Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

2023 Regional Transportation Plan

Technical appendices

July 10, 2023

oregonmetro.gov/rtp

Adopted by Metro Council on November 30, 2023

Metro respects civil rights

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

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Project website: **oregonmetro.gov/rtp**

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

Supplement to Exhibit A to Ordinance No. 23-1496:
2023 Regional Transportation Plan Appendices

Due to the size of the 2023 Regional Transportation Plan Appendices, it is being included in the packet electronically via this document. The appendices can be found at https://www.oregonmetro.gov/public-projects/2023-regional-transportation-plan/public-comment or click on the blue links below to view the individual documents. Printed copies are available on request.

- **Appendix A - 2023 RTP Constrained Priorities Project List** (2023 to 2045 project lists and interactive map and interactive project list). This appendix documents the projects that fit within "financially constrained" budget of federal, state and local funds the greater Portland region can reasonably expect through 2045, consistent with federal and state law. These projects are eligible for state and federal funding under federal law. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix B – 2023 RTP Unconstrained Strategic Priorities Project List** (2023 to 2045 strategic project list and interactive map and interactive project list). This appendix documents additional priority projects that could be constructed with additional resources. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix C – Federal Air Quality Attainment Status Certification Letter.** This appendix contains a certification letter from the U.S. Environmental Protection Agency declaring the region's attainment status for air quality and that transportation conformity requirements no longer apply for federally-funded transportation projects. The region remains responsible for implementation of transportation control measures contained in the Oregon State Implementation Plan.
- **Appendix D – 2023 RTP Public and Stakeholder Engagement and Consultation Summary.** This appendix documents the engagement and consultation process to inform development of the 2023 RTP and comments received during the final public comment period. *This appendix is under development and will be finalized following adoption of the 2023 RTP and Appendices.*
- **Appendix E – 2023 RTP Regional Mobility Policy Documentation**. This appendix documents the research, policy development and related engagement activities conducted to inform development of the 2023 RTP regional mobility policy and action plan for future work. *This appendix will be developed and reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix F – 2023 RTP Environmental Assessment and Potential Mitigation Strategies.** This appendix documents the methods and data used to conduct a system-level environmental analysis of the 2023 RTP projects and discusses environmental requirements and potential environmental mitigation strategies. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix G – Coordinated Transportation Plan for Seniors and People with Disabilities.** Adopted in June 2020 by the TriMet Board, this appendix documents regional planning conducted to assess the transportation needs of seniors and people with disabilities, fulfilling federal requirements for a coordinated human services plan.
- **Appendix H – 2023 RTP Financial Strategy Documentation.** This appendix documents the methods and data used to develop the financially constrained revenue forecast for the 2023 RTP. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*

Supplement to Exhibit A to Ordinance No. 23-1496: 2023 Regional Transportation Plan Appendices

- **Appendix I – 2023 RTP Performance Evaluation Documentation.** This appendix documents the regional system performance evaluation outputs. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496 and finalized once the final model runs are complete.*
- **Appendix J – 2023 RTP Climate Smart Strategy Implementation and Monitoring.** This appendix documents progress implementing the adopted Climate Smart Strategy and the analysis tools and technical assumptions used to forecast future greenhouse gas emissions and related vehicle miles traveled per capita. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix K – 2023 RTP Performance Targets Summary.** This appendix documents the RTP performance targets. *This appendix will be finalized once the final model runs are complete following adoption of the 2023 RTP by Ordinance No. 23-1496. See Chapter 2 for information about performance measures and targets. See Chapter 7 for information performance of the draft plan.*
- **Appendix L – 2023 RTP Federal Transportation Performance Management and Congestion Management Process Documentation.** This appendix documents the region's approach for addressing federal transportation performance management and congestion management monitoring and reporting requirements. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496.*
- **Appendix M – 2023 RTP Regional Modeling and Analysis Documentation.** This appendix documents travel model assumptions, regionally coordinated and adopted land use forecast and transportation analysis zone assumptions. *This appendix will be updated to reflect final recommendations in Exhibit C to Ordinance No. 23-1496 and finalized once the final model runs are complete.*
- **Appendix N – Southwest Corridor Light Rail Locally Preferred Alternative.** This appendix documents the locally preferred alternative for Southwest Corridor light rail project adopted by JPACT and the Metro Council by Resolution No. 18-4915.
- **Appendix O – Earthquake Ready Burnside Bridge Locally Preferred Alternative.** This appendix documents the locally preferred alternative for the Earthquake Ready Burnside Bridge Project adopted by JPACT and the Metro Council by Resolution No. 23-5306.
- **Appendix P – East Metro Connections Plan.** This appendix documents the adopted final action plan recommendations contained in the East Metro Connections Plan.
- **Appendix Q – Sunrise Project Locally Preferred Alternative.** This appendix documents the adopted locally preferred alternative for the Sunrise Project.
- **Appendix R – I-5/99W Connector Study Recommendations.** This appendix documents the locally-adopted I-5/99W Connector Study recommendations.
- **Appendix S – I-5 Interstate Bridge Replacement Modified Locally Preferred Alternative.** This appendix documents the modified locally preferred alternative for the I-5 Interstate Bridge Replacement Program endorsed by JPACT and the Metro Council by Resolution No. 22-5273.
- **Appendix T – Clackamas to Columbia Corridor Plan.** This appendix documents the final recommendations contained in the Clackamas to Columbia Corridor Plan.
- **Appendix U – Key JPACT and Metro Council discussions and actions on ODOT projects in the greater Portland area undergoing the NEPA process.** *This appendix will be developed following adoption of the 2023 RTP and will reflect commitments and expressed desired outcomes for each project contained in Attachment 1 to Exhibit C (Part 1) to Ordinance No. 23-1496.*
- **Appendix V – 2023 RTP Summary of Comments and Recommended Actions.** *This appendix will be developed following adoption of the 2023 RTP by Ordinance No. 23-1496 and will reflect Exhibit C (Part 1 and Part 2) to Ordinance No. 1496.*

Supplement to Exhibit A to Ordinance No. 23-1496: 2023 Regional Transportation Plan Appendices

- **Appendix X – RTP Amendments Overview and Checklist.** *This appendix will be developed following adoption of the 2023 RTP by Ordinance No. 23-1496 and will reflect Section 8.3 of the 2018 Regional Transportation Plan.*

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX A

2023 Regional Transportation Plan

Constrained priorities

July 10, 2023

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2023 RTP Public Review Draft Constrained Project List (2023-2045)
(projects are organized by time period alphabetically by County and nominating agency)

