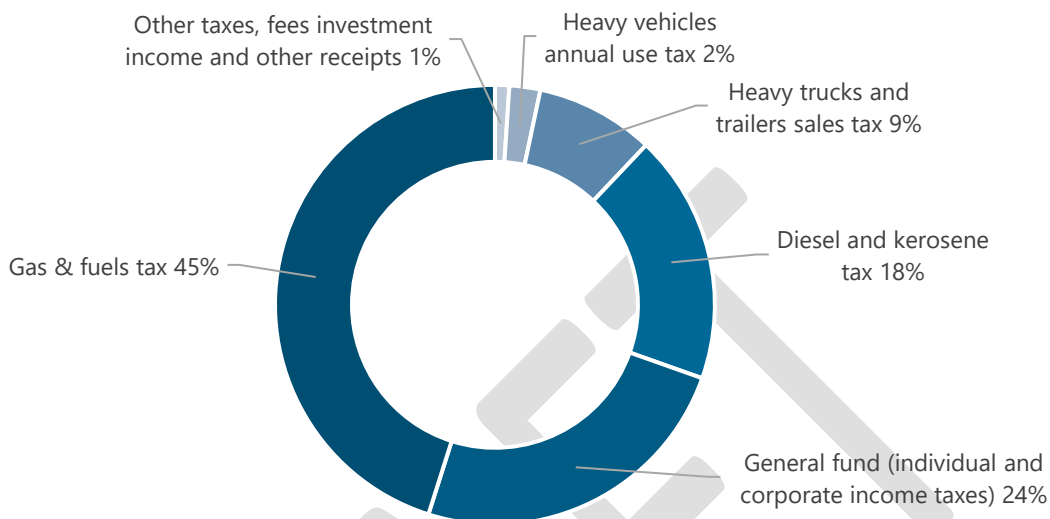
The Federal Highway Trust Fund (HTF) is funded primarily by the federal gas tax, a key revenue source that has seen decreasing returns in recent years. Between changing travel behaviors, inflation, and the rising demand for infrastructure, the HTF has increasingly relied on general revenue transfers to cover its deficit. A portion of this revenue goes to states specifically to maintain federal roadways—Interstate Highways and U.S. Highways—and the remainder is further distributed to various states and localities for their local transportation needs, through formula and grant programs. Figure 5 below provides a breakdown of the revenue sources that make up the Highway Trust Fund.

²⁴ [Portland Metro. \(2018\). "2018 Regional Transportation Plan: Chapter 5: Our Transportation Funding Outlook."](#)

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Figure 5: Federal Transportation Revenue Sources²⁵



State funds comprise 35% of the Regional Transportation Plan's financial plan. These revenues fund transit, roadway capital and maintenance projects. Figure 6 shows the breakdown of revenue sources collected at the state level that contribute to ODOT's budget. Roughly 28% of ODOT transportation revenues are from driver, vehicle, and other transportation license fees. ODOT also levies a weight-mile tax on commercial vehicles with a gross weight over 26,000 pounds, to account for their heavier toll on road conditions.²⁶

However, the majority (77%) of transportation revenues in the Regional Transportation Plan are collected from local sources, such as property taxes, parking fees and fines, local gas taxes, and transit revenues. The prevalence of local revenue sources reflects how local funding can play a significant role in influencing equitable outcomes.

Figure 7 illustrates local own-source revenues, which were drawn from the revenue forecast data developed for the 2018 Regional Transportation Plan and local budget documents. It should be noted that each jurisdiction within the greater Portland region experiences these costs differently. For example, the City of Portland's Bureau of Transportation (PBOT) brings in roughly \$31 million each year in parking fees and fines, which account for a noticeably greater portion of its transportation revenues than other municipalities with lower density and parking demand. As such, parking fee policies in Portland carry more weight in the equity discussion than would similar strategies deployed in less populous areas of the greater Portland region.

²⁵ [Tax Policy Center. \(2020\). "Briefing Book: A citizen's guide to the fascinating \(though often complex\) elements of the federal Tax System."](#)

²⁶ [Oregon Department of Transportation. \(2022\). "Report Your Taxes."](#)

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Figure 6: State Transportation Revenue Sources, Oregon²⁷

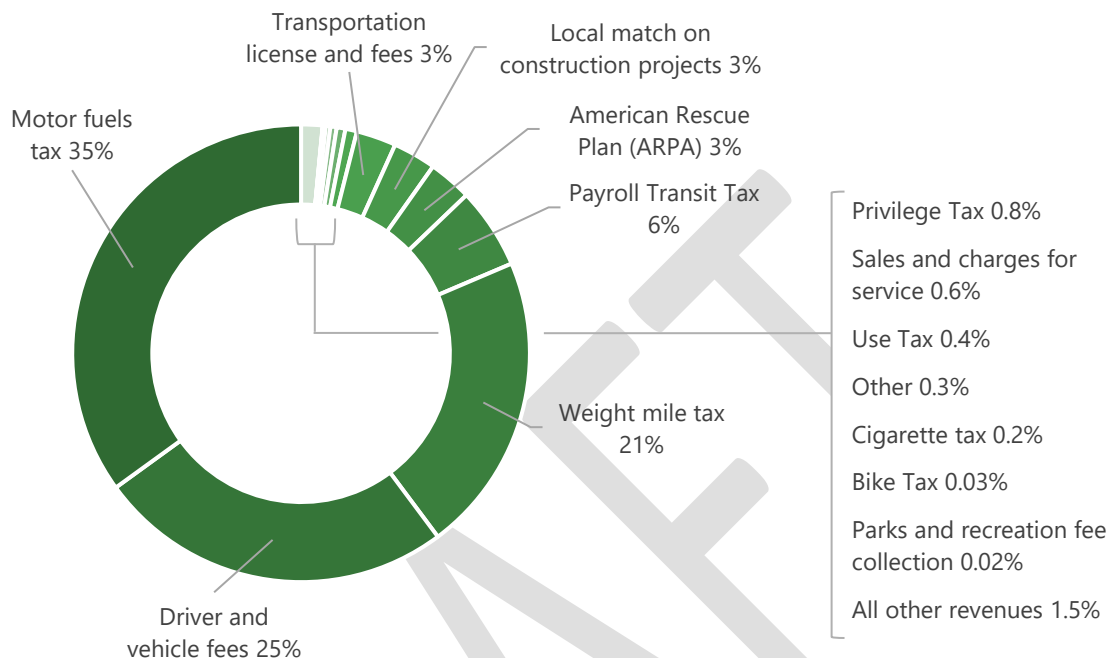
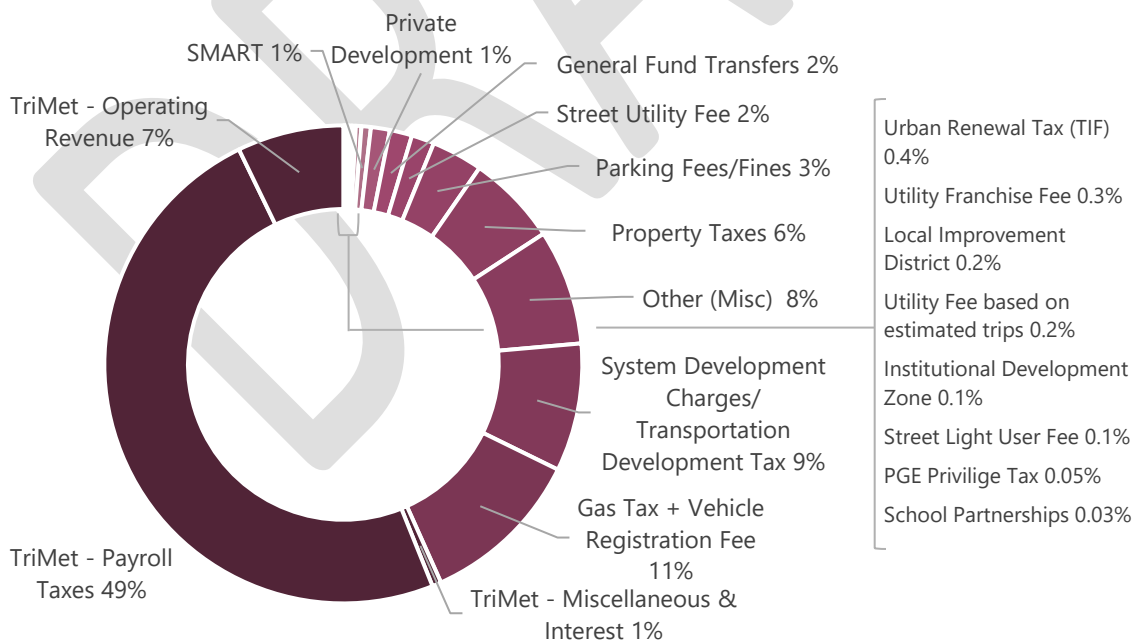


Figure 7: Local Transportation Revenue Sources, greater Portland region²⁸



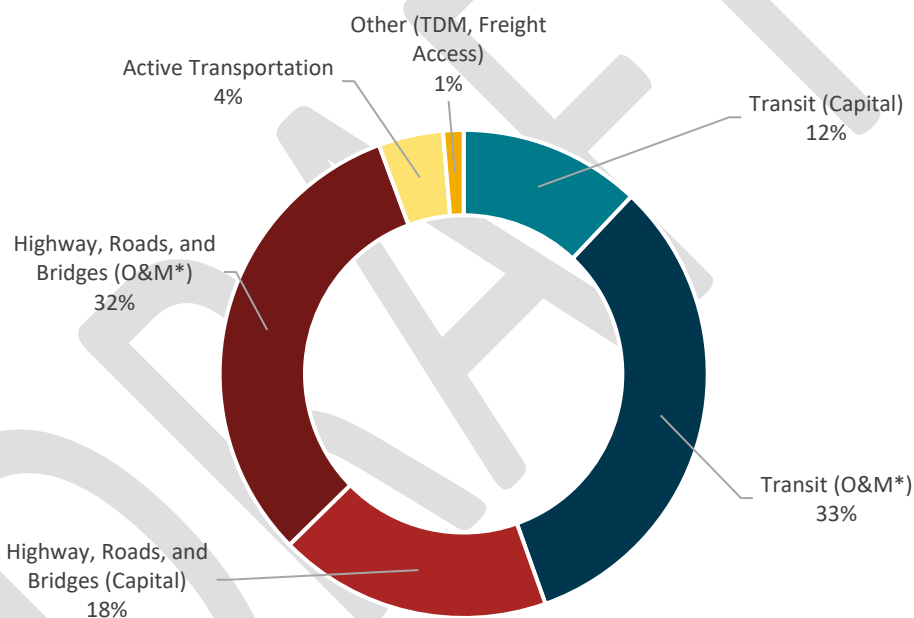
²⁷ [Oregon Department of Transportation, \(2021\). "2021-2023 Legislatively Adopted Budget."](#)

²⁸ Portland Metro and other agencies. (2018). Local Revenue Summary Reports and 2018 Revenue Projections; [TriMet. \(2022\). "Adopted 2022-2023 Budget."](#)

Revenue Allocation

Depending on the jurisdiction, legal constraints are placed on the usage of certain funding sources. In Oregon, revenue generated from motor vehicles is constitutionally limited for exclusive use on roadway projects. This means state motor fuel taxes and heavy vehicle fees, which are two of the most prominent funding sources at the state and local level, cannot be allocated for public transit or separated bicycle trails, as examples. Federal gas taxes are not subject to similar constraints. Figure 8 provides an overview of how transportation revenues identified for the 2018 RTP are allocated.

Figure 8: Planned Transportation Funding Allocations within the Greater Portland Region (2018-2040) ²⁹



**O&M stands for Operations and Maintenance.*

²⁹ [Portland Metro. \(2018\). "2018 Regional Transportation Plan: Chapter 5: Our Transportation Funding Outlook."](#)

Key Findings and Equity Challenges

The region's transportation system is funded through a variety of revenue sources and financing mechanisms, each originating at different jurisdictional levels; there are many societal benefits to funding the ongoing maintenance, operations, and continued improvement of the transportation system. The goal of the Equity Assessment (Appendix A) is to evaluate the present funding of the greater Portland region's transportation system and how it impacts low-income households and people of color, informing recommendations on how to make the transportation funding processes more equitable.

The sources of funding and how and where that funding is invested play a key role in the equity of the region's transportation system. The Equity Assessment evaluates revenue sources for six different measures of equity.³⁰ Each measure looks at the impacts of equity from a different perspective: the cost burden of the source, whether it is tiered, whether people with lower-income and people of color are likely to see greater benefits, if the payment methods create barriers for under or unbanked households, and the potential for penalties that can lead to debt and legal repercussions.

Equity Assessment Measures

- **Share:** Do lower-income households pay a higher share of their income?
- **Burden:** Does the source provide subsidies or exemptions to alleviate unfair burdens?
- **Tiered:** Is the fee or tax graduated based on the value of the item?
- **Benefits:** Are low-income households and people of color directly benefiting?
- **Payment:** Are unbanked or underbanked individuals unfairly penalized?
- **Penalties:** Do unpaid fines, fees, or taxes trigger penalties and legal repercussions?

The revenue sources are organized by government levels, broken down by status (existing, emerging, future), and rated on a scale of Good, Fair, or Poor, based on the five key metrics.

³⁰ The Equity Assessment includes many, but not all, of the existing revenue sources at the federal, state, and local levels. The focus of the assessment is on sources which collect revenue from individuals, businesses, or commercial operations. It does not include revenue that is gathered from financing mechanisms like bonds or from passive revenue sources like transit advertising, rent, loan repayment, land use planning fees or other similar sources. The last section of the Equity Assessment lists identified revenue sources which were excluded from this analysis.

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The findings from this work, and an explanation of the rating scale, are provided in full in Appendix A.

Of the 29 existing sources that were assessed:

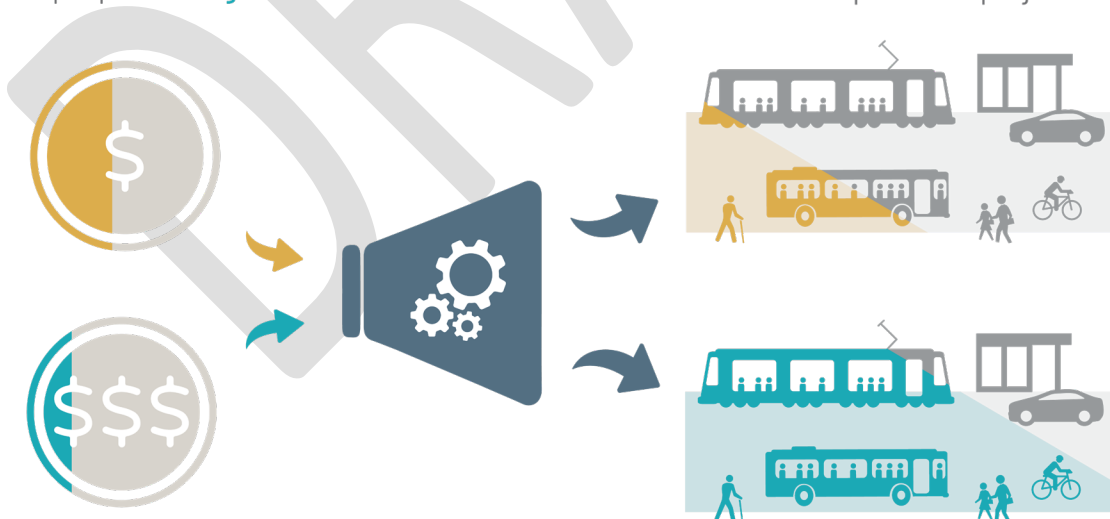
- 8 were rated 'Good,' 6 were 'Fair,' and 15 were 'Poor' for how equitable the share of costs are across income levels;
- 6 were rated 'Good,' 6 were 'Fair,' and 17 were 'Poor' for the extent of measures that could alleviate these unfair cost burdens.

This disparity highlights how lower income individuals and households in the greater Portland region face larger cost burdens for their transportation needs under the status quo. There are twice as many regressive revenue sources than those with costs equitably distributed. While certain programmatic elements (such as how a tax or fee is tiered and scaled) can alleviate and subsidize how low-income people experience these costs, not all of what they pay goes directly into transportation infrastructure that benefits them. For example, fines for traffic violations and parking penalties that are collected on roadways are disproportionately levied on people of color but are typically not reinvested into the transportation system.

Figure 9: Disparity in Burden of Transportation Costs versus Benefits from Transportation Investment

People with **lower incomes** spend more of their income on transportation costs than people with **higher incomes**...

...but lower-income communities are **less likely** to benefit from spending on transportation projects.



The Disproportionate Burden and Worsening Inequities for Low-Income Households

As shown in Figures 5, 6, and 7, some revenue sources play larger roles in funding the transportation system than others, confirming that these sources likely have significant impacts on equity and cost burdens. Motor fuel taxes, transportation system development charges, and property taxes are a key funding streams that have compounding and regressive impacts on lower-income communities; these implications are explored below.

Motor Fuel Taxes

Transportation revenue sources that are most relied upon often disproportionately burden low-income and marginalized households, exacerbating existing inequities. As previously discussed, motor fuel taxes comprise a significant proportion of transportation revenue collected at every level of government. Motor fuel taxes are a form of excise tax; a sales tax targeted on specific products determined by quantity purchased rather than a consumer's ability to pay. In the case of transportation, which is relatively inelastic, access to mobility options is often needed regardless of one's income (e.g., for school, work, errands etc.). This means that the out-of-pocket cost to low-income individuals and households inevitably consume a bigger proportion of their income.

Motor Fuels Taxes Equity Snapshot

Share:	Poor
Burden:	Poor
Tiers:	Poor
Benefits:	Fair
Payment:	Good
Penalties:	Good

The necessity to own, drive, and maintain a personal vehicle exacerbates this burden. Residents of the greater Portland region spend more on transportation than any other household expenditures besides housing; in 2020, residents spent more than \$10,000 on transportation expenses per person.³¹ Data from the U.S. Bureau of Labor Statistics reveals that nationally, the top 20% of income earners on average spend less than 2% of their after-tax income on motor fuel, contrasted with the lowest 20% who spend 8.2%. In periods of inflation (as seen at the time of this writing), this proportion can inflate to as much as 12%, although the tax-specific burden largely remains unchanged.³²

³¹ [U.S. Bureau of Labor Statistics. \(2022\). "Portland Area Economic Summary." United States Department of Labor.](#)

³² [Peck, Emily. \(2022\). "Percentage of after-tax income spent on gas, by income bracket." Axios.](#)

Figure 10: Share of Individual Income Spent on Motor Fuel in the United States, 2019³³

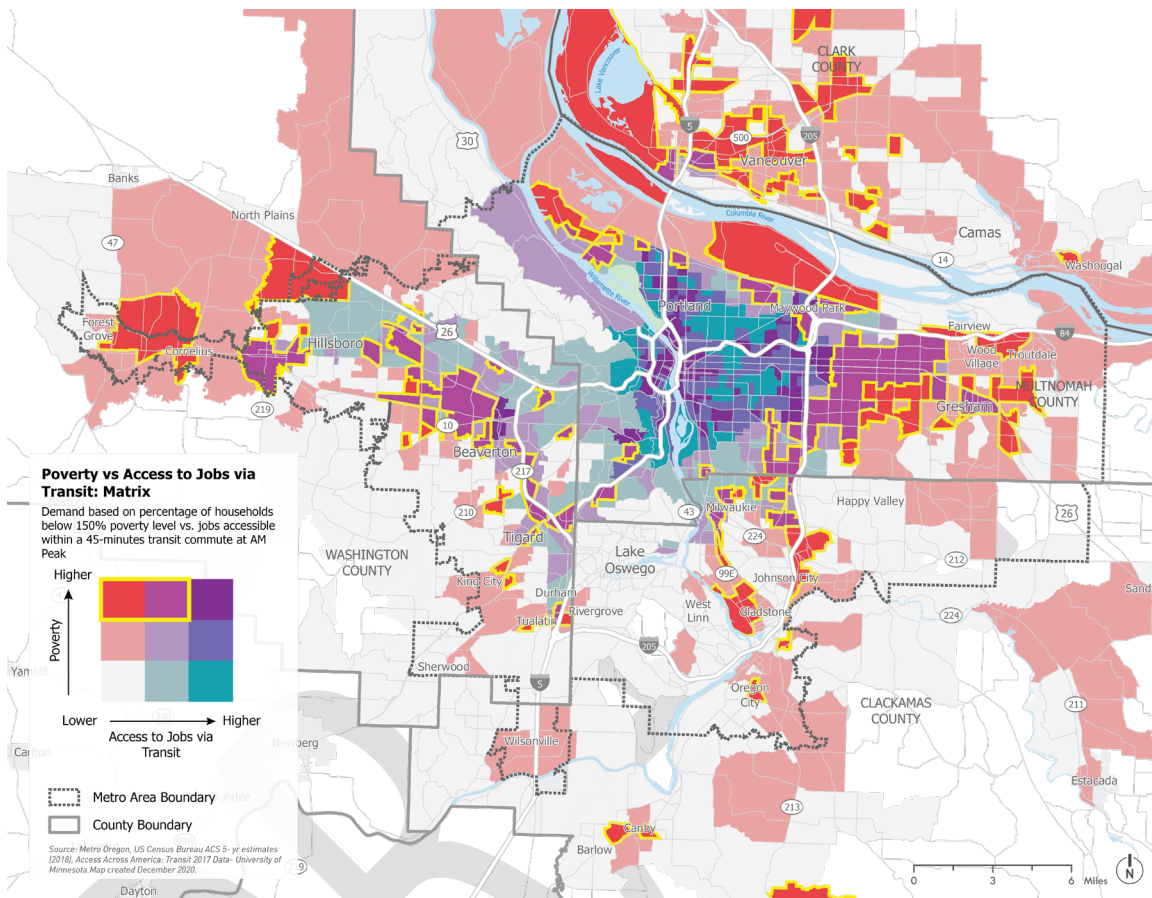


The per-unit cost of the gas tax particularly penalizes low mileage efficiency vehicles, which are also heavily represented amongst low-income and rural populations. Where more affluent households increasingly transition to electric vehicles or newer more fuel-efficient vehicles, diminishing the tax base, the transportation system's continued reliance on motor fuel taxes for revenue thus falls heavier upon financially vulnerable and low-income communities. The Federal Highway Trust Fund (HTF) has not fully funded the nation's surface transportation needs since 2001, and the revenue deficit has only continued to worsen.³⁴ Discussions surrounding increasing the tax rate to "fix" this revenue source are problematic from an equity perspective, as the incidence would fall heavily upon long distance commuters and low-income populations. To equitably and holistically tackle the declining efficacy of motor fuel revenues, other revenue sources will need to be considered.

³³ [Peck, Emily. \(2022\). "Percentage of after-tax income spent on gas, by income bracket." Axios.](#)

³⁴ [Congressional Research Service. \(2020\). "Funding and Financing Highways and Public Transportation."](#)

Figure 11: Communities with High Levels of Poverty and Limited Access to Jobs via Transit³⁵



A possible means of alleviating the motor fuel tax burden is through the provision of alternative methods of transportation, namely public transportation and active transportation. The greater Portland region has made substantial investments into public transit and street design over the past two decades; the availability of these alternatives has allowed Portland to enjoy 25% fewer vehicle miles driven per year than other US metropolitan areas.³⁶ However, these investments have been predominantly concentrated in central urban areas, and issues of regional coverage and service frequency are a limitation to transit use. Figure 11 illustrates the poor access to employment opportunities via public transit that low-income communities face.

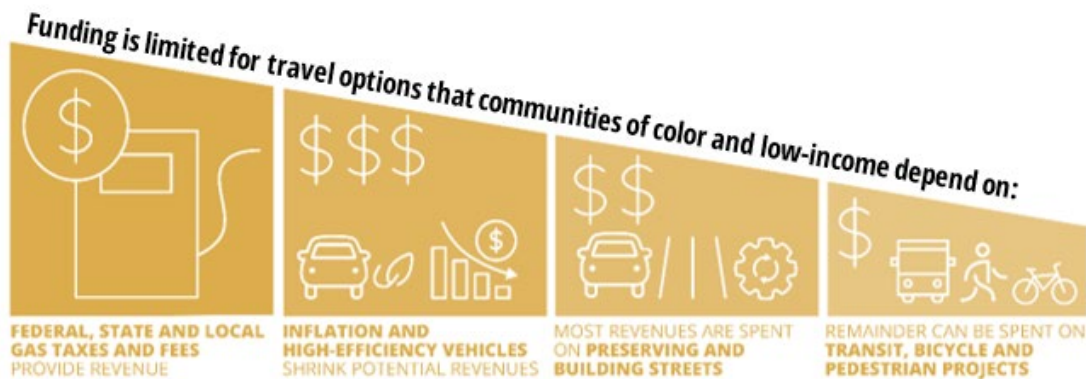
While more transit services are needed, the most significant funding sources do not incentivize transit investment. For example, the federal gas tax rate is 18.3 cents-per-gallon, of which only 2.86 cents-per-gallon goes towards the mass transit account. The Oregon state

³⁵ [Portland Metro. \(2021\). "Regional Congestion Pricing Study."](#)

³⁶ [Small, Rebecca. \(2016\). "You are here: A snapshot of how the Portland region gets around." Metro News.](#)

constitution dictates the exclusive use of motor vehicle-related revenues for the upkeep of highway rights-of-way (ROW).

Figure 12: The Equity of Transportation Spending Allocations³⁷



Transportation System Development Charges (TSDCs)

TSDCs are a popular means of financing infrastructure improvements at the local level. TSDCs account for 9% of locally collected transportation revenues, the third largest source of local revenue. Transportation System Development Charges, or Transportation Development Taxes, are one-time fees levied on new developments such as buildings to cover the cost of new public infrastructure capacity needed to service said development. Eligible projects include new bicycle lanes, transit infrastructure, and roadway improvements, all of which are explicitly stated to meet the anticipated capacity needs of the area after property development is completed. TSDCs are an upfront cost to most developers, which are compounded by other System Development Charges such as stormwater and sewage SDCs.

The equity and cost burden of TSDCs vary significantly by programmatic design, and policies often differ by municipality. Many cities in the greater Portland region utilize uniform or flat tax rates with some differentiation by use type such as residential or commercial. The City of Portland offers tax subsidies for projects with affordable

TSDC/TDTs Equity Snapshot	
Share:	Poor
Burden:	Fair
Tiers:	Poor
Benefits:	Poor
Payment:	Good
Penalties:	Good

³⁷ [Portland Metro. \(2021\). "Regional Congestion Pricing Study."](#)

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housing components, and dollar-for-dollar credit for projects that incorporate infrastructure improvements on the city's project list.³⁸

Studies have shown that holistic assessment methodologies are needed to better estimate a new building's per unit infrastructural impacts, factoring density and availability of transportation demand management (TDM) programs, among other factors, to ensure the right incentives are put in place.³⁹ On the other hand, TSDC rates that are set too low can hinder a city's ability to complete the necessary requisite infrastructure projects. The City of Portland's TSDC model generally only covers 30% of projected project costs; this informs the "Poor" rating assessed to the Benefits Received criteria in the Equity Framework (see Appendix A).⁴⁰

Furthermore, TSDCs are taxes on the supply-side of an economy, which means that the tax incidence can be shifted onto consumers. In this case, the higher cost of development can lead to higher rents, and renters will suffer the costs of worsened housing affordability. As low-income individuals and households are more likely to be renters, the cascading cost burdens on financially vulnerable communities are highly inequitable. To offset or alleviate the share of these costs, a reevaluation of TSDCs should be conducted to better understand if a programmatic redesign or fundamental policy change is needed.⁴¹

Property Taxes

Property taxes can be regressive and vary based on the assessed value of each property, even though on the surface property tax rates are flat. The tax becomes regressive when lower-value homes are valued at higher effective rates. In Oregon, the 1997 state ballot Measure 50 locked property values at 1995 rates, with annual increases capped at 3%. Actual property values have risen much more than 3%, and the greater Portland region has seen actual home values triple since 1995.⁴² This linear tax model results in an effective tax rate that can vary significantly between similar properties depending on their time of sale, creating equity concerns.

As property tax rates and revenues become more detached from real home values, lower-income homeowners may end up paying a higher proportion of their real value in taxes due to overvalued property. On the other side, higher-value properties may be undervalued,

³⁸ [City of Portland, Oregon. \(2022\). "Transportation System Development Charges."](#)

³⁹ [Portland Metro. \(2007\). "System Development Charges."](#)

⁴⁰ [City of Portland, Oregon. \(2022\). "Transportation System Development Charges."](#)

⁴¹ [League of Oregon Cities. \(2020\). "System Development Charges Survey Report." Pages 12, 125;](#) [Portland Housing Bureau. \(2022\). "HOU-3.03 – System Development Charge \(SDC\) Exemption Home Ownership Program." City of Portland, Oregon.](#)

⁴² [Nius, Elliot. \(2018\) "Property tax rates in Oregon's 36 counties, ranked". The Oregonian.](#)

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allowing for wealthier individuals to pay a lower proportion of their real value in taxes. A University of Chicago study on nationwide property value assessment disparities found that in Multnomah County, 82% of the lowest value homes are over-valued compared with only 35% of the highest value homes. From 2007 to 2019, the study determined the least expensive homes to have had an effective tax rate 1.63 times the rate applied to the most expensive homes.⁴³ This property tax burden falls disproportionately on Black and Latinx communities, due to the cumulative effects of discriminatory planning practices, including redlining, that have stagnated property values while tax rates inflate. Despite living in the same location and having the same tax rates, these populations were reported to face a 10-13% higher tax burden than other households.⁴⁴

Property taxes are not scaled by a homeowner's financial situation (such as their income), equity disparity arises in circumstances where low-income earners are living in high-value properties. The correlation between household income and assessed property values is not direct, as they are separately influenced by factors such as inequitable value assessments and the labor market. The penalties for those who struggle to pay the taxes out of pocket are severe, ranging from additional fines to foreclosure of the property. The negative equity implications of property taxes might be mitigated through alternative assessment approaches or changing the process of determining tax rates.

Share:	Fair
Burden:	Poor
Tiers:	Good
Benefits:	Good
Payment:	Fair
Penalties:	Poor

Long-Term Community Impacts of Fines and Penalties

Fines and penalties have the potential to be major sources of debt, especially when citations are paid late or not at all. Of the revenue sources evaluated in the Equity Assessment on their penalties, (Appendix A), 11 had 'poor' and 5 had 'fair' ratings. Poor or fair ratings were given for sources that had potential to bring in sizable revenue, but could lead to significant penalties, legal repercussions, or snowballing debt if left unpaid or if paid late. Revenue sources with the lowest or no chance of penalties are those that collect at the point of sale (excise taxes). These include items like gas taxes or vehicle or bicycle purchase taxes. Revenue sources that received a 'good' rating have potential for penalties and are taxes and fees

⁴³ [Berry, Christopher. \(2022\). "An Evaluation of Property Tax Regressivity in Multnomah County, Oregon." *The University of Chicago - Center for Municipal Finance*.](#)

⁴⁴ [Avenancio-León, Carlos and Troup Howard, \(2020\). "The Assessment Gap: Racial Inequalities in Property Taxation", *Washington Center for Equitable Growth*.](#)

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levied on business or commercial operations. Using penalties to hold businesses or commercial operations accountable was deemed equitable.

The System of Penalties

In Portland, parking citations issued by the Portland Bureau of Transportation (PBOT) must be paid within 30 days. If left unpaid, the citation becomes delinquent. At best, a delinquent citation will see the citation amount doubled. A court may also decide to issue a warrant for immobilization or impoundment of the vehicle, enter a judgement and impose a fine up to the maximum allowed by law, or send the citation to collections.⁴⁵ Debts in collections will see added fees and may harm a person's credit score. Credit scores impact an individual's ability to access financing and resources or obtain a job. Accounts in collections, or other negative marks from late payments, will generally stay on a credit report for seven years.⁴⁶

In Oregon, the State can garnish debt from tax returns for unpaid citations or court-imposed fees, and these debts stay on the books for 20 years. Low-income households are more likely to be burdened by citations and often rely on tax refunds to make ends meet. Anyone who received and did not pay a parking ticket in 2003 could have hundreds of dollars removed from their state tax refund the following year. In Multnomah County, from 2019 to 2021, 61% of garnished tax refunds on behalf of state courts occurred in zip codes with household incomes below the county's overall median household income, and 33% of these garnished refunds occurred in five zip codes that have some of the lowest median household incomes and highest portions of people of color in the county.⁴⁷

Racial Disparities in Enforcement and Penalties

Parking tickets, traffic violations, and other violations across all categories are also levied on Black individuals in the region at a higher rate than white individuals. In Multnomah County alone, Black individuals are charged three to thirty times more often than white residents for the same violations. Individual citations are also given at skewed rates. Black individuals are charged fifteen times more often for failing to cross the street at a right angle, eight and a half for jaywalking, three for failing to use vehicle lights, six for disabled vehicle parking violations, and five and a half for walking in the road. While not all of these violations are related to revenue sources that fund transportation, it in no uncertain terms highlights the pervasiveness of racial inequity.⁴⁸

⁴⁵ [City of Portland, Oregon. \(2022\). "Pay and/or contest a parking ticket."](#)

⁴⁶ [Pyles, Sean. \(2021\). "How do Collections Accounts Affect your Credit?" Nerd Wallet.](#)

⁴⁷ [Iboshi, Kyle. \(2022\). "Oregon garnishes millions in tax refunds to collect old, unpaid parking tickets and court fees." KGW8.](#)

⁴⁸ [Budnick, Nick \(2017\), "The High Costs of Disparities for People of Color in Multnomah County"](#)

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There is also a gap in the amount paid by fine for Blacks vs. whites. Default judgements may be to blame, which occur when the defendant does not perform a court-ordered action—typically appearing at court for a hearing—and the judge by default rules in the plaintiff's favor.⁴⁹ The gap in fines between Black and white people in Multnomah County:⁵⁰

- Jaywalking: \$379 compared to \$280
- Disabled parking: \$317 compared to \$183
- Failure to wear a seatbelt: \$142 compared to \$106
- TriMet fare violations: \$384 compared to \$225
- Speeding: \$190 compared to \$162

The Criminal Justice System and Cascading Impacts of Penalties

A majority of traffic fees and fines do not fund the transportation system despite their occurrence on the public right-of-way, since in the region, only fees and fines related to parking or TriMet fare evasion are put back into the transportation system. All other motor vehicle, pedestrian, and cycling related fines go to general funds, policing, and the criminal justice system. The City of Portland's fixed-speed camera program is an exception, dedicating any remaining revenue not used for maintaining the program to traffic safety. However, since the program began in 2016, there has yet to be excess revenue.

Low-income people and people of color disproportionately bear the burden of policing and suffer from well-documented bias in police forces around the country, including Portland.⁵¹ Fees and fines are not applied based on a person's ability to pay. This means that low-income people receive a relatively more extreme punishment than higher income people do for the same violation.

Fees and fines are not only an inequitable source of government revenue, but they are inefficient. Research has demonstrated that the costs of court activities, collecting and enforcing payments, and jailing those unable to pay can use 70% to 115% of the revenue raised through such efforts.⁵² This system has a cascading impact throughout society. It creates and ingrains patterns of racialized indebtedness and cycles of poverty, extracts financial resources from the community—especially those least able to pay—undercuts the

⁴⁹ [Legal Information Institute. \(2022\). "Default Judgment." Cornell Law School.](#)

⁵⁰ [Budnick, Nick \(2017\), "The High Costs of Disparities for People of Color in Multnomah County"](#)

⁵¹ [Griggs, Taylor. \(2022\). "Despite police directive, Portlanders of color still overrepresented in traffic stops." Bike Portland.](#)

⁵² [Menendez, Matthew. Lauren-Brooke Eisen, Noah Atchison, and Michael Crowley. \(2019\). "The Steep Costs of Criminal Justice Fees and Fines." Brennan Center for Justice.](#)

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ability to build intergenerational wealth, supports predatory lending and other exploitative financial practices, and reproduces system of inequality for individuals and communities.⁵³

The City of Portland is developing an in-depth report on the current state and impact of this system, titled *Fines, fees, and traffic-camera enforcement in Portland, Oregon*. The report provides recommendations for Portland's fixed speed-camera program and the system of fines and fees in general. The recommendations provide level of effort and estimated impacts for each recommendation. The recommendations include better instructions that accompany traffic camera tickets, reducing minimum fine rates, creating ability-to-pay parameters in Oregon state law to guide payment plan decisions, eliminating credit reporting for accounts referred to collections, and many other similar recommendations to make Oregon's fine and fee system more equitable.⁵⁴

The Burden of Being Underbanked or Unbanked

As shown in Appendix A, 17 sources were ranked 'Good' for the accessibility of their payment methods, 8 were 'Fair,' and 5 were 'Poor.' This means that most existing revenue collection methods do not overwhelmingly burden those without access to banking or digital payment services. Many revenue sources are collected at the point of sale or are levied from businesses and industries that already have the financial means. However, this should not overshadow the potential equity implications for individuals who are unbanked (those without access to a bank account with an insured institution) and/or underbanked (those who do not have the ability to use a bank account).⁵⁵ An FDIC study in 2019 reported a 2.5% Unbanked Rate across the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA).⁵⁶ They remain a vulnerable demographic as payment collection methods shift towards digital platforms.

Parking fees and fines are a significant sector of transportation revenue that can heavily burden the unbanked. Parking fees can be paid at meters and pay stations using a mobile app, credit card, or coins, however cash payments must be exact since change is not offered. The Oregon Judicial Department (OJD) requires all parking citations to be paid using checks, money orders, or credit cards, either online or by phone. The only way to pay with cash is to visit the court in person, which is a heavier burden to bear by way of commute time and costs.⁵⁷ Some jurisdictions across the nation have sought different strategies to alleviate this

⁵³ Fines, fees, and traffic-camera enforcement in Portland, Oregon – work not yet published

⁵⁴ Fines, fees, and traffic-camera enforcement in Portland, Oregon – work not yet published

⁵⁵ [Chicago Metropolitan Agency for Planning. \(2021\). "Equity in Transportation Fees, Fines, and Fares."](#)

⁵⁶ [Federal Deposit Insurance Corporation. \(2019\). "How America Banks: Household Use of Banking and Financial Services."](#)

⁵⁷ [Oregon Judicial Department. \(2022\). "Parking Citations."](#)

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burden; in 2020, Arizona partnered with retail chains such as 7-Eleven to provide a "PayNearMe" service, where residents can pay traffic and parking fines at their local store.

Transit fares also create accessibility challenges as many systems embrace contactless payment systems. TriMet most recently reported that their Hop Fastpass digital fare system accounted for 83.5% of fares collected on fixed route services, which means the remaining 16.5% relied on cash payments on buses and trains.⁵⁸ Moreover, a 2022 review of transit rider surveys found that 37% of those aged 55+ in Portland/Gresham did not have a smartphone, and another 30% did not have a mobile data plan for their phones. 20% of riders aged 35 and below were unbanked, which is the highest amongst all age groups.⁵⁹ Although these statistics reflect only the circumstances of a portion of the region's ridership, it still serves as a critical reminder that technological innovations in fare collection systems cannot, and do not, solve all equity issues for transit riders.

Share:	Fair
Burden:	Fair
Tiers:	Poor
Benefits:	Good
Payment:	Fair
Penalties:	Poor

Revenue Allocation Constraints

Funding constraints determine where and how revenue can be spent and are applied at the revenue source, fund, or program level. Appendix B lists the various revenue sources evaluated and their allocation constraints as applied to Oregon. State and local motor fuel taxes all are subject to the constitutional requirement for exclusive spending on roadways, prohibiting the use of those funds for transit. While motor fuel tax funds and other motor vehicle revenue sources are collected by users of roadways, restricting these funds to pay for further roadway improvements raises equity issues.⁶⁰ These restrictions encourage further use and funding of roadway networks that require access and ability to use a personally owned vehicle. The cost per household of owning and maintaining a personal vehicle is \$9,500 dollars annually,⁶¹ while the cost of an unlimited TriMet transit pass is \$1,200 dollars per year.⁶² Personal vehicles also require the physical ability to drive, which can be a barrier for those of old age, severe illness, or disability.

⁵⁸ [TriMet. \(2021\). "Business Plan: FY2022 – FY2026."](#)

⁵⁹ [Aaron Golub et al. \(2022\). "Equity and exclusion issues in cashless fare payment systems for public transportation." *Transportation Research Interdisciplinary Perspectives*.](#)

⁶⁰ State and local vehicle registration and driver's license fees are included, See Appendix B for more information about constraints and allocation per revenue source.

⁶¹ [Bureau of Transportation Statistics. \(2022\). "Average Cost of Owning and Operating an Automobile."](#)

⁶² [TriMet. \(2022\). "Fares."](#)

Recommendations to Improve Equity Outcomes

Transportation needs in the greater Portland region exceed existing revenue capacity. This work utilized an equity lens to explore the benefits and costs of the funding sources that the greater Portland region relies on; it considered how revenues are collected and who pays, and how revenues are distributed and who benefits. We have identified several recommendations that we believe will be helpful to policy makers and transportation providers:

Laying a Foundation to Advance Equity Outcomes

- **No one solution.** Equitable transportation funding is not something that one solution can fix, so it should be broken down into numerous smaller, tenable goals, which contribute to achieving the overall goal of improving equitable outcomes in transportation funding.
- **Transparency is key.** Publishing the agency's goals so that they are viewable by the public in an easily accessible location is crucial to positive public perception and building strong community and regional partnerships.
- **Elevate community voices.** Continuing to strengthen the existing partnerships with local community organizations can provide more individuals with voices that may not have had the platform to be heard. This can be beneficial when establishing goals and receiving meaningful input during the early planning phases of policy initiatives or developments.
- **Put it into policy.** The establishment of policy helps to determine how revenues are collected and what they can be spent on; policy can be used to achieve more equitable outcomes. Adopting a policy stating that future revenue collection and disbursement should lead to more equitable outcomes is a central recommendation to this work, and establishing standards for revenue collection that does not disproportionately burden marginalized and low-income groups is one of the key starting points to equitable revenue collection.

Offering Fair and Accessible Opportunities for Meaningful Public Engagement and Input

- Offering ample opportunities for meaningful public engagement and input is critical to hearing diverse perspectives on equity-based goals, projects, and policies. Opportunities should be offered in-person and online, at a variety of locations and times, and available for individuals of varying English proficiency and non-English speakers.

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- Public outreach and involvement must be meaningful and intentional. Working with the community organizations that the agency has relations with will impact trust and participation.
 - Include a broad array of community members before, and during, the early planning phase; this builds trust and ensures that more voices are heard.
 - Utilize the relationships that the agency has with community-based organizations, groups, and trusted figures.
 - Hire trusted community members to do engagement work. Make sure to recruit several community members who are active in different areas.
- Communities affected by specific policies, funding efforts, or developments must be key contributors to the planning process. This results in an inclusive and iterative process where the communities affected by and benefiting from initiatives—like congestion pricing—are helping shape the program.

Equitable Revenue Collection

- The systems currently in place to raise revenues for transportation have been built over decades of policy decisions. These decisions have disproportionately placed a large burden on the most vulnerable people. Revenue collecting should be restructured to be more equitable. This can take many forms and should not end after one change. Several restructuring revenue collection suggestions are listed below:
 - Restructuring fines so they are non-compounding and do not impact credit scores or employment eligibility
 - Prorating (based on income or item value) payment structures for parking, license and registration fees, violation fines, and tolling and congestion charges
 - Providing alternatives to paying violation fines and split-repayment plans
 - Restructuring fare evasion programs to be more lenient and offer repayment plans or alternative forms of payment
 - Allowing license and registration renewal with unpaid fines

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- Removing barriers to acquiring Honored Citizen Fare Cards can make it possible for individuals with limited access to documents, identification, or internet able to get a card⁶³
- Reduce reliance on regressive tax strategies and encourage more progressive taxes and fees, such as TNC fees to ease the burden on transit users.
- Adjust the gas tax according to inflation and dedicate any additional revenue to maintenance, operations, and capital investment improvements in equity focus areas.
- Explore unified financial assistance system models for low-income households that could be applied to pricing programs and transportation services.⁶⁴

Equitable Revenue Disbursement

- Equitably redistributing revenue gained from congestion pricing to emphasize investments focused on safety, transit, and active transportation in equity focus areas.
- Major investment can often lead to an increase in cost of living and rent rates; incorporating anti-displacement policies can help mitigate the potential for displacement.
- Explore using revenues from new funding sources to offset taxes and fees for low-income households. Covering taxes and fees would reduce a significant portion of the cost of living for low-income households, ultimately allowing them greater financial flexibility.
- Tying transit costs to time of day or user to accommodate shift schedules and night/late-shift workers more affordable transportation options that cater specific needs. Additionally, encouraging employers to participate in transit passes or bikeshare programs can make transportation to and from work more affordable for their employees.
- Encouraging and incentivizing environmentally friendly investments in mid- and low-income households can have financial benefits for the household and can reduce the

⁶³ Currently, obtaining an Honored Citizen Fare Card requires proof of income and government-issued ID to be uploaded to an online portal for the card to be mailed to them upon approval. Alternatively, enrollment locations are available for on-the-spot visits and the applicant can receive a card at that time, but these locations are only open during business hours on weekdays. For someone that may not have a valid license due to unpaid violations, or works throughout the day and week, or someone with limited internet access this card may be difficult to obtain.

⁶⁴ [City of Portland. \(2021\). "Pricing Options for Equitable Mobility."](#)

overall carbon footprint. Offering discounts and rebates for households that want to invest in electric vehicles could be a step towards decreasing the up-front cost.

Next Steps

Improving equity in transportation is a key concern in the greater Portland region. Inequities in transportation funding are wide-ranging and systemic. Leaders around the region may use the findings from this study to inform policies, including the development of the 2023 RTP and future RTPs and support transportation providers as they discuss current and future funding programs.

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Glossary

BIPOC	Black, Indigenous, and People of Color. Those who identify as Black, Native American and Alaska Native, Native Hawaiian and Pacific Islander, Central and South American Indigenous, Asian, Hispanic/Latinx/a/o, and/or one or more non-white races or marginalized ethnic groups.
Direct Spending	Project spending led by agencies at each level.
Equity Lens	A critical thinking approach to undoing racial and economic disparities by evaluating burdens, benefits, and outcomes to underserved communities.
Inequities	A particular kind of disparity that is not only of concern for being potentially unfair, but which is believed to reflect injustice.
Intergovernmental Transfers	The funds that agencies at the federal, state, and local levels are sending to other levels of government for use on their respective projects.
Low Income	Persons or households with incomes 150% below the federal poverty level.
Older Adults	Individuals 65 years old or older.
Own-Source Revenue Flows	The funds raised by transportation agencies themselves at the federal, state, and local levels.
People Living with Disabilities	People who have a physical or mental impairment that substantially limits one or more major life activities, people who have a history or record of such an impairment, or a person who is perceived by others as having such an impairment.
Race	The social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage, cultural affiliation, cultural history, ethnic classification, and the social, economic and political needs of a society at a given period of time. Racial categories subsume ethnic groups.
Systemic Racism	The system of interrelated policies, practices, and procedures that work to advantage and position white people and communities over people of color. It can result in discrimination in criminal justice, employment, housing, health care, political power, and education, among other issues.
Unbanked	Households where no member has access to a checking or savings account.

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- Underbanked** Households that have a checking or savings account with an insured institution, but do not have the ability to use the account or have used alternative financial services in the past 12 months such as money orders, payday loans, pawn shop loans, check cashing, etcetera.
- Underserved** The people and places that historically and currently have not had equitable resources or access to infrastructure, healthy environments, housing choice, etc. Disparities may be recognized in both services and in outcomes.

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Appendices

**Appendix A: Equity Assessment Framework for Transportation
Revenue Sources**

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EQUITY ASSESSMENT OF REVENUE SOURCES

The transportation system in the region is funded through a variety of revenue sources and financing mechanisms, each originating at different jurisdictional levels. There are many societal benefits to funding the ongoing maintenance, operations, and continued improvement of our transportation system. The goal of this assessment is to evaluate the impacts of the way the system is currently funded on low-income households and people of color in order to inform recommendations to improve equity in our funding processes.

The sources of funding and how and where that funding is invested play a key role in the equity of the region's transportation system. This assessment aims to evaluate revenue sources for six different measures of equity. Each measure looks at the impacts of equity from a different perspective: the cost burden of the source, whether it is tiered, whether people with lower-income and people of color are likely to see greater benefits, if the payment methods create barriers for under or unbanked households, and the potential for penalties that can lead to debt and legal repercussions.

The first table below details the equity assessment for existing sources of revenue. These sources were drawn from the revenue forecast data developed for the 2018 Regional Transportation Plan, federal, state, and local budget documents, and other sources. Specific sources are noted in the footnotes.

The second table includes an assessment of emerging and potential future revenue sources. These sources are drawn from the Regional Congestion Pricing Study, the One Oregon report and other sources. The list is intended to be illustrative. The equity assessment for many of these sources are listed as variable. More information about each source and what types of program design may lead a potential future source to be more or less equitable is included in the rating details tables which follow the summary tables. Information about potential future sources will help guide recommendations for a more equitable funding system.

This assessment includes many, but not all, of the existing revenue sources at the federal, state, and local levels. The focus of this assessment is on sources which collect revenue from individuals, businesses, or commercial operations. It does not include revenue that is gathered from financing mechanisms like bonds or from passive revenue sources like transit advertising, rent, loan repayment, land use planning fees or other similar sources. The last section of this report lists identified revenue sources which were excluded from this analysis.

Equity Ratings

Variable: Equity impacts dependent on program design and guiding policies

Poor: Negative impact on people with lower income or people of color

Fair: Some negative impact on people with lower income or people of color, balanced by benefits provided

Good: Does not negatively impact people with lower income or people of color

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Existing Revenue Sources – Summary Table¹

Source	Overall Equity Rating	Share	Burden	Tiered	Benefits Received	Payment Methods	Penalties
Federal							
Fuels tax	Poor	Poor	Poor	Poor	Fair	Good	Good
Heavy trucks and trailers sales tax	Good	Good	Good	Good	Fair	Good	Good
Heavy vehicles annual use tax	Good	Good	Good	Good	Fair	Good	Good
Individual income taxes, corporate income taxes (General Fund transfer)	Fair	Good	Fair	Fair	Fair	Poor	Poor
State							
Motor Fuels Tax	Poor	Poor	Poor	Poor	Fair	Good	Good
Weight Mile Tax	Good	Good	Good	Good	Fair	Good	Good
Driver and Vehicle Fees	Poor	Poor	Poor	Fair	Poor	Good	Fair
Transportation License and Fees	Good	Good	Good	Good	Fair	Good	Good
Cigarette Tax	Fair	Poor	Poor	Fair	Good	Good	Good
Bike Tax	Poor	Poor	Poor	Fair	Good	Fair	Fair
Privilege Tax	Fair	Fair	Poor	Good	Good	Good	Good
Statewide Transit Tax (employee paid)	Fair	Fair	Poor	Fair	Good	Fair	Poor
Income Tax (General Fund Transfer)	Poor	Poor	Fair	Fair	Fair	Poor	Poor
Lottery Revenues	Fair	Poor	Poor	Fair	Good	Good	Good
Local (differs by municipality)							
Transit Payroll Tax (employer paid)	Good	Good	Good	Good	Good	Fair	Fair
Transit Fares (Passenger Revenues)	Fair	Fair	Fair	Poor	Good	Fair	Poor

¹ The revenue sources represented in this table are not an exhaustive list of all sources of funding in the region. See the Revenue Sources Not Included in Assessment section of this document for more details.

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Source	Overall Equity Rating	Share	Burden	Tiered	Benefits Received	Payment Methods	Penalties
Gas Tax	Poor	Poor	Poor	Poor	Fair	Good	Good
Vehicle Registration Fees	Poor	Poor	Poor	Poor	Fair	Good	Fair
Transportation System Development Charges	Fair	Poor	Fair	Poor	Poor	Good	Good
Trip-Based Utility Fees	Fair	Fair	Fair	Good	Good	Fair	Poor
Franchise Fees	Fair	Fair	Fair	Poor	Fair	Good	Good
PGE Privilege Tax	Poor	Poor	Poor	Poor	Fair	Good	Poor
Parking Fees and Fines	Poor	Poor	Poor	Good	Fair	Poor	Poor
Urban Renewal	Poor	Poor	Poor	Good	Good	Fair	Poor
Street Light User Fee	Poor	Poor	Poor	Good	Fair	Good	Poor
Property Taxes	Fair	Fair	Poor	Good	Good	Fair	Poor
TNC Fee	Fair	Good	Poor	Good	Good	Poor	Fair
Local Improvement District Tax	Poor	Poor	Poor	Fair	Poor	Fair	Poor
Heavy Vehicle Use Tax	Good	Good	Good	Fair	Fair	Good	Good

Emerging and Potential Future Revenue Sources – Summary Table

Source	Overall Equity Rating	Share	Burden	Tiered	Benefits Received	Payment Methods	Penalties
Emerging							
Freeway Tolling	Variable	Variable	Variable	Variable	Variable	Poor	Variable
Vehicle Miles Traveled Fee	Variable	Variable	Variable	Variable	Variable	Poor	Variable
Cordon Pricing	Variable	Variable	Variable	Variable	Variable	Poor	Variable
Roadway Pricing	Variable	Variable	Variable	Variable	Variable	Poor	Variable
Parking Pricing	Variable	Variable	Variable	Variable	Variable	Poor	Variable
Potential Future							

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Source	Overall Equity Rating	Share	Burden	Tiered	Benefits Received	Payment Methods	Penalties
Carbon Fee	Variable	Variable	Variable	Poor		Variable	Variable
Regional Gas Tax	Fair	Poor	Poor	Poor	Good	Good	Good
Gas Tax Indexing	Fair	Poor	Poor	Poor	Poor	Good	Good
Studded Tire Fee	Variable	Fair	Variable	Poor	Variable	Variable	Good
Regional Vehicle Registration Fee	Variable	Variable	Variable	Variable	Fair	Fair	Fair
First-time Title Fee on New Vehicles	Variable	Fair	Variable	Fair	Fair	Fair	Fair
Electric Vehicle Fees/Tax	Variable	Variable	Variable	Variable	Fair	Fair	Fair
General Sales Tax	Variable	Poor	Poor	Poor	Variable	Poor	Good
Targeted Sales Tax	Variable	Variable	Variable	Variable	Variable	Variable	Good
Business Income Tax	Variable	Variable	Variable	Variable	Variable	Poor	Fair
Corporate Activities Tax	Variable	Good	Fair	Good	Fair	Fair	Fair
Zero-Emission Zone (ZEZ) / Low Emission Zone (LEZ)	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Curb Use Fees	Variable	Variable	Variable	Variable	Variable	Variable	Variable
First/Last Mile Delivery Fees	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Vehicle Rental Fees	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Traffic Fines	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Public-Private Partnerships	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Naming Rights or Sponsorships	Variable	Good	Good	N/A	Variable	N/A	N/A
Allowance of Use of ROW for Rest Areas/Privatization	Variable	Good	Good	N/A	Variable	N/A	N/A
Overweight Truck and SUV Personal Tax	Variable	Fair	Fair	Fair	Fair	Variable	Variable

Measures and Methods Defined

This assessment relies on six measures, defined below. These measures aim to target different attributes about a given revenue source that impact equity. This ranges from whether low-income households pay a higher share of their income to whether the source has the potential, if unpaid or paid late, to cause additional penalties or legal repercussions. The measures were developed through research and literature review, including the One Oregon report², Chicago's Improving equity in transportation fees, fines, and fares report³, and Metro's Regional Congestion Pricing Study⁴.

This is a qualitative assessment. The methods for assigning ratings (poor, fair, good) to each measure for each revenue source are based on research of available information online, information known to Metro, and review of local budget documents. Researchers searched for indications of exemptions and penalties, for example, and based the ratings on the degree to which these items would appear to impact low-income households negatively or positively. Therefore, this assessment has some gray area and users of this report are urged to read the details of each revenue source in the rating details tables.

Measures

- **Share:** Do lower-income⁵ households pay a higher share of their income?
- **Burden:** Does the source provide targeted exemptions or subsidies to avoid an unfair burden for households below an income threshold? If yes, does obtaining the targeted exemption of subsidy place substantial burden of proof on applicants?
- **Tiered:** Is the fee or tax tiered based on the value of the priced item, like vehicles?
- **Benefits Received:** Are low-income households and people of color directly benefitting?
- **Payment Methods:** Does the payment method of the fee or tax provide options for unbanked and underbanked individuals? Is the payment method burdensome?
- **Penalties:** Do unpaid fines, fees, or taxes trigger penalties or legal repercussions? Can the fines or penalties compound to become a major source of debt for people with lower income?

Overall Rating Methodology

While each measure is important for describing the potential for equity impacts, an overall rating per revenue source was useful for summarizing the information. Though the assessment is qualitative, the simplest way to create an overall rating while remaining objective was to take a quantitative approach. The approach is described below. The

² [One Oregon: A Vision for Oregon's Transportation System](#)

³ [Chicago Metropolitan Agency for Planning: Improving equity in transportation fees, fines, and fares](#)

⁴ [Metro Regional Congestion Pricing Study, July 2021](#)

⁵ Lower-income households are defined as 150% of the federal poverty level.

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numerical points assigned to each rating, and the overall sum of available points, were used to organize the information and are meant to be relative to one another. The ratings for the Share and Burden measures were weighted times three. This weight was given to show the outsized impact the equity of the amount of the revenue source holds. If a revenue source is scaled based on household income and offers appropriate exemptions and subsidies, the impact of the other measures is lessened. For example, the impact of penalties is slightly less if revenue sources are based on the ability to pay. This would greatly reduce the number of people which find themselves unable to afford to pay in the first place who are then drawn into the cycle of the criminal justice system.

Steps to create the overall rating:

- Step 1: Poor = 1, Fair = 2, Good = 3
- Step 2: Share and Burden are weighted times 3
- Step 3: Sum all of the points achieved for each revenue source.
- Step 4: Find the percentage of the points achieved compared to the total available points. For example, if the revenue source gets 15 weighted points, and the total available is 30, the revenue source is achieving 50% of its available points. Total available points is the sum of points across measures if each measure received a good rating.
- Step 5: Assign the overall rating based on thresholds for point percentage achieved.
 - Poor = 50% or less
 - Fair = 75% or less
 - Good = greater than 75%

REVENUE SOURCES RATING DETAILS

Federal

Fuels Tax

Fuels tax includes gasoline, diesel, and kerosene. Gasoline for motor vehicles is taxed at \$0.184 per gallon. Diesel is taxed at \$0.244 per gallon. Flat tax on a per gallon rate rather than as a general fuel sales tax limits the impact of inflation and price adjustments on the tax burden.

Share	Poor	Everyone pays the same tax on gasoline regardless of income. Lower income households may have longer commute times to work but may drive less for leisure activities. ⁶ However, lower income households still pay a greater percentage of their income than a higher income household. ⁷
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Poor	The fuel tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to driver older, less fuel-efficient vehicles and have fewer resources to invest in electric vehicles. Electric vehicles on average cost \$10,000 more than traditional gas-powered vehicles and often require installation of home charging stations. While the federal government offers a tax credit for electric vehicles of up to \$7,500, it requires purchasers to pay the upfront cost and the tax credit is reduced once a manufacturer has sold 200,000 vehicles. ⁸
Benefits Received	Fair	Road users are paying the tax which supports the Highway Trust Fund. The fuel tax funds roadways, transit, and bike and pedestrian infrastructure. ⁹ The Mass Transit Account receives 15.5% of the revenue generated by the gasoline tax and 11.7% of the revenue generated by the tax on diesel fuel. More people with low income and people of color rely on transit. ¹⁰ The majority of the Highway Trust Fund supports roadways. A higher percentage of the gas tax supporting transit would provide a more positive impact for the people with the greatest needs.

⁶ <https://bikeportland.org/2016/01/25/low-income-households-drive-much-less-than-high-income-households-173261>

⁷ <https://www.axios.com/2022/06/10/high-gas-prices-low-income-us-biden> Gas Prices by Income Bracket

⁸ <https://www.nrdc.org/stories/electric-vs-gas-it-cheaper-drive-ev> NRDC Cost of Electric Vehicles

⁹ <https://crsreports.congress.gov/product/pdf/R/R44332>

¹⁰ <https://www.fhwa.dot.gov/fastact/factsheets/htfs.cfm>

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		The federal gas tax has not kept pace with inflation and has not been increased since 1993. It has also seen declining revenues due to electric vehicles. Since 2008, revenues in the Highway Trust Fund have not been enough to cover the costs of surface transportation spending. ¹¹
Payment Methods	Good	Payment is collected at point of sale. It is common practice for gas stations to provide a cash option which can support unbanked individuals, and which may be a lower posted cost than paying with credit.
Penalties	Good	Payment is collected at point of sale.

¹¹ <https://sgp.fas.org/crs/misc/R45350.pdf> Funding and Financing Highways and Public Transportation – Congressional Research Service

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Heavy Trucks and Trailers Sales Tax

A 12% tax is applied to the sale of automobile truck chassis and bodies, truck trailer and semitrailer chassis and bodies, and tractors of the kind chiefly used for highway transportation in combination with a trailer or semitrailer.¹² The tax only applies to vehicles which have a gross vehicle weight (GVW) over 33,000 pounds and trailers with a GVW over 26,000. Vehicles of this weight are typically commercial vehicles.

Share	Good	Tax rates are not based on household income; however, the tax is for commercial operations and is less likely to impact low-income households.
Burden	Good	No targeted exemptions or subsidies provided; however, the tax is for commercial operations and is less likely to impact low-income households.
Tiered	Good	The sales tax is 12%, higher cost vehicles pay more in tax.
Benefits Received	Fair	The tax supports roadway maintenance and improvements through the Highway Trust Fund ¹³ and is levied on heavy vehicles that do the most damage. However, research has shown that heavy vehicles do a disproportionate amount of roadway damage that is not made up for by the revenue they generate for the transportation system. Additionally, funding roadways does not always have a positive impact on the people with the greatest needs.
Payment Methods	Good	Payment is collected at point of sale. The sales tax is included in the price of the vehicle and an individual without the ability to purchase an eligible vehicle would not be impacted. Additionally, the tax is only eligible for commercial operations and therefore is less likely to impact unbanked individuals.
Penalties	Good	Payment is collected at point of sale.

¹² <https://www.law.cornell.edu/cfr/text/26/145.4051-1> Federal Heavy Trucks and Trailers Sales Tax

¹³ <https://www.epa.gov/verified-diesel-tech/learn-about-federal-excise-tax-exemption> Federal Heavy Trucks and Trailers Sales Tax

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Heavy Vehicles Annual Use Tax

An annual fee is levied on heavy vehicles operating on public highways, with exemptions for specific groups or types of vehicles such as mass transit authorities. Heavy vehicles are defined as exceeding 55,000 pounds.¹⁴ The maximum tax is \$550 per year.

Share	Good	Everyone pays the same tax regardless of income. However, this tax generally applies to commercial vehicles or companies and is less likely to impact individual household incomes.
Burden	Good	The tax provides exemptions for several groups and vehicle categories, including public transit authorities, the American Red Cross, nonprofit volunteer fire departments, ambulance associations, or rescue squads, Indian tribal governments for vehicles used in essential tribal government functions. This tax is more relevant for commercial vehicles or companies; however, these exemptions include a number of nonprofits and historically marginalized communities. ¹⁴
Tiered	Good	The tax is tiered based on two weight categories. This ties directly to the damage higher weight vehicles do to roadways.
Benefits Received	Fair	The tax supports roadway maintenance and improvements through the Highway Trust Fund ¹⁵ and is levied on heavy vehicles that do the most damage. However, research has shown that the heaviest vehicles do a disproportionate amount of roadway damage that is not made up for by the revenue they generate for the transportation system. ¹⁶ Additionally, funding roadways does not always have a positive impact on the people with the greatest needs.
Payment Methods	Good	Payments are made through submission of IRS Form 2290 along with payment via credit or debit card, electronic funds withdrawal, or via the Electronic Federal Tax Payment System. ¹⁷ This tax generally applies to commercial vehicles or companies and is less likely to impact unbanked individuals.
Penalties	Good	Penalties for non-compliance can be high and states also suspend the registration of vehicles that have not produced proof of payment. For those actively evading the tax, penalties can include fines and incarceration. While penalties for low-income households who cannot afford certain taxes or fees have a negative equity impact, holding businesses and commercial operations accountable for paying for their use and wear and tear of the transportation system is important.

¹⁴ <https://www.fhwa.dot.gov/policyinformation/hvut/mod1/whatishvut.cfm>

¹⁵ <https://www.fhwa.dot.gov/policy/091116/pdfs/fhwatri-fold.pdf> Federal Heavy Vehicle Use Tax

¹⁶ The U.S. Department of Transportation in its most recent Highway Cost Allocation Study estimated that light single-unit trucks, operating at less than 25,000 pounds, pay 150 percent of their road costs while the heaviest tractor-trailer combination trucks, weighing over 100,000 pounds, pay only 50 percent of their road costs. <https://www.fhwa.dot.gov/policy/091116/pdfs/fhwatri-fold.pdf> and <https://thehill.com/blogs/pundits-blog/transportation/334499-feds-could-pay-for-road-improvements-by-charging-big-trucks/>

¹⁷ <https://www.irs.gov/forms-pubs/about-form-2290> Paying the Federal Heavy Vehicle Use Tax

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Individual income taxes, corporate income taxes (General Fund transfer)

To maintain solvency of the Highway Trust Fund, transfers from the General Fund have been authorized by Congress every year since FY 2008. In total \$114.7 billion has been transferred to the Highway Account and \$28.9 billion to the Mass Transit Account. The General Fund collects revenue from personal income tax and corporate income tax, among other sources.

Share	Good	Personal income tax brackets increase the tax rate progressively as incomes increase. Low-income households pay a smaller percentage on taxable income than higher income households. The corporate income tax is progressive. The majority of its burden is carried by high-income households via taxes on income from dividends, capital gains, and other forms of capital income. ¹⁸
Burden	Fair	The IRS offers a number of deductions and credits for personal income tax. ¹⁹
Tiered	Fair	Personal income and corporate income taxes are based on the amount of income. However, income is grouped into brackets which can have a wide range.
Benefits Received	Fair	The personal income tax is paid by most Americans who also benefit from the transportation system. Corporations also rely on the transportation system to do business. While there is not a direct connection between the personal and corporate income tax and the transportation system, the ability to access jobs, goods, and services relies on the transportation system. The General Fund supports the Highway Trust Fund which funds roadways, transit, and bike and pedestrian infrastructure. Transit and bike and pedestrian projects help to support people with the greatest needs.
Payment Methods	Poor	Filing taxes can be an onerous process and often requires access to the internet or the time and money to research and access forms or to hire a tax preparer. It is possible to pay in cash but can only be done so via an authorized Cash Processing Company. ²⁰
Penalties	Poor	The IRS charges penalties for late filings, incorrect payment, and incorrect returns. The penalties can be eliminated if there is a “reasonable” cause which puts the burden on lower-income households. Black and lower-income households are more likely to be audited than high-income households, resulting in more penalties. ²¹

¹⁸ <https://www.taxpolicycenter.org/briefing-book/are-federal-taxes-progressive> Tax Policy Center - federal personal income and corporate income taxes

¹⁹ <https://www.irs.gov/efile/credits-deductions> Personal Income Tax Credits and Deductions

²⁰ <https://www.irs.gov/payments/pay-with-cash-at-a-retail-partner> IRS Cash Processing Companies

²¹ <https://inequality.org/great-divide/fund-irs-wealth-squad/> IRS auditing

State Transportation Revenues

Motor Fuels Tax

The motor fuels tax category includes the state gas tax and aviation fuel taxes. Gasoline for motor vehicles is taxed at \$0.38 per gallon as of 2022.²² A portion of revenues are from fuel purchases for non-automotive purposes (such as fuel purchased for boats, lawn mowers, etc.); these gas tax revenues are not bound by the constitutional restriction that they be used on road projects. A portion of these funds are allocated to the State Transportation Improvement Fund program for transit.

Share	Poor	Everyone pays the same tax on gasoline regardless of income. Lower income households may have longer commutes to work but may drive less for leisure activities. ²³ However, lower income households still pay a greater percentage of their income than a higher income household. ²⁴
Burden	Poor	There are no targeted exemptions or subsidies available. Oregon state law provides for motor fuels tax refunds for the purchase of gasoline for uses other than travel on public roadways. Refunds are not based on income and require burden of proof. ²⁵ House Bill 3055, passed in 2021, provides an exemption for federally recognized Indian tribes, tribal entities, and tribal member owned entities. However, the new law requires that the tribal entities levy a tax on motor vehicle fuels at the same rate as the Oregon state motor vehicle fuels tax. ²⁶
Tiered	Poor	The fuel tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to driver older, less fuel-efficient vehicles and have fewer resources to invest in electric vehicles. Electric vehicles on average cost \$10,000 more than traditional gas-powered vehicles and often require installation of home charging stations. While the federal government offers a tax credit for electric vehicles of up to \$7,500, it requires purchasers to pay the upfront cost and the tax credit is reduced once a manufacturer has sold 200,000 vehicles. ²⁷
Benefits Received	Fair	Gas tax revenue is deposited into the State Highway Fund. Under state law, the Highway Fund must be spent in the road right-of-way, including roadways, bikeways, and walkways. While supporting bike and pedestrian infrastructure can have a positive equity impact, the majority of this funding is spent on improvements for motor vehicles. A higher share of funding supporting bike and pedestrian infrastructure would provide a more positive impact for the people with the greatest needs.

²² <https://www.oregon.gov/odot/FTG/Pages/Current%20Fuel%20Tax%20Rates.aspx#:~:text=Gasoline%20%240.38%20per%20gallon,Use%20Fuel%20%240.38%20per%20gallon>

²³ <https://bikeportland.org/2016/01/25/low-income-households-drive-much-less-than-high-income-households-173261>

²⁴ <https://www.axios.com/2022/06/10/high-gas-prices-low-income-us-biden> Gas Prices by Income Bracket

²⁵ https://oregon.public.law/statutes/ors_319.280 Oregon State Law 319.280 that provides for the reimbursement of tax paid based on use of fuel.