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	97th Ave/Mather Road Complete Street	11522	Lawnfield Rd	Summers Lane	Add bikeways, pedways along project length, add eastbound left turn lanes at Mather Rd / Summers Ln, provide ADA accessibility improvements as necessary.	$5,516,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Courtney Ave: OR 99E to Oatfield Rd	11520	OR 99E	Oatfield Rd	Fill gaps in pedways and bikeways, improve intersection safety, increase access to employment, transit access and ADA accessibility.	$2,959,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Courtney Ave: River Rd to OR 99E	11525	River Rd	OR 99E	Construct pedway / complete gaps on the south side; add bikeways, improve ADA access, increase transit accessibility, improve access to employment.	$7,996,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	To be determined	Clackamas County	I-205 Multiuse Path from OR 224 to OR 212 Design and Environmental	12204	OR 224	OR 212	Conduct public engagement and prepare project preliminary design	$1,707,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave	11503	River Rd	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities. Phase II of project that is currently underway.	$2,674,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: Oatfield to OR 99E	12202	Oatfield Road	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities.	$5,278,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: River Rd to OR 99E	12203	River Rd	OR 99E	Implement proven safety counter measures by widening to 2-lane urban minor arterial standard with bikeway and pedway infill, improvements to ADA accessibility and stormwater facilities. Phase II of project that is currently underway.Phase II of project that is currently underway.	$1,678,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd and Bell Ave Intersection Safety Improvements (TSAP)	11774	Johnson Creek Blvd/Bell Ave intersection	Johnson Creek Blvd/Bell Ave intersection	Improve intersection of Johnson Creek Blvd and Bell Ave to improve intersection safety by implementing proven safety counter measures for bicyclist and pedestrians as identified in county Transportation Safety Action Plan and improve ADA accessibility. No change in intersection capacity.	$1,707,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Linwood Ave: Monroe St to Johnson Creek Blvd	10102	Monroe St	Johnson Creek Blvd	Add bikeways. Linwood Ave / Monroe St intersection improvements. Add curbs/sidewalks, improve horizontal alignments, add ADA accessibility features, add stormwater features.	$16,664,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	McLoughlin Blvd. Improvement	10024	Milwaukie	Gladstone	Improve safety for bicyclist and pedestrians by adding bikeways, pedestrian facilities, fill sidewalk gaps, add transit supportive elements, improve ADA accessibility, and implementing proven safety counter measures.	$8,746,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Monroe St	11494	Linwood Ave	Fuller Rd	Add bikeways, pedways and traffic calming and safety measures, improve ADA accessibility, improve stormwater, increase access to transit and access to employment for historically marginalized community. Combines two projects from 2014 RTP.	$6,913,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Oak Grove Blvd	11504	Oatfield Rd	River RD	Fill gaps in pedways and bikeways.	$3,049,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	82nd Drive/Strawberry Lane Intersection	11514	82nd Dr/Strawberry Lane intersection	N/A	Improve safety at a key intersection on a high crash corridor by implementing proven safety counter measures, installing a traffic signal and turn lanes on eastbound and northbound approaches, improve ADA accessibility as necessary.	$4,837,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd/79th Ave Intersection (TSAP)	11763	80th Place	79th Ave	Construct new signalized intersection at the intersection of Johnson Creek Blvd and either 79th Ave or 80th Place and implement proven safety counter measures at high injury location identified in county Transportation Safety Action Plan, including bike/ped and ADA accessibility improvements as necessary.	$2,504,000	2023-2030	Yes
Transportation System Management (Technology)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek/Linwood Ave ITS Improvements (project underway using federal funds)	11766	Johnson Creek Blvd/Linewood Ave Intersection	Johnson Creek Blvd/Linewood Ave Intersection	Implement proven safety counter measures by adding intelligent transportation system improvements at the intersection of Johnson Creek Blvd and Linwood Ave to provide warnings and special phasing for bicyclists and pedestrians. Include ADA accessibility improvements as necessary.	$1,594,000	2023-2030	Yes
Transportation System Management (Technology)	Clackamas County	Clackamas County	Clackamas County	Sunnyside Road Adaptive Signal Control Phase II	11762	132nd Ave	172nd Ave	Install adaptive signal control at major intersections from 132nd Ave to 172nd Ave and upgrade ADA accessibility features as necessary.	$2,959,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Gladstone	Gladstone	Portland Avenue Multi-Modal Project Design and Engineering	12264	Clackamas Blvd	Jersey St	Project development and engineering to implement the Portland Avenue Streetscape Plan, including wider sidewalks, lighting, marked crossings, bike lanes, and street reconstruction.	$3,414,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Environmental/Engineering	10151	Portland Ave.	Oregon City Clackamas R. Trail	Regional trail would connect the proposed regional Trolley Trail to the Clackamas River Trail via an existing railroad bridge spanning the Clackamas River.	$2,140,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Clackamas River Trail: North Carver	12195	Hwy. 212/224 Interchange	Springwater Bridge	Constructs outstanding segments of multi-use regional trail to follow north side of Clackamas River between Hwy. 212/224 interchange and Springwater Bridge.	$3,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 3	12042	Hagan Rd	Hwy. 212	A multi-use path following Rock Creek between former golf club and Hwy-212. Alignment to cross Sunnyside Rd and Sunrise Corridor below grade. Includes connections to Pioneer Park on SE 153rd as well as Hood View Park and area schools.	$9,300,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	162nd Ave Extension South: Phase 2	11346	157th Ave.	Rock Creek Blvd.	Extend 162nd Ave from 157th Ave to Rock Creek Blvd by constructing new, 3 lane roadway with continuous left turn lane, sidewalks, bike lanes, traffic signals and bridge over Rock Creek. Project improves access to Rock Creek Employment Center and industrial sector.	$26,400,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd Ave: Phase 1 - Design	10033	Cheldelin Rd.	Sunnyside Rd.	Phase 1 design work to widen 172nd to five lanes between Sunnyside Rd and 172nd – 190th Connector and to three lanes from the 172nd – 190th Connector to Cheldelin Rd. Project includes bike lanes, sidewalks and continuous left turn lane.	$6,100,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd Ave: Phase 2 - Construction	12071	Cheldelin Rd	Sunnyside Road	Public right-of-way acquisition and construction to widen 172nd to five lanes between Sunnyside Rd and 172nd – 190th Connector and to three lanes from the 172nd – 190th Connector to Cheldelin Rd. Project includes bike lanes, sidewalks and continuous left turn lane.	$51,200,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Carman Dr. sidewalks &/ bike lanes	11082	Meadows Rd	Parker Rd	4,200' long widening for 6' wide bike lanes, 6' wide separated concrete sidewalks along 80% of length, both sides. Continuation of improvements toward I-5 expected to be incorporated into SW Corridor project.	