²⁶ <https://www.oregon.gov/odot/FTG/Pages/TribalExemption.aspx>

²⁷ <https://www.nrdc.org/stories/electric-vs-gas-it-cheaper-drive-ev> NRDC Cost of Electric Vehicles

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		Fuel tax revenue is not always used in the same geographic location as collected. State statute dictates that 40% of the State Highway Fund, which includes the motor fuels tax as a major source of revenue, must be distributed to cities and counties. ²⁸
Payment Methods	Good	Payment is collected at point of sale. It is common practice for gas stations to provide a cash option which can support unbanked individuals, and which may be a lower posted cost than paying with credit.
Penalties	Good	Payment is collected at point of sale.

²⁸ <https://www.oregon.gov/odot/About/Pages/Transportation-Funding.aspx> ODOT Transportation Funding in Oregon overview

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Weight Mile Tax

A tax per mile driven in Oregon for motor carriers operating vehicles in commercial operations on public roads with a gross weight over 26,000 pounds.²⁹

Share	Good	Tax rates are not based on household income; however, the tax is for commercial operations and is less likely to impact low-income households.
Burden	Good	The tax provides limited exemptions for government, charitable, private, or off-road operations. The tax is for commercial operations and is less likely to impact low-income households.
Tiered	Good	The tax is tiered based on weight of vehicle and miles driven within Oregon. ³⁰
Benefits Received	Fair	Heavy vehicles incur more damage on roadways than lighter vehicles and the tax funds roadway repair and maintenance which commercial vehicle operations rely on. However, research has shown that heavy vehicles do a disproportionate amount of roadway damage that is not made up for by the revenue they generate for the transportation system. Additionally, funding roadways does not always have a positive impact on the people with the greatest needs.
Payment Methods	Good	The tax is only eligible for commercial operations and is therefore less likely to impact unbanked individuals.
Penalties	Good	ODOT may suspend an operator's account if they fail to file, do not pay the tax, do not pay on time, or fail to file or comply with other rules. Suspension results in all OR DOT plates and tax-enrolled vehicles to be invalid which makes operating illegal and can result in further citations, fines, and penalties. While penalties for low-income households who cannot afford certain taxes or fees have a negative equity impact, holding businesses and commercial operations accountable for paying for their use and wear and tear of the transportation system is important.

²⁹ https://www.oregon.gov/odot/MCT/New%20Carrier%20Education%20Manual/Section_3_Weight-MileTax.pdf Oregon Weight Mile Tax

³⁰ <https://www.oregon.gov/odot/Forms/Motcarr/9928-2022.pdf> Oregon Weight Mile Tax rates

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Driver and Vehicle Fees

Includes driver license fees, vehicle registrations, title fees for passenger vehicles, buses, trailers, motorcycles, and others. This category contains many fees for various areas from snowmobile titles to specialty license plates. This analysis will focus on driver license, vehicle registration, and title fees.

Share	Poor	Low-income drivers pay the same amount in fees as high-income drivers. Fees are set at a flat rate.
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Fair	Driver license fees for non-commercial operations are the same regardless of personal vehicle owned. Vehicle registration and title fees are tiered based on the age of the vehicle. Electric vehicles do not have age-tiered fees and are currently required to pay \$192 while the maximum non-electric vehicle fee is \$116. ³¹ Electric vehicles are charged a higher fee because they do not contribute to funding the transportation system via revenues gained through the gas tax. People with lower income are less likely to own an electric vehicle due to their relative higher cost and more likely to drive an older vehicle which would be subject to lower fees.
Benefits Received	Poor	Drivers and owners of vehicles pay the fees; however, the amount of the fees is not based on the amount that a driver operates a vehicle or the number of miles a particular vehicle is driven. Driver license and vehicle fees are deposited into the State Highway Fund. Under state law, the Highway Fund must be spent in the road right-of-way, including roadways, bikeways, and walkways. While supporting bike and pedestrian infrastructure can have a positive equity impact, the majority of this funding is spent on improvements for motor vehicles. A higher share of funding supporting bike and pedestrian infrastructure would provide a more positive impact for the people with the greatest needs.
Payment Methods	Good	The Oregon DMV accepts cash, check, money order, or credit or debit card as payment for services. ³²
Penalties	Fair	Driver license and vehicle registration and title fees must be paid to receive the license or registration. Penalties may be incurred for driving without a license or for operating an unregistered vehicle. ³³ People of color are more likely to be charged. In Multnomah County, Black people are charged three to 30 times more often than white people for the same violations. Black people also pay higher fines for the same violations. ³⁴

³¹ <https://www.oregon.gov/odot/dmv/pages/fees/vehicle.aspx> Oregon State Vehicle Registration and Title Fees

³² <https://www.oregon.gov/odot/dmv/pages/fees/index.aspx> DMV payment methods

³³ https://www.oregon.gov/osmb/boater-info/Documents/Schedule_of_Fines_on_Violations_2021.pdf Oregon Schedule of Fines and Violations

³⁴ <https://www.invw.org/2017/02/02/being-black-in-multnomah-county/> The High Costs of Disparities for People of Color in Multnomah County

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Transportation License and Fees

Includes heavy vehicle registrations, vehicle and Sno-Park permits. This analysis will focus on the heavy vehicle registration fee. Heavy vehicle registration fees are tiered based on the weight category of the vehicle and generally begin at 8,000 pounds.³⁵

Share	Good	Everyone pays the same fee regardless of income. However, this fee generally applies to heavy commercial vehicles and is less likely to impact low-income households.
Burden	Good	No targeted exemptions or subsidies provided. However, this fee generally applies to heavy commercial vehicles and is less likely to impact low-income households.
Tiered	Good	The fee is tiered based on weight of vehicle.
Benefits Received	Fair	Heavy vehicles incur more damage on roadways than lighter vehicles and the fee funds roadway repair and maintenance which commercial vehicle operations rely on. However, research has shown that heavy vehicles do a disproportionate amount of roadway damage that is not made up for by the revenue they generate for the transportation system. Additionally, funding roadways does not always have a positive impact on the people with the greatest needs.
Payment Methods	Good	The Oregon DMV accepts cash, check, money order, or credit or debit card as payment for services. The fee generally applies to commercial operations and is therefore less likely to impact unbanked individuals.
Penalties	Good	The fee must be paid in order to receive the registration. Penalties may be incurred for operating an unregistered vehicle. While penalties for low-income households who cannot afford certain taxes or fees have a negative equity impact, holding businesses and commercial operations accountable for paying for their use and wear and tear of the transportation system is important.

³⁵ <https://www.oregon.gov/odot/forms/dmv/6013.pdf> Oregon Heavy Vehicle Registration Fees

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Cigarette Tax

The cigarette tax is \$3.33 per stamp. Every pack of cigarettes sold in Oregon must have a stamp.³⁶

Share	Poor	Everyone pays the same tax regardless of income. Lower income households pay a greater percentage of their income than a higher income household. Cigarette taxes are generally regarded as regressive. ³⁷ Some smokers may change their behavior, but many will not or cannot and cigarette smoking disproportionately impacts people with low-income. ³⁸
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Fair	The tax is the same regardless of the cost of an individual pack of cigarettes, but the amount paid is based on the price.
Benefits Received	Good	The costs are paid by smokers regardless of their use of the transportation system and the revenue source does not have a direct connection to transportation. However, the revenue is dedicated to transit services for seniors and disabled people which has a positive equity component. Seniors and disabled people are more likely to live in low-income households.
Payment Methods	Good	Payment is collected at point of sale. Payment options vary by vendor, but many locations accept cash as a form of payment.
Penalties	Good	Payment is collected at point of sale.

³⁶ <https://www.oregon.gov/dor/programs/businesses/Pages/cigarette-overview.aspx> Cigarette Tax Overview

³⁷ One Oregon: A Vision for Oregon's Transportation System, Appendix A

³⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448232/> Cigarette tax regressivity

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Bike Tax

The Oregon Bicycle Excise tax is a flat tax of \$15 that is levied on bicycles purchased for \$200 or more.³⁹

Share	Poor	Everyone pays the same tax regardless of income. Lower income households pay a greater percentage of their income than a higher income household. While the tax is only applied to new bicycles, the threshold of \$200 is quite low compared to current new bicycle costs.
Burden	Poor	There are no targeted exemptions or subsidies. Nonprofits and state agencies are not exempt, federal agencies are exempt. While the tax is only applied to new bicycles, the threshold of \$200 is quite low compared to current new bicycle costs.
Tiered	Fair	The fee is not tiered but bicycles costing less than \$200 are not taxed.
Benefits Received	Good	The tax is paid by people buying bicycles and is intended to provide funding for bike and pedestrian projects . Supporting bike and pedestrian infrastructure can have a positive equity impact.
Payment Methods	Fair	Payment is generally collected at point of sale. However, if a consumer is not charged the tax they must pay separately later and are provided with an online option for payment.
Penalties	Fair	Payment is generally collected at point of sale. However, if not and the consumer is responsible, there is a 5 percent late penalty and a 20 percent penalty if not filed within 30 days of due date. Interest is added to any unpaid tax.

³⁹ <https://www.oregon.gov/dor/programs/businesses/Pages/Bicycle-excise-tax.aspx> Bicycle Excise Tax Overview

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Privilege Tax

The vehicle privilege tax is a tax for the privilege of selling vehicles in Oregon. The tax is .005 percent on the retail price of any taxable vehicle. Taxable vehicles are those that are purchased from a dealer in Oregon, have been driven less than 7,500 miles, and are less than 26,000 pounds.⁴⁰

Share	Fair	Everyone pays the same tax regardless of income. Lower income households pay a greater percentage of their income than a higher income household. However, taxes on new vehicles are generally considered to be less regressive than other revenue sources. ⁴¹
Burden	Poor	There are no targeted exemptions or subsidies.
Tiered	Good	The tax is based on the sale price of the vehicle.
Benefits Received	Good	The tax is paid by vehicle owners. The funds are deposited into Connect Oregon. Connect Oregon is restricted to projects outside the road right-of-way but funds active transportation, rail projects, and the Zero-Emission Incentive Fund which have a positive equity component. ⁴²
Payment Methods	Good	Payment is collected at point of sale.
Penalties	Good	Payment is collected at point of sale.

⁴⁰ <https://www.oregon.gov/dor/programs/businesses/Pages/Vehicle-privilege-and-use-taxes.aspx> Oregon Vehicle Privilege Tax

⁴¹ One Oregon: A Vision for Oregon's Transportation System, Appendix A

⁴² <https://www.oregon.gov/odot/programs/pages/connectoregon.aspx> Connect Oregon

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Statewide Transit Tax

The statewide transit tax is imposed on the wages of each employee. The tax is .001% from wages of Oregon residents or non-residents who perform services in Oregon.⁴³

Share	Fair	The tax is a percentage based on wages, so low-income earners do not pay the same amount as high-income earners. However, they are considered to be more regressive than employer payroll taxes ⁴⁴
Burden	Poor	Employees who aren't subject to regular income tax withholding due to high exemptions, wages below the threshold for income tax withholding, or other factors are still subject to statewide transit tax withholding, impacting low wage earners.
Tiered	Fair	The tax is calculated based on the employee's wages.
Benefits Received	Good	There is no direct connection to revenue source and use because employees working and living in areas without transit or good transit will pay but not directly benefit. The tax is deposited into the Statewide Transportation Improvement Fund and is limited to investments and improvements in public transportation services, except for those involving light rail. Funding transit has a positive equity component.
Payment Methods	Fair	Payments can be made by cash, check, money order, or EFT. However, if an employee's employer does not withhold the tax, the burden is on the employee to file the appropriate paperwork and pay the tax.
Penalties	Poor	If an employee does not file or pay on time, they may be subject to penalties and interest.

⁴³ <https://www.oregon.gov/dor/programs/businesses/Pages/statewide-transit-tax.aspx> Statewide Transit Tax

⁴⁴ One Oregon: A Vision for Oregon's Transportation System, Appendix A

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Income Tax (General Fund Transfer)

The Oregon General Fund is primarily made up of state personal and corporate income taxes. Personal income tax is the largest share of revenue at 86% of projected revenue for the 2019-2021 adopted budget.⁴⁵ This analysis focuses on the personal income tax in Oregon.

Share	Poor	Oregon's personal income tax is progressive, with high-income earners paying a higher portion of their annual income than low-income earners. ⁴⁶ However, the tax rate begins at 4.75% and tops out at 9.9%. The gap between the brackets for the lower rates is small. A couple filing together that makes \$18,400 will pay the same tax rate as a couple earning \$200,000. ⁴⁷
Burden	Fair	Oregon provides a refundable Earned Income Tax Credit.
Tiered	Fair	The amount of tax owed is based on the amount of wages earned. However, as stated above, the brackets can include a wide range of income.
Benefits Received	Fair	While there is not a direct connection between the personal income tax (which is paid by most Oregonians) and the transportation system, the ability to access jobs, goods, and services relies on the transportation system.
Payment Methods	Poor	Filing taxes can be an onerous process and often requires access to the internet or the time and money to research and access forms or to hire a tax preparer. Oregon accepts online payments, checks, or money orders. ⁴⁸
Penalties	Poor	Oregon does not allow an extension to pay taxes. Late payments incur a 5% penalty. Payments more than three months late receive a 20% late-filing penalty. There are additional penalties for not filing at all or other types of tax avoidance. ⁴⁹

⁴⁵ <https://sos.oregon.gov/blue-book/Pages/facts/finance-state.aspx> State General Fund and Lottery Fund

⁴⁶ <https://itep.sfo2.digitaloceanspaces.com/whopays-ITEP-2018.pdf> Who Pays? A Distributional Analysis of the Tax Systems in All 50 States

⁴⁷ <https://www.ocpp.org/2021/04/15/8-things-know-about-oregons-tax-system/> 8 Things to Know About Oregon's Tax System

⁴⁸ <https://www.oregon.gov/dor/pages/payments.aspx> Oregon Department of Revenue Payments

⁴⁹ <https://www.oregon.gov/dor/programs/individuals/pages/penalties.aspx> Oregon penalties and interest for personal income tax

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Lottery Revenues

A portion of funds from the Oregon Lottery are deposited into Connect Oregon.

Share	Poor	Participating in the lottery will cost the same across income groups and is generally regarded as regressive. ⁵⁰ Research has found that low-income people disproportionately participate in the lottery and that lottery retailers are more highly concentrated in minority and low-income neighborhoods. ⁵¹
Burden	Poor	No exemptions or subsidies for discounted lottery tickets or games are provided.
Tiered	Fair	The cost of the lottery is dependent on how much one participates and what games or tickets are purchased.
Benefits Received	Good	Lottery revenue is deposited into Connect Oregon which funds active transportation, rail projects, and the Zero-Emission Incentive Fund which have a positive equity component. ⁵²
Payment Methods	Good	There is a wide array of options to pay for lottery tickets or games.
Penalties	Good	Payment for lottery service is due at point of sale.

⁵⁰ One Oregon: A Vision for Oregon's Transportation System, Appendix A

⁵¹ <https://www.opb.org/article/2022/07/11/state-lotteries-transfer-wealth-out-of-needy-communities/> Lottery revenue regressivity

⁵² <https://www.oregon.gov/odot/programs/pages/connectoregon.aspx> Connect Oregon

Local Transportation Revenues

Transit Payroll Tax (Employer paid)

The mass-transit tax is a tax on the wages earned by employees and the net earnings from self-employment for services performed within specified transit district boundaries. It is a tax on employers, not employees, based on the amount of payroll and includes all salaries, commissions, bonuses, fees, payment to a deferred compensation plan, or other items of value.⁵³ The TriMet District Boundary has a tax of 0.7837%⁵⁴ and the Wilsonville Transit District, which funds SMART, has a tax of 0.005%⁵⁵.

Share	Good	The tax is a percentage based on wages, so low-income earners do not pay the same amount as high-income earners. The tax is paid by the employer.
Burden	Good	There are no targeted exemptions or subsidies, but it is a tax paid by employers. Nonprofits are still subject to the tax.
Tiered	Good	The tax is calculated based on the employee's wages.
Benefits Received	Good	Only employers with employees working in the TriMet district pay the tax. The tax helps fund mass transportation in the TriMet district. ⁵⁶ Some people may have better access to transit than others. However, funding transit has a positive equity component.
Payment Methods	Fair	Filings can be online or through paper forms. ⁵⁷
Penalties	Fair	If an employer does not file or pay on time, they are subject to penalties and interest.

⁵³ https://www.oregon.gov/dor/forms/formspubs/transit-payroll-taxes_211-503.pdf Guide to TriMet and Land Transit Payroll Taxes

⁵⁴ <https://trimet.org/taxinfo/> TriMet Payroll and Self-Employment Tax

⁵⁵ <https://www.ci.wilsonville.or.us/finance/page/transit-payroll-tax-information> Wilsonville Transit District Payroll and Self-Employment Tax

⁵⁶ https://www.oregon.gov/dor/forms/Formspubs/form-or-tm-instructions_555-001-1_2021.pdf TriMet tax helps fund mass transportation

⁵⁷ <https://www.oregon.gov/DOR/programs/businesses/Pages/payroll-basics.aspx> Oregon Payroll Basics

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Transit Fares (Passenger Revenues)

Fares are charged by TriMet for each passenger. The fares make up 7% of TriMet's FY2023 Budget.⁵⁸

Share	Fair	Fares are a flat rate and low-income households would pay a larger share of their income, however, TriMet offers discounted fare.
Burden	Fair	TriMet offers an Honored Citizen Fare and a Youth Fare, which are half the price of a full adult fare, to Seniors 65+, people on Medicare, people with disabilities, people with qualifying incomes, youth ages 7-17, and students in high school or pursuing a GED are eligible. Qualifying incomes include people enrolled in the Oregon Health Plan, SNAP, or TANF and people with household income less than double the federal poverty level. ⁵⁹ The Honored Citizen Fare requires proof of eligibility and a valid photo ID. Both may be barriers for qualified people. ⁶⁰ The Youth Fare does not require advanced application, but riders must carry proof of age or student status when riding TriMet. ⁶¹
Tiered	Poor	The cost is the same despite the cost or quality of service.
Benefits Received	Good	Fares are paid by riders and the funds go back to the transit system. Funding transit has a positive equity component.
Payment Methods	Fair	TriMet accepts cash, tickets, or electronic payment. To pay with cash for the MAX, tickets must be pre-purchased. ⁶²
Penalties	Poor	TriMet has worked with the state legislature to resolve fares directly with riders. Fare evasion can result in financial penalties or community service. Penalties will be waived if a person accused of fare evasion is qualified for and enrolls in the Honored Citizen Fare. While these penalties are an improvement over resolving fare evasion through the court system, the penalty for the first offense is \$75. ⁶³ For people with low or no income, that could represent a significant burden.

⁵⁸ <https://trimet.org/budget/pdf/2023-approved-budget.pdf> Page 42, Page 42, passenger revenue % of TriMet FY2023 budget

⁵⁹ <https://trimet.org/fares/honoredcitizen.htm> TriMet Honored Citizen Fare

⁶⁰ <https://trimet.org/income/index.htm> TriMet Low-Income Qualification

⁶¹ <https://trimet.org/fares/youth.htm> TriMet Youth Fare

⁶² <https://support.trimet.org/hc/en-us/articles/4417245229083> Paying with cash on TriMet

⁶³ <https://trimet.org/fares/fareisfair.htm> TriMet fare enforcement

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Gas Tax

Motor Vehicle Fuels Tax in counties and cities in the Portland region.⁶⁴

Share	Poor	Everyone pays the same tax on gasoline regardless of income. Lower income households may have longer commutes to work but may drive less for leisure activities. ⁶⁵ However, lower income households still pay a greater percentage of their income than a higher income household. ⁶⁶
Burden	Poor	There are no targeted exemptions or subsidies available. Oregon state law provides for motor fuels tax refunds for the purchase of gasoline for uses other than travel on public roadways. Refunds are not based on income and require burden of proof.
Tiered	Poor	The fuel tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to drive older, less fuel-efficient vehicles and have fewer resources to invest in electric vehicles. Electric vehicles on average cost \$10,000 more than traditional gas-powered vehicles and often require installation of home charging stations. While the federal government offers a tax credit for electric vehicles of up to \$7,500, it requires purchasers to pay the upfront cost and the tax credit is reduced once a manufacturer has sold 200,000 vehicles. ⁶⁷
Benefits Received	Fair	Under state law, gas tax revenue must be spent in the road right-of-way, including roadways, bikeways, and walkways. While supporting bike and pedestrian infrastructure can have a positive equity impact, the majority of this funding is spent on improvements for motor vehicles. A higher share of funding supporting bike and pedestrian infrastructure would provide a more positive impact for the people with the greatest needs. In Portland, heavy vehicles (over 26,000 lbs.) are exempt from the tax but are levied the Heavy Vehicle Use Tax in replacement. ⁶⁸
Payment Methods	Good	Payment is collected at point of sale. It is common practice for gas stations to provide a cash option which can support unbanked individuals, and which may be a lower posted cost than paying with credit.
Penalties	Good	Payment is collected at point of sale.

⁶⁴ <https://www.oregon.gov/odot/ftg/pages/current%20fuel%20tax%20rates.aspx?wp4401=I%3A100>

⁶⁵ <https://bikeportland.org/2016/01/25/low-income-households-drive-much-less-than-high-income-households-173261>

⁶⁶ <https://www.axios.com/2022/06/10/high-gas-prices-low-income-us-biden> Gas Prices by Income Bracket

⁶⁷ <https://www.nrdc.org/stories/electric-vs-gas-it-cheaper-drive-ev> NRDC Cost of Electric Vehicles

⁶⁸ <https://www.portlandoregon.gov/transportation/article/596383>

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Vehicle Registration Fee

A vehicle registration fee that is collected by the state for local jurisdictions. Fee amount varies by municipality

Share	Poor	Low-income drivers pay the same amount in fees as high-income drivers. Fees are set as a flat rate.
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Poor	The fee is not tiered based on age or value of vehicle.
Benefits Received	Fair	Under state law, motor vehicle fee or tax revenue must be spent in the road right-of-way, including roadways, bikeways, and walkways. While supporting bike and pedestrian infrastructure can have a positive equity impact, the majority of this funding is spent on improvements for motor vehicles. A higher share of funding supporting bike and pedestrian infrastructure would provide a more positive impact for the people with the greatest needs.
Payment Methods	Good	The Oregon DMV accepts cash, check, money order, or credit or debit card as payment for services.
Penalties	Fair	Vehicle registration fees must be paid in order to receive the registration. Penalties may be incurred for operating an unregistered vehicle.

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Transportation System Development Charges

The majority of the region’s cities and counties have transportation system development charges (TSDCs). TSDCs are one-time fees levied on new development, usually at the time a building permit is issued, that are meant to recoup a fair share of the cost of additional infrastructure capacity required to serve the development.⁶⁹ In Oregon, state law requires that revenue only be spent on capital projects.⁷⁰ Local municipalities may have additional requirements on use of revenue.

Share	Poor	The fee is levied on developers; however, the cost may be passed on to residents. As mentioned in the “nexus” and “tiered” measures, biases in assessing the amount of TSDCs owed by developments may reduce the amount of development of dense and more affordable housing.
Burden	Fair	Portland offers exemptions and reductions of TSDCs for developers building affordable housing. ⁷¹ Policies differ by municipality.
Tiered	Poor	Most infrastructure impact/finance methodologies fail to account for variations in the characteristics of a unit and its impact on the overall infrastructure system. Middle housing has a lesser per unit impact on infrastructure systems in comparison to single-family detached dwellings, yet most infrastructure planning and finance methodologies assume similar per unit impacts, regardless of the characteristics of the unit or local context of development, both of which significantly affect the actual infrastructure impact of a particular development. ⁷²
Benefits Received	Poor	The developer, and potential residents, paying the fee will benefit from improved infrastructure. The fee is levied to cover the costs of additional infrastructure capacity required by the development. However, this dynamic biases TSDC estimates against smaller and higher-density developments, precludes housing development where the demand is greatest, and decreases the affordability of housing.
Payment Methods	Good	The fee is paid by the developer who is unlikely to be unbanked. Portland allows for payment by cash, check, money order, or credit card. ⁷³
Penalties	Good	The fee is paid by the developer, typically at the time the City issues the building permit.

⁶⁹ https://www.oregonmetro.gov/sites/default/files/2014/05/10/sdc_report.pdf TSDCs

⁷⁰ https://www.oregonlegislature.gov/bills_laws/ors/ors223.html State law controlling use of SDC revenue

⁷¹ <https://www.portland.gov/phb/sdc-exemption> Portland SDC Exemptions

⁷² Build Small Coalition, email from Andrea Pastor to Lake McTighe.

⁷³ <https://www.portland.gov/bds/current-fee-schedules/systems-development-charges-sdcs> Portland SDCs

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Trip-Based Utility Fees

Several local jurisdictions levy a trip-based utility fee that funds transportation.^{74 75 76 77 78}

Share	Fair	Dependent on the jurisdiction. Everyone pays the same fee regardless of income. But some jurisdictions offer qualified low-income households the opportunity to waive the fee, which does help balance the higher proportion of income that low-income households would have to pay.
Burden	Fair	Dependent on the jurisdiction. Utility assistance programs are available but may have limited funds and may only cover assistance once annually.
Tiered	Good	Dependent on the jurisdiction. In some locations rates are tiered based on property type, the benefit a property will receive from improvements, and the estimated number of trips a property generates.
Benefits Received	Good	Dependent on the jurisdiction. Rates are partially set based on the estimated number of trips a property generates. Properties that will receive a greater benefit pay a higher rate. Fees are generally spent locally on street maintenance, active transportation projects, or ADA improvements.
Payment Methods	Fair	Dependent on the jurisdiction. Payments options are available with cash, check, money order, online payment, or credit/debit card. In-person cash payments may be limited depending on the location or fee that must be paid.
Penalties	Poor	Dependent on the jurisdiction. Late payments may result in fees or penalties. Non-payment may result in termination of utility services.

⁷⁴ https://www.milwaukieoregon.gov/sites/default/files/fileattachments/transportation_utility_fee_flyer_rev_1.pdf Milwaukie transportation utility fees

⁷⁵ <https://www.sherwoodoregon.gov/utilitybilling/page/current-service-rates> Sherwood Street Utility Fee

⁷⁶ <https://www.tualatinoregon.gov/finance/usage-rates> Tualatin Street Utility Fee

⁷⁷ <https://www.sherwoodoregon.gov/utilitybilling/page/low-incomehardship-assistance> Sherwood Utility Assistance Program

⁷⁸ <https://www.milwaukieoregon.gov/utilitybilling/paying-your-bill> Milwaukie paying utility bills

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Franchise Fees

Utility franchise fees that fund transportation are collected in Beaverton, Milwaukie, and West Linn. Utility franchise fees are paid by utility providers, such as NW Natural Gas, to the municipality for use of the right-of-way. In Beaverton, the tax is 5% of gross revenue.⁷⁹

Share	Fair	Fees paid by utility companies. Fees may be passed on to consumers.
Burden	Fair	No targeted exemptions or subsidies provided.
Tiered	Poor	The tax is a set percentage regardless of the value of the service.
Benefits Received	Fair	The companies paying the fees benefit from the use of the right-of-way. Collection is based on use of the right-of-way and funds return to the transportation system.
Payment Methods	Good	Payment is through utility providers who are not unbanked.
Penalties	Good	Right-of-way permits will not be granted without payment of the fee.

⁷⁹ <https://www.beavertonoregon.gov/819/Rights-of-Way> Beaverton Franchise Fees

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PGE Privilege Tax

Portland General Electric (PGE) privilege tax is collected in Milwaukie. It is a 1.5% tax on total PGE revenues in the city. The tax is passed to customers of PGE as an itemized charge on electricity bills.^{80 81}

Share	Poor	Everyone pays the same tax regardless of income. Lower income households pay a greater percentage of their income than a higher income household.
Burden	Poor	There are targeted exemptions or subsidies available to qualified customers, but funding is limited and there is no guarantee that assistance will be granted. ⁸²
Tiered	Poor	The tax is the same regardless of energy consumption per person.
Benefits Received	Fair	All consumers of electricity pay the tax regardless of their use of the transportation system, but funds are spent locally on street repair and maintenance.
Payment Methods	Good	PGE accepts cash, account transfer, and credit or debit card as payment for services. ⁸³
Penalties	Poor	Late-payment charges may be applied if a bill is not paid in full. ⁸⁴

⁸⁰ https://www.milwaukieoregon.gov/sites/default/files/fileattachments/engineering/page/46171/ssmp_program_report_final.pdf Milwaukie PGE Privilege Tax

⁸¹ https://www.milwaukieoregon.gov/sites/default/files/fileattachments/ordinance/2591/or2074_pge_signed.pdf Milwaukie PGE Privilege Tax

⁸² <https://portlandgeneral.com/help/help-topics/energy-assistance-programs-residential> PGE Energy Assistance Programs

⁸³ <https://portlandgeneral.com/billing-payment-options> PGE Payment Options

⁸⁴ <https://portlandgeneral.com/help/help-topics/understanding-my-bill> PGE late payments

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Parking Fees and Fines

Portland charges for parking in a set of districts across the city, including Downtown and the Lloyd District, amongst others. Parking costs vary from \$1 to \$2 per hour depending on the district. Parking is generally charged a fee during the day on weekdays with some districts offering free parking on one or both weekend days.⁸⁵

Share	Poor	Low-income drivers pay the same amount in fees as high-income drivers. Fees are set as a flat rate.
Burden	Poor	No targeted exemptions or subsidies available.
Tiered	Good	Parking fees are based on time of day and location, approximating the value of the parking space.
Benefits Received	Fair	The funds return to the transportation system but do not always fund parking or vehicle-related improvements; Parking fee revenue is general discretionary transportation revenue at PBOT. ⁸⁶
Payment Methods	Poor	Parking is paid for via app or at a meter via credit or debit card. Citations may be paid with check, money order, online, or credit or debit card.
Penalties	Poor	Drivers may receive a citation if they do not pay to park or stay past the paid period. Penalties may occur for unpaid or paid late citations. ⁸⁷

⁸⁵ <https://www.portland.gov/transportation/parking/parking-guide> Portland Parking Guide

⁸⁶ <https://www.portlandoregon.gov/cbo/article/7DRIV85596> On-street parking meter revenues comprises one of the largest portions of discretionary (unrestricted) revenues at PBOT. Pg. 522

⁸⁷ <https://www.portland.gov/transportation/parking/parking-violations> Portland parking violations

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Urban Renewal Tax

Urban renewal areas, also known as Tax Increment Financing (TIF) districts, receive funding in two different ways: the Urban Renewal Division of Tax and the Urban Renewal Special Levy. Division of tax funds are a portion of existing property taxes that are dedicated to a given TIF district, they are not an additional tax on residents. Special levies are additional taxes that are used to pay bonded indebtedness in special districts that receive a limited amount of “divide-the-tax” revenue. In Portland, there are three districts that receive special levy funds, all of which are set for repayment by 2025.⁸⁸ Portland taxes are collected through Multnomah County. Clackamas County has urban renewal districts but only relies on TIF funds that are generated through existing property taxes, not special levy funds.⁸⁹

Share	Poor	Property taxes are based on the assessed value of a property, not the owner’s ability to pay. Lower income households may pay a greater percentage of their income than a higher income household.
Burden	Poor	Multnomah County offers a limited tax exemption based on qualifying income and property. Exemptions and deferrals are also offered for senior citizens, disable citizens, active-duty military, and veterans. ⁹⁰ Clackamas County does not appear to offer any income-based exemptions or subsidies.
Tiered	Good	Tax amounts are based on assessed value of the property. Higher-income earners typically, but not always, live in higher-valued homes.
Benefits Received	Good	Taxes are paid by all homeowners in a jurisdiction and revenue is spent on local transportation projects within specified districts. TIF districts can be used to fund improvements in historically underserved communities, including transportation projects and supporting transit and active transportation, which have a positive equity component.
Payment Methods	Fair	Payments can be made with direct transfer, credit or debit, or by check. Property taxes only impact property owners, which are less likely to be unbanked. ^{91 92}
Penalties	Poor	Interest accrues on past due payments at a rate of 16% annually. Property with three years of delinquent taxes may be subject to foreclosure. ^{93 94}

⁸⁸ <https://prosperportland.us/your-property-tax-bill-and-urban-renewal-2021/> TIF info from Prosper Portland

⁸⁹ <https://dochub.clackamas.us/documents/drupal/52638cea-8599-4b4c-b417-ae3989685c57> Clackamas County Urban Renewal

⁹⁰ <https://www.multco.us/assessment-taxation/dart-special-programs> Multnomah County Tax Exemptions

⁹¹ <https://www.multco.us/assessment-taxation/property-tax-payment> Multnomah County Property Tax Payments

⁹² <https://www.clackamas.us/at/options.html> Clackamas County Property Tax Payments

⁹³ <https://www.multco.us/assessment-taxation/property-tax-payment-faqs> Multnomah County Property Tax Payment FAQ

⁹⁴ <https://www.clackamas.us/at/foreclosure.html> Clackamas County Foreclosures

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Street Light User Fee

Wilsonville charges a Street Light User Fee. The fee is based on the cost of street lighting and takes into consideration the type of pole and light fixture. The fee is included in the municipal utility bill.^{95 96}

Share	Poor	Everyone pays the same fee regardless of income. Lower income households pay a greater percentage of their income than a higher income household.
Burden	Poor	The City provides an annual grant to Wilsonville Community Sharing (WCS), a local community social-services agency. WCS provides assistance with utility bills for individuals that qualify based on income. Access to information about WCS is not apparent on the government's utility billing website. ⁹⁷
Tiered	Good	The fee amount is based on the type of fixture in the surrounding area.
Benefits Received	Fair	All units are charged a Street Light fee regardless of lighting for the location of service. Fees are used to exclusively fund the installment and maintenance of streetlights. ⁹⁸
Payment Methods	Good	The City accepts cash, check, Visa, Mastercard, or Discover for utility billing payments.
Penalties	Poor	Late fees for utility bills are 9% Per Annum or a Minimum of \$5.00 whichever is greater

⁹⁵ <https://www.ci.wilsonville.or.us/utility-billing/page/rates-fees> Wilsonville Utility Billing

⁹⁶ https://www.ci.wilsonville.or.us/sites/default/files/fileattachments/utility_billing/page/2961/back_of_bill_05172022.pdf Wilsonville Utility Billing Rates

⁹⁷ <https://wilsonvillecommunitysharing.org/our-services/> Wilsonville Community Sharing

⁹⁸ https://library.municode.com/or/wilsonville/codes/code_of_ordinances?nodeId=CH3CIPR_PUIM_3.204STLIUN Wilsonville Street Light Fund

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Property Taxes

Washington County partially funds their Major Streets Transportation Improvement Program (MSTIP) with property taxes.^{99 100}

Share	Fair	Property taxes are based on the assessed value of a property, not the owner's ability to pay. Lower income households may pay a greater percentage of their income than a higher income household. However, property taxes are less regressive than many other types of transportation revenue sources. ¹⁰¹
Burden	Poor	There are no targeted exemptions or subsidies available based on ability to pay. Exemptions and deferrals are offered for senior citizens, citizens with disabilities, and veterans.
Tiered	Good	Tax amounts are based on assessed value of the property. Higher-income earners typically, but not always, live in higher-valued homes.
Benefits Received	Good	Taxes are paid by local homeowners and revenue is spent on local transportation projects through the Major Streets Transportation Improvement Program (MSTIP). MSTIP funding improves the transportation system for bicyclists, pedestrians, drivers, and transit passengers. Funding transit and active transportation has a positive equity component.
Payment Methods	Fair	Payments can be made with direct transfer, credit or debit, or by check. Property taxes only impact property owners, which are less likely to be unbanked. ¹⁰²
Penalties	Poor	Interest accrues on past due payments at a rate of 16% annually. Property with three years of delinquent taxes may be subject to foreclosure.