$9,400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Goodall Rd Pathway	11612	Knaus Rd	Country Club Rd	3,000' long, 6' wide asphalt shoulder pathway on both sides of road. R/W needed for stormwater swale. Completes a connection.	$3,900,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	Boones Ferry Rd bike lanes	11081	Country Club	North City Limits	3,500' long widening includes retaining walls above and below the roadway grade for bike lanes, sidewalks, and intermittent turn lanes.	$17,400,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	Lakeview Boulevard Improvements	11935	Jean Road	SW McEwan Road	3,500' long widening for two 14' shared use lanes with an 8' sidewalk on one side separated by stormwater planter and curb.	$4,500,000	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	37th Ave Sidewalks	10096	Lake Rd	Harrison St	Fill in sidewalk gaps on both sides of street to increase pedestrian safety and to improve accessibility in equity priority areas.	$1,560,000	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Intersection Curb Ramp Improvements (Milwaukie)	11621	Citywide	Citywide	Install curb ramps at all intersections with sidewalks to improve safety and connectivity in equity priority areas.	$3,898,000	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Lake Road Sidewalks	10094	Where Else Ln	Railroad Ave	Fill in sidewalk gaps on both sides of street.	$1,560,000	2023-2030	Yes
Active Transportation - Pedestrian	Clackamas County	Milwaukie	Milwaukie	Ochoco St Sidewalks and Bridge	10112	19th Ave	McLoughlin Blvd	Construct sidewalks, reconstruct bridge over Johnson Creek.	$1,715,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Bicycle and Pedestrian Overpass over Railroad Ave	11533	Railroad Ave	International Way	Establish a dedicated bicycle and pedestrian connection across Railroad Ave and the railroad tracks.	$4,678,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 1--Monroe St Neighborhood Greenway	10099	McLoughlin Blvd	Linwood Ave	Designate Monroe St as a Neighborhood Greenway and install traffic-calming improvements and fill sidewalk gaps on both sides of street. Traffic-calming improvements and completed sidewalk sections will increase bicycle and pedestrian safety. Intersection improvements to improve safety of crossing at Linwood Ave and Monroe St. Improves bicycle and pedestrian network in an equity priority area.	$15,593,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 6--Sidewalk & Pedestrian Safety Projects (part 1)	11535	Various locations	Various locations	Harmony Rd Sidewalks Fill in sidewalk gaps on both sides of street. Logus Rd Sidewalks Fill in sidewalk gaps on both sides of street. International Way Sidewalks Fill in sidewalk gaps on both sides of street. Brookside Dr Sidewalks = Fill in sidewalk gaps on both sides of street. River Rd Sidewalks = Fill in sidewalk gaps on both sides of street. Group 6 projects improve pedestrian safety and access to equity priority areas.	$15,727,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 6--Sidewalk & Pedestrian Safety Projects (Part 2)	11954	Various Locations	Various Locations	Fill in sidewalk gaps on Ochoco St. King Rd Blvd Treatments = Install street boulevard treatments: widen sidewalks and improve crossings. Group 6 projects improve will improve pedestrian access to equity priority areas.	$1,559,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 7--Bicycle Infrastructure Improvements	11541	Various locations	Various locations	Oatfield Rd Bike Lanes Fill in gaps in existing bicycle network with bike lanes. Harrison St Bike Lanes Fill in gaps in existing bicycle network with bike lanes (cost included with Harrison St road widening project). International Way Bicycle Facilities = Construct bike lanes or other bike facilities. Group 7 projects improve safety and bicycle connectivity to equity priority areas.	$1,715,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Railroad Ave Capacity Improvements	10095	37th Ave	Harmony Rd	Pedestrian aspect: construct multiuse path. Public transit aspect: Provide bus service to extend to Clackamas Town Center and points east. Project improves bicycle and pedestrian access to public transit and equity priority areas.	$10,136,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Group 8--Street Connectivity & Intersection Improvement Projects	11540	Various locations	Various locations	Harrison St and King Rd Connection Enhance connection between King Rd and Harrison St at 42nd Ave. Intersection Improvements at 42nd Ave and King Rd Enhance intersection function. Intersection Improvements at 42nd Ave and Harrison St = Signalize intersection to facilitate dominant traffic flow. Intersection Improvements at Johnson Creek Blvd and Linwood Ave = Improve safety of crossing at intersection.Intersection Pedestrian Signal Improvements City-wide - committed. Traffic-Calming Improvements on River Rd at Lark St = Install traffic-calming measures such as a permanent speed-warning sign and/or roundabout.	$2,784,500	2023-2030	Yes
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Kellogg Creek Dam Removal and OR 99E Underpass	10101	Location- Specific	Location- Specific	Replace OR 99E bridge over Kellogg Creek, remove dam, restore habitat. Construct bike/ped undercrossing between downtown Milwaukie and Riverfront Park. Improves cyclist and pedestrian safety and increases connectivity in an equity priority area.	$40,654,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Local Street Improvements in Tacoma Station Area	11624	Location-specific	Location-specific	Construct street improvements on Stubb St, Beta St, Ochoco St, Hanna Harvester Dr, and Mailwell Dr. (TSAP). Street improvements will improve connectivity to equity priority areas.	$8,732,000	2023-2030	Yes
Pricing Programs	Clackamas County	ODOT	ODOT	I-205 Tolling Project (PE)	12099	Oswego Hwy (OR 43) Interchange	Stafford Rd Interchange	The Project would toll all lanes of I-205 on or near the Abernethy Bridge and Tualatin River Bridge. The Project's purpose is to raise revenue to fund construction of the I-205 Improvements Project and manage congestion between Stafford Road and Oregon Route 213 (OR 213). The PE phase includes completion of environmental analysis under the National Environmental Policy Act (NEPA). The NEPA process for the I-205 Toll Project will analyze the benefits and impacts of tolling on I-205 between Stafford Road and Oregon Route 213 (OR 213), and describe mitigation commitments. The Project area includes all adjacent, connected, or parallel highways as described in ORS 383.009(2)(j) that may or may not be impacted by diversion. Money from the Toll Program Fund will be used to fund improvements in the Project area, including any mitigation identified for toll related impacts, and I-205 improvements in the Project area, pending NEPA outcomes. The Project will enhance the connection between tolling on I-205 and the Regional Mobility Pricing Project. The Project will use the Oregon Toll Program's Equity Framework and demonstrate how the pricing system will manage demand to reduce greenhouse gases. Before a toll is assessed, the Project will establish and implement equitable income-based toll strategies as described in HB 3055 Section 162 (2021). I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes).	$27,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-205 Abernethy Bridge (CON)	11969	OR99E Interchange	Oswego Hwy (OR 43) Interchange	Widen both directions of the I-205 Abernethy Bridge and approaches to address recurring bottlenecks on the bridge. Install Active Traffic Management (ATM) on northbound and southbound I-205. The project will include new pedestrian and bicycle facilities around OR 43 and OR 99E to increase comfort for people walking, biking or rolling in these areas. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes).	$545,000,000	2023-2030	Yes

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Exhibit A to Ordinance No. 23-1496

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Throughways	Clackamas County	ODOT	ODOT	I-205 Southbound and Northbound widening (PE, ROW)	11586	Oswego Hwy Interchange	Stafford Rd Interchange	PE/ROW Phase. The project is located along a 7-mile portion of Interstate 205 (I-205) between the Stafford Road and OR 213 interchanges. Add variable rate tolls on the I-205 Abernethy Bridge and Tualatin River Bridges to raise revenue for construction of planned improvements on I-205 and to manage congestion. Adds a third travel lane in each direction of I-205 between the Stafford Road interchange and OR 43 interchange, constructing a northbound auxiliary lane between OR 99E and OR 213, and seismic upgrades to or reconstruction of eight bridges along I-205 between Stafford Road and OR 213. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes). The project or a portion of the project is outside the designated urban growth boundary.	$68,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	11904	Oswego Hwy Interchange	Stafford Rd Interchange	The Project is located along a 7-mile portion of Interstate 205 (I-205) between the Stafford Road and OR 213 interchanges. Add variable rate tolls on the I-205 Abernethy Bridge and Tualatin River Bridges to raise revenue for construction of planned improvements on I-205 and to manage congestion. Adds a third travel lane in each direction of I-205 between the Stafford Road interchange and OR 43 interchange, constructing a northbound auxiliary lane between OR 99E and OR 213, and seismic upgrades to or reconstruction of eight bridges along I-205 between Stafford Road and OR 213. I-205 in the project area has numerous sites that rank in the top 5 or 10 percent of sites according to 2019 data from the Safety Priority Index System (SPIS), ODOT's systematic scoring method for identifying potential safety problems on state highways based on the frequency, rate, and severity of crashes. Due to the proposed highway improvements (tolling and lane configuration changes) the number of crashes on I-205 in the project area, including crashes resulting in fatalities and injuries, is expected to be 26% lower (representing 144 total crashes).	$557,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (PE, RW)	12305	Wilsonville Rd	Wilsonville-Hubbard Hwy	Conduct preliminary engineering and right of way work to address congestion, safety, and the seismic resiliency of Interstate 5 in the vicinity of the Boone Bridge. The project will replace Boone Bridge with a seismically resilient structure and add an auxiliary lane on SB I-5 from Wilsonville Road to the Wilsonville-Hubbard Highway (OR 551), preserving the current NB auxiliary lane, to address crashes due to short merging distances, closely spaced interchanges and frequently congested conditions both on and just south of the Boone Bridge. Bike/ped access will be determined. A portion of the project is outside the designated urban growth boundary.	$50,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (PE, ROW)	10890	122nd Ave	172nd Ave.	Conduct preliminary engineering (PE) and acquire right-of-way (ROW) on phase 2 of the OR 212/224 Sunrise Corridor from SE 122nd Ave to SE 172nd Ave consistent with the Final Environmental Impact Statement (FEIS)/Record of Decision (ROD).	$85,000,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	ODOT	OR 224 Milwaukie Expressway improvements	11350	I-205	Rusk Rd	Construct a third westbound lane on Milwaukie Expressway (Hwy-224) from I-205 to Rusk Rd.	$20,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Holcomb Boulevard Safe Routes to School Project	12266	Holcomb School Road	Winston Drive	Construct sidewalk, street lighting and bicycle lane on the north side of roadway. Project including RRFB's at Oak Tree Terrace & Winston Drive, a when flashing school zone.	$2,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Main Street Bike & Pedestrian Improvements	11184	Agnes Avenue	10th Street	Construct streetscape improvements from 10th Street to 15th Street. Construct separated multi-use path or sidewalks and bike lanes from 15th Street to Agnes Avenue. (TSP D90, W3, B3, B4, S1)	$13,230,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Willamette Falls Shared-Use Path	10123	10th Street	S 2nd Street	Add a shared-use path along the Willamette River. (TSP S3)	$5,740,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Oregon City	Beavercreek Road Improvements, Phase 3A	10026	Clackamas Community College	Meyers Road	Widen to 3 lanes with sidewalks and bike lanes. (TSP D81 & D82)	$11,073,000	2023-2030	Yes

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Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Linn/Leland/Meyers Road Roundabout	11183	Linn/Leland/Meyers Intersection	Linn/Leland/Meyers Intersection	Reconstruct intersection for safety and capacity improvements into a roundabout. (TSP D34)	$5,740,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Maple Lane Road & Walnut Grove Way Roundabout	12267	Walnut Grove Way	Beavercreek Road	Construction of a roundabout at the intersection of Maple Lane Road and Walnut Grove Way.	$1,500,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Molalla Avenue Roundabout	11182	Taylor Street	Division Street	Reconfigure intersection for safety and LOS into roundabout. (TSP D30)	$2,710,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 213 & Beavercreek Road WB Right-Turn Merge Lane	11758	OR 213 & Beavercreek Road	~1,300 feet north of OR 213 & Beavercreek Road	Addition of a Westbound Right-Turn Free Flow Acceleration Lane on Hwy 213 Northbound, approximately 1,300 feet in length.	