⁹⁹ <https://www.co.washington.or.us/LUT/TransportationFunding/what-is-mstip.cfm> Washington County Major Streets Improvement Program

¹⁰⁰ <https://www.co.washington.or.us/AssessmentTaxation/faq.cfm> Washington County property tax FAQ

¹⁰¹ One Oregon: A Vision for Oregon's Transportation System, Appendix A

¹⁰² <https://washcotax.co.washington.or.us/> Washington County payment methods

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TNC Fee

Fees can be charged on trips provided by transportation network companies (TNCs) such as Uber and Lyft. Beginning in 2018, the City of Portland charges a \$.50 fee per TNC ride that the Portland Bureau of Transportation uses to fund programs like PDX WAV¹⁰³ to support on-demand transportation for users who require a wheelchair accessible vehicle. Airports also commonly charge a fee to TNCs. In October 2021, the Pricing for Equitable Mobility final report was released to modify the existing fee structure.

Share	Good	All riders pay the same \$0.50 fee regardless of length of trip or household income. This could be beneficial for low-income riders who use the service from out of town.
Burden	Poor	Could impact the cost of TNCs which could impact people with lower income.
Tiered	Good	Typically, a flat fee.
Benefits Received	Good	This fee funds programs that help remove barriers to mobility. Program examples include Wheelchair-Accessible Vehicle program, Safe Ride Home Program, Taxi business incubator, and Transportation Wallet Initiative. In the POEM new recommendations, fees will also enhance driver working conditions. ^{104 105}
Payment Methods	Poor	TNCs do not typically take cash payment or not smart-phone ride requests.
Penalties	Fair	Riders would need to pay the fee to use the TNC. However, SB 1558 went into effect in June 2022, which could create inequitable debt for drivers.

¹⁰³ <https://bikeportland.org/2022/02/02/ridesharing-bill-would-preempt-portland-plans-for-driving-fees-344725>

¹⁰⁴ <https://www.portland.gov/transportation/regulatory/private-hire/pfht> TNC fee

¹⁰⁵ <https://content.govdelivery.com/accounts/ORPORTLAND/bulletins/236bb62> TNC fee

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Local Improvement District Tax

A Local Improvement District (LID) is a mechanism for neighboring property owners to share the cost of improvements to infrastructure, where property owners agree to tax themselves (typically at least 51% of the property owners must be in favor). For transportation, it is often used to pave unimproved streets or build sidewalks. Typically, a government agency manages the design and construction of the project and often pays the indirect costs of the work. Property owners pay the direct costs, such as engineering, financing, and the payments to the contractor. Financing may be used, and individual property owners can select 5-, 10-, or 20-year financing terms. Most jurisdictions can create LIDs. Portland is the only jurisdiction in the region that included LIDs revenues in the RTP financial assumptions.¹⁰⁶

Share	Poor	Assessed values for improvements are not based on income. Lower income households pay a greater percentage of their income than a higher income household. Portland only requires 51% of benefitting homeowners to be in support of a LID but all homeowners are required to share in the cost.
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Fair	The cost is based on the cost of the project, but it is not typically tiered based on property values.
Benefits Received	Poor	The cost is based on actual project design and construction costs. Property owners paying the cost are directly benefiting.
Payment Methods	Fair	Property owners make payments over time. LIDs only impact property owners, which are less likely to be unbanked.
Penalties	Poor	Non-payment may result in late interest based on the amount of past due installments, penalties equal to 5% of delinquent installments, and collection charges. If unpaid after a year, the city may enforce its property lien and foreclose and sell the property to collect the outstanding loan balance, this could exacerbate inequities for low-income property owners. ¹⁰⁷

¹⁰⁶ <https://www.portland.gov/transportation/pbot-projects/lid-projects/what-local-improvement-district-lid> Portland Local Improvement District (LID)

¹⁰⁷ <https://www.portland.gov/policies/licensing-and-income-taxes/assessments-liens/lic-1402-assessment-loan-program-policy> Portland LID financing terms

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Heavy Vehicle Use Tax

The Portland Heavy Vehicle Use Tax (HVT) applies to individuals or businesses that operate one or more heavy vehicles on streets owned or maintained by the City of Portland. A heavy vehicle is considered any vehicle that is subject to the Oregon Weight-Mile Tax (over 26,000 lbs.). For 2020-2023 the tax is 3% of the taxpayer's total Oregon Weight-Mile Tax.¹⁰⁸ Heavy Vehicles pay this in lieu of the Portland local gas tax.¹⁰⁹

Share	Good	Tax rates are not based on household income, however, the tax is for commercial operations and is less likely to impact low-income households.
Burden	Good	No targeted exemptions or subsidies provided, however, the tax is for commercial operations and is less likely to impact low-income households.
Tiered	Fair	The tax is not tiered based on weight of vehicle or miles driven within Portland. A tiered tax would more directly tie to the damage higher weight vehicles do to roadways and may enable higher taxes for certain vehicles.
Benefits Received	Fair	Heavy vehicles incur more damage on roadways than lighter vehicles and the tax funds roadway repair and maintenance which commercial vehicle operations rely on. However, research has shown that heavy vehicles do a disproportionate amount of roadway damage that is not made up for by the revenue they generate for the transportation system. Additionally, funding roadways does not always have a positive impact on the people with the greatest needs.
Payment Methods	Good	The tax is only eligible for commercial operations and is therefore less likely to impact unbanked individuals.
Penalties	Good	Failure to pay the tax or pay on time may result in penalties. While penalties for low-income households who cannot afford certain taxes or fees has a negative equity impact, holding businesses and commercial operations accountable for paying for their use and wear and tear of the transportation system is important.

¹⁰⁸ <https://www.portland.gov/revenue/hvt> Portland Heavy Vehicle Use Tax

¹⁰⁹ <https://www.portlandoregon.gov/transportation/article/596383> Portland Heavy Vehicle Use Tax – use of funds

Emerging Transportation Revenue Sources

Freeway Tolling

Drivers pay to drive on a particular roadway, the fee is a flat rate and not dependent on congestion or time of day.

Share	Variable	This is dependent on program design.
Burden	Variable	This is dependent on program design.
Tiered	Variable	This is dependent on program design.
Benefits Received	Variable	This is dependent on program design.
Payment Methods	Poor	The majority of roadway and toll pricing technology has evolved beyond physical toll booths which provide a cash option. Roadway and toll pricing typically relies on a variety of technologies to identify vehicles passing a certain point on roadways. Bills may be sent directly to drivers or pre-pay systems may be set up. Though direct bills may have the potential to be paid by unbanked individual, using this method on an ongoing basis would be burdensome and introduce opportunities for unpaid fees
Penalties	Variable	This is dependent on program design.

Vehicle Miles Traveled Fee

Drivers pay for every mile traveled, as known as a road user charge.

Share	Variable	This is dependent on program design.
Burden	Variable	This is dependent on program design.
Tiered	Variable	This is dependent on program design.
Benefits Received	Variable	This is dependent on program design.
Payment Methods	Poor	VMT programs may implement different tracking mechanisms. Self-reporting and a cash option may be feasible but would present a burden. Oregon's pilot program, OreGo, requires a bank card to open an OreGo account. ¹¹⁰
Penalties	Variable	This is dependent on program design.

¹¹⁰ <https://www.myorego.org/get-started/>

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Cordon Pricing

Drivers pay to enter a designated area.

Share	Variable	This is dependent on program design.
Burden	Variable	This is dependent on program design.
Tiered	Variable	This is dependent on program design.
Benefits Received	Variable	This is dependent on program design.
Payment Methods	Poor	Cordon pricing typically relies on a variety of technologies to identify vehicles entering a priced area. Bills may be sent directly to drivers or pre-pay systems may be set up. Though direct bills may have the potential to be paid by unbanked individual, using this method on an ongoing basis would be burdensome and introduce opportunities for unpaid fees. ¹¹¹
Penalties	Variable	This is dependent on program design.

¹¹¹ https://www.portland.gov/sites/default/files/2020-09/poem_tollingmemo.pdf

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Roadway Pricing

Drivers pay to drive on a particular roadway, the fee is variable based on congestion or time of day.

Share	Variable	This is dependent on program design.
Burden	Variable	This is dependent on program design.
Tiered	Variable	This is dependent on program design.
Benefits Received	Variable	This is dependent on program design.
Payment Methods	Poor	The majority of roadway and toll pricing technology has evolved beyond physical toll booths which provide a cash option. Roadway and toll pricing typically relies on a variety of technologies to identify vehicles passing a certain point on roadways. Bills may be sent directly to drivers or pre-pay systems may be set up. Though direct bills may have the potential to be paid by unbanked individual, using this method on an ongoing basis would be burdensome and introduce opportunities for unpaid fees
Penalties	Variable	This is dependent on program design.

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Parking Pricing

Drivers pay to park in certain areas.

Share	Variable	This is dependent on program design.
Burden	Variable	Outcomes are dependent on program design. For example, the City of Portland is not currently able to put into place a parking meter discount or exemption program for low-income drivers. This will require better data, outreach, policy development and potentially technology changes. However, the City has identified an interim step in alignment with POEM recommendations, the transaction fee will allow PBOT to expand distribution of its affordable housing Transportation Wallet program, which provides households on lower incomes with passes and credits that can be used for transit, BIKETOWN, scooter-share, taxis, Uber and Lyft, and other options. It will also help support the BIKETOWN for All program that provides discounted bike-share memberships for Portlanders living on a low income. Finally, the fee will also fund greater research and policy development to inform more robust affordability protections in advance of any future rates increases, as well as outreach around existing affordability programs, such as the SmartPark swing shift reduced rates for people living on low incomes. ¹¹²
Tiered	Variable	This is dependent on program design.
Benefits Received	Variable	This is dependent on program design.
Payment Methods	Poor	The majority of parking meter technology has evolved beyond coin operated machines and relies on the use of a credit card. If a cash option is available, it would require additional steps for the driver to submit a form and payment.
Penalties	Variable	This is dependent on program design.

¹¹² Parking Climate and Equitable Mobility Transaction Fee Overview <https://www.portland.gov/sites/default/files/2022/transaction-fee-one-pager.pdf>

Potential Future

Carbon Fee

Emitters are charged for each ton of greenhouse gas emissions they emit. Also known as emissions fees, carbon fees can be applied to emitters directly or as a tax on goods or services that are greenhouse gas-intensive such as a carbon tax on gasoline.¹¹³ The implementation of carbon fees are primarily conducted through two policy mechanisms, emissions trading (cap-and-trade); and emissions tax.

Share	Variable	On its own, the purely financial share of an emissions tax is generally regressive, meaning lower income households would pay a larger proportion of their income towards a carbon tax. This is due in many ways to how carbon-intensive technologies and consumption is cheaper than green technology. ¹¹⁴ However, parts of the carbon fee revenue can be used to offset income taxes for lower-income households, creating a net positive effect.
Burden	Variable	To offset the regressivity of an energy, emissions, or carbon tax, other forms of subsidies such as income tax credits can be helpful. However, the burden is placed upon lower income households to demonstrate need for and knowledge of potential rebates available to them.
Tiered	Poor	The carbon tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to driver older, less fuel-efficient vehicles.
Benefits Received	Variable	The benefits of a carbon tax are highly dependent on the program design, especially if additional measures such as rebates and tax credits are included. Although lower-income households are much more likely to change their behaviors as a result of a carbon tax, those who can afford the added cost may not necessarily change their behaviors. Once again, the actual net financial benefit for transportation funding and for vulnerable populations are largely variable and not immediately evident.
Payment Methods	Variable	Depending on what carbon or emissions sources are taxed, the payment methods could be as straightforward as a post-transaction addition (such as a sales tax on purchasing gas), or added to an energy bill. If the emissions fee is taxed upstream at the point of production, this cost might also be imposed upon consumers via price increases in the purchase of the energy goods themselves. As such, payment methods should be largely unchanged from the status quo.
Penalties	Variable	This is dependent on the payment method. Generally, an indirect sales tax or a price increase would not offer opportunities to not pay the cost of a carbon tax.

¹¹³ <https://www.c2es.org/content/carbon-tax-basics/>

¹¹⁴ <https://www.nber.org/digest/jan10/how-regressive-price-carbon> Carbon tax regressivity.

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Regional Gas Tax

Taxes on motor fuels can be collected at multiple levels of government, including regionally. Metro, the Portland regional government does not currently collect motor fuel taxes.

Share	Poor	Everyone pays the same tax on gasoline regardless of income. Lower income households may have longer commutes to work but may drive less for leisure activities. ¹¹⁵ However, lower income households still pay a greater percentage of their income than a higher income household. ¹¹⁶
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Poor	The fuel tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to driver older, less fuel-efficient vehicles and have fewer resources to invest in electric vehicles. Electric vehicles on average cost \$10,000 more than traditional gas-powered vehicles and often require installation of home charging stations. While the federal government offers a tax credit for electric vehicles of up to \$7,500, it requires purchasers to pay the upfront cost and the tax credit is reduced once a manufacturer has sold 200,000 vehicles. ¹¹⁷ .
Benefits Received	Good	Road users would pay a tax collected and spent regionally, benefiting more directly than gas taxes collected at the state or federal level. The fuel tax funds roadways, transit, and bike and pedestrian infrastructure. ¹¹⁸
Payment Methods	Good	Payment is collected at the pump and is included in the overall price of gasoline. It is common practice for gas stations to provide a cash option which can support unbanked individuals, and which may be a lower posted cost than paying with credit.
Penalties	Good	Due to the payment method, there is no ability to have unpaid fines which result in negative outcomes or increase the cost of the revenue source due to lack of payment.

¹¹⁵ <https://bikeportland.org/2016/01/25/low-income-households-drive-much-less-than-high-income-households-173261>

¹¹⁶ <https://www.axios.com/2022/06/10/high-gas-prices-low-income-us-biden> Gas Prices by Income Bracket

¹¹⁷ <https://www.nrdc.org/stories/electric-vs-gas-it-cheaper-drive-ev> NRDC Cost of Electric Vehicles

¹¹⁸ <https://crsreports.congress.gov/product/pdf/R/R44332>

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Gas Tax Indexing

Indexing the motor fuel tax to the Consumer Price Index or other index allows the tax rate to keep pace with the pace of inflation.¹¹⁹

Share	Poor	Everyone pays the same tax on gasoline regardless of income. Lower income households pay a greater percentage of their income than a higher income household. Lower income household may also have longer commutes to work and less access to transit.
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Poor	The fuel tax is the same regardless of the fuel-efficiency of the vehicle. Lower income households are more likely to driver older, less fuel-efficient vehicles.
Benefits Received	Good	Road users are paying the tax which supports the Highway Trust Fund. The Mass Transit Account receives 15.5% of the revenue generated by the gasoline tax and 11.7% of the revenue generated by the tax on diesel fuel. ¹²⁰ The majority of the Highway Trust Fund supports roadways. The fuel tax funds roadways, transit, and bike and pedestrian infrastructure. ¹²¹
Payment Methods	Good	Payment is collected at the pump and is included in the overall price of gasoline. It is common practice for gas stations to provide a cash option which can support unbanked individuals, and which may be a lower posted cost than paying with credit.
Penalties	Good	Due to the payment method, there is no ability to have unpaid fines which result in negative outcomes or increase the cost of the revenue source due to lack of payment.

¹¹⁹ <https://mobility.tamu.edu/mip/strategies-pdfs/funding/technical-summary/Indexed-Fuel-Tax-2-Pg.pdf>

¹²⁰ <https://www.fhwa.dot.gov/fastact/factsheets/htffs.cfm>

¹²¹ <https://crsreports.congress.gov/product/pdf/R/R44332>

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Studded Tire Fee

Studded tires increase wear to road surfaces, reducing pavement life. Charging a fee on new studded tires can offset some of the road maintenance costs.

Share	Fair	Fees are set as a flat rate; however, not all drivers use studded tires. A studded tire fee disproportionately impacts drivers based on their geography, particularly areas that face heavier snowfall and treacherous driving conditions. Since rural areas are typically lower income per capita than urban areas (which often have snow-clearing services), a studded tire fee can potentially impact lower income households disproportionately.
Burden	Variable	This is dependent on program design (e.g., Washington State has exemptions for their studded tire fee). Exemptions based on time of year can help reduce year-round costs to users, and promotion of alternatives such as non-studded traction tires can help reduce the reliance on cheaper studded tires. Discouraging the use of safer tires can have fatal consequences, especially if drivers are forced to use regular tires due to cost.
Tiered	Poor	Fees are the same regardless of type of vehicle.
Benefits Received	Variable	This is dependent on program design. In most existing examples the fee is used to fund road maintenance costs caused by studded tires, which benefits all road users.
Payment Methods	Good	Payment is collected by the tire seller and is included in the overall price of the tire.
Penalties	Good	Due to the payment method, there is no ability to have unpaid fines which result in negative outcomes or increase the cost of the revenue source due to lack of payment.

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Regional Vehicle Registration Fees

A vehicle registration fee collected by the state and distributed to regional governments. A regional vehicle registration fee is not currently collected.

Share	Variable	This is dependent on program design. Fees are generally set at a flat rate for each tier, if tiers are utilized. For example, if fuel efficiency is used, this can disproportionately impact lower-income households as older cars tend to have lower MPG ratings.
Burden	Variable	This is dependent on program design. In Multnomah County, veterans with disabilities are exempt from the fee. Other exemptions and reductions can be designed, including coordination with incentive programs for registering and purchasing new electric vehicles.
Tiered	Variable	This is dependent on program design. Fees can be applied higher or lower depending on size, fuel efficiency, or classification of a vehicle.
Benefits Received	Fair	Drivers and owners of vehicles pay the fees, however, the amount of the fees is not based on the amount that a driver operates a vehicle or the number of miles a particular vehicle is driven. Under state law, the vehicle registration fees must be spent in the road right-of-way, including roadways, bikeways, and walkways. The greatest benefit will go to those using the roadways the most.
Payment Methods	Good	The Oregon DMV accepts cash, check, money order, or credit or debit card as payment for services.
Penalties	Fair	Vehicle registration fees must be paid to receive the registration. Penalties may be incurred for operating an unregistered vehicle.

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First-Time Title Fee on New Vehicles

A vehicle registration fee or vehicle title fee assessed at a higher rate for new vehicles. A first-time fee on new vehicles differs from the existing privilege tax. The privilege tax is a .005 percent tax on the retail price of any vehicle purchased from a dealer in Oregon, with a few exceptions. This fee would be an additional title fee for new vehicles. The difference would likely be that this would be a flat fee or a scaled fee based on vehicle value, but it would not exceed certain thresholds, unlike the privilege tax.

Share	Fair	Lower-income households are more likely to buy used cars, but not exclusively.
Burden	Variable	This is dependent on program design. Administering agencies can opt to exempt different demographics based on the priorities of the agency, such as income or residential demographics.
Tiered	Fair	Dependent on program design but any new vehicle fee is tiered when not applied to used vehicles.
Benefits Received	Fair	Buyers of new vehicles pay the fees; however, the greatest benefit will go to those using the roadways the most. Under state law, vehicle fees must be spent in the road right-of-way, including roadways, bikeways, and walkways.
Payment Methods	Good	When collected at time of vehicle purchase.
Penalties	Fair	Vehicle registration and licensing fees must be paid to receive the registration. Penalties may be incurred for operating an unregistered vehicle.

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Electric Vehicle Fees

Since electric vehicles do not pay motor fuel taxes some states charge a higher registration or license fee to recoup some of the lost fuel tax revenue.

Share	Variable	This is dependent on program design. Electric and most hybrid vehicles tend to carry a higher retail price, and charging is not as readily available as petrol stations. As such, lower-income households would generally not elect to purchase EVs. An EV fee shifts part of the lifetime cost of vehicle ownership upfront, which can further disincentivize purchase of EVs. Recurring ongoing costs are known to be less psychologically influential as a one-time, larger upfront cost.
Burden	Variable	This is dependent on program design, and highly dependent on what other confounding priorities exist in transportation and urban policy. While exemptions for financially vulnerable demographics can alleviate the initial barrier to accessing an EV, the long term tradeoff of reduced revenue will hurt infrastructure improvements that those very communities may rely on.
Tiered	Variable	This is dependent on program design. Some states have tiered fees based on vehicle weight, as well as an alternative per-mile fee system.
Benefits Received	Fair	Buyers of electric vehicles pay the fee; however, all road users will benefit. Depending on program design, some states have appropriated parts of the EV fee to pay for charging infrastructure, which will further incentivize EV purchase (and emissions reductions).
Payment Methods	Good	When collected at time of vehicle purchase.
Penalties	Fair	Vehicle registration and licensing fees must be paid to receive the registration. Penalties may be incurred for operating an unregistered vehicle.

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General Sales Tax

Sales taxes are applied to the purchase of all or most goods and services as a percentage of the total sale.

Share	Poor	Everyone pays the same tax on items regardless of income. Lower income households pay a greater percentage of their income than a higher income household. General sales tax exemptions for items such as groceries and utilities that constitute a larger share of income for poorer taxpayers, or targeted low-income tax credits instead of exemptions are options to provide relief for low-income tax payers and make the tax more progressive. ¹²²
Burden	Poor	There are no targeted exemptions or subsidies available.
Tiered	Poor	Sales is the same regardless of the purchases made.
Benefits Received	Poor	This is dependent on program design. General sales taxes have few direct connections to transportation projects.
Payment Methods	Good	Collected at point of sale in the payment medium the sale is made in.
Penalties	Good	Due to the payment method, there is no ability to have unpaid fines which result in negative outcomes or increase the cost of the revenue source due to lack of payment.

¹²² Options for Progressive Sales Tax Relief <https://itp.sfo2.digitaloceanspaces.com/pb14crex.pdf> "Exemptions and credits are both progressive options for low-income tax relief—but neither is sufficient to offset the basic regressivity of sales taxes. Sales tax exemptions and credits should each be part of a broader strategy for tax fairness that includes a progressive, graduated personal income tax, but sales tax breaks are likely to be insufficient on their own to eliminate the unfairness of state and local taxes."

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Targeted Sales Tax

Targeted sales taxes are applied to specific goods and services. Also known as an excise tax if it is levied at moment of manufacture rather than a sale.

Share	Variable	This is dependent on the goods and services that are taxed. In general, lower income households pay a greater percentage of their income than a higher income household. Some products are taxed at multiple levels, which compounds regressivity and diminishes consumption. This can potentially lead to a decline in tax revenue at other levels of government.
Burden	Variable	This is dependent on program design, as well as the goods and services that are taxed. Targeting the tax on non-essential goods such as tobacco, alcohol, and betting can have potential in avoiding the blanket regressivity of a general sales tax, but can also exacerbate the financial struggles of long-term users. Excise taxes on luxury goods can be more equitable.
Tiered	Variable	This is dependent on program design. Exemptions could be made on certain tax-free days, such as back-to-school sales where school supplies are made exempt. This would be a form of time and product-based tiering.
Benefits Received	Variable	This is dependent on program design. Most taxation of this form rarely goes towards transportation projects.
Payment Methods	Good	Collected at point of sale in the payment medium the sale is made in.
Penalties	Good	Due to the payment method, there is no ability to have unpaid fines which result in negative outcomes or increase the cost of the revenue source due to lack of payment.

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Business Income Tax

All businesses except partnerships file an annual federal income tax return, states can also levy income taxes on businesses.¹²³

Share	Variable	This is dependent on program design, and what the thresholds are for each bracket. Whether this income tax is regressive, highly depends on how much small and local businesses pay relative to what national or multinational corporations are responsible for.
Burden	Variable	This is dependent on program design. Similar to personal income taxes, tax credits can be implemented to alleviate the burden on small businesses and local enterprises.
Tiered	Variable	This is dependent on how the tax brackets and thresholds are designed. Business income taxes can also be tiered by number of employees, and whether they qualify as small-and-medium-enterprises (SMEs).
Benefits Received	Poor	This is dependent on program design, but there is no direct connection to transportation projects.
Payment Methods	Good	Is paid by businesses directly.
Penalties	Fair	Penalties or fine could pose a burden for small businesses.

¹²³ <https://www.irs.gov/businesses/small-businesses-self-employed/business-taxes>

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Corporate Activities Tax

Applied in Oregon to business with \$1 million or more taxable commercial activity, the total amount a business realizes from transactions in Oregon.

Share	Good	Paid by businesses with a threshold of commercial activity.
Burden	Fair	Passed on in the price of commercial activity, but not directly levied on low-income residents.
Tiered	Good	Applies only to businesses above a threshold.
Benefits Received	Fair	All will benefit but some businesses may rely on transportation network more than others.
Payment Methods	Good	Is paid by businesses directly.
Penalties	Fair	Penalties or fine could pose a burden for small businesses.

Zero-Emission Zone (ZEE) and Low Emission Zone (LEZ)

Zero-Emission Zones (ZEE) and Low Emission Zones (LEZ) are a similar concept to cordon-based congestion pricing, zones are identified and vehicles entering are charged a fee if they do not meet emissions and other requirements.¹²⁴ This approach can also apply to deliveries only.¹²⁵ Enforcement is generally conducted through traffic cameras, which run license plates through registration databases.

Share	Variable	Similar to emissions fees, these have potential to be regressive as highly pollutive vehicles are more likely to be represented in lower income households.
Burden	Variable	This is dependent on program design. ZEE and LEZ should not be enforced in low-income neighborhoods. Low-income households should not need to pay ZEE and LEZ fees, as these zones may house essential places for individuals, e.g., place of work, grocery, medical services.
Tiered	Variable	This is dependent on program design. A tiered fee based on income level would remove some barriers to accessibility.
Benefits Received	Variable	This is dependent on program design. Equitable ZEE and LEZ fees would be invested into accessible transit to and from low-income neighborhoods.
Payment Methods	Variable	This is dependent on program design. An equitable payment method would provide accessible payment programs by cash, check, card, or loan system.
Penalties	Variable	This is dependent on program design. It would be most equitable to offer low income households prepaid debit cards to use for entering ZEE and LEZ.

¹²⁴ <https://theicct.org/publication/a-global-overview-of-zero-emission-zones-in-cities-and-their-development-progress/>

¹²⁵ <https://lincubator.org/zeez/>

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Curb Use Fees

Fees can be charged to delivery vehicles, TNCs (e.g., Uber, Lyft), and other curb users who are regulated through additional fees such as the TNC fee described above. Charging all curb users a fee requires metering or other form of payment system.

Share	Variable	This is dependent on program design. For Uber, drivers make around \$30K less than the Portland median income ¹²⁶ . As a result, TNC should pay for curb use fees or allow drivers to pay based on their income.
Burden	Variable	This is dependent on program design. To promote equity, TNC can subsidize fees for drivers below a certain income threshold.
Tiered	Variable	This is dependent on program design. Tiered pricing based on the value of the car would make the fees more equitable.
Benefits Received	Variable	This is dependent on program design. Equitable benefits would ensure fees went into transit access and installation.
Payment Methods	Variable	This is dependent on program design. An equitable payment method would provide accessible payment programs by cash, check, card, or loan system.
Penalties	Variable	This is dependent on program design. Penalties should not force drivers to lose their jobs or go into debt, as that would create an endless cycle.

¹²⁶ <https://www.indeed.com/cmp/Uber/salaries/Driver>

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First/Last Mile Delivery Fees

The Zero Emission Zone (ZEZ) and Low Emission Zone (LEZ) (a similar concept to cordon-based congestion pricing, zones are identified and vehicles entering are charged a fee if they do not meet emissions and other requirements.¹²⁷ This approach can also apply to deliveries only¹²⁸) as well as curb use fees that can be applied specifically to delivery to incentive more sustainable delivery and raise revenue. Electrifying First/Last Mile Delivery Fees can significantly decrease heavy-duty vehicle use. A fee for vehicles outside of ZEZ or LEZ can help incentivize the change¹²⁹. To approach this equitably, the employer should be responsible for those fees or households on a tiered system could be responsible if they are high-income. Lower-income households should not be penalized for living outside the city center when the city center is too expensive to be livable. Additionally, if corridors provide EV charging stations, this creates more opportunity to drive in a ZEZ or LEZ.

Share	Variable	This is dependent on program design. TNC would need to cover the fees or low-income households would pay a proportionate fee to make the fee equitable.
Burden	Variable	This is dependent on program design; however, an equitable program would subsidize fees for households below an income threshold.
Tiered	Variable	This is dependent on program design, but equitable tiered fees would change depending on the weight and value of the vehicle entering the ZEZ or LEZ.
Benefits Received	Variable	This is dependent on program design. To make the program equitable, fees need to be reinvested in transit programs and access in low-income neighborhoods.
Payment Methods	Variable	This is dependent on program design. An equitable payment method would provide accessible payment programs by cash, check, card, or loan system.
Penalties	Variable	This is dependent on program design. Individuals should not be penalized for driving in ZEZ or LEZ even if they still have unpaid fees when they are working or accessing essential locations. If their fees cannot be paid, there should be a re-evaluation of the fee structure for the most equitable program.

¹²⁷ <https://theicct.org/publication/a-global-overview-of-zero-emission-zones-in-cities-and-their-development-progress/>

¹²⁸ <https://lincubator.org/zedz/>

¹²⁹ <https://theicct.org/publication/tco-battery-diesel-delivery-trucks-jun2022/> Electrifying last-mile delivery

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Vehicle Rental Fees

Additional fee that renter pays to the jurisdiction that enacts the fee. Depending on the state and region, the fee will be reinvested into the surrounding area but not necessarily into transportation funding.¹³⁰

Share	Variable	This is dependent on program design but would be most equitable if fees were paid by rental companies or charged depending on household income.
Burden	Variable	This is dependent on program design. To avoid regressive taxes/fees, fees should be eliminated for households below an income threshold, where various forms of proof are acceptable.
Tiered	Variable	This is dependent on program design. The value and weight of the vehicle that is rented should determine the exact amount paid by renter.
Benefits Received	Variable	This is dependent on program design. A general fund does not provide equitable benefits, nor do tourism-related events; however, fees that fund transportation projects allow for accessible and equitable opportunities.
Payment Methods	Variable	This is dependent on program design. An equitable payment method would provide accessible payment programs by cash, check, card, or loan system.
Penalties	Variable	This is dependent on program design. To eliminate any penalty structure or legal repercussion, fees should be included in initial cost and be available by loan system if necessary.

¹³⁰ <https://taxfoundation.org/reforming-rental-car-excise-taxes/>

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Traffic Fines

Fines incurred by the person driving a car for violating a variety of different regulations, ultimately determined by the police officer issuing the ticket. Black Oregonians have paid roughly \$5.6 million more than White Oregonians.

Share	Poor	Lower-income households pay the same fines.
Burden	Poor	There are no exemptions. Payment plans can be set-up through calling the accounting department, but the exact details of the plans offered are not available.
Tiered	Poor	The fine does not vary.
Benefits Received	Poor	The first \$50 goes to the state, the last \$16 goes to the jail fund, and the remainder is split between the county and agency who issued the fine. About 30% of the revenue is invested into the city, which is does not specifically go towards active transportation projects.
Payment Methods	Good	Payment can be made in a variety of ways and both online and by mail.
Penalties	Poor	Fines can add up to a large debt and can also lead to warrants if unpaid. Research has shown that lower-income households ultimately owe more.

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Public-Private Partnerships

Public-private partnerships (sometimes called P3s) can be used to finance, build, and operate projects. Private partners may have access to additional forms of financing or flexibility. P3s require a source of revenue to pay for the financing, it is not a source of funding.

Share	Variable	This is dependent on program design. This could be equitable if private companies fund active transportation projects to go towards low-income households.
Burden	Variable	This is dependent on program design. Equitable P3s need to ensure they do not displace housing or remove transit access for low-income households.
Tiered	Variable	This is dependent on program design, but private companies that put forth large sums of money to invest in transit and pedestrian improvements are more equitable.
Benefits Received	Variable	This is dependent on program design. A good score would result from the growth of transit and pedestrian improvements and enhancements.
Payment Methods	Variable	This is dependent on program design.
Penalties	Variable	This is dependent on program design.

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Naming Rights or Sponsorships

Naming rights or sponsorships can generate revenue depending on the arrangement (e.g., Salesforce Transit Center in San Francisco).

Share	Good	Only advertisers opt to pay.
Burden	Good	No monetary burden to residents.
Tiered	N/A	
Benefits Received	Variable	This is dependent on program design, but funds raised on advertising are typically spent on the systems being advertised to.
Payment Methods	N/A	
Penalties	N/A	

Allowance of Use of ROW for Rest Areas/Privatization

Excess right of way not being used for transportation can be used for rest areas or other developments. Transit agencies are best positioned to benefit from transit-oriented development on their land, development along large roads have noise and pollution challenges.

Share	Good	Only developers opt to pay.
Burden	Good	No monetary burden to residents.
Tiered	N/A	
Benefits Received	Variable	This is dependent on program design.
Payment Methods	N/A	
Penalties	N/A	

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Overweight Truck and SUV Personal Tax

Multnomah County is exploring a tax for people purchasing vehicles over 6,000 pounds. In D.C., this tax is \$500 annually. This tax is created to help combat pollution and fatalities and serious injuries. Owners of EV vehicles that surpass the 6,000-pound mark will have a “1,000 pound credit”.¹³¹

Share	Fair	The tax is based on the weight of the vehicle, not household income. The initial price of this vehicle creates a barrier for lower income households to own this vehicle.
Burden	Fair	There are no subsidies or exemptions available, and this tax (as exemplified in D.C.) is still applicable whether the vehicle is personal use or needed for work.
Tiered	Fair	The tax is determined by weight, not value of the vehicle. However, vehicles that are over 6,000 pounds carry a higher value than those weighing less.
Benefits Received	Fair	Taxes would contribute to street safety enhancements. The tax is aimed to increase safety for vulnerable users, the majority of which are low-income.
Payment Methods	Variable	This is dependent on program design. Equitable payment methods would allow people to pay their fine over time, with no interest or penalties accrued for late payment.
Penalties	Variable	This is dependent on program design. Equitable penalties would enforce additional fines based on income levels and wave penalty fees if household is below poverty line.

¹³¹ <https://www.bloomberg.com/news/articles/2022-05-26/a-new-way-to-curb-the-rise-of-oversized-pickups-and-suvs>

Revenue Sources not Included in Assessment

This list details items that were not included because the item was a financing mechanism rather than a revenue source or did not represent a significant equity impact based on available information. Many of these items are often grouped together under an 'other' category in budget documents and typically do not generate a large share of revenue.

- Bond Proceeds (revenues that generate bond proceeds (e.g., gas tax) are included in the equity assessment). Bonds are a financing mechanism, rather than a specific revenue source.
- Transit advertising. Transit advertising is ads or other forms of advertising, including digital media, placed on public transportation vehicles or areas, such as bus stops.
- Contract Revenue/Service Contracts are typically revenues paid from one agency to another, or one department to another for services rendered. For example, the City of Portland contracts with TriMet for operating personnel for the Portland Streetcar.
- Federal Other taxes, fees investment income and other receipts. This group includes penalties and fines imposed for violation of motor carrier safety requirements, penalties related to highway-user taxes, NHTSA motor vehicle safety penalties, and interest on invested balance.
- Various Revenues generated from government activities (sale of government property, interest income, loan repayment, rent and fines).
- Land Use Planning Fees are charged for each type of land use review. The fee includes portions that are allocated different government departments, including Transportation.
- Potential future Advertising Revenues (for use within ROWs or assets). Billboards on public land, naming rights of facilities, and advertisement on transit vehicles and at stops are some of potential sources of advertising revenue.
- Institutional Zone Development. Hospitals, universities, and other large institutions invest in transportation infrastructure improvements through their conditional use permits and/or Master Plans. The new Comprehensive Plan proposes to implement institutional zones which will remove the Conditional Use status for these institutions. We anticipate institutions will continue to invest in transportation improvements as a part of the new Institutional Zone Development process.
- School Partnerships. Funding included in a school bond measure for traffic safety improvements at schools. In Portland, the process developed in partnership between PPS and the City ensures that development fees are prioritized for safety improvements near the schools that need them the most.

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Appendix B: Allocation and Constraints by Revenue Source

Source	Category	Allocation and Constraints Description
Federal		
Fuels tax	Roadways, transit, bike, and pedestrian	Federal revenue sources fund the Highway Trust Fund (HTF). The HTF is made up of the Mass Transit Account and the Highway Account. The Mass Transit Account receives 15.5% of the revenue generated by the gasoline tax and 11.7% of the revenue generated by the tax on diesel fuel. The remainder of the fuel tax is dedicated to the Highway Account. The Mass Transit Account funds transit projects while the Highway Account funds roadway, bike, and pedestrian projects. Federal funding from the HTF flows through state DOTs and to local agencies and is allocated using formula funds. ⁶⁵
Heavy trucks and trailers sales tax		
Heavy vehicles annual use tax		
Individual income taxes, corporate income taxes (General Fund transfer)		
State		
Motor Fuels Tax	Roadways, bike, and pedestrian within the right-of-way	These revenue sources fund the State Highway Fund. The State Highway Fund is restricted to funding construction, operation, and maintenance of roads, including bike and pedestrian projects in the right-of-way. ⁶⁶ In 1971, ORS 366.514 dedicated at least 1% of highway funds to bicycle and pedestrian projects. ⁶⁷
Weight Mile Tax		
Driver and Vehicle Fees		
Transportation License and Fees		
Cigarette Tax	Transit	A portion of the Cigarette tax is dedicated to transit services for seniors and disabled people. ⁶⁸
Bike Tax	Bike	Revenue from the bicycle excise tax goes into Multimodal Statewide Investments Management Fund. It used to fund a bike and pedestrian program within Connect Oregon. ⁶⁹
Privilege Tax	Outside of right-of-way – aviation, rail, and marine	Funds are allocated to the Connect Oregon Fund and fund rebates for electric vehicles. The Connect Oregon Fund is restricted to projects outside the highway right-of-way. Historically these projects included active transportation but most recently funds are dedicated to aviation, rail, and marine projects. Any project that is eligible for funding from the State Highway Fund is not eligible for funding from Connect Oregon. ⁷⁰
Lottery Revenues		

⁶⁵ [U.S. Department of Transportation Federal Highway Administration. \(2017\). "Fixing America's Surface Transportation Act or "FAST Act.""](#)

⁶⁶ [Oregon Department of Transportation. \(2022\). "Transportation Funding in Oregon."](#)

⁶⁷ [Interpretation of ORS 366.514](#)

⁶⁸ [Oregon Department of Transportation. \(2022\). "Transportation Funding in Oregon."](#)

⁶⁹ [Oregon Department of Transportation. \(2022\). "Connect Oregon."](#)

⁷⁰ [Oregon Department of Transportation. \(2022\). "Connect Oregon."](#)

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Source	Category	Allocation and Constraints Description
Payroll Transit Tax	Transit except light rail	The tax is deposited into the Statewide Transportation Improvement Fund and is limited to investments and improvements in public transportation services, except for those involving light rail. ⁷¹
Income Tax (General Fund Transfer)	Variable	As state legislatively directed. In the past it has been used for capital projects such as light rail.
Local		
Mass-Transit (TriMet) Tax	Transit	The tax funds mass transportation in the TriMet district. ⁷²
Transit Fares (Passenger Revenues)	Transit	Fares fund the transit system. They make up 7% of TriMet's FY2023 Budget. ⁷³
Gas Tax	Roadways, bike, and pedestrian within the right-of-way.	Under state law, motor vehicle revenue is restricted to funding construction, operation, and maintenance of roads, including bike and pedestrian projects in the right-of-way.
Vehicle Registration Fee		
Transportation System Development Charges	Capital projects that increase or improve capacity	Fees are dedicated to recoup the cost of additional infrastructure projects required to serve new developments. ⁷⁴ In Oregon, state law requires that revenue only be spent on capital projects. ⁷⁵ Local municipalities may have additional requirements on use of revenue, such as specifically serving the impacted area and related parameters.
Street Utility Fees	Street repair and maintenance	Funds are spent locally on street maintenance.
Utility Fees based on estimated number of trips	Street repair and maintenance, Bike and Pedestrian Accessibility, ADA Transition	Revenue funds projects outlined in Milwaukie's Street Surface Maintenance Program, Bicycle and Pedestrian Accessibility Program, and the federal ADA Transition Plan. Funding transit, ADA improvements, and active transportation has a positive equity component.
Franchise Fees	Flexible	Franchise fees feed directly into the General Fund to support a portion of a city's transportation budget.

⁷¹ [Oregon Department of Revenue. \(2022\). "Statewide transit tax."](#)

⁷² [TriMet. \(2021\). "Form OR-TM Instructions."](#)

⁷³ [TriMet. \(2022\). "Adopted 2022-2023 Budget."](#)

⁷⁴ [Portland Metro. \(2007\). "System Development Charges."](#)

⁷⁵ [Oregon Legislature. \(2021\). "Chapter 223 – Local Improvements and Works Generally."](#)

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Source	Category	Allocation and Constraints Description
PGE Privilege Tax	Street repair and maintenance	Funds are spent locally on street maintenance.
Parking Fees/Fines	Flexible, discretionary PBOT revenue	Parking fee revenue is general discretionary transportation revenue at PBOT. ⁷⁶
Urban Renewal	Flexible but must be spent within TIF districts	Taxes are paid by all homeowners in a jurisdiction and revenue is spent on local transportation projects within specified districts. Tax Increment Financing (TIF) districts can be used to fund improvements in historically underserved communities, including transportation projects. ^{77 78}
Property Taxes	Flexible, must be on major road.	For example, taxes are paid by local homeowners in Washington County and revenue is spent on local transportation projects through the Major Streets Transportation Improvement Program (MSTIP). MSTIP funding improves the transportation system for bicyclists, pedestrians, drivers, and transit passengers. Projects must improve safety, improve traffic flow or congestion, be on a major road, address needs for all travelers. ⁷⁹
TNC Fee	Flexible, funds programs	This fee has been used to fund programs that help remove barriers to mobility. Program examples include Wheelchair-Accessible Vehicle program, Safe Ride Home Program, safety inspections, and Transportation Wallet Initiative. ^{80 81}
Local Improvement District	Flexible, must be spent in the LID	A Local Improvement District (LID) is a mechanism for neighboring property owners to share the cost of improvements to infrastructure, where property owners agree to tax themselves (typically at least 51% of the property owners must be in favor). For transportation, it is often used to pave unimproved streets or build sidewalks.
Heavy Truck Fee	Street repair, maintenance, and safety	In Portland, the fee is allocated for 56% Street Repair/Maintenance and 44% Traffic Safety. Projects for both safety and maintenance should focus on streets important to freight movement. ⁸²

⁷⁶ [Portland Bureau of Transportation. \(2019\). "PBOT Financial Overview."](#)

⁷⁷ [Prosper Portland. \(2021\). "Your property tax bill and urban renewal."](#)

⁷⁸ [Clackamas County Development Agency. \(2011\). "Urban Renewal in Clackamas County."](#)

⁷⁹ [Washington County, Oregon. "Major Streets Transportation Improvement Program \(MSTIP\)."](#)

⁸⁰ [City of Portland, Oregon. "Private For-Hire Transportation & Regulations."](#)

⁸¹ [Schafer, Hannah. \(2019\). "PBOT News Release: PBOT, Portland Police Bureau encourage Portlanders to take a Safe Ride Home on St. Patrick's Day." Portland Bureau of Transportation.](#)

⁸² [Portland Bureau of Transportation. "Heavy Vehicle Use Tax \(HVUT\) Background and Projects."](#)



2023 Regional Transportation Plan Update Climate Smart Strategy: Background on greenhouse gas emissions targets, policies, and analytical tools

Prepared for TPAC and MTAC members and interested parties

The Portland region's climate targets

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 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 2050.¹ 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 2050.² 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 emission. Beginning in 2012, the State set GHG reduction targets for Oregon's metropolitan areas to meet, and has continued to update these targets since. For the 2023 RTP update, the Portland region's targets are:

- A 20 percent reduction in per capita greenhouse gas emissions by the year 2035
- A 25 percent reduction by 2040
- A 35 percent reduction by 2050
- Targets for the years 2041-2049 steadily increase from 26 to 34 percent in order to maintain progress toward the 2050 target.³

It is important to note that **these targets focus on per capita reductions achieved by reducing light vehicle trips and travel which includes passenger vehicles (cars, pickup trucks and SUVs) and commercial trucks with a vehicle weight rating of 10,000 pounds or less.** Only certain kinds of reductions count toward these targets:

Regional targets are focused on reducing vehicle use, not on making fuels and vehicles cleaner and more efficient. Regional transportation plans have typically focused on providing sustainable travel options, coordinating transportation and land use, and other actions that allow people to drive less.

¹ Oregon Department of Environmental Quality, Oregon Greenhouse Gas Emissions, <https://www.oregon.gov/deq/aq/programs/Pages/GHG-Oregon-Emissions.aspx>

² https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

³ 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

The State is the primary regulator of vehicles and fuels sold in Oregon. Oregon’s climate rules recognize this division of responsibilities, and require that RTPs primarily focus on reducing GHG emissions by reducing vehicle miles traveled (VMT) per person. Regional targets are designed to “fill the gap” between the State’s overall GHG reduction goals and the reductions that are expected to be achieved through State-level policies and actions identified in the [Statewide Transportation Strategy \(STS\)](#), which aim to advance Oregon’s transition to cleaner, low-carbon fuels and zero and low-carbon emissions vehicles. Metropolitan areas can only take credit for GHG reductions from making vehicles and fuels cleaner if they can demonstrate that they are taking actions that go above and beyond the STS. This means that in most cases, the GHG reduction targets above are functionally the same as VMT per capita reductions.

Regional targets only apply to emissions from light-duty passenger and commercial vehicles, and reductions in emissions from heavy-duty vehicles (e.g., freight trucks with a gross vehicle weight rating greater than 10,000 pounds) **do not count** toward these targets.

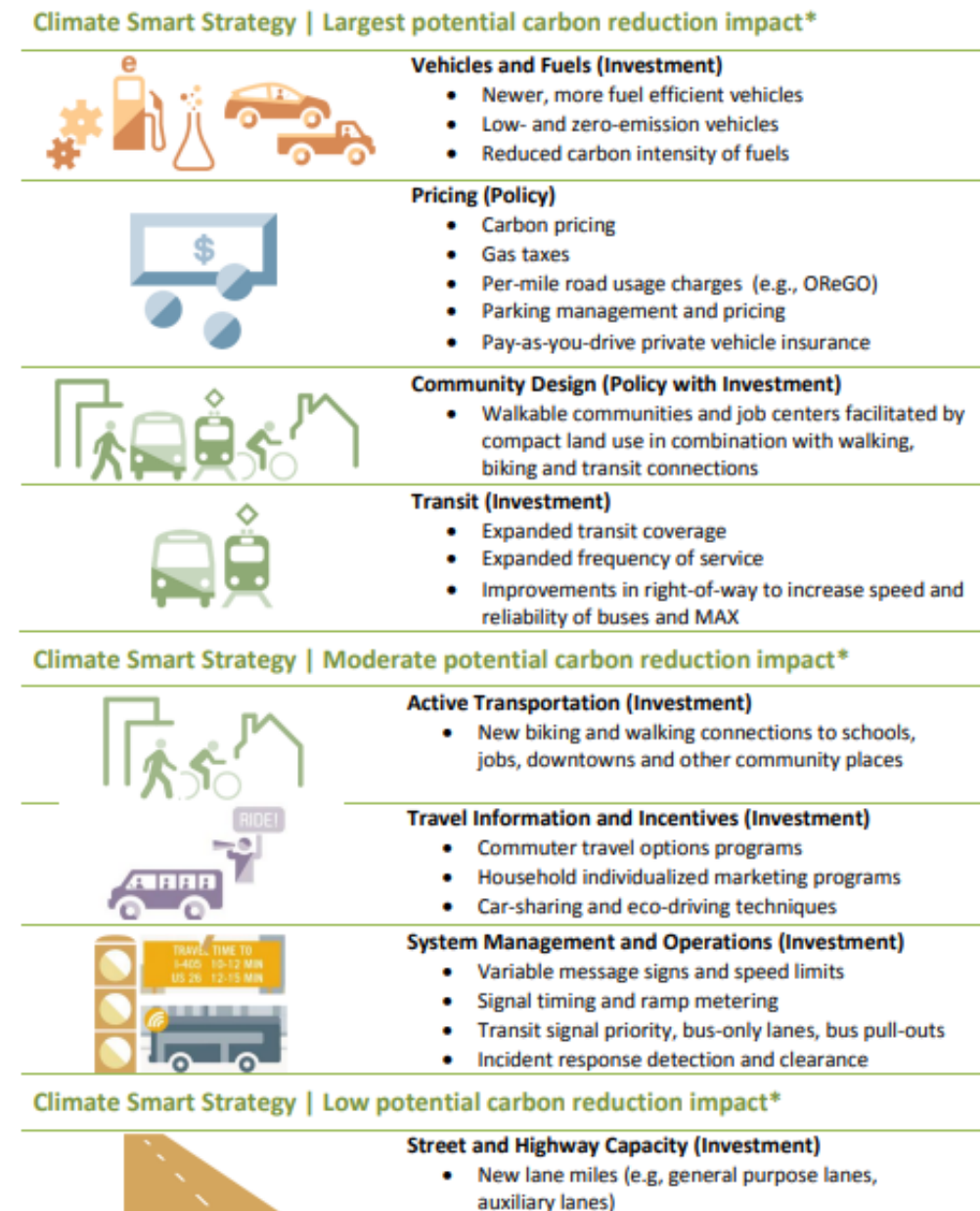
Population growth is accounted for in progress toward regional targets. All things being equal, a region with a higher population will produce more total greenhouse gas emissions than one with a lower population, because more people means more driving and therefore more emissions. To control for the influence of growth, and to focus instead on the influence of transportation policies and investments, the targets above apply to per capita GHG emissions, not total emissions.

The greater Portland region’s climate strategy

In 2014, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council adopted the Climate Smart Strategy⁴ with broad regional support from community, business and elected leaders. The Strategy, which was approved by the Land Conservation and Development Commission in 2015, was based on extensive stakeholder and public input, scenario planning and analysis. As part of the process, Metro conducted detailed modeling and analysis of various GHG scenarios and estimated the potential for a variety of strategies to reduce transportation-related GHG emissions, and identified the most effective strategies. These GHG reduction strategies are summarized below in Figure 1.

⁴ <https://www.oregonmetro.gov/climate-smart-strategy>

Figure 1: Climate Smart Strategy (Policies and Investments by potential GHG reduction impact)



Source: Understanding Our Land Use and Transportation Choices Phase 1 Findings (January 2012), Metro.

The Climate Smart Strategy and related policies (see Appendix B) were adopted in the 2018 Regional Transportation Plan and will be reviewed and updated in 2023 to ensure ongoing compliance with Oregon’s GHG emissions reduction targets. The monitoring report that was included as part of the 2018 RTP concluded that the Portland region was making satisfactory progress implementing the Climate Smart Strategy, but was not able to directly compare the GHG emissions from the RTP to the state-mandated targets because different tools were used to set the targets than were used to analyze performance of the RTP (see the GHG forecasting tools section).

In order to help stakeholders gauge progress toward climate targets, the RTP also reported on the implementation of individual strategies and assumptions from the climate strategy. It found that the RTP met or exceeded targets for expanding transit service, locating housing in compact communities, managing parking, and increasing bicycle travel. However, the RTP fell short of targets for reducing VMT per capita, building bicycle and pedestrian infrastructure, and tripling walk, bike and transit mode share.

The 2023 RTP update will include an update to the Climate Smart Strategy and supporting RTP policies and investments, as needed, to meet the region's state-mandated greenhouse gas emissions reduction targets. The update will consider how best to account for more recent changes to federal and state climate-related policies and updated regional congestion pricing-related policies, and whether the strategies and key assumptions underlying the region's Climate Smart Strategy are being implemented and continue to be realistic, including:

- **Federal climate rulemaking⁵** is underway that would require State departments of transportation (State DOTs) and metropolitan planning organizations (MPOs) to establish declining carbon dioxide (CO₂) targets for on-road motor vehicle emissions. As proposed, the draft rule does not mandate the level of reduction the targets should achieve. Rather, State DOTs and MPOs would have flexibility to set targets that are appropriate for their communities and given their respective climate policies and other policy priorities - so long as the targets would reduce emissions over time and align with the Biden Administration's target of net-zero emissions, economy-wide, by 2050.⁶ Comments are due by Oct. 13, 2022.
- **New Climate-Friendly and Equitable Communities land use and transportation rules** that support implementation of the Climate Smart Strategy. Adopted by the Land Conservation and Development Commission in July 2022, the new rules require cities and counties to designate walkable, compact mixed use areas⁷ that are served by transit and other sustainable transportation options, reform parking management, plan for high quality pedestrian, bicycle and transit infrastructure, prioritize and select projects meeting climate and equity outcomes and demonstrate that land use and transportation system plan updates reduce per capita vehicle miles traveled.
- State updates to the STS that are expected to account for **new policies and programs to support the transition to cleaner, low carbon vehicles and fuels**. Since 2018, the State has adopted new policies and programs to support clean vehicles and fuels in response to Executive Order 20-04.⁸ See Appendix A for an overview of these and other state policies and programs are under development.
- Updates to **congestion pricing policies** in the RTP. Research suggests that pricing can be very effective at reducing GHG emissions, and pricing is the only high-effectiveness strategy in Climate Smart Strategy that has not yet been implemented in the region.

⁵ <https://www.federalregister.gov/documents/2022/07/15/2022-14679/national-performance-management-measures-assessing-performance-of-the-national-highway-system>

⁶ Executive Order 13990 (<https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>) and Executive Order 14008 (<https://www.energy.gov/sites/default/files/2021/02/f83/eo-14008-tackling-climate-crisis-home-abroad.pdf>)

⁷ For the Portland region, these areas are the 2040 Centers, including the Portland Central city and regional and town centers

⁸ https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

- The **impact of the COVID-19 pandemic on travel behavior and the transportation system** - in particular the significant loss of transit riders due to health concerns and the resulting cuts in service, which have been exacerbated by an ongoing shortage of transit drivers.

GHG forecasting tools

Since 2010, ODOT and Metro have been developing, testing, and refining tools to measure and forecast transportation-related GHG emissions. There are three main tools that have been used to develop GHG reduction targets and assess regions' progress toward these targets.

The regional travel model

The regional travel model has been the primary tool that Metro uses to evaluate the impact of transportation projects and policies. It is a complex model that simulates travel behavior based on surveys detailing individuals' tripmaking and on a detailed representation of the regional transportation system. Metro also uses a land use and economic model and various off-model tools (including MOVES, which is a tool developed by the EPA that is required in clean air analysis, and is used to convert travel model outputs into GHG emissions) in concert with the travel model when developing the RTP.⁹ The term "travel model" is used in this memorandum as a shorthand way of referring to this entire suite of tools.

The travel model will likely remain the primary tool for quantifying greenhouse gas reductions, as well as other performance measures, for the 2023 RTP. There are three reasons for this. First, it is a detailed and nuanced tool that takes into account the complex interrelationships between land use, trip cost, the availability of different travel options, congestion, socioeconomic characteristics, and other factors that determine how people travel in the region. Second, the travel model has been widely used to assess regional plans and projects, which makes it easier for stakeholders to interpret results. Third, federal regulations require the use of a travel model in developing an RTP.

That said, there are two important limitations to the regional travel model. First, it is a complex tool that is labor-intensive to program and run, so it is not the best tool for quickly assessing the relative effectiveness of different GHG reduction strategies or for conducting "what if" assessments that explore how different combinations of strategies could impact emissions. Second, results from the travel model are not directly comparable to those from VisionEval (see below), which is the tool that the State used to set regional GHG reduction targets – an issue that the State noted when reviewing GHG results from the 2018 RTP. As described in the following section, Metro has been developing and testing a regional-scale version of VisionEval to support the 2023 RTP update. One of the goals of this work is better understand how VisionEval works at the regional scale and improve our understanding of the differences in results between VisionEval and the regional travel model and to be able to estimate greenhouse gas emissions from the 2023 RTP and directly compare forecasted emissions and corresponding VMT per capita to the region's state-mandated targets.

VisionEval and GreenSTEP

VisionEval is a scenario planning tool that examines how people respond to changes in the transportation system based on aggregate inputs about the transportation system (e.g., factors like lane-miles and transit service), detailed assumptions about current and future travel options and costs, research on the impact of different changes on travel behavior, detailed demographic and socioeconomic data, and other information.

⁹ Modeling 101

VisionEval is designed to allow users to evaluate large numbers of scenarios and explore how different combinations of future conditions might affect performance measures like VMT and GHG emissions. It is also the tool that the State uses to set regional greenhouse gas reduction targets (which it does by using VisionEval to assess progress toward state GHG reduction goals due to state-level clean vehicle and fuel strategies, determining the gap between the results of these strategies and the targets, and identifying the reductions in VMT per capita that may be needed to fill this gap). As such, **VisionEval is well-suited for assessing progress toward the GHG reduction target and estimating potential reductions from many of the additional strategies that may be needed to meet these targets.** In addition, **Metro may recommend using VisionEval to demonstrate compliance with GHG reduction targets if staff find that technical differences between VisionEval and the travel model make it challenging to compare results and targets that are based on two different tools.**

However, VisionEval is not as detailed of an analysis tool as the travel model. The model forecasts people's behavior based on the destinations that they typically travel to and on the specific travel time, options, and conditions between their origin and destination, whereas VisionEval looks at fleet changes and aggregate effects of policies on GHG and VMT.

GreenSTEP is a scenario planning tool, similar to VisionEval, that the State used to set regional GHG reduction targets prior to 2017. The State has since promoted VisionEval as a replacement for GreenSTEP in setting and assessing progress toward state and regional targets. GreenSTEP and VisionEval are broadly similar, but they use different inputs and calculations, so **GHG targets and results from one RTP cycle are not directly comparable to those from other cycles or development of the Climate Smart Strategy in 2014.**

Different tools for different uses

GHG analysis is complex, and must speak to a variety of audiences – including the public, decision-makers, state and federal regulators, and partner agency staff. As reinforced by the Climate Expert Panel convened by Metro in June 2022¹⁰, **there is no single best tool for the job, all of the available tools have their limitations, and the results are only as sound as the assumptions behind each tool. All of these tools are only useful insofar as they support Metro and its partner agencies in taking action to reduce carbon emissions and protect people from the impacts of climate change.**

Though VisionEval and the travel model have their differences, **they share many of the same strengths and limitations.** Both are generally well-suited to capture how land use, population change, roadway capacity, transit service, transportation costs, and travel time affect travel behavior. Both are capable of accounting in detail for how changes to fuels and vehicles affect GHG emissions. Both are also limited when it comes to analyzing induced demand, pedestrians' and bicyclists' behavior, or how people respond to travel demand management strategies (other than those that involve pricing). However, **the strengths of these tools generally align with the strategies that research suggests are most effective at producing significant long-term VMT reductions** (or avoiding further increases) – including implementing pricing, expanding and improving transit service, and limiting new roadway capacity.¹¹

¹⁰ <https://www.oregonmetro.gov/events/climate-and-transportation-expert-panel/2022-06-22>

¹¹For examples of research highlighting the impact of these strategies, see: Handy et al., State-Level Strategies for Reducing Vehicle Miles of Travel (2017); CDC, Strategies for Health-Oriented Transportation Projects and Policies: Reduce Vehicle Miles Traveled (VMT); Salon, The Effect of Land Use Policies and Infrastructure Investments on How Much we Drive (2015), Gately and Reardon, The Impacts of Land Use and Pricing in Reducing Vehicle Miles Traveled (2021).

VisionEval is better suited to evaluate and compare the relative effectiveness of different packages of GHG reduction strategies. It is also responsive to state climate policies. The travel model is better suited to conduct the final analysis of the RTP, and its use is required by federal regulations. Technically, the main question that Metro and its partner agencies face in using these two separate tools in the RTP update is how to compare and translate results between the two, so that the initial VisionEval analysis of GHG scenarios leads to a final RTP that meets GHG reduction targets.

Initial Climate Smart Strategy review: preliminary findings and considerations for the 2023 RTP update

In preparation for updating the 2023 RTP, Metro staff is creating a **Climate Smart Strategy (CSS) Scenario¹² in VisionEval** that represents the 2014 Climate Smart Strategy as currently adopted in the 2018 RTP, but with the updated growth forecast (households and jobs) adopted in 2020 for use in the 2023 RTP update. This scenario will be based on adopted policies and plans, including regional assumptions about implementation of VMT-reducing strategies in the 2018 RTP and State assumptions about Oregon’s transition to cleaner, low carbon fuels and more fuel-efficient vehicles from the 2013 Statewide Transportation Strategy.¹³

Table 1 summarizes how Metro staff is using the inputs in VisionEval to represent some of the key strategies¹⁴ adopted in the Climate Smart Strategy. **This is designed to help build understanding of how the current Climate Smart Strategy is represented in VisionEval.**

Metro staff will be asking for input on whether the assumptions underlying the region’s Climate Smart Strategy are realistic, how certain assumptions should be updated, and if new or updated policies and additional GHG reduction strategies that are not currently included in Climate Smart Strategy should be reflected in the updated strategy.

Table 1 does not include any recommendations on how strategies should be updated, but it does include notes on current values and/or trends for many inputs. This information should be considered when updating Climate Smart Strategy assumptions as part of the 2023 RTP update. The table also distinguishes between regional assumptions that are set by Metro and its partner agencies through the RTP and assumptions that are set by the State.

As of August 2022, ODOT is in the process of updating the latter based on several new policies and programs described in Appendix A, and intends to provide these updated assumptions for use in the 2023 RTP update. **Though State assumptions are not set through the RTP process, they are included in this document to help improve understanding of key factors behind VMT and GHG results more thoroughly.**

¹² Though the assumptions used in creating this scenario mirror those used for the 2018 RTP as closely as possible, neither the assumptions nor the results are identical because of the differences between GreenStep, VisionEval and the regional travel model discussed in the previous section.

¹³ <https://www.oregon.gov/odot/Planning/Pages/STS.aspx>. In 2018, the Oregon Transportation Commission adopted an amendment to incorporate the STS as part of the Oregon Transportation Plan (<https://www.oregon.gov/odot/Planning/Pages/Plans.aspx>). The 2013 STS assumptions do not reflect recent updates to State clean vehicle and fuel policies (see Appendix A). As of August 2022, ODOT staff are working to develop VisionEval assumptions that reflect these updates.

¹⁴ VisionEval is a complex tool with hundreds of detailed inputs.

Table 1 focuses only on inputs that reflect key strategies adopted in the CSS. Information on all VisionEval inputs can be found at <https://visioneval.org/docs/model-inputs.html>.

Table 1: Key transportation assumptions in Climate Smart Strategy Scenario

Assumption	Climate Smart Strategy Scenario in VisionEval	Notes on recent ¹⁵ data and trends
<i>Climate Smart Strategy Assumptions</i>		
Transit Service	Transit service grows roughly in proportion with the region’s population.	Between 2010 and 2019, transit service hours grew by 4%, roughly half the rate of population growth. ¹⁶ The region plans to increase transit service significantly, ¹⁷ but agencies have cut service during the COVID pandemic.
Employer-based Travel Options Programs	30% of workers receive regular travel options programming.	Based on data from the Regional Travel Options program, 5.5% of workers currently receive regular travel options programming.
Household-based Travel Options Programs	45% of households receive regular travel options programming.	Based on data from the Regional Travel Options program, less than 1% of households currently receive regular travel options programming.
Parking pricing and management	Consistent with the 2018 RTP, most of the region’s 2040 centers and many of its frequent transit corridors include managed parking, and parking is priced in central Portland and at selected other destinations throughout the region. ¹⁸	The new Climate-Friendly and Equitable Communities rules call for increasing the use of parking management and pricing in 2040 centers and within proximity of frequent transit service.
Pay-As-You-Drive (PAYD) Insurance	40% of the region uses PAYD insurance.	Some insurers offer PAYD insurance, but usage of PAYD insurance in Oregon is not increasing as envisioned in the STS. ¹⁹ The STS envisioned 20% of Oregon households had PAYD insurance by 2020 and almost 100% of households by 2035.
<i>Fleet and technology assumptions from the State</i>		
Gas Prices	Gas prices are \$6.75 per gallon ²⁰	
Electricity Prices	Electricity prices are \$0.23 per kWh ²¹	
Commercial Fleet Age	The average lifetime of commercial vehicles is 7.6 years.	Commercial vehicle lifetimes currently average 14.2 years and are increasing. ²²
Fleet Electrification	24% of commercial light-duty trucks are hybrid or electric.	Currently, less than 1% of heavy-duty vehicles are hybrid or electric. One recent forecast ²³ estimates that 7% of the heavy-duty fleet will be hybrid/electric by 2030, rising to 49% in 2040.

¹⁵ As of April 2022.

¹⁶ TriMet, TriMet Service and Ridership Statistics, November 30, 2021.

<https://trimet.org/about/pdf/trimetridership.pdf>.

¹⁷ Metro, Regional Transit Strategy, 2018 Regional Transportation Plan, December 6, 2018.

¹⁸ See the 2018 RTP, Figure 6.30, p. 6-44 and 2018 RTP Appendix M, p. 20 to p.25.

https://www.oregonmetro.gov/sites/default/files/2020/07/29/2018-RTP-Appendix_M-Regional-Analysis.pdf

¹⁹ ODOT, STS Implementation Monitoring Report, p. 26. <https://www.oregon.gov/odot/Planning/Documents/STS-2018-Monitoring-Report.pdf>.

²⁰ This price approximates the STS Vision inputs and was provided for use during development of the climate Smart Strategy. VisionEval uses 2010 dollars for all price inputs. This equates to \$9.17 per gallon in 2022 dollars.

²¹ This price approximates the STS Vision inputs and was provided for use during development of the climate Smart Strategy. VisionEval uses 2010 dollars for all price inputs. This equates to \$0.23 per kWh in 2022 dollars.

²² Brusseau, D., Aging Trucks Create More Service Opportunities, NTEA News,

https://www.ntea.com/NTEA/Member_benefits/Industry_leading_news/NTEANewsarticles/Aging_trucks_create_more_service_opportunities.aspx?fbclid=IwAR3mkimdcKilEbdqvwYYSwODX5Hop5g6odQWuQdlt9cJ37I30kwxgv209PU

²³ Ledna, C., et. al., Decarbonizing Medium- & Heavy-Duty On-Road Vehicles: Zero-Emission Vehicles Cost Analysis <https://www.nrel.gov/docs/fy22osti/82081.pdf>

Assumption	Climate Smart Strategy Scenario in VisionEval	Notes on recent ¹⁵ data and trends
		This does not account for state policies promoting clean heavy-duty vehicles.
Commercial Fleet Share	20% of light-duty commercial vehicles are trucks/SUVs and 80% are cars.	58% of light-duty commercial vehicles are trucks, and that percentage has been increasing. ²⁴
Household Fleet Share	20% of light-duty passenger vehicles are trucks/SUVs and 80% are cars.	80% of new U.S. vehicle sales are trucks, and that percentage has been increasing. ²⁵
Household Vehicle Fleet Age	The average lifetime of passenger cars is 7 years and 7.7 years for trucks/SUVs.	Passenger vehicle lifetimes currently average 11.9 years and are increasing. ²⁶

Potential strategies to produce additional VMT per capita and related GHG reductions

In support of the 2023 RTP update, Metro staff proposes to use VisionEval to conduct a preliminary analysis of VMT per capita and related GHG reductions under the 2018 RTP (as a next step), and will update TPAC and MTAC on the results at a future meeting, including whether the updated RTP seems likely to meet its VMT per capita and related GHG reduction targets. Staff also proposes to evaluate the draft 2023 RTP project list using VisionEval as part of the system analysis conducted following the Call for Projects in Spring 2023.

Below are some of the strategies that are likely to produce significant additional reductions – focusing on the strategies identified in the Climate Smart Strategy (See Figure 1) with the greatest potential carbon reduction potential, as well as on strategies that are well-represented in the GHG analysis tools discussed above – if additional action is needed to meet the region’s targets.



Pricing: Multiple agencies, including ODOT, Metro and the City of Portland, are currently working on plans to price roadways in the Portland region in order to both manage demand and raise revenues for future transportation investments. The 2023 RTP update is anticipated to include updated policies and new projects that expand the region’s approach to pricing. **Pricing presents a major opportunity to reduce GHG emissions since pricing is the only high-impact strategy identified in Climate Smart that has not yet been implemented at scale.** The Regional Congestion Pricing Study analyzed a variety of potential approaches to pricing and found that all of them reduced VMT, ranging from a minor reduction to a 7.6 percent decrease.²⁷ This analysis focused on pricing’s potential to help manage travel demand, and does not account for additional VMT per capita and related GHG reductions that could result from reinvesting a share of the resulting revenues in other climate strategies such as those discussed below.

²⁴ Bureau of Transportation Statistics, U.S. Automobile and Truck Fleets by Use, <https://www.bts.gov/content/us-automobile-and-truck-fleets-use-thousands>

²⁵ FRED Blog, Long-term trends in car and light truck sales, March 15, 2021. <https://fredblog.stlouisfed.org/2021/03/long-term-trends-in-car-and-light-truck-sales/>

²⁶ Bureau of Transportation Statistics, Average Age of Automobiles and Trucks in Operation in the United States, <https://www.bts.gov/content/average-age-automobiles-and-trucks-operation-united-states>

²⁷ Metro, Regional Congestion Pricing Study, p. xiii and Appendix D.i. <https://www.oregonmetro.gov/sites/default/files/2021/10/05/Regional%20Congestion%20Pricing%20Study%20-%20final%20report%20-%20Metro.pdf>



Increasing transit service: Increasing transit service has long been a focus of Metro and its partners' efforts to implement the 2040 Growth Concept, expand travel options, improve air quality and reduce GHG emissions. This strategy also has significant potential benefits for equity and mobility. The 2018 RTP exceeded Climate Smart Strategy targets for increasing transit service, both in general and in the region's housing and job centers. However, the COVID-19 pandemic reduced

transit ridership and necessitated cuts to transit service that weren't anticipated in the 2018 RTP. As a result, it may take additional funding to achieve the level of transit service – and corresponding per capita VMT and GHG reductions – envisioned in the 2018 RTP, and even more to increase transit-related GHG reductions beyond what was expected in 2018. Some resources may be available through pricing (though constitutional restrictions on how revenue raised from vehicles and fuels can be spent may limit how pricing revenues can be spent on transit); others may be available through the new funding programs created as part of the Bipartisan Infrastructure Law.