$4,470,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	SMART	SMART	SMART Bus stop access improvements	11343	NA	NA	Design & construct a variety of improvements to enhance access to transit including bus stops, bus shelters (with solar or conventional lighting), bus pull-outs, ADA improvements at stops, interactive kiosks, etc.	$2,032,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Bus Purchases and Replacements - including Alternative Fuel Vehicles	11109	NA	NA	Purchase new buses and replace those that are out of date, unreliable or inoperable. New and replacement buses will include alternative fuel vehicles.	$11,152,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Customer Service Center at Wilsonville Transit Center	11750	9699 SW Barber St, Wilsonville, OR 97070	9699 SW Barber St, Wilsonville, OR 97070	SMART transit customer service center on first floor in a multi-story transit oriented development (TOD) facility with intention to provide regional customer service hub for multiple transit providers. Affordable housing on the upper levels.	$6,373,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	SMART	SMART	Wilsonville SMART Fleet Facility Expansion	11112	28879 SW Boberg Rd, Wilsonville, OR 97070	NA	Completion of SMART fleet facility expansion to underground electrical for bus charging, expand bus parking area, and update security gate.	$7,074,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Commuter Bus Service to Neighboring Communities	11327	NA	NA	Additional service hours for new services and related bus stop and ROW improvements to neighboring communities; such as but not limited to Salem, Tigard, Tualatin, Sherwood, Keizer, Woodburn, Portland, etc.	$9,432,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service for Wilsonville Developing Areas	11108	NA	NA	Additional service hours for new services and related bus stop and ROW improvements for the developing areas of Wilsonville; such as the areas of Coffee and Basalt Creek, and Frog Pond.	$3,983,000	2023-2030	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service to Clackamas Town Center and Oregon City	11328	Wilsonville Transit Center, 9699 Barber St., Wilsonville, OR 97070	Clackamas Town Center, 12000 SE 82nd Ave, Happy Valley, OR 97086	Additional service hours for new service to Clackamas Town Center and related bus stop and ROW improvements, with possible intermediate stops at Riverside High School, and in cities of West Linn, and/or Oregon City.	$15,242,000	2023-2030	Yes
Transportation Demand Management	Clackamas County	SMART	SMART	SMART Vanpool Services	11531	NA	NA	Continue and expand vanpool program in partnership with Commute with Enterprise.	$1,694,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Confederated Tribes of the Grand Ronde Community of Oregon	TBD	tumwata village Complete Streets	12089	tumwata village	tumwata village	Construct new roadways consisting of the Main Street, Water Street, 4th Avenue, 3rd Street, and Railroad Street alignments, including sidewalks and bikeways.	$7,157,000	2023-2030	Yes
Transit Capital - Other	Clackamas County	TriMet	TriMet	Park Avenue Park & Ride	12253	12952 SE 27th Pl, Milwaukie	12952 SE 27th Pl, Milwaukie	This project is a part of the Portland-Milwaukie Light Rail Project to add two floors to the Orange Line Park Avenue Park and Ride and approximately 320 parking spaces in a single phase of construction.	$24,000,000	2023-2030	Yes
Transit Operating Capital	Clackamas County	TriMet	TriMet	Oregon City Transit Center Improvements	12270	1035 Main St, Oregon City	1035 Main St, Oregon City	Expand and retrofit the Oregon City transit center to add bus layover capacity for service expansion, make pedestrian safety improvements and improve amenities for bus operators and riders.	$8,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	West Linn	OR 43 Multimodal Improvements - Arbor Dr. to Mary S. Young Park	11746	Arbor Drive	Mary S. Young State Park	Construction of multimodal transportation improvements on OR 43 (N. West Linn city limits to Mary S. Young Park) in accordance with 2016 TSP and 2016 Highway 43 Concept Plan, optimizing traffic flow at major intersections and improving ped/bike safety.	$12,430,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette Falls Drive Multimodal Improvements - 10th St. to Tualatin River	11747	10th St.	Tualatin River (S. City Limits)	Provide bike lanes/cycle tracks and sidewalks. This will provide a direct connection between downtown Willamette Main Street area and South city limits.	$8,482,701	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette River Greenway Trail	10129	Willamette Park	Willamette Falls - Mill St.	Paved trail running parallel to the Willamette River from Willamette Park at the mount of the Tualatin River eventually to the Lake Oswego City Limits facilitating connection to the Willamette River Trail with neighboring cities as part of the Metro Region.	$1,559,000	2023-2030	Yes
Throughways	Clackamas County	ODOT	West Linn	I-205 / 10th Street Improvements	11242	Willamette Falls Drive	Blankenship Rd / Salamo Road	Construct a long-term interchange improvement to provide congestion relief, address safety issues, and improve bike/ped connectivity.	$12,162,696	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	French Prairie Drive Pathway	11777	Country View Lane	Miley Road	Construct 10 foot wide shared use path, removing bicycles and pedestrians from vehicle travel lane.	$2,300,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	I-5 Walking and Biking Bridge	11554	Boones Ferry Rd.	Town Center Loop Road	Construct bike/pedestrian bridge over I-5 to connect Town Center area with businesses and neighborhoods west of I-5.	$14,500,000	2023-2030	Yes