Expanding parking management and pricing: Managing and pricing parking can have a similar impact on VMT and GHG emissions as road pricing. In addition, parking pricing can also be applied in a more targeted fashion to destinations that are easy to reach by modes other than driving. Currently, very few places in the region have managed or priced parking, and in most cases the rules and fares that are in place are not designed to manage demand and encourage the use of transit and other modes instead of driving. The new Climate Friendly and Equitable Communities (CFEC) rules seek to change this by requiring the implementation of managed/priced parking in designated regional centers and station communities. The RTP is generally aligned with the CFEC rules, which calls for significantly expanding the use of managed parking in the region in 2040 centers and in areas near frequent transit service. However, the RTP currently anticipates a modest level of parking management in most communities that implement it. This means that there is an opportunity for local governments to implement parking management and pricing in a coordinated fashion that is guided by best practices in managing demand, and implement the new CFEC rules in a way that maximizes GHG reductions.

Plan and build compact and multimodal communities: Coordinating land use and transportation planning has been a core focus of Metro and its partners' efforts for decades. In the context of the RTP, this has meant building a multimodal transportation system that connects the centers and communities identified in the 2040 Growth Concept.



Take additional action to accelerate the adoption of clean vehicles and fuels:

Oregon's climate regulations generally direct Metro, cities and counties to focus on reducing GHG emissions by reducing VMT per capita. They require Metro to assume that complementary State clean vehicle and fuel programs and policies will be implemented, and to use assumptions provided by the State that account for these programs and policies when calculating progress toward GHG reduction targets. However, the State also allows Metro to take credit for GHG reductions from clean vehicle and fuel strategies as long as they can demonstrate that these strategies are additive to State policies and programs.

Given how high interest in clean vehicles and fuels is in the Portland region – zero-emission vehicle (ZEV) ownership rates in each of the region's three counties exceed those in any other Oregon county by 50% or more, and collectively Multnomah, Washington and Clackamas Counties account for three-fifths of the state's registered ZEVs – there may be opportunities to implement unique and innovative programs. However, the State already assumes a high level of ZEV penetration in the

Portland region, and agencies in the region have so far generally focused on greening their own fleets instead of increasing consumer usage of ZEVs. It will likely take detailed analysis and coordination between local, regional and State agencies to identify what, if any, additional actions that the RTP could take to significantly increase adoption of clean vehicles and fuels and that are not duplicative of State policies and programs.

As noted above, the recommendations above are focused on implementing strategies that are identified by the Climate Smart Strategy as having a high impact on GHG reductions. It may also be possible to increase GHG reductions from the medium- and low-impact strategies shown in Figure 1 above.

Metro staff recommend that Metro Council and policy/technical committees first identify what assumptions may need to be updated or revised to account for new information and changes to policies, strategies and other assumptions since 2018 and then focus on the high-impact strategies that have the greatest potential to reduce GHG emissions before pursuing medium- and low-impact strategies.

Next steps

Metro staff will continue to analyze progress toward regional VMT per capita and related GHG reduction targets based on the feedback received today, as well as on the continued development of the 2023 RTP and of federal and State climate-related guidance, and will further engage TPAC, MTAC, MPAC, JPACT and the Metro Council in updating the Climate Smart Strategy.

Proposed next steps in this process include:

- Estimating likely VMT per capita and related GHG reductions under the 2018 RTP and 2023 RTP using VisionEval, to help assess whether the RTP is on track to meet its targets for 2040 and 2045.
- Conducting a sensitivity analysis of the additional VMT per capita and related GHG reductions that could result from increasing implementation of certain carbon reduction strategies.
- Mapping how household-based VMT per capita varies across the region, which will help identify communities with higher and lower levels of per person transportation-related GHG emissions, as well as support the implementation of the Climate-Friendly and Equitable Communities rules and the updated Regional Mobility Policy.
- Engaging a consultant team to support greenhouse gas analysis, potentially including some of the tasks listed above.

3.2.3 Climate leadership 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. Documented effects include warmer temperatures and sea levels, shrinking glaciers, shifting rainfall patterns and changes to growing seasons and the distribution of plants and animals.

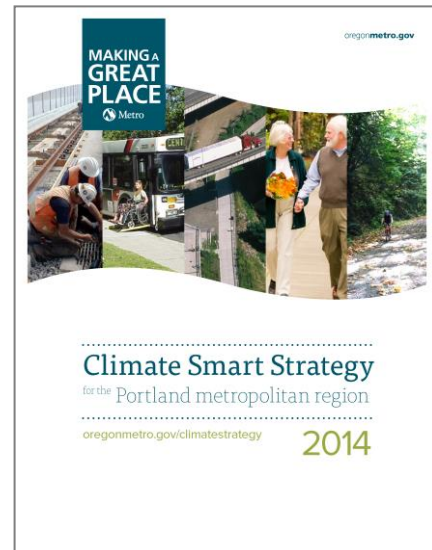
Warmer temperatures will affect the service life of transportation infrastructure, and the more severe storms that are predicted will increase the frequency of landslides and flooding. Consequent damage to roads and rail infrastructure will compromise system safety, disrupt mobility and hurt the region's economic competitiveness and quality of life. Our ability to respond will have unprecedented impacts on our lives and our survival.

Transportation sources account for 34 percent of greenhouse gas emissions in Oregon, largely made up of carbon dioxide (CO₂). 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.

3.2.3.1 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 and 2017.

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 clean, build healthy and equitable communities, and grow our economy – all while reducing greenhouse gas emissions.



The 2018 Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy.

For more information, visit www.oregonmetro.gov/climatesmart

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.

3.2.3.2 Climate Smart Strategy 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 RTP policies related to transit, biking and walking, use of technology and system and demand management strategies.

Climate Smart Policies	
Policy 1	Implement adopted local and regional land use plans.
Policy 2	Make transit convenient, frequent, accessible and affordable.
Policy 3	Make biking and walking safe and convenient.
Policy 4	Make streets and highways safe, reliable and connected.
Policy 5	Use technology to actively manage the transportation system and ensure that new and emerging technology affecting the region’s transportation system supports shared trips and other Climate Smart Strategy policies and strategies.
Policy 6	Provide information and incentives to expand the use of travel options.
Policy 7	Make efficient use of vehicle parking spaces through parking management and reducing the amount of land dedicated to parking
Policy 8	Support Oregon’s transition to cleaner fuels and more fuel-efficient vehicles in recognition of the external impacts of carbon and other vehicle emissions.
Policy 9	Secure adequate funding for transportation investments that support the RTP climate leadership goal and objectives.

3.2.3.3 Climate Smart Strategy toolbox of potential actions

The responsibility of implementation of these policies and the Climate Smart Strategy does not rest solely with Metro. Continued partnerships, collaboration and increased funding from all levels of government will be essential. To that end, the Climate Smart Strategy also identified 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. 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 particular 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.

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.

3.2.3.4 Climate Smart Strategy monitoring

The Climate Smart Strategy also contained 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 reports on implementation progress since 2014, and found the 2018 Regional Transportation Plan makes satisfactory progress towards implementing the Climate Smart Strategy and, if fully funded and implemented, can reasonably be expected to meet the state-mandated targets for reducing per capita greenhouse gas emissions from passenger cars and small trucks (light-duty vehicles) for 2035 and 2040.

The analysis also found that more investment, actions and resources will be needed to ensure the region achieves the mandated greenhouse gas emissions reductions defined in OAR



Appendix J reports on implementation progress since 2014. The analysis found the 2018 RTP makes satisfactory progress towards implementing the Climate Smart Strategy, but more investment, actions and resources are needed to ensure the region achieves mandated greenhouse gas emissions reductions.

660-044-0060. In particular, additional funding and prioritization of Climate Smart Strategy investments and policies that substantially reduce greenhouse gas emissions will be needed.

3.2.3.5 Transportation preparedness and resilience

The topic of preparedness and resilience has broad implications across all sectors of the economy and communities throughout the region. Natural disaster 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 fuel, essential supplies and medical transport. Advance 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.

What are the risks we face?

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 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.

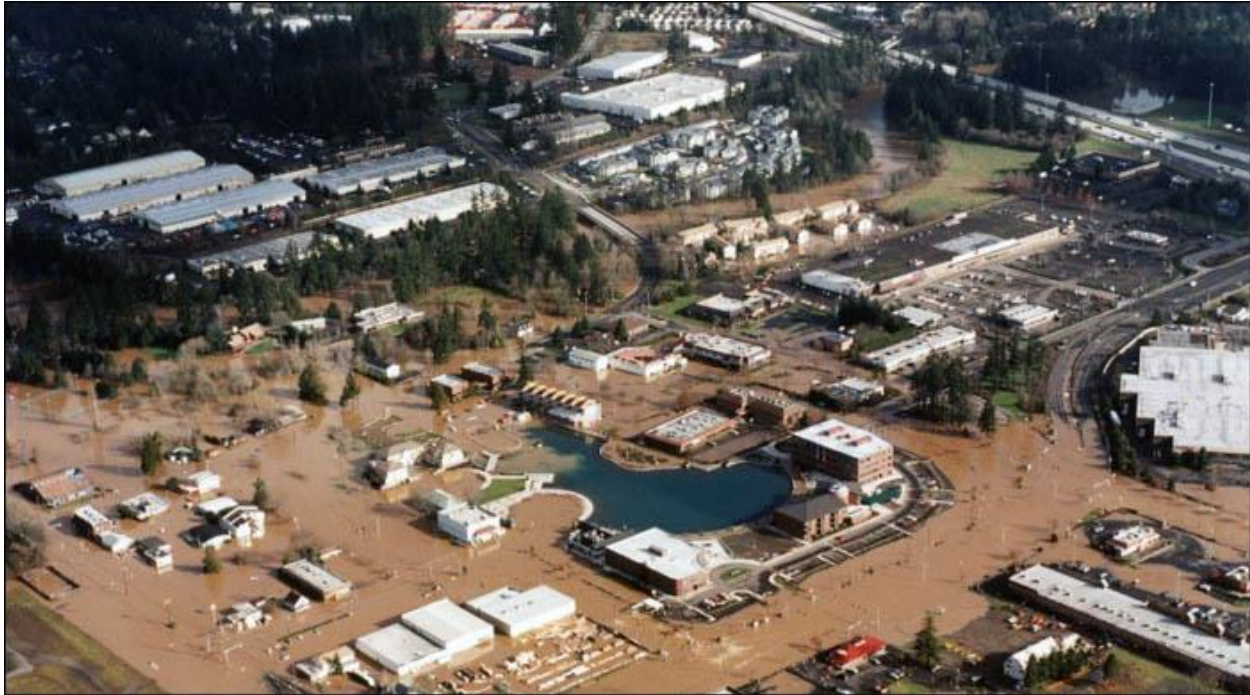
Regional collaboration and disaster preparedness

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 earthquake.



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. For more information, visit www.rdpo.net.



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.

Potential opportunities for future regional collaboration in support of transportation preparedness and resilience include:

- Partner with the RDPO to update the region’s designated Emergency Transportation Routes (ETRs) for the five-county area, which were last updated in 2006. These routes are designated to facilitate all-hazards emergency response activities, including those of medical, fire, law enforcement and disaster debris removal in the immediate aftermath of an earthquake or other major event. The project will use data from the DOGAMI study to apply a seismic lens to determine whether the routes have a high likelihood of being damaged or cut-off during an earthquake and determine whether other routes may be better suited to prioritize as ETRs as a result. Some considerations for emergency recovery will also be incorporated into the updated ETR criteria and recommendations for future work. See Chapter 8 (Section 8.2.3.10) for more information.
- Consider climate and other natural hazard-related risks during transportation planning, project development, design and management processes.
- Conduct 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.

- Optimize operations and maintenance practices that can help lessen impacts on transportation from extreme weather events and natural disasters. 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.
- Integrate green infrastructure into the transportation network when practicable to avoid, minimize and mitigate negative environmental impacts of climate change, natural disasters and extreme weather events.
- Protection and avoidance of natural areas and high value natural resource sites, especially the urban tree canopy and other green infrastructure, in slowing growth in carbon emissions from paved streets, parking lots and carbon sequestration and addressing the impacts of climate change and extreme weather events, such as urban heat island effects and increased flooding.
- Avoidance of 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.

Appendix B: New State clean vehicle and fuel strategies since 2018

Since 2018, the State has adopted new policies and programs to support clean vehicles and fuels in response to Executive Order 20-04.¹ The [Every Mile Counts](#) Program and its coordinated STS Multi-Agency Implementation Work Plan are focused on reducing greenhouse gas emissions and implementing the STS.

Recent actions include the formation of climate offices within ODOT and ODEQ and the statewide CFEC rulemaking by the LCDC and the Department of Land Conservation and Development (DLCD). In addition, several Oregon vehicles and fuels legislative actions and Environmental Quality Commission (EQC) rules are expected to be in place by the end of 2022 that will help greatly advance the STS goals to "clean up every mile" and associated air quality impacts:

1. Clean Car Standards Program (ZEV1) (EQC adopted in 2005)
2. Clean Fuels Program (CFP1) ([HB2186](#), 2009)
3. Clean Electricity Standard ([HB2021](#), 2021)
4. Advanced Clean Truck Rules (ACT) (EQC adopted in November 2021)
5. Climate Protection Program (CPP) (EQC adopted in December 2021)
6. Clean Fuels Program Expansion (CFP2) (EQC expected adoption in 2022)
7. Clean Car Standards Program Expansion (ZEV2) (EQC expected to initiate rulemaking mid-2022)

The first three are expected to achieve by 2026 a roughly 10 percent reduction in state GHG emissions. The Climate Protection Program is an overarching policy that will restrict sales of fossil fuel sales in the state across multiple sectors increasingly each year starting in 2022. The latter programs are critical to implementing that policy to ease the transition to a low carbon future for all vehicle groups. Some credit trading is allowed prior to 2030, which makes it hard to predict exact forecasts in the near term. The ZEV programs when fully implemented should roughly conform to the goals set out in [SB1044](#).

¹ https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf

Materials following this page were distributed at the meeting.



Metro

Development of the 2023 Regional Transportation Plan (RTP) Financial Plan

September 14, 2022

Introduction

Financial Plan – includes several elements

Revenue forecast – first work task

Retained DKS Consultants to develop

Financial Plan - RTP Chapter 5

2023 RTP Financial Plan Chapter 5: Our Transportation Funding Outlook

Understanding
How
Transportation
is Funded

Revenue Forecast
and Assumptions

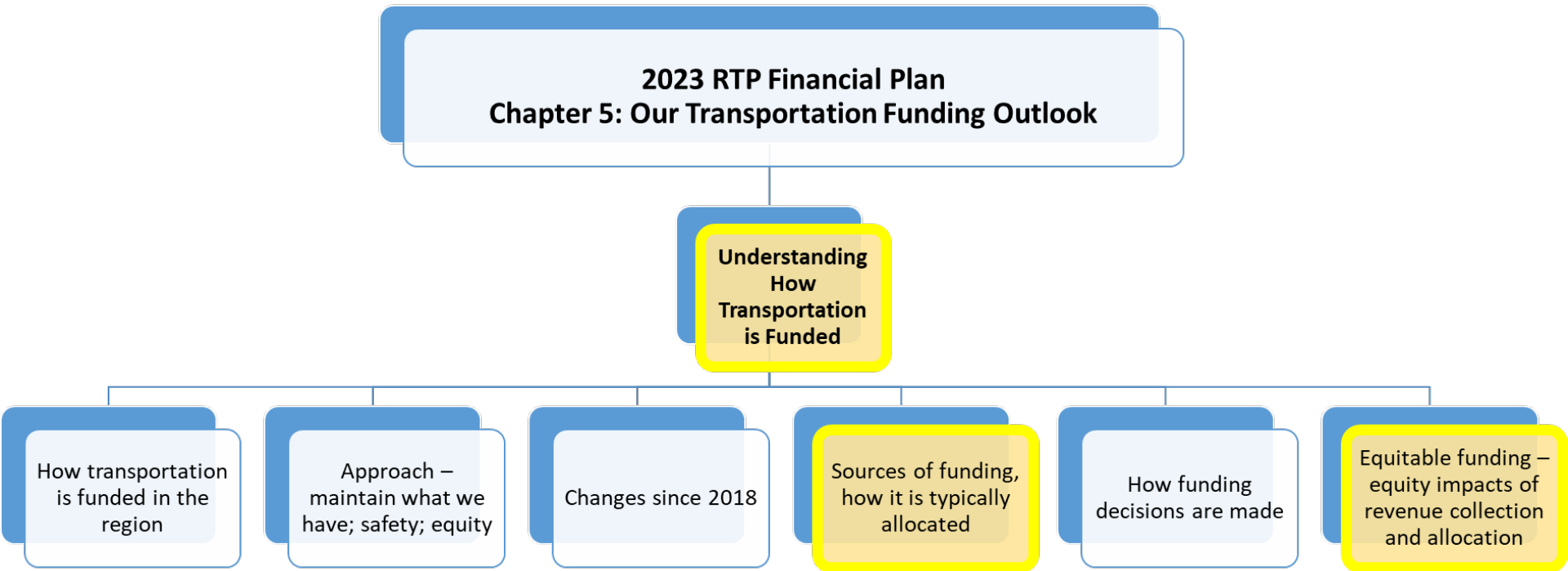
Transportation
System Costs

Demonstrating
Fiscal Constraint

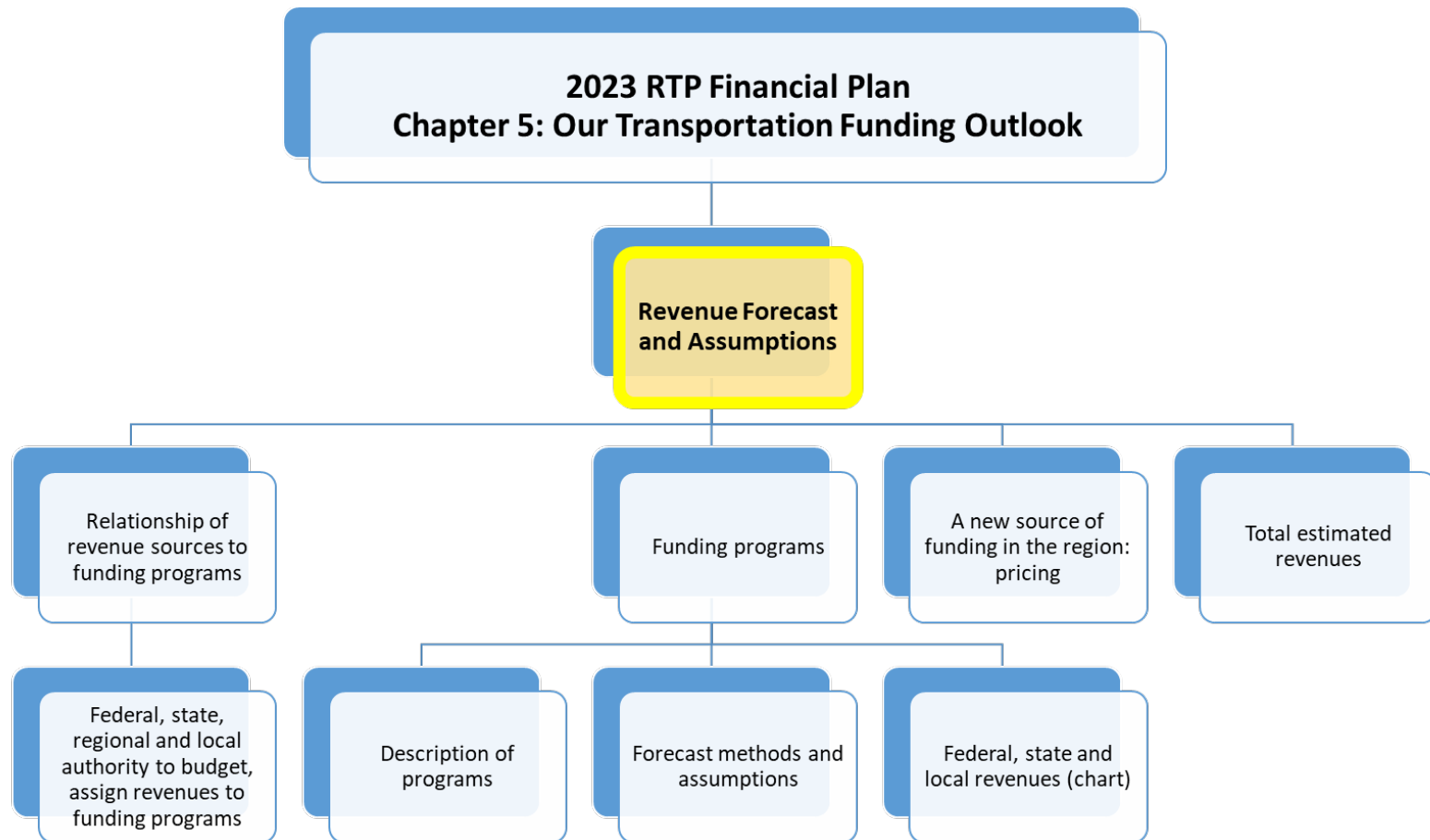
Analysis of
Planned Spending

Moving Forward
Together to Fund
the Transportation
System

RTP Chapter 5 – Understanding How Transportation is Funded



RTP Chapter 5 – Revenue Forecast



Revenue Forecast Elements

Revenue Sources

- Federal
- State
- Regional/Local

Funding Allocation Programs

- Developed by allocating agencies
- Can be single source revenues or mix of revenues

Revenue Forecast Work Tasks

Revenue Sources

- Federal and State to MPO area
- Local agency generated revenues

Funding Allocation Programs

- Revenue mixes to funding programs
- Define purpose and restrictions of funding programs

Work Task Assignments

Gresham Local Revenues Totals				
SDC Program				
Year	Amount	Annual Inflationary Growth	RTP Segment Years Total	RTP Divisions
2015				
2016				
2017				
2018	\$ 2,750,000		2018-20	2018 to 2027 ↓
2019	\$ 2,750,000	0.00%		
2020	\$ 2,750,000	0.00%	\$ 8,250,000	
2021	\$ 2,750,000	0.00%	2021-25	
2022	\$ 2,750,000	0.00%		
2023	\$ 2,750,000	0.00%		
2024	\$ 2,750,000	0.00%		
2025	\$ 2,750,000	0.00%	\$ 13,750,000	
2026	\$ 2,750,000	0.00%	2026-30	
2027	\$ 2,750,000	0.00%		
2028	\$ 2,750,000	0.00%		2028 to 2040
2029	\$ 2,750,000	0.00%		
2030	\$ 2,750,000	0.00%	\$ 13,750,000	
2031	\$ 2,750,000	0.00%	2031-35	

Next Steps

Distribution of revenue forecast worksheets to funding allocation agency staff contacts

Follow up by DKS Staff on agency revenue and allocation process information

Draft revenue forecast and funding framework for RTP project solicitation process

Questions or Comments?



Arts and conference centers

Garbage and recycling

Land and transportation

Oregon Zoo

Parks and nature

oregonmetro.gov

September 14, 2022

Equitable Transportation Funding

TPAC Presentation

Lake McTighe, Metro

Theresa Carr and Aria Wong, Nelson\Nygaard



Metro



NELSON
NYGAARD

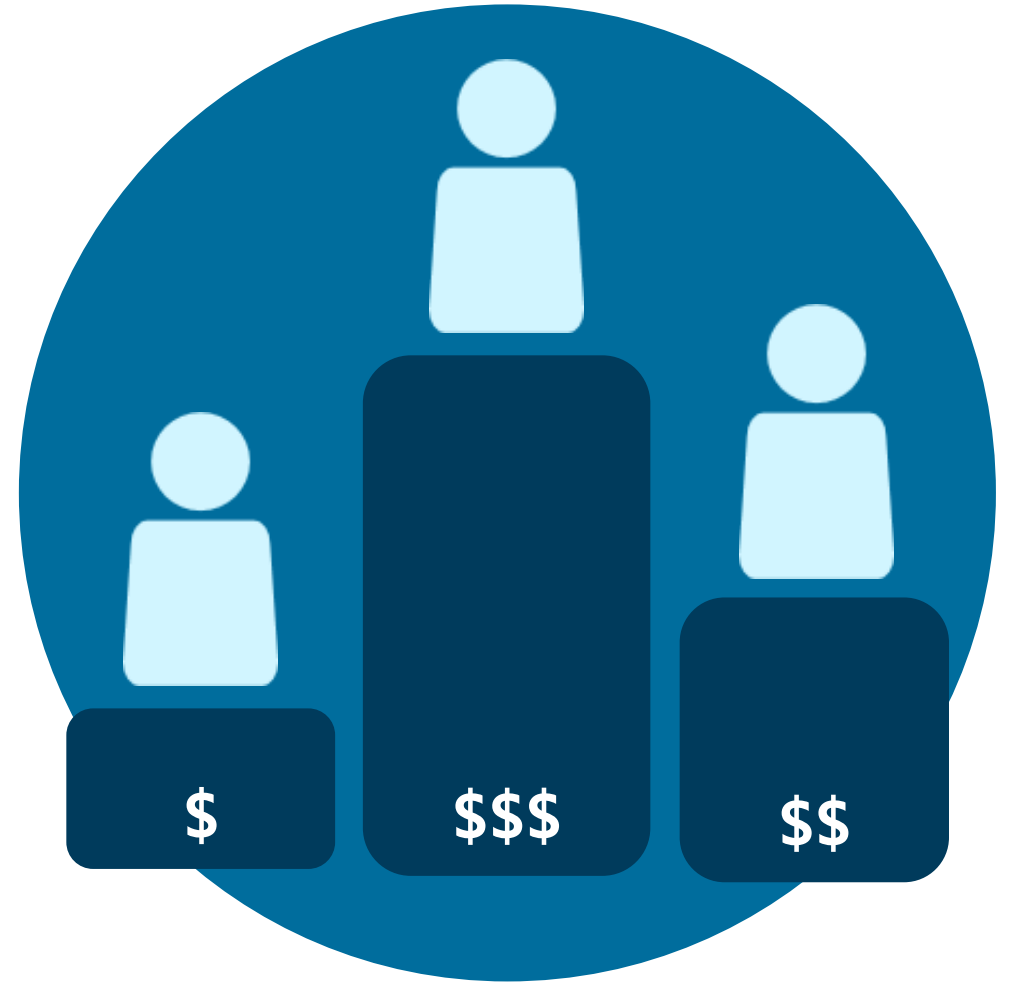
Presentation topics

1 Purpose and overview

2 *Draft Equitable Transportation Funding Research Report*

Outcomes of discriminatory planning
Funding the transportation system
Key findings and equity challenges
Recommendations to improve equity outcomes

3 Next steps



Purpose and Overview



Purpose of today's discussion

- Share *Draft* Equitable Transportation Funding Research Report
- Hear input from TPAC to prepare final draft

Questions for TPAC

- How would you like to see the findings and recommendations inform the update of the RTP Financial Chapter?
- What questions or comments do you have on the that should be considered as the report is finalized?

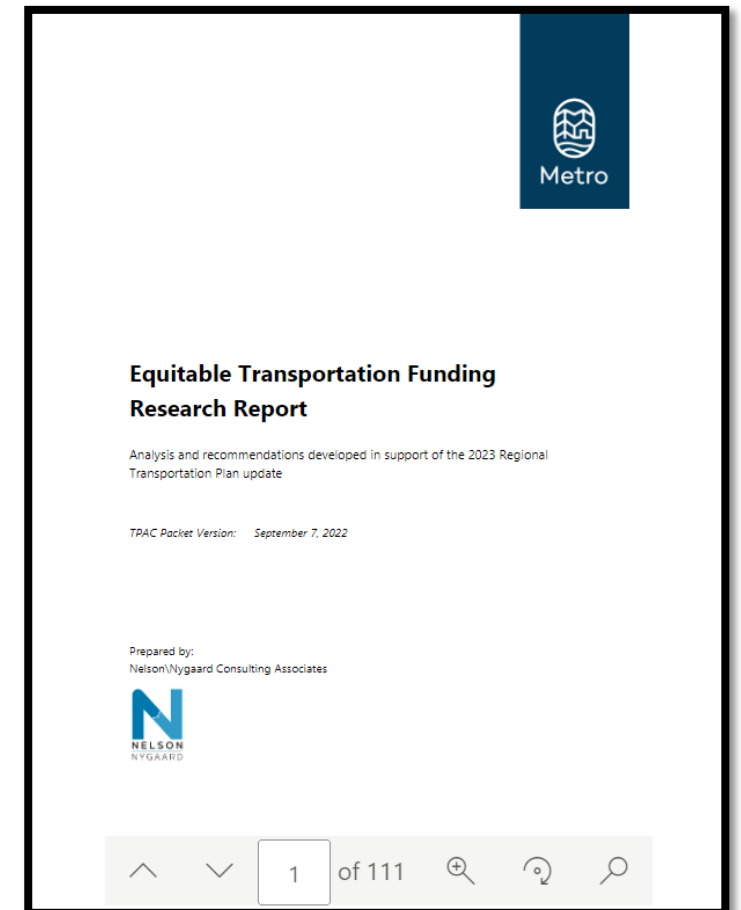
Draft Equitable Transportation Funding Research Report

Developed to support the 2023 RTP focus on equity

Provides an inventory of existing, emerging and potential revenue sources for transportation

Illuminates how revenue collection and disbursement may contribute to transportation inequities

Provides more transparency and clarity about how the regional transportation system is funded



Supporting the 2023 RTP Update



Equitable Funding Report

- Assessment of revenue sources
- Assessment of allocations
- Equitable funding recommendations

RTP Financial Plan

- Revenue forecast (including tolling)
- Equitable funding research
- Future funding options

Congestion Pricing

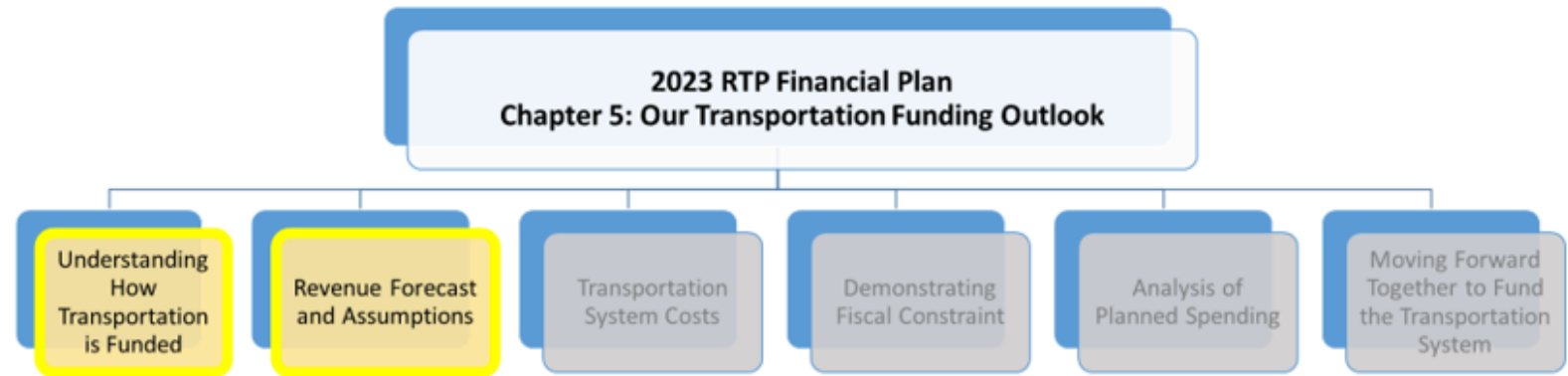
- Policy to create an equitable funding framework

Future Work

- Potential recommendations for future equitable funding strategies in RTP Chapter 8

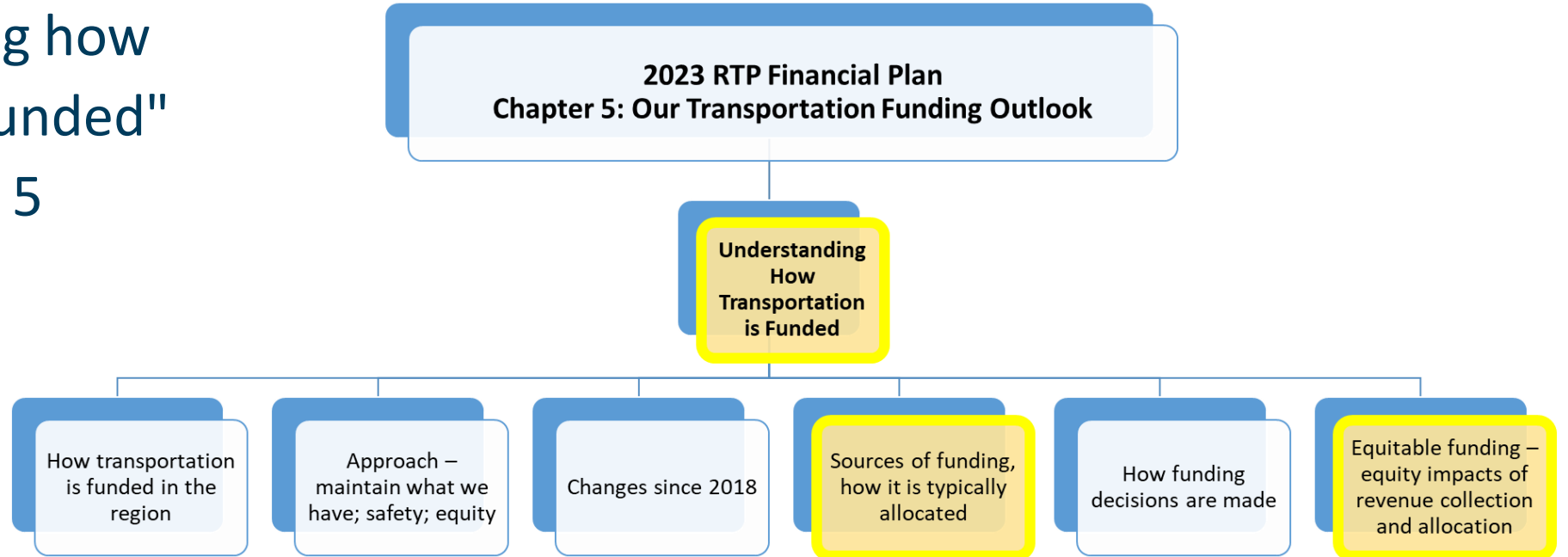
How This Report Will be Used

- Inform elements of *Chapter 5: Our Transportation Funding Outlook* of the 2023 RTP
- Inform future discussions as agencies consider potential new revenues
- Other?