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Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boeckman Rd. at Boeckman Creek	10156	Canyon Creek Rd. N	Stafford Rd.	Widen Boeckman Road to 3 lanes with bike lanes, sidewalks and connections to regional trail system and install bridge. The road has had a serious injury. A vertical curve has limited sight distance causing reduces emergency response times. The installation of buffered bike lane and complete sidewalks will remove conflicts that exist on the current two lane road.	$19,500,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Courtside Drive Extension - Town Center Loop West to Park Place: Complete Street	12199	SW Town Center Loop West	SW Park Place	Construct two lane extension of Courtside Drive through Wilsonville Town Center with sidewalks, curb extensions, street trees, lighting, and on-street parking.	$6,500,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Park Place Extension - Wilsonville to Courtside: Complete Street	12196	SW Courtside Drive	SW Wilsonville Road	Construct two lane extension of Park Place through Wilsonville Town Center with sidewalks, curb extensions, street trees, lighting, on-street parking and traffic signal at Wilsonville Road.	$6,400,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Parkway Ave Urban Upgrade	11775	Target/Costco Entrance	Printer Parkway	Widen to 3 lane section and add sidewalks and buffered bike lanes. The road is adjacent to I-5, which encourages higher speeds along this stretch of road. This project will create a left turn pocket for access to employment along with removing pedestrian traffic from the vehicle lane.	$8,000,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Stafford Road Urban Upgrade	11773	Kahle Road	Boeckman Road	Widen road to 3 lane section with sidewalks and buffered bike lanes which will remove pedestrians from the vehicle travel lane. This project or a portion of the project is located outside the urban growth boundary.	$16,800,000	2023-2030	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Wilsonville Road Intersection Modifications - Town Center Loop West to Town Center Loop East	12197	SW Town Center Loop West	SW Town Center Loop East	Implement traffic management plan to improve traffic flow, add wider sidewalks and safer pedestrian crossings, and add bike lanes.	$3,200,000	2023-2030	Yes
Throughways	Clackamas County, Multnomah County	ODOT	ODOT	I-205 Active Traffic Management	11305	Columbia River	I-5	Construct improvements to address recurring bottlenecks on I-205. Specific improvements as identified in operational analysis, Mobility Corridor analysis, refinement planning and Active Traffic Management Atlas.	$18,000,000	2023-2030	Yes
Transit - Better Bus	Clackamas County, Multnomah County	TriMet	TriMet	ETC: Lombard/Cesar Chavez Enhanced Transit Project	12034	St. Johns Town Center	Milwaukie Town Center	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit Maintenance	Clackamas County, Multnomah County	TriMet	TriMet	Willamette Shore Line Improvements	12257	311 N State St, Lake Oswego	S Lowell & Bond, 0650, S Lowell St, Portland	Repair and replace trestles, routine maintenance and track improvements on Willamette Shore Line rail corridor.	$4,000,000	2023-2030	Yes
Roadway (Capital)	Clackamas County, Washington County	Clackamas County	Clackamas County	65th/Elligsen/Stafford Intersection Roundabout	10054	65th, Elligsen, Stafford Rd. intersections	65th, Elligsen, Stafford Rd. intersections	Implement proven safety counter measure, a roundabout, at a high crash intersection identified in the county adopted TSAP.	$15,593,000	2023-2030	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Service, Operations and Maintenance: 2023-2030	12097	SMART service area	SMART service area	Operations of transit services, such as drivers, security, facilities and rolling stock maintenance.	$43,435,000	2023-2030	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Weekend Service Expansion	11994	NA	Portland Metro Area	Additional service hours for in-town and intercity services.	$5,576,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Fairview	Fairview	Fairview Parkway Multi-Use Path and Bike/Transit Hub	12262	Halsey St/Fairview Parkway	NE 213 Ave/Park Cleone	Construct a multi-use pathway along Fairview Parkway connecting Salish Ponds and Park Cleone City Parks. Along this route, project will also develop a bike and transit hub at the northeast corner of the NE Fairview Parkway/NE Halsey St intersection.	$6,700,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	181st - I-84 to San Rafael: Pedestrian and Bicycle Improvements	11676	I-84	San Rafael	Complete sidewalk connections on 181st from I-84 to San Rafael - Bicycle improvements and routing at I-84 interchange.	$2,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	1st Street - Powell to 257th: Complete Buildout	10425	242nd Ave.	257th Ave.	Construct to minor arterial standards with sidewalk and bicycle lane.	$3,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Division - Gresham/Fairview Trail to Wallula/212th: Sidewalks, Bike Lanes	10440	Gresham Fairview Trail	Wallula	Add bicylce lanes and sidewalks.	$9,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham Transit Center: Access and Design Enhancements	10441	Gresham Transit Center	Gresham Transit Center	Improve sidewalks, lighting, crossings, bus shelters, benches.	$2,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham/Fairview Trail - Halsey to Sandy: Construct Multi-Use Path	10437	Halsey	Sandy Blvd.	Construct multi-use path between Halsey and Sandy.	$7,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Gresham/Fairview Trail - Sandy to Marine (Phase V): New Multi-Use Path	11602	Sandy Blvd.	Marine Dr.	Construct multi-use path between Sandy Blvd. and Marine Dr. This ultimately connects the Springwater Trail to Marine Drive Trail.	$4,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Pleasant View Bridge - start of the Powerline Trail multi-use path	12220	Powell Loop	100 feet south of Johnson Creek	Reconstruct bridge with sidewalk and bicycle lanes. Prepares access for East Buttes Powerline Trail.	$5,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Powell Multi-Use Path	12219	Cleveland	1st Street	Construct a multi-use path along the north side of Powell Blvd, from Cleveland to 1st Street.	$3,500,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Wy'East Way/Max Path - Cleveland to Hogan: Construct Multi-Use Path	10436	Cleveland	Hogan	Construct new shared multi-use path to from 197th to Hogan.	$4,200,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	162nd - Glisan to Halsey: Complete Buildout	10447	Glisan	Halsey	Construct to 3 lanes with buffered bike lanes and sidewalks. Focus is on safety and access to transit improvements to support future frequent service transit.	$13,700,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	181st - Glisan to Yamhill: Complete Buildout w/Boulevard Design	10454	Glisan	Yamhill	Construct safety improvements such as center medians for access management, ADA sidewalk improvements, and lighting.	$8,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th - 30th to Richey: Complete Buildout	10533	30th	Richey	Improve existing road to 5-lane arterial standards with sidewalk and planter strip, signalize 190th at Giese, Butler, SW 41st.	$5,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	223rd at Stark: Add Turn Lanes	10473	223rd at Stark	223rd at Stark	Add EB and NB RT lanes and 2nd NB and SB LT lanes.	$5,300,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - 197th to Eastman: Complete Boulevard Design	10434	197th	Eastman	Complete boulevard design improvements on Burnside from Wallula/212 to Eastman, with median for access control.	$8,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Cleveland - Burnside to Stark: Complete Buildout	11096	Burnside	Stark	Reconstructs street from Stark to Burnside, with two travel lanes, center turn lane, bike lane, and sidewalk.	$6,700,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan at Stark: Add Turn Lanes	10511	Stark	Stark	Add right turn lanes on all approaches and second northbound and southbound left turns.	$4,800,000	2023-2030	Yes
Active Transportation - Pedestrian	Multnomah County	Multnomah County	Multnomah County	ADA Curb Ramp Replacements: Tier 1	12221	N/A	N/A	Design and reconstruct all Tier 1 curb ramps not compliant with ADA standards in County right of way according to the County ADA Transition Plan.	$7,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave: Fairview Elementary School Bike and Pedestrian Facilities	12222	Lincoln St	Bridge St	Construct new sidewalks along the west side of the road from Lincoln Street to Cedar Street/First Street. Install bike lanes on both sides of the road between Lincoln and Bridge Street. Install stormwater catch basin/facility treatment in southwest corner of Harrison Street and NE 223rd Avenue/Cedar Street/First Street intersection. Improve pedestrian ramps to meet ADA needs at Lincoln Street, Walnut Lane, SE Matney Street, Harrison Street, Cedar Street/First Street. (502U)	$2,600,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave. (Glisan St to Sandy Blvd): Complete Street	10388	Glisan St	Sandy Blvd	Reconstruct 223rd Avenue to 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes, and intersection improvements. To address safety and reduce crashes the project will use proven safety countermeasures. Project does not include implementation of a context sensitive design through area known as Old Town Fairview. (501U, 502U)	$12,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Main Streets on Halsey	10385	201st Ave	Historic Columbia River Hwy	Reconstruction of the Halsey corridor through Fairview, Wood Village, and Troutdale to be a pedestrian and bike-friendly "main street" based on the Main Streets on Halsey Street Design Concept Plan. This includes a roundabout, intersection improvements, bicycle-specific safety enhancements, new sidewalk/lighting/crossing enhancements, pedestrian/bicycle crossing with refuge and/or RRFB. (519U, 520U, 522U)	$37,200,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Safe Streets Project Implementation	11599	East Multnomah County	East Multnomah County	Implement safety countermeasures on High Injury Corridors as prioritized in Safety Action Plan and Safe Routes to School program across East County cities.	$5,700,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Safety corridor: 257th (Cherry Park - SE Stark)	11684	Cherry Park Rd/SWSturges Drive	SE Stark St	Address high crash corridor using proven safety countermeasures including improved street crossings, street lighting, bike boxes, and other measures identified through public engagement process. Project will also repave road, upgrade signals, and reconstruct ADA curb ramps.	$6,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Sandy Blvd Complete Street: Quail Hollow to 230th	12223	Quail St.	230th St	Reconstruct Sandy Blvd to minor arterial standards with bike lanes, sidewalks and drainage improvements, utilizing recommendations from TGM grant. Addition of bike lanes and sidewalks will improve safety of this area and reduce conflict among modes. To address safety and reduce crashes the project will use proven safety countermeasures	$20,200,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Sandy Blvd. Complete Street: 201st to Quail Hollow	10399	201st Ave	Quail St.	Fill gaps in sidewalks and bike lanes and add enhanced crosswalks and transit access improvements. This project will use proven safety countermeasures to reduce conflicts between freight and neighborhood use. Also includes replacing a culvert for fish passage.	$7,900,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road at Beaver Creek: Fish Passage Restoration and Fill Bike and Pedestrian Gap	11673	Beaver Creek crossing at Troutdale Rd	Beaver Creek crossing at Troutdale Rd	Replace the existing culvert and failed fish ladder on Beaver Creek at Troutdale Rd with a new bridge. The project will fill a gap in sidewalks and bicycle lanes on Troutdale Rd where there is currently not adequate space over the existing culvert. (542U)	$11,600,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road: Bike and Pedestrian Safety Improvements	11674	SW Cherry Park Rd	Stark St	Reconstruct S Troutdale Road between SW Cherry Park Road and SE Stark Street to major collector standards with two travel lanes, a center lane or median, sidewalks, and bicycle lanes. Project includes enhanced pedestrian crossings at Beaver Creek Lane and the planned regional trail. Project does not include major culvert replacement over Beaver Creek (see 11673). (542U)	$12,100,000	2023-2030	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Earthquake Ready Burnside Bridge: Phase 2 (Design)	11376	Willamette River	Willamette River	Earthquake Ready Burnside Bridge project will increase safety of people and structures during and after an earthquake by replacing the Burnside Bridge with a seismically resilient structure. Phase 2 will move into the Design, Right of Way, and Utility Phases based on the Preferred Alternative defined during the NEPA Phase.	$127,600,000	2023-2030	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Earthquake Ready Burnside Bridge: Phase 3 (Construction)	12076	Willamette River	Willamette River	Earthquake Ready Burnside Bridge project will increase safety of people and structures during and after an earthquake by replacing the Burnside Bridge with a seismically resilient structure. Phase 3 will move forward with construction.	$767,200,000	2023-2030	Yes
Bridge (Capital)	Multnomah County	Multnomah County	Multnomah County	Stark Street Bridge over Sandy River: Replacement	11375	Stark Street Bridge at Sandy River	Stark Street Bridge at Sandy River	Replace the existing Stark Street Bridge with a new bridge that meets current design standards, provides improved bike and pedestrian facilities, and is seismically resilient.	$18,000,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Movable Span Deck Replacement	12224	Willamette River	Willamette River	Replace failing FRP deck on the movable span of the Broadway Bridge (BUN-BR-16)	$20,900,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Rehabilitation 2	11902	Willamette River	Willamette River	Electrical/structural upgrade to gates (BUN-BR-10), fix pavement and update drainage, restripe (BUN-BR-11); replace lighting (BUN-BR-07).	$22,600,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Rehabilitation: Phase 2	12077	Willamette River	Willamette River	Deck rehabilitation on bridge approaches (BUN-HA-17)	$9,600,000	2023-2030	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Morrison Bridge Rehabilitation: Phase 2	11128	Willamette River	Willamette River	Painting and structural rehabilitation on the Morrison Bridge west approach (BUN-MO-09).	$9,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	ODOT	Powell, SE (I-205 to 174th) Multi-Modal Improvements, Phase 2	11742	I-205	SE 174th	Widen Street to 3-4 lanes (inclusive of center turn lane) with sidewalks, buffered bikelanes or other enhanced bike facility, and enhanced pedestrian/bicycle crossings. Phase 2 includes all segments except phase 1 (RTP # 11648): 116th to 136th.	$120,000,000	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (PE, NEPA, ROW)	10867	I-84	Greeley St.	Conduct preliminary engineering and National Environmental Policy Act review, and right of way work to improve safety and operations on I-5, connection between I-84 and I-405, and multimodal access to and connectivity between the Lloyd District and Rose Quarter.	$338,000,000	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	11176	I-84	Greeley St.	The Project adds auxiliary lanes and shoulders to reduce congestion and improve safety on I-5 between I-84 and I-405 where three interstates intersect and feature the biggest traffic bottleneck in Oregon. The project will also improve community connections with a highway cover, which includes reconnecting neighborhood streets, enhancing public spaces, and promoting economic development opportunities.	$975,000,000	2023-2030	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 South Operational Improvements	11304	Marquam Bridge	Region Boundary	Construct improvements to address recurring bottlenecks on I-5 south of the central city. Specific improvements as identified in operational analysis, Mobility Corridor analysis and refinement planning.	$50,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Port of Portland	Port of Portland	40 Mile Loop: Blue Lake Park to Sundial Road	12075	Blue Lake Park	Sundial Road	Construct two segments of a 10-foot wide, paved multi-use path as part of the greater 40 Mile Loop, for a total of 1.6 miles, located in the Troutdale Reynolds Industrial Park along the Sandy and Columbia Rivers.	$4,159,000	2023-2030	Yes
Freight	Multnomah County	Port of Portland	Port of Portland	T4 Modernization	11208	Terminal 4	Terminal 4	The Port of Portland's Terminal 4 Berth 410 is located at the Port of Portland's (Port) Terminal 4 along the Willamette River and functions as part of a bulk-material handling and loading facility leased and operated by Kinder Morgan for exporting soda ash. It is a timber structure built between 1959 and 1962 and is an extension of the Berth 411 wharf structure. A structural inspection of Berth 410 conducted in 2018 showed that the overall condition of Berth 410 has significantly deteriorated over time, and that in order to assure continuing safe operations, it needs either significant repairs or a full replacement.	$22,000,000	2023-2030	Yes