Informing Elements of Chapter 5

Findings from the report will primarily be reflected in the "Understanding how transportation is funded" section of Chapter 5



This work originates in foundational planning and policy

- Adopted Six Desired Outcomes
- Metro strategic plan to advance racial equity
- Regional Congestion Pricing Study
- Pricing Options for Equitable Mobility (POEM)
- Equity and Mobility Advisory Committee (EMAC)
Shaping an Equitable Toll Program

***Draft* Equitable
Transportation Funding
Research Report**



Defining Equity

- We are defining **transportation equity** as the elimination of barriers and disparities relating to transportation
- Addressing inequities means providing access to safe, affordable, convenient, and reliable transportation and opportunities
- It also requires listening to and working with the communities that have little power to change systems



Defining Equitable Transportation Funding

Equitable transportation funding considers the collection and disbursement of revenues in relation to a larger community context

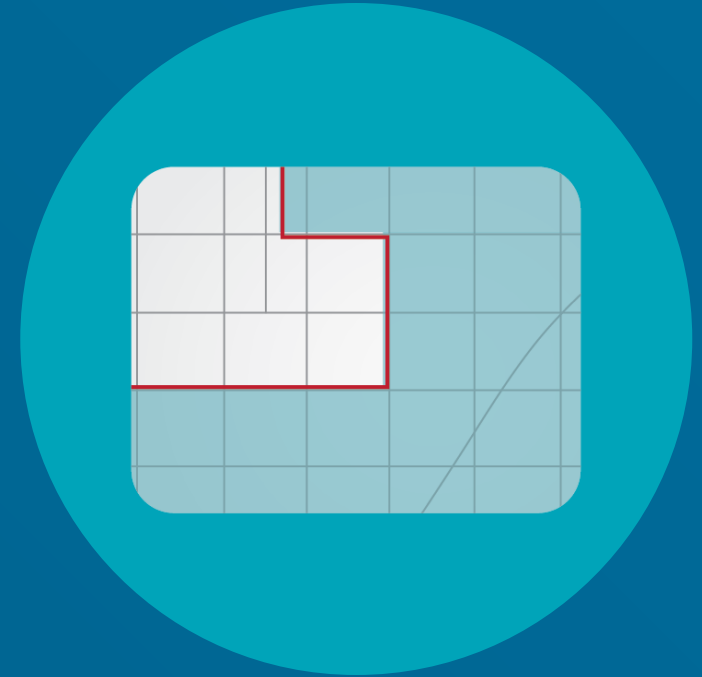
With the goal is to address past harms and avoid further burdens for people with lower income and communities of color

Leading with race recognizes that racism is the foremost, deeply pervasive factor contributing to unequal access, opportunities, and health outcomes that persist today for all people that are negatively impacted

The report addresses two key questions

1. *Who does revenue collection burden and benefit the most?*
2. *How can the revenue collection and disbursement be balanced to address inequities?*

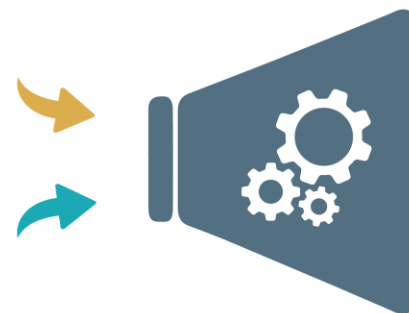
Outcomes of Discriminatory Planning



Burden and Harm

Transportation planning and funding practices disproportionately burden and harm low-income households, people of color, and people with disabilities.

People with **lower incomes** spend more of their income on transportation costs than people with **higher incomes**...

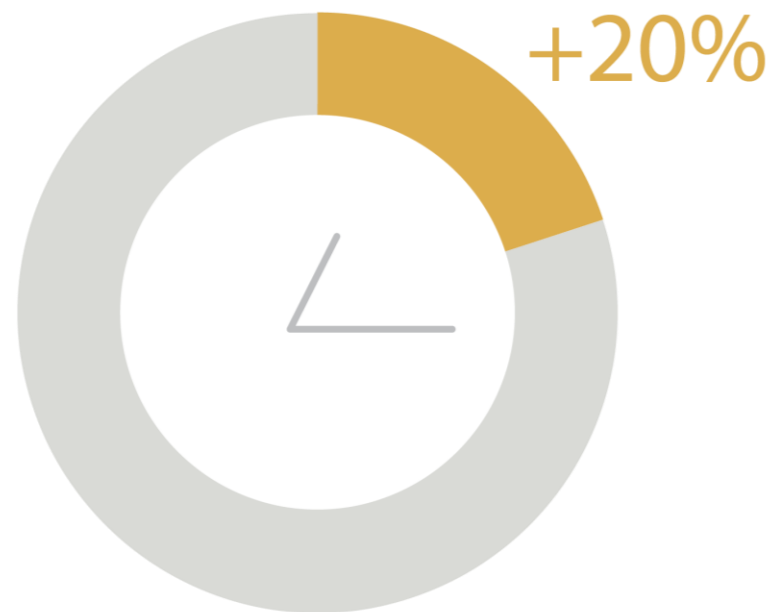


...but lower-income communities are **less likely** to benefit from spending on transportation projects.



Inequities in Commute Times

In the Portland region, the average commute time for Black commuters living below the federal poverty level is 20% longer than white commuters.



Inequities in Burden of Cost



The lowest income households spend 28.8% of their income on transportation.

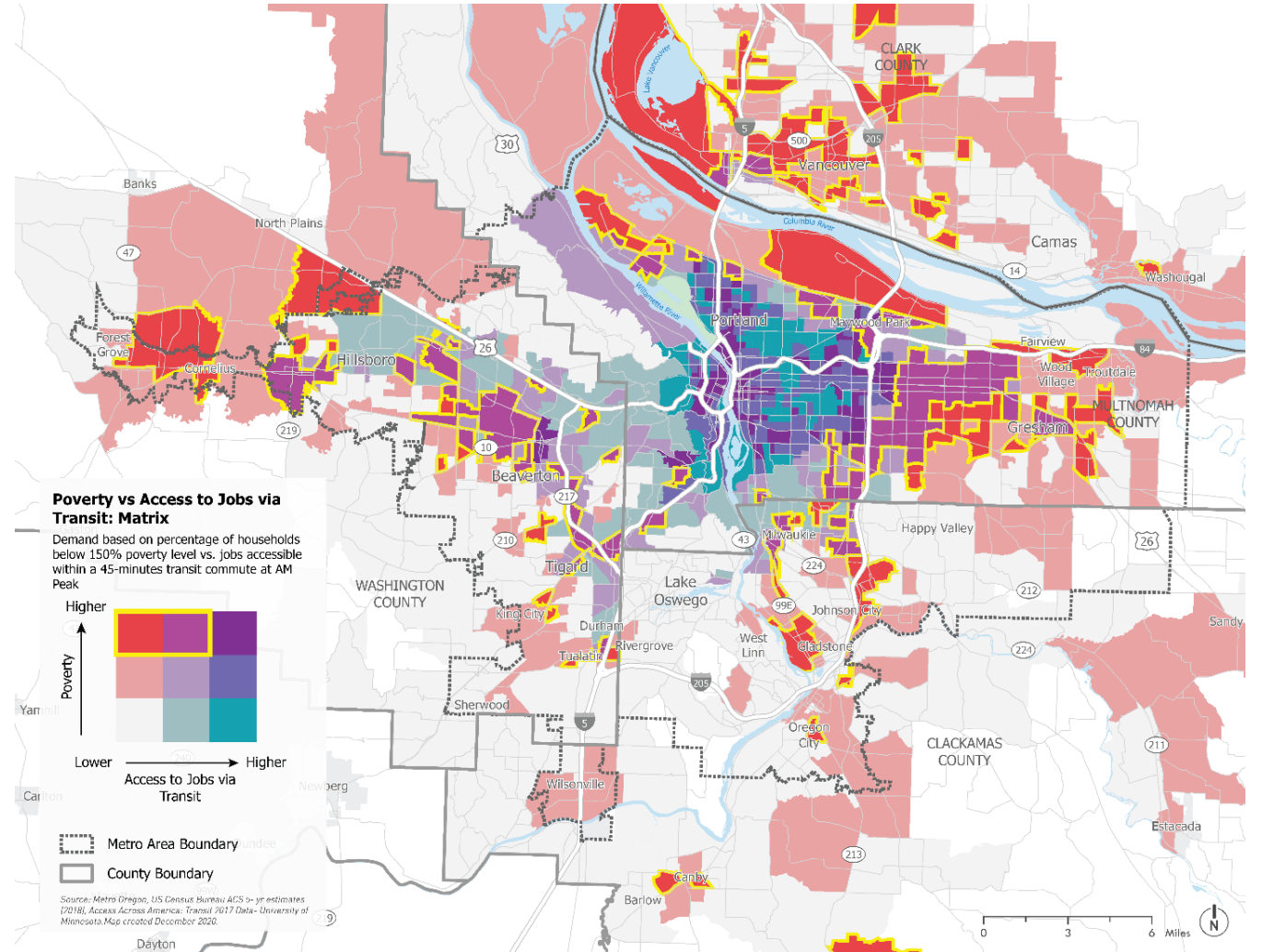
VS.



Those with the highest income spend 9.5% or less.

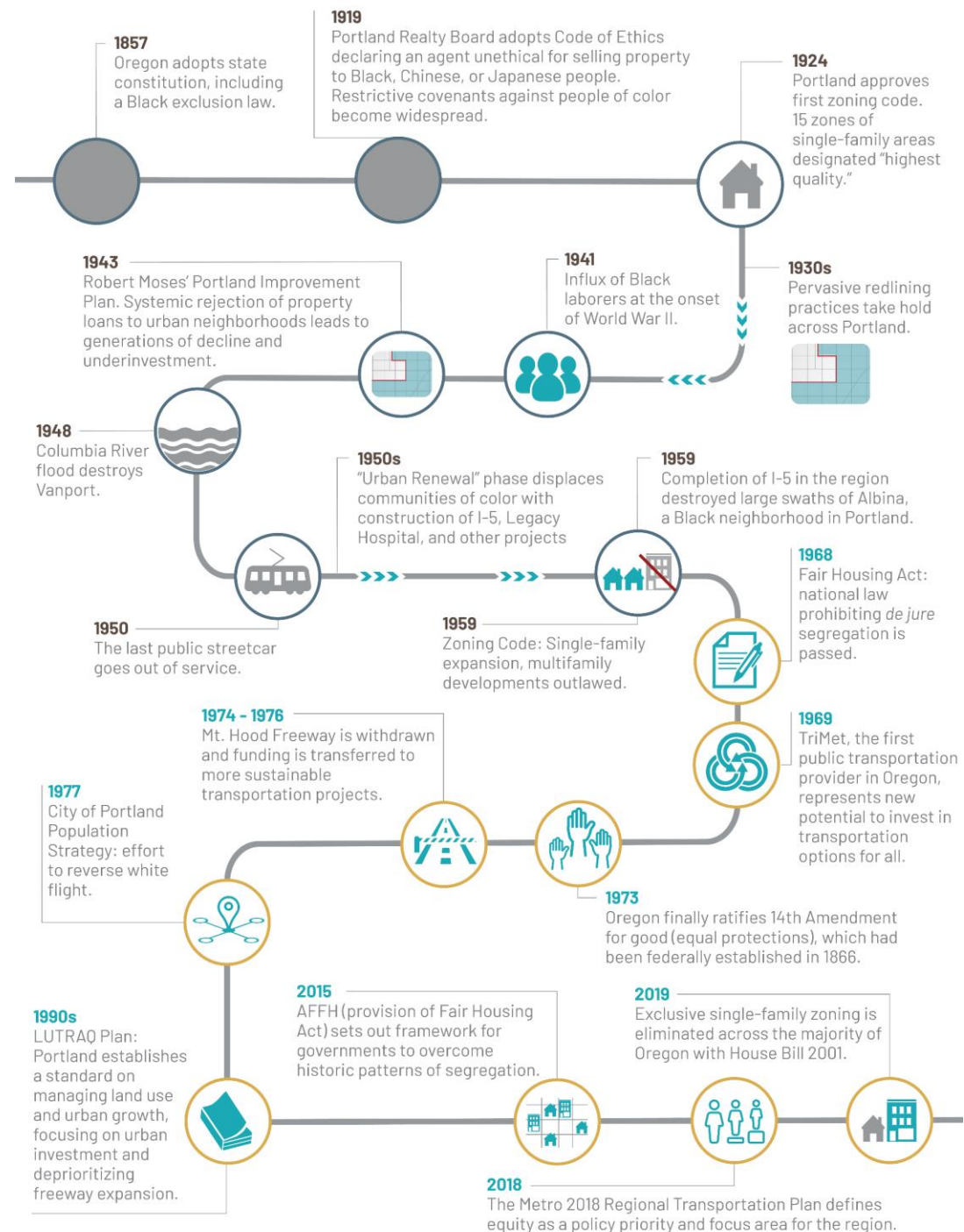
Communities with Higher Levels of Poverty and Limited Access to Jobs Via Transit.

There is a clear correlation between low-income households and lack of access to opportunity via transit



Timeline of Discrimination and Planning

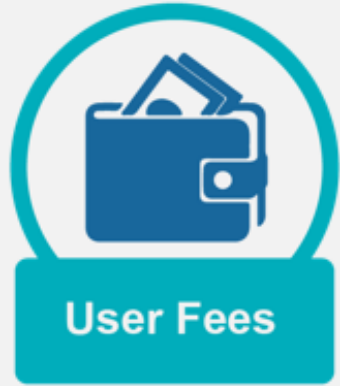
- The greater Portland region has a long history of discrimination in planning
- Since the late 1960s efforts to undo the damage have made progress, but more work is needed



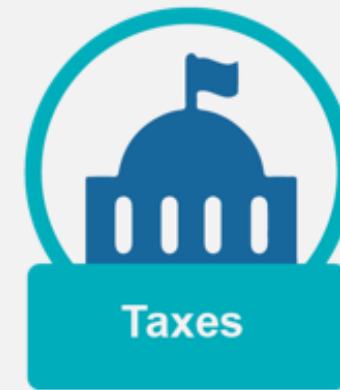
Funding the Transportation System



Types of Revenue Sources



- Includes license fees, vehicle taxes and fees, tolls, fares, and gas taxes
- Many of these fees are paid on a per-use basis rather than a flat fee
- Households with different ranges transportation options to meet their needs will also have different ability to manage the impact of these fees



- Paid at federal, state and local levels
- Some taxes are dedicated for transportation, while other taxes are put into a general fund and are later appropriated for transportation purposes
- The ultimate purpose of these funds may be less visible to the payer

Revenue & Funding From Many Levels



Federal

- Federal motor fuel tax, which funds FTA and FHWA programs
- General funds (mostly collected as personal income tax, corporate income tax, and payroll tax)



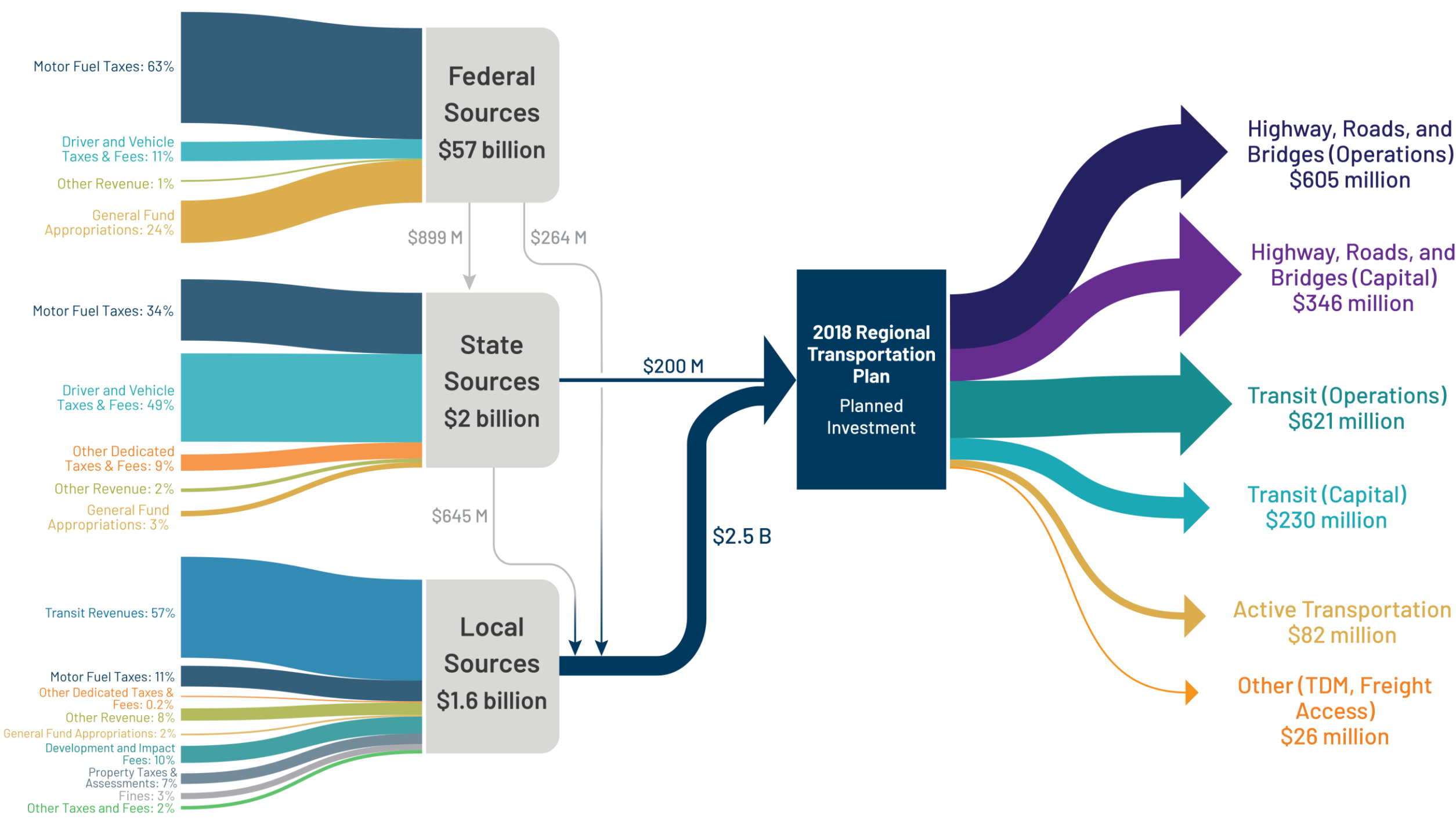
State

- State motor fuel tax
- Driver and vehicle and fees
- Weight mile tax
- Other taxes and fees including payroll tax, sales tax, and license fees



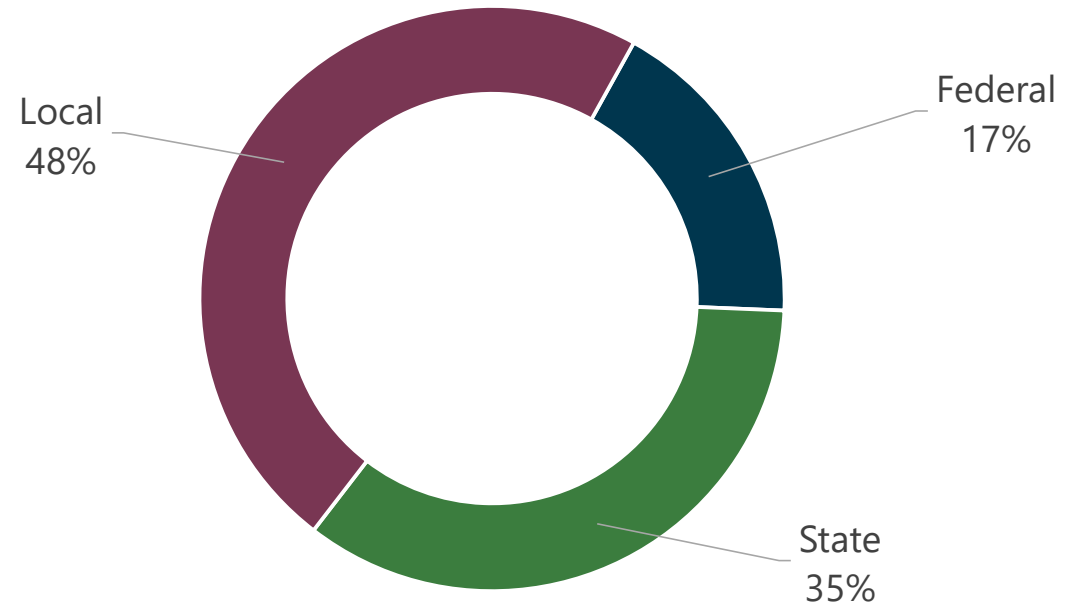
Local

- Transit revenues
- Motor fuel taxes
- Variety of local funding sources including development impact fees, property taxes, general funds, taxes, fees, and general fund appropriations



2018 RTP Revenue Sources *by government level*

*Almost half of revenues
in the RTP financial
plan are local*

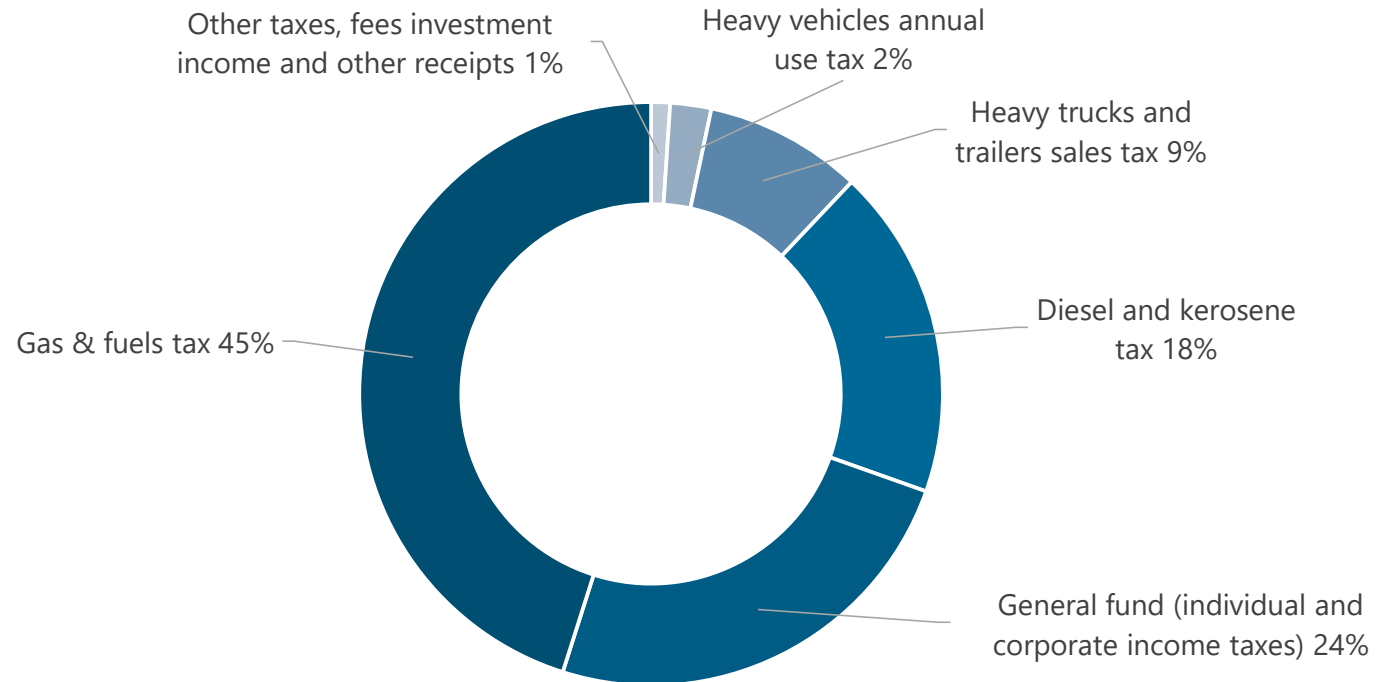


Transportation Revenue Sources

Federal

Gas and fuels tax contribute the largest portion

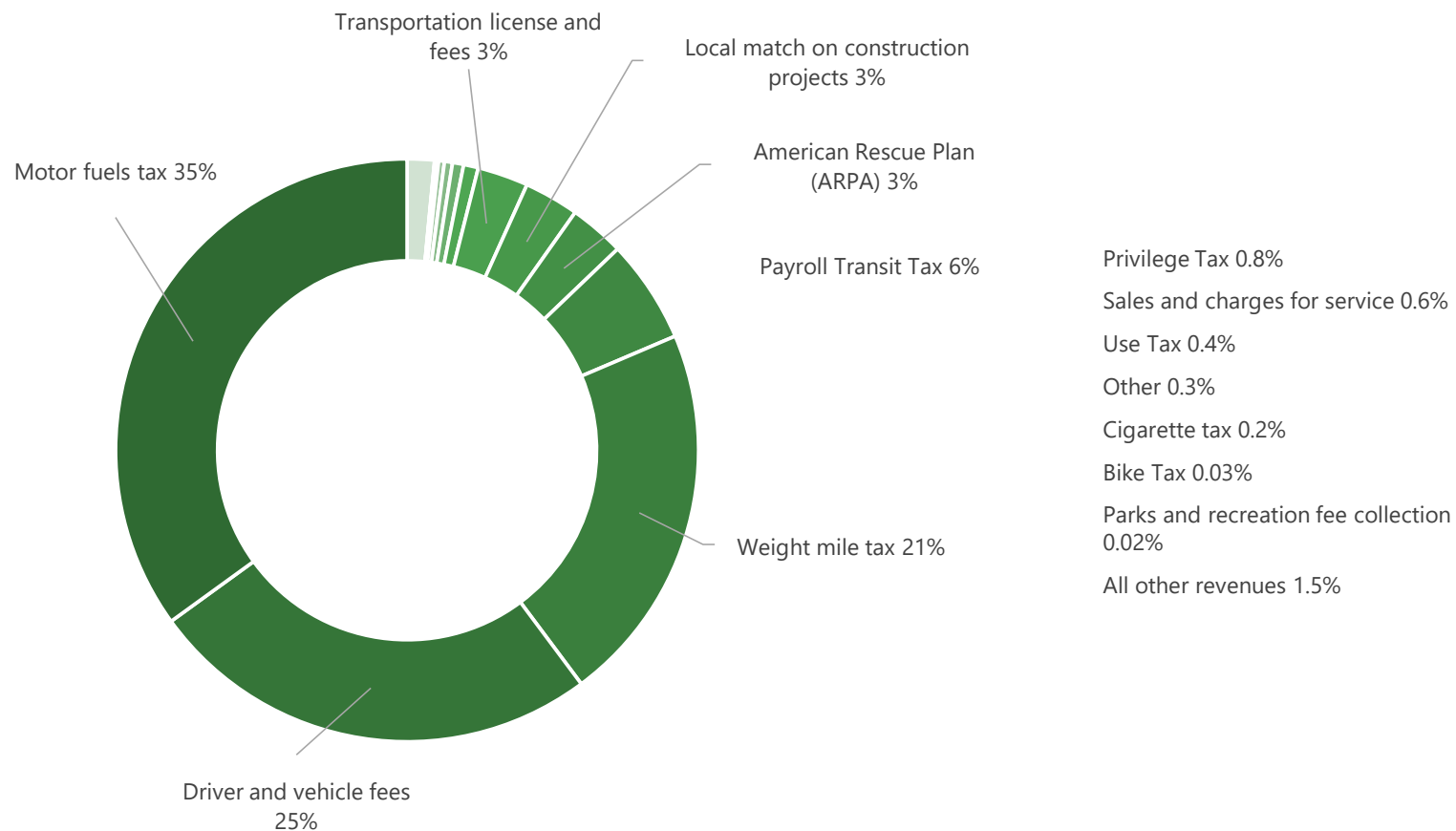
But almost a quarter of funding comes from the General Fund



Transportation Revenue Sources

State

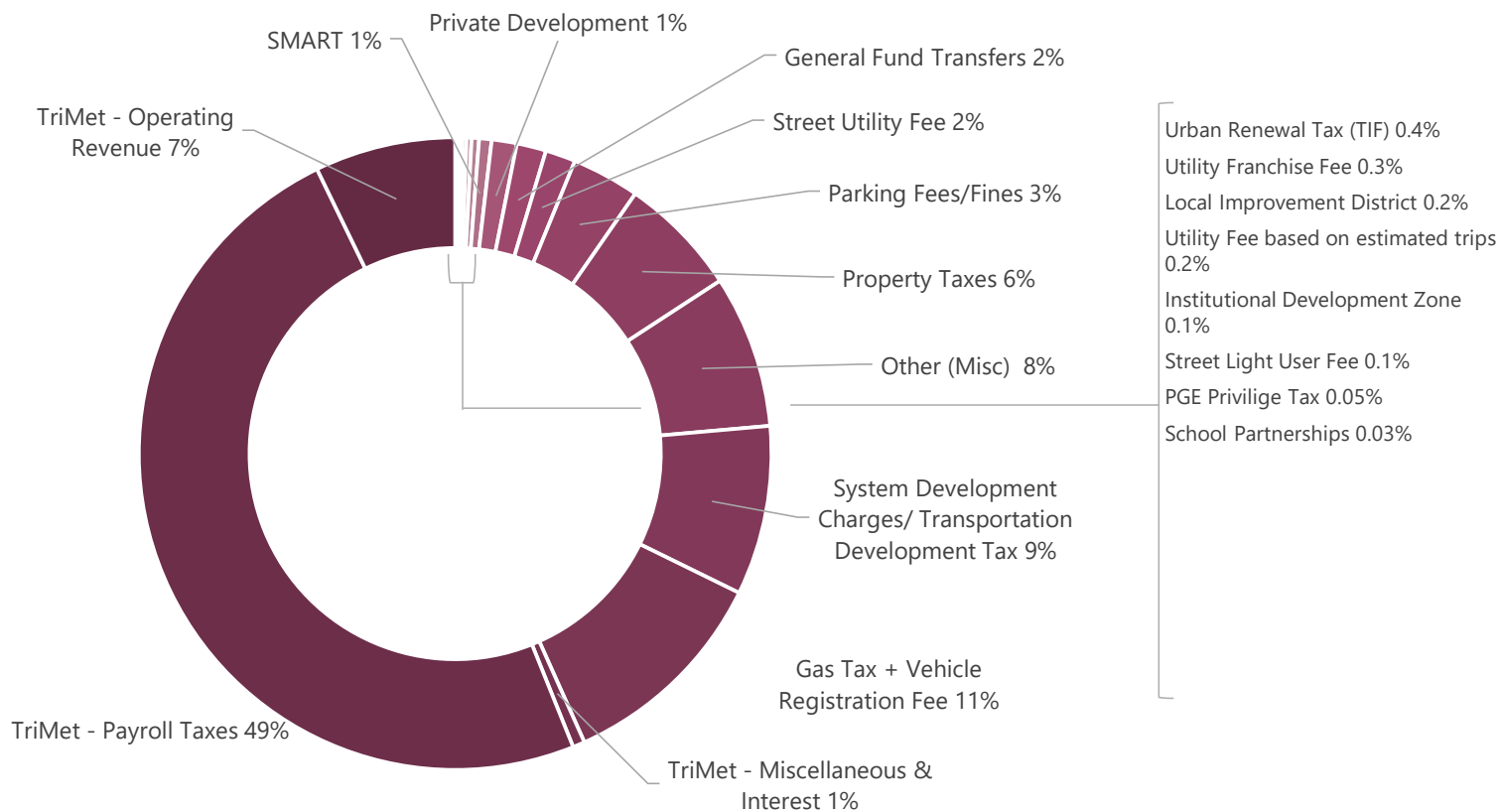
The gas tax and driver and vehicle fees contribute 60% of state funds in the RTP



Transportation Revenue Sources

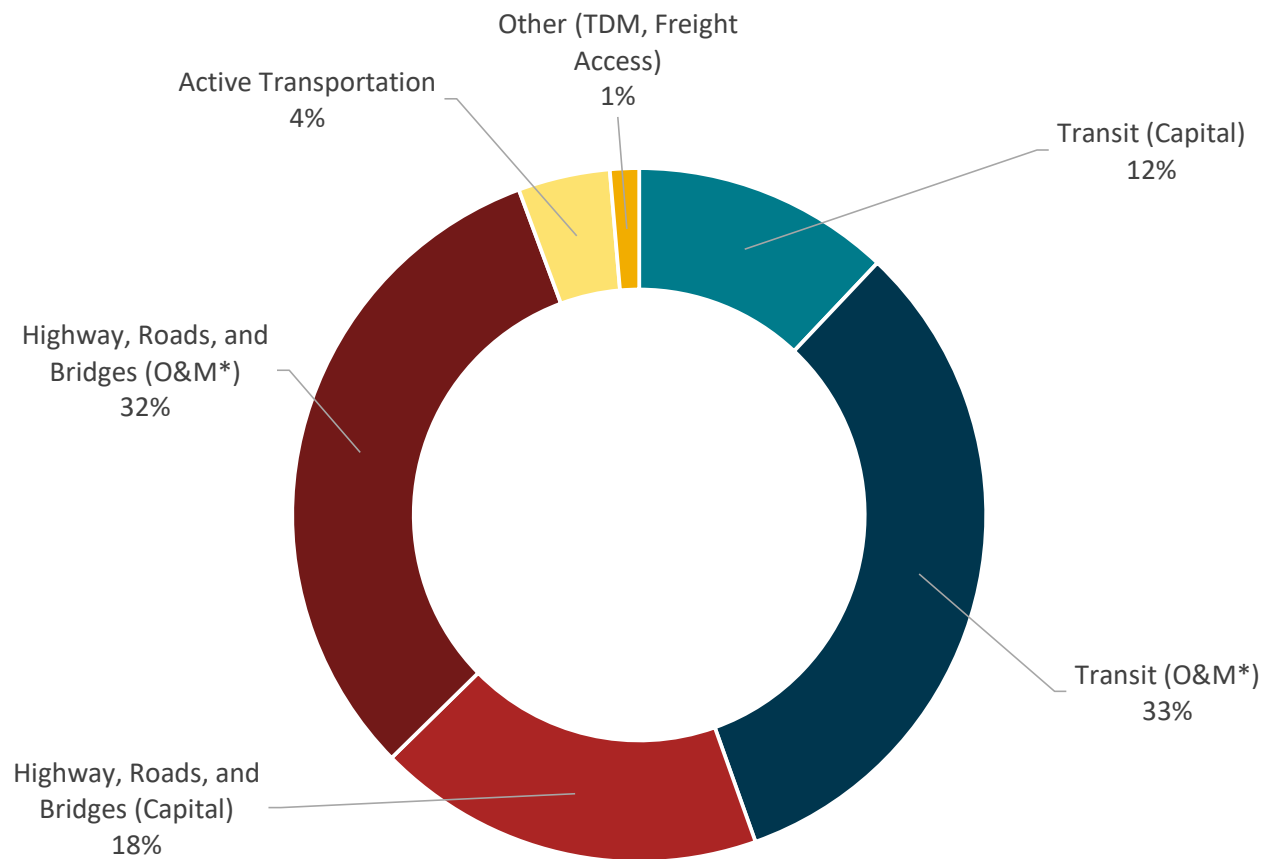
Local

TriMet Payroll Taxes make up almost half of local funds



Planned Funding Allocations *2018 RTP*

*Planned funding
by investment
category*



Key Findings and Equity Challenges



How We Assessed Equity by Revenue Source



- **Share:** Do lower-income households pay a higher share of their income?
- **Burden:** Does the source provide subsidies or exemptions to alleviate unfair burdens?
- **Tiered:** Is the fee or tax graduated based on the value of the item?



- **Benefits:** Are low-income households and people of color directly benefiting?



- **Payments:** Are unbanked or underbanked individuals unfairly penalized?
- **Penalties:** Do unpaid fines, fees, or taxes trigger penalties and legal repercussions?

Equity Assessment (Appendix A)

- The assessment includes many, but not all, of the existing revenue sources at the **federal, state, and local levels**.
- Assigned an **equity rating** (variable, poor, fair, good) based on performance against the measures
- There are many **societal benefits** to collecting revenues to fund the transportation system
- The goal of the assessment is to **evaluate the impacts** of the way the system is currently funded on low-income households and people of color

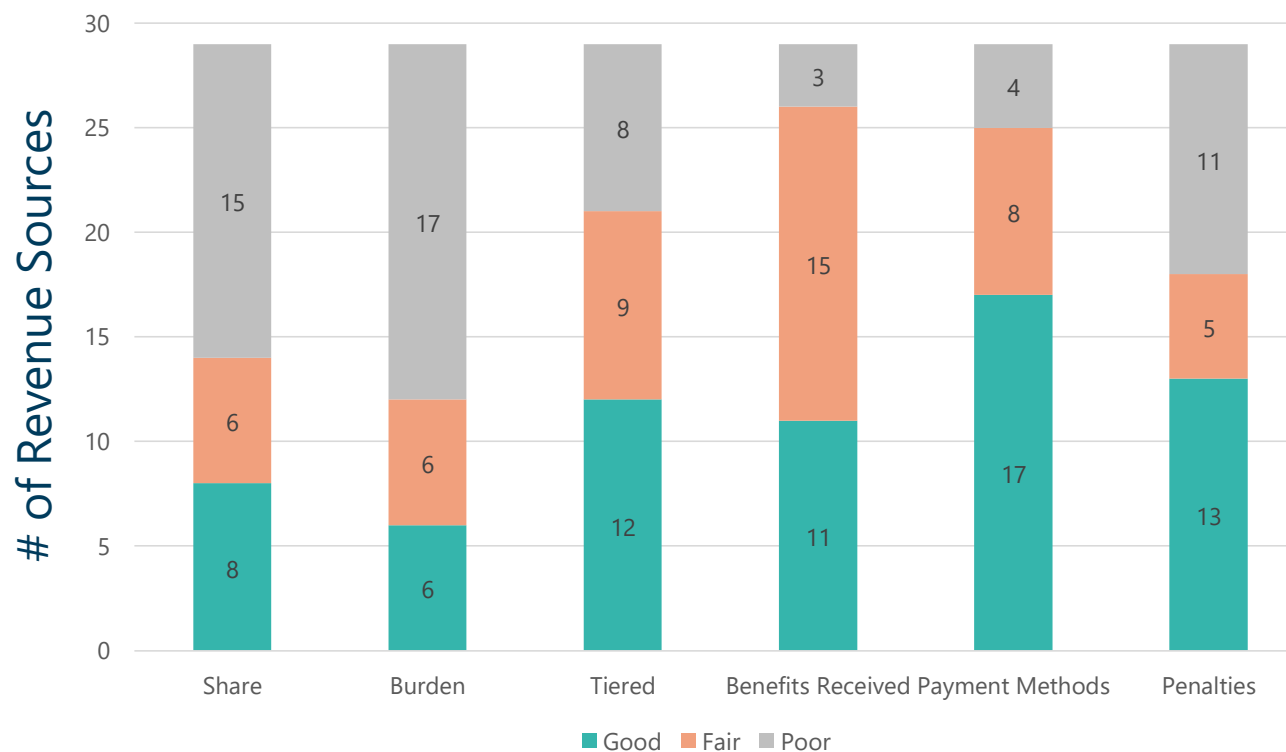
Existing Revenue Sources – Summary Table¹

Source	Overall Equity Rating	Share	Burden	Tiered	Benefits Received	Payment Methods	Penalties
Federal							
Fuels tax	Poor	Poor	Poor	Poor	Fair	Good	Good
Heavy trucks and trailers sales tax	Good	Good	Good	Good	Fair	Good	Good
Heavy vehicles annual use tax	Good	Good	Good	Good	Fair	Good	Good
Individual income taxes, corporate income taxes (General Fund transfer)	Fair	Good	Fair	Fair	Fair	Poor	Poor
State							
Motor Fuels Tax	Poor	Poor	Poor	Poor	Fair	Good	Good
Weight Mile Tax	Good	Good	Good	Good	Fair	Good	Good
Driver and Vehicle Fees	Poor	Poor	Poor	Fair	Poor	Good	Fair
Transportation License and Fees	Good	Good	Good	Good	Fair	Good	Good
Cigarette Tax	Fair	Poor	Poor	Fair	Good	Good	Good
Bike Tax	Poor	Poor	Poor	Fair	Good	Fair	Fair
Privilege Tax	Fair	Fair	Poor	Good	Good	Good	Good
Statewide Transit Tax (employee paid)	Fair	Fair	Poor	Fair	Good	Fair	Poor
Income Tax (General Fund Transfer)	Poor	Poor	Fair	Fair	Fair	Poor	Poor
Lottery Revenues	Fair	Poor	Poor	Fair	Good	Good	Good
Local (differs by municipality)							
Transit Payroll Tax (employer paid)	Good	Good	Good	Good	Good	Fair	Fair
Transit Fares (Passenger Revenues)	Fair	Fair	Fair	Poor	Good	Fair	Poor

Summary of Ratings

- Of the 29 existing sources that were assessed, **Share and Burden** received the most “Poor” ratings.
- These two measures represent how much of a **financial burden** a given revenue source represents for low-income households.
- Many revenue sources offer **alternative payments methods**. This measure received the most “Good” ratings.

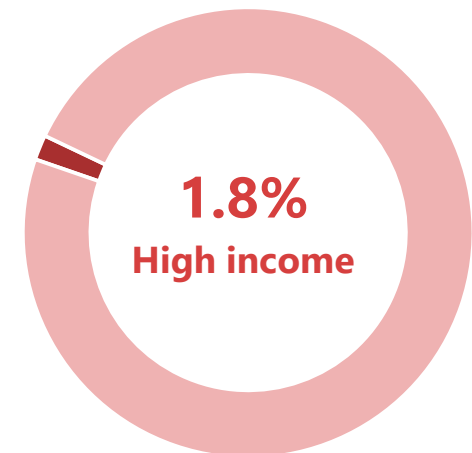
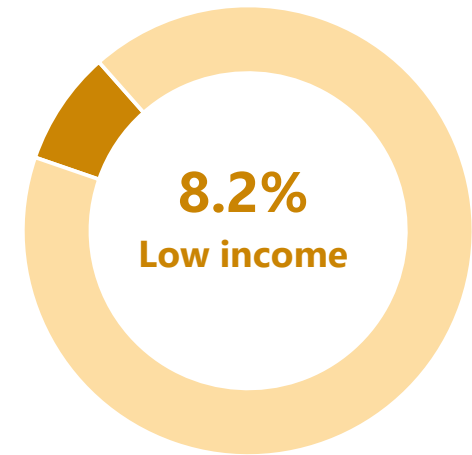
Summary of Rankings by Measure



Disproportionate Burden and Worsening Inequities

- Some revenue sources play larger roles in funding the transportation system. They have an outsize impact on individuals and so their equity ratings are especially important.
- **Motor fuel taxes, transportation system development charges, and property taxes** are key revenue sources that have a disproportionate burden for share or burden of costs.

Share of Income Spent on Motor Fuel in the United States



Long-Term Community Impacts of Fines and Penalties

- Fines and penalties have the potential to be major sources of debt, typically impacting those with the lowest incomes if paid late or not at all. Revenue sources with the lowest or no chance of penalties are those collected at the point of sale.
- 11 revenue sources received “Poor” ratings and 5 received “Fair”.
- Revenue sources with a “Good” rating that have the potential for penalties were taxes or fees levied on businesses or commercial operations.
- Fees and fines disproportionately harm low-income households and people of color. People of color are given citations at a higher rate than white people.

Burden of Being Underbanked or Unbanked

** Underbanked: those without access to a bank account with an insured institution.*

Unbanked: those who do not have the ability to use a bank account.

- Payment methods received the most “Good” ratings (17), with 8 “Fair” ratings and 4 “Poor” ratings.
- Many revenue sources offer alternative payment methods by cash or money order that allow underbanked or unbanked individuals* to participate.
- However, this group is vulnerable as payment methods shift towards digital platforms, including digital transit payment.
- Parking fees can burden the under or unbanked. Cash payments must be exact change. Unpaid parking fees have the potential to result in citations and debt.

Revenue Allocation Constraints

- Funding constraints determine where and how revenue can be spent and are applied at the revenue source, fund, or program level.
- State and local motor fuel taxes all are subject to the constitutional requirement for exclusive spending on roadways, prohibiting the use of those funds for transit and other uses outside the road right of way.
- While motor fuel tax funds and other motor vehicle revenue sources are collected by users of roadways, restricting these funds to pay for further roadway improvements raises equity issues.
- These restrictions encourage further use and funding of roadway networks that require access and ability to use a personally owned vehicle.

Recommendations to Improve Equity Outcomes



Recommendations

Transportation needs in the greater Portland region exceed existing revenue capacity. Our recommendations are organized as follows:

- Foundational principles
- Fair and equitable public outreach
- Equitable revenue collection
- Equitable revenue disbursement

Foundational Principles

- **No one solution**
- **Transparency is key**
- **Elevate community voices**
- **Put it into policy**

Fair and Equitable Public Outreach

- Provide ample opportunities for meaningful public engagement and input
- Opportunities should be offered in-person and online, at a variety of locations and times, and available for individuals of varying English proficiency and non-English speakers
- Work with community organizations
- Communities affected by specific policies, funding efforts, or developments must be key contributors to the planning process

Equitable Revenue Collection

- Restructure fines so they are non-compounding and do not impact credit scores or employment eligibility
- Prorate payment structures for parking, license and registration fees, violation fines, and tolling and congestion charges
- Provide alternatives to paying violation fines and split-repayment plans
- Restructure fare evasion programs to be more lenient and offer repayment plans or alternative forms of payment
- Allow license and registration renewal with unpaid fines

Equitable Revenue Collection, cont.

- Remove barriers to acquiring Honored Citizen Fare Cards
- Reduce reliance on regressive tax strategies / encourage more progressive taxes and fees
- Adjust the gas tax according to inflation
- Explore unified financial assistance system models

Equitable Revenue Disbursement

- Redistribute congestion pricing revenue towards investments focused on safety, transit, and active transportation in equity focus areas.
- Incorporate anti-displacement policies to help mitigate displacement risk
- Explore using revenues from new funding sources to offset taxes and fees for low-income households

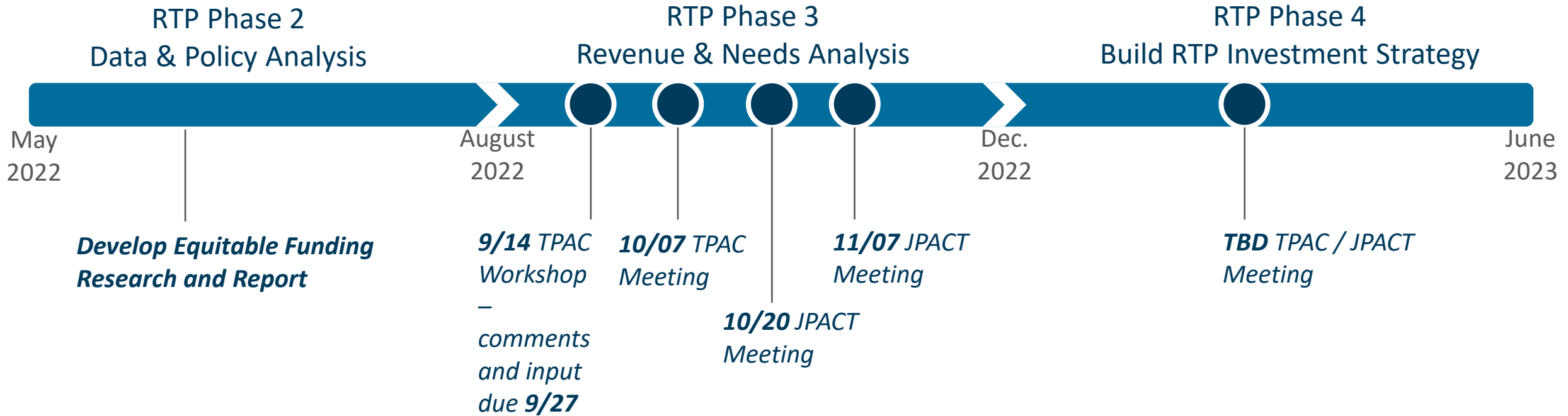
Equitable Revenue Disbursement, cont.

- Tie transit costs to time of day or user to accommodate shift schedules and night/late-shift workers
- Encourage more employers to participate in transit passes or bikeshare programs
- Encourage and incentivize environmentally friendly investments in mid- and low-income households

Timeline and Next Steps



Timeline and next steps



Questions for TPAC

- How would you like to see the findings and recommendations inform the update of the RTP Financial Chapter?
- What questions or comments do you have on the that should be considered as the report is finalized?

Thank you!



Metro



Lake McTighe, Lake.McTighe@oregonmetro.gov

Theresa Carr, tcarr@nelsonnygaard.com

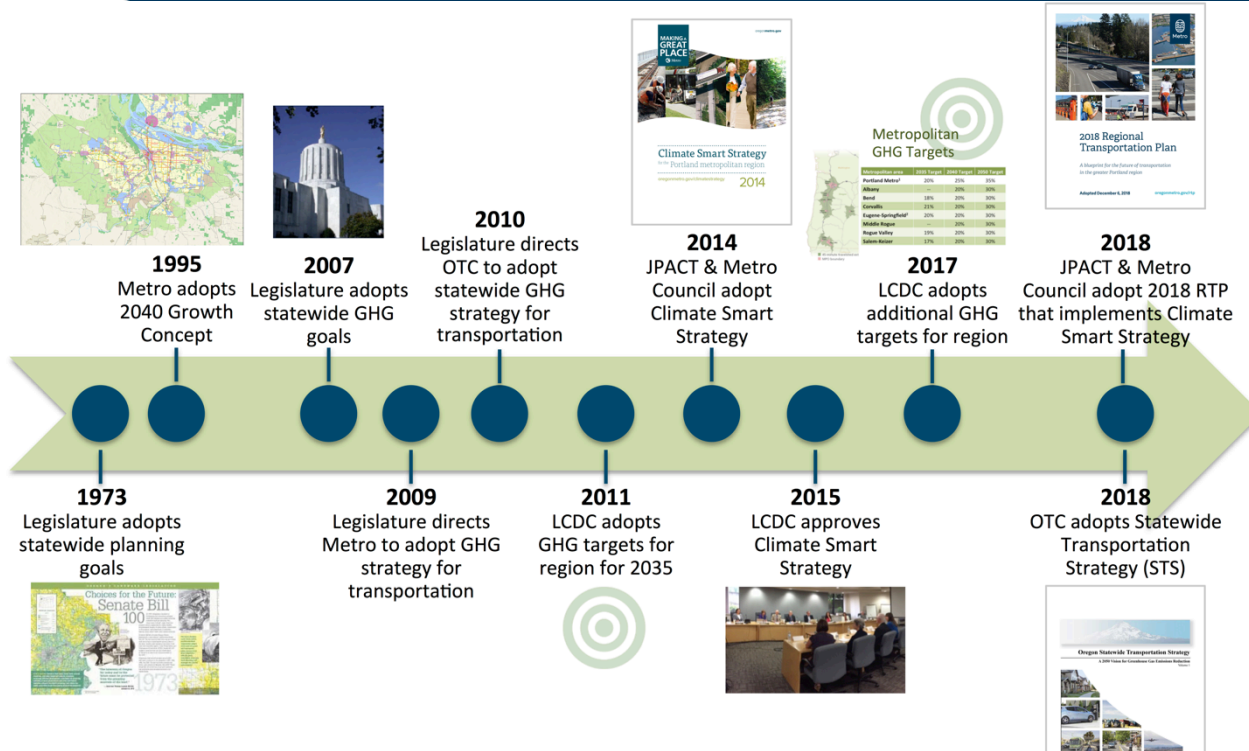
Aria Wong, awong@nelsonnygaard.com



Metro

**2023 Regional Transportation Plan
Climate Smart Strategy Update – Kick-Off**
TPAC Workshop | September 14, 2022

History of reducing climate pollution from transportation in Oregon



Executive Order 20-04 and statewide and federal rulemaking

State directed region to reduce greenhouse gas emissions

- 2007** Legislature adopts House Bill 3543 (Global Warming Actions)
- 2009** Legislature adopts House Bill 2001 (Jobs and Transportation Act)
- 2011** LCDC adopts greenhouse gas reduction targets for our region (OAR 660-044)
- 2012** LCDC adopts Dec. 31, 2014 deadline for adopting Climate Smart Strategy (OAR 660-044)
- 2017** LCDC adopts updated greenhouse gas reduction targets for our region (OAR 660-044)
- 2022** LCDC adopts Climate-Friendly Equitable Communities rules (OAR 660-044 and OAR 660-012)



Regional Greenhouse Gas Targets

per capita light vehicle greenhouse gas emissions reduction below 2005 levels
(in addition to reductions anticipated from changes to fleet and technology)



OAR 660-044 adopted by the Oregon Land Conservation and Development Commission in 2011 and amended in 2017



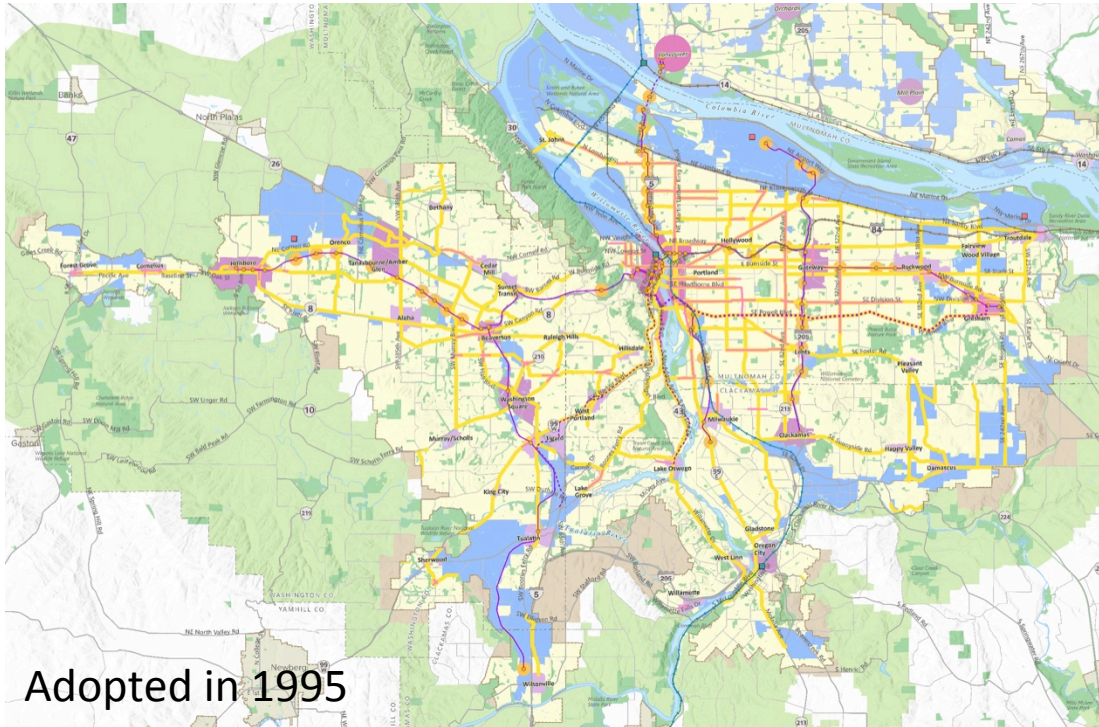
Metropolitan area	2035 Target	2040 Target	2050 Target
Portland Metro¹	20%	25%	35%
Albany	--	20%	30%
Bend	18%		
Corvallis	21%		
Eugene-Springfield²	20%		
Middle Rogue	--		
Rogue Valley	19%		
Salem-Keizer	17%		

¹ Required scenario planning, adoption and implementation

² Required scenario planning

Meeting these targets sets us 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

2040 Growth Concept is our platform for local and regional climate action



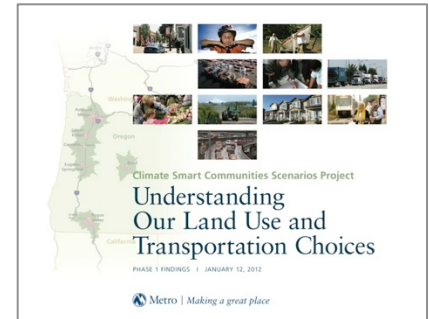
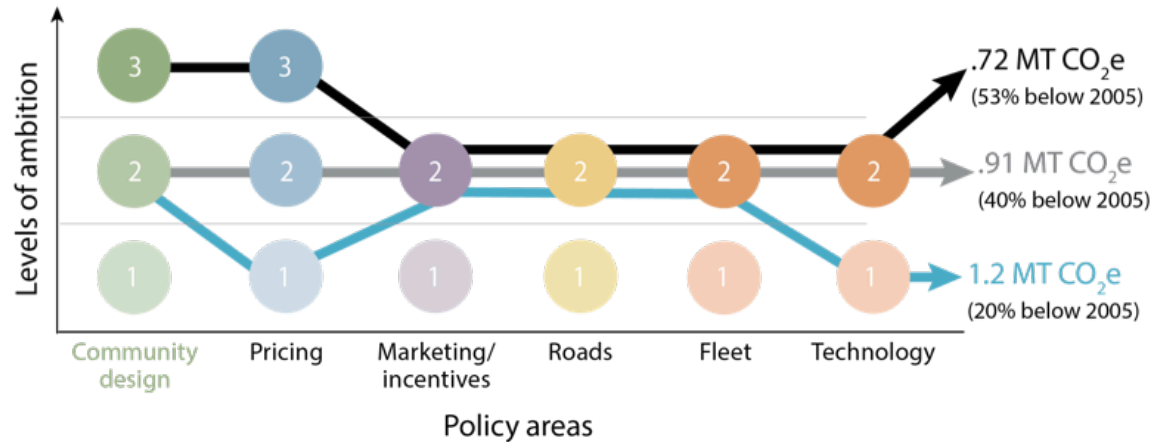
Implemented through adopted community and regional plans



Building toward six desired outcomes

Climate Smart Strategy Approach (2014)

We tested 144 scenarios; more than 90 met or exceeded our target for 2035



Strategies with the **largest** carbon reduction potential in our region

Climate Smart Strategy | Largest potential carbon reduction impact*



Vehicles and Fuels (Investment)

- Newer, more fuel efficient vehicles
- Low- and zero-emission vehicles
- Reduced carbon intensity of fuels



Pricing (Policy)

- Carbon pricing
- Gas taxes
- Per-mile road usage charges (e.g., OReGO)
- Parking management and pricing
- Pay-as-you-drive private vehicle insurance



Community Design (Policy with Investment)

- Walkable communities and job centers facilitated by compact land use in combination with walking, biking and transit connections



Transit (Investment)

- Expanded transit coverage
- Expanded frequency of service
- Improvements in right-of-way to increase speed and reliability of buses and MAX

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Strategies with **moderate** carbon reduction potential in our region

Climate Smart Strategy | Moderate potential carbon reduction impact*



Active Transportation (Investment)

- New biking and walking connections to schools, jobs, downtowns and other community places



Travel Information and Incentives (Investment)

- Commuter travel options programs
- Household individualized marketing programs
- Car-sharing and eco-driving techniques



System Management and Operations (Investment)

- Variable message signs and speed limits
- Signal timing and ramp metering
- Transit signal priority, bus-only lanes, bus pull-outs
- Incident response detection and clearance

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Strategies with **low** carbon reduction potential in our region

Climate Smart Strategy | Low potential carbon reduction impact*

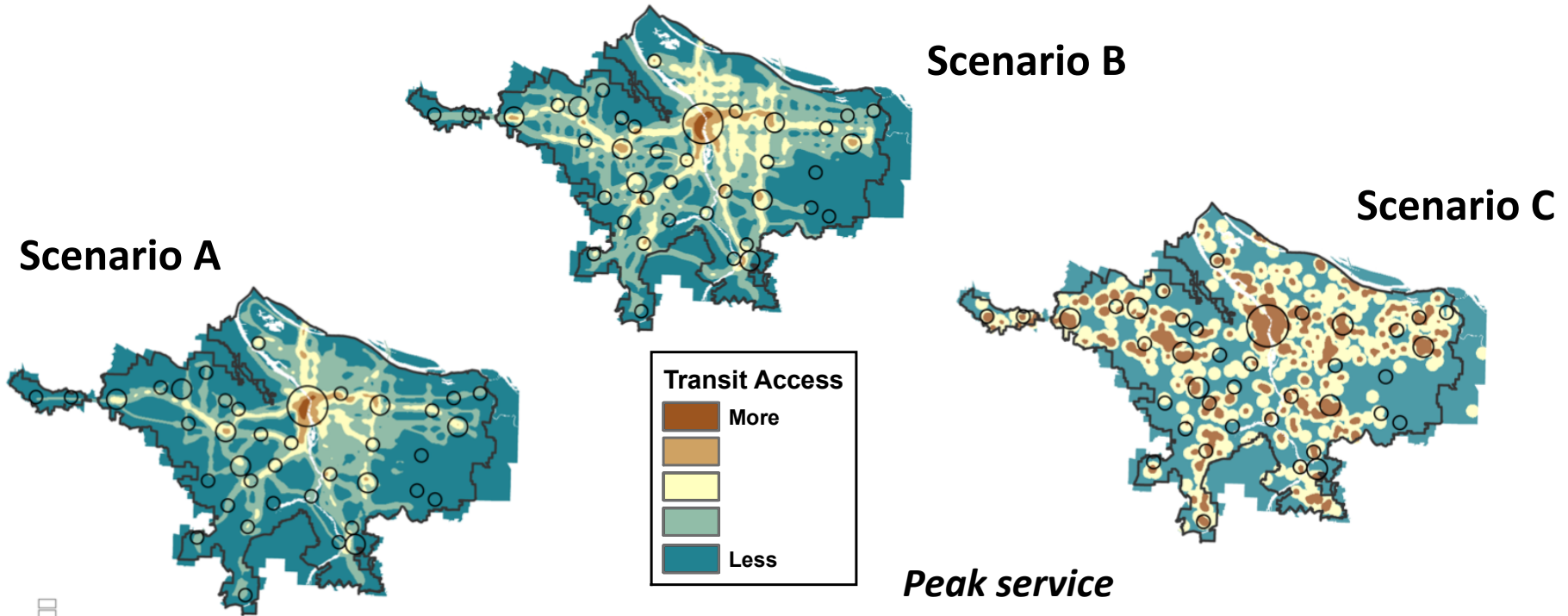


Street and Highway Capacity (Investment)

- New lane miles (e.g, general purpose lanes, auxiliary lanes)
-

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Investment in transit is key

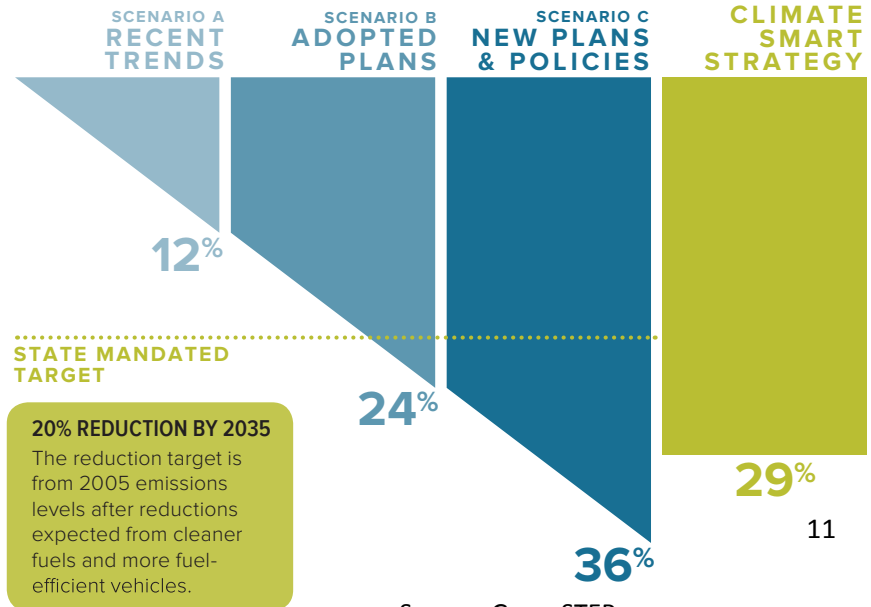


Adopted strategy exceeds target and supports other goals

144 scenarios
narrowed to 3

3 scenarios
narrowed to our
preferred scenario –
the Climate Smart
Strategy

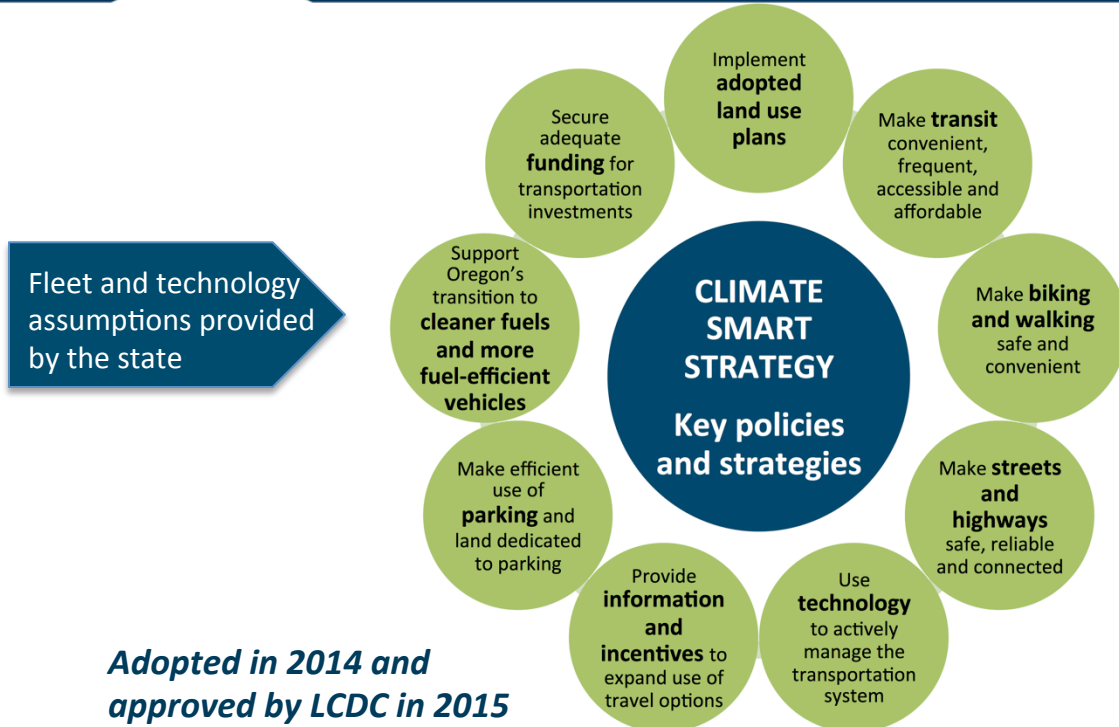
REDUCED GREENHOUSE GAS EMISSIONS PERCENT BELOW 2005 LEVELS



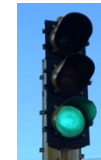
Source: GreenSTEP

Climate Smart Strategy

Regional policies and strategies for reducing emissions



Adopted in 2014 and approved by LCDC in 2015



Extensive, inclusive engagement built the Climate Smart Strategy



Climate Smart Strategy Performance Monitoring

- **Relies on existing performance monitoring processes, including:**
 - LCDC report to respond to Oregon State Statutes ORS 197.301 and ORS 197.296 (2 years)
 - Regional Transportation Plan updates (5 years)
 - Urban Growth Report updates (5 years)
- **Reports existing & new measures with monitoring targets** that reflect key assumptions and modeled outcomes
- **Informs whether mid-course adjustments are needed**



How were we doing in 2018?

We were making **satisfactory progress** if we fully implement the 2018 RTP, but recognized more work and funding needed

We **exceeded** Climate Smart targets for:

- land use and growth in 2040 mixed-use centers
- transit service hours
- households served by frequent transit service

We **fell short** of RTP targets for:

- sidewalk and biking system completion
- tripling walking, biking and transit mode share
- reduced per capita vehicle miles traveled by 10 percent by 2040



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The landscape has changed since 2018

The **reality of climate change and sense of urgency** is growing
COVID-19 widened disparities and changed how people travel

Declining **transit service and ridership**

Increased **online shopping and working from home**

More **affordable and efficient electric vehicles**

Increased **fatal crashes** and increased **concerns about personal safety**

New state rules call for reduced VMT per capita, more parking management and other policies; **federal rulemaking underway**

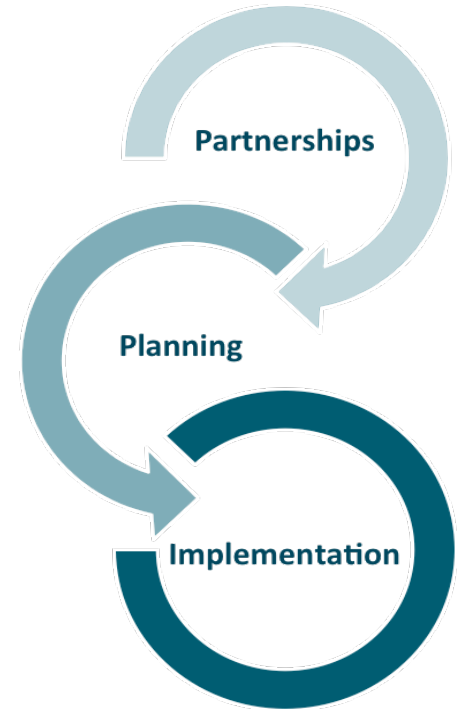
Work since 2018 to support 2023 RTP update

Developed regional VE-RSPM in partnership with ODOT and the City of Portland to support city's GHG planning

Can be used in 2023 RTP update

Consistent with State level target setting tools

Convened Climate and Transportation Expert Panel



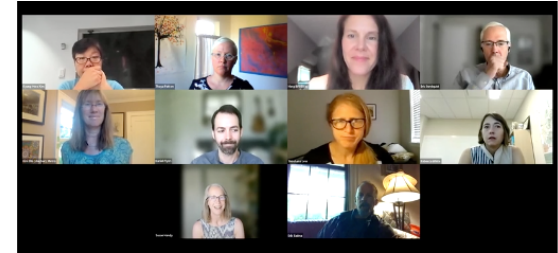
Key takeaways from Climate Expert Panel

No perfect climate analysis tool, and more than one tool is likely needed

Significant progress can be made with less than perfect information

Keep the tent broad and diverse

Decide what future we want and work together to get there – knowing modeling cannot answer all our questions



<https://www.oregonmetro.gov/events/climate-and-transportation-expert-panel/2022-06-22>

Next steps

September: TPAC kick-off discussion; Metro staff release RFP for consultant support

November: MTAC and MPAC discussions; JPACT/
Metro Council Workshop (11/10)

December/January: TPAC, JPACT and Metro
Council follow-up discussions

Discussion and feedback

- Do you have **questions about the information presented today?**
- **What issues and policy questions are you interested in exploring as we update our strategy** during this time of change and uncertainty?
- **What opportunities do you see for the region to move forward should our analysis show we need to do more** to meet our VMT per capita reduction targets and climate goals?

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Kim Ellis, AICP
RTP Project Manager

kim.ellis@oregonmetro.gov