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Freight	Multnomah County	Port of Portland	Port of Portland	T6 Modernization	11207	Terminal 6	Terminal 6	The Port of Portland's Strengthening Terminal 6 in Response to Operational Needs, Growth, and Energy Reliability Project (STRONGER T6 or the "Project") consists of pavement improvements to Yards 604, 605, 606, and 607, upgrades to the electrical system serving these areas, and a new stormwater collection system. The Project will bring the pavement and the electrical system to a state of good repair so that they can operate at a high standard for years to come, and reduce terminal operating costs and emissions from electricity generation.	$42,106,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Port of Portland	Port of Portland	82nd Ave./Airport Way Grade Separation	10362	82nd Avenue/Airport Way Intersection	82nd Avenue/Airport Way intersection	Grade-separate Eastbound Airport Way over 82nd Avenue to reduce intersection signal phase competition, merge northbound left-turners with westbound traffic without a traffic signal and reduce cross traffic exposure for bicycling and walking across Airport Way.	$119,490,000	2023-2030	Yes
Active Transportation - Bicycle	Multnomah County	Portland	Portland	N Willamette Blvd Bikeway	11842	N Rosa Parks Way	N Richmond Ave	Enhance existing bikeway from Rosa Parks to Ida by adding protection and extend protected bikeway to Richmond. Incorporate pedestrian safety and access to transit improvements throughout the project.	$6,000,000	2023-2030	Yes
Active Transportation - Bicycle	Multnomah County	Portland	Portland	Terwilliger Bikeway Gaps	11862	SW Sheridan St	SW Boones Ferry Rd	Design and implement bicycle facilities to fill in gaps in the Terwilliger Bikeway.	$2,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	122nd Ave Corridor Safety and Transit Improvements	11868	NE Prescott St	SE Foster Rd	Construct multimodal corridor safety and access to transit improvements as well as transit priority treatments to reduce transit delay and improve transit reliability and travel times.	$37,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	57th/Cully Safety Improvements	11845	Prescott/Cully	Klickitat/57th	Construct sidewalk infill, curb ramp upgrades, protected bike lane, and a signal rebuild at Fremont.	$8,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	60th MAX Station Area Improvements	11320	60th Ave MAX Station Area	60th Ave MAX Station Area	Construct priority pedestrian and bicycle access to transit improvements in the 60th Ave MAX Station Area, as identified in the Growing Transit Communities Plan. Improve traffic safety on NE Halsey St.	$9,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Brentwood-Darlington Safe Routes to School	11856	SE 52nd Ave	SE 87th Ave	Sidewalk infill behind existing curb on SE Duke St and SE Flavel St from 52nd Ave to 82nd Ave. Construct a neighborhood greenway on Knapp and Ogden from 52nd to 87th, with traffic calming and crossing improvements.	$5,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Central City Multimodal Safety Improvements, Phase 2	11832	Portland Central City	Portland Central City	Construct high-priority bikeways, pedestrian improvements, and transit priority treatments in the Central City, identified through the Central City Multimodal Project planning phase.	$10,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Division-Midway Connected Centers Project Phase 1	11859	Division-Midway Town Center	Division-Midway Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to Division-Midway Town Center and nearby neighborhood centers, including projects identified in the Division-Midway Neighborhood Street Plan and the Growing Transit Communities Plan.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	E Burnside Safety and Access to Transit	11858	82nd Ave	102nd Ave	Construct priority pedestrian and bicycle safety and access to transit improvements in the E Burnside corridor, as identified in the Growing Transit Communities Plan, including ITS and NextGen TSP.	$9,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Flanders/Naito Crossing	10232	NW Flanders St & Naito Pkwy	NW Flanders St & Naito Pkwy	Construct a new at-grade crossing of Naito Parkway. This project will be coordinated with the railroad operator and ODOT Rail.	$2,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Halsey/I-205 Overcrossing Trail	11647	NE 92nd Ave & Tillamook St	NE 102nd Ave & Halsey St	Sidewalk infill and bike lanes on 92nd from Tillamook to Halsey. Multi-use path on Halsey structure over I-205 to connect to Gateway and I-205 Path.	$3,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Holgate Blvd Corridor Improvements	10307	SE McLoughlin Blvd	SE 92nd Ave	Design and construct multimodal safety improvements along Holgate Blvd, including enhanced pedestrian crossings at regular intervals, bus stop improvements, lighting upgrades, bike network improvements, and signal upgrades. Reconstruct pavement in segments in poor condition along the corridor.	$5,500,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Jade & Montavilla Connected Centers Project	11855	Jade District and Montavilla Neighborhoods	Jade District and Montavilla Neighborhoods	Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers.	$7,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Killingsworth/Interstate Connected Centers Project, Phase 1	11846	Killingsworth/Interstate Town Center	Killingsworth/Interstate Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to the Killingsworth / Interstate Town Center and nearby Neighborhood Centers.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Area Connected Centers Project, Phase 1	11316	Lents Town Center	Lents Town Center	Construct pedestrian and bicycle improvements to build out the active transportation network in and around Lents Town Center and other nearby Neighborhood Centers.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Columbia Blvd Safety Improvements	10341	N Lombard St	N Argyle St	Improve safety and access by filling high-priority sidewalk gaps, adding pedestrian crossings, improving access to transit (supporting TriMet's proposed future bus line from N Lombard St to NE 60th Ave), and employing safety countermeasures to reduce motor vehicle crashes. Design and implement a protected bikeway or multi-use path along Columbia Blvd from N Lombard St to N Portsmouth Ave to fill a gap in the bikeway network.	$8,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Interstate Ave Bike and Ped Safety Improvements	11843	N Russell St	N Argyle St	Enhance existing bike lanes and extend bike lanes to fill gaps along the corridor. Improve pedestrian safety at signalized intersections, especially at MAX station locations.	$2,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Columbia Blvd Safety Improvements	12321	N Argyle St	NE 60th Ave	Fill high-priority sidewalk gaps, adding pedestrian crossings, improving access to transit for proposed bus line from N Lombard to NE 60th and employ safety countermeasures to reduce motor vehicle crashes.	$8,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Halsey Safety and Access to Transit	10320	NE 67th Ave	NE 92nd Ave	Construct high-priority safety and access to transit improvements along the Halsey corridor, as identified in the Growing Transit Communities Plan. Elements include bicycle facilities on Halsey/82nd overpass, improvements to existing path under Halsey overpass west of MAX station, and neighborhood greenway connection to Tillamook.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 1	11640	Kelley Point Park	N. Columbia Blvd	Construct the North Slough Bridge and build trails connecting south to Columbia Blvd and north to Marine Drive to fill the last remaining gaps in Segment 1 of the N Portland Greenway Trail.	$5,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 2	11641	N. Columbia Blvd	Cathedral Park	Build a multi-use trail connecting Chimney Park, Pier Park, Baltimore Woods, Cathedral Park, and St Johns.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Trail: Columbia Blvd Bridge	11741	N Columbia Blvd at Chimney Park	N Columbia Blvd at Chimney Park	Construct a pedestrian/bicycle bridge over Columbia Blvd and adjacent connections. Connects North Portland Greenway Trail segments 1 and 2.	$10,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Alberta Neighborhood Greenway	11847	NE 72nd Ave	I-205 Path	Design and implement a neighborhood greenway, including connection through or around Sacajawea Park.	$5,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Holgate Blvd Corridor Improvements	11823	92nd Ave	136th Ave	Construct sidewalks and crossing improvements to facilitate pedestrian travel and access to transit. Enhance existing bicycle facilities and extend bicycle facilities from 130th to 136th.	$4,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Stark Safety and Access to Transit	10321	SE 111th	City Limits	Construct priority pedestrian and bicycle access to transit improvements in the Outer Stark corridor, as identified in the Safer Outer Stark Plan. Elements include improved pedestrian crossings, enhanced bikeways, transit stop improvements, transit priority improvements, lighting upgrades, and roadway design changes to improve traffic safety. Project includes repaving to address areas in poor condition.	$21,500,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Taylors Ferry Safety Improvements, Segment 1	10284	SW Capitol Hwy	SW 48th	Widen shoulders to provide bike lanes and construct a walkway for pedestrian travel and access to transit. Rebuild traffic signal.	$11,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Prescott Multimodal Improvements	10311	NE 72nd Ave	I-205 Path	Install separated bike lanes on Prescott from 72nd Ave to I-205 Path. Construct sidewalk infill on Prescott from Sandy to 92nd.	$5,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Red Electric Trail, Segment 1	12207	City Limits	SW Bertha Blvd	Provide east-west route for pedestrians and cyclists in SW Portland that connects the Fanno Creek Trail to the Hillsdale neighborhood.	$11,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SE 92nd Ave Safety Improvements	10271	SE Stark	City Limits	Design and implement bicycle facilities to fill all bikeway gaps along SE 92nd Ave. Enhance existing bike lanes. Fill sidewalk gaps and provide enhanced pedestrian crossings at regular intervals.	$3,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Seventies Greenstreet and Bikeway	10220	NE Lombard St	SE Flavel St	Develop a combined pedestrian greenway and bike boulevard including crossing improvements from Lombard St to the Springwater Corridor.	$11,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	St Johns Connected Centers Project	10182	St Johns Town Center	St Johns Town Center	Enhance pedestrian connectivity and access to transit, improve safety, improve sub-standard streets, add lighting and crossings, and construct bikeway connections within and around St Johns Town Center.	$5,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Stark/Washington Multimodal Improvements	10319	SE 92nd	SE 111th	Build protected bike lanes, pedestrian crossings, and transit improvements in and around the Stark/Washington couplet in Gateway Regional Center.	$12,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	SW Macadam Ped/Bike Improvements	10309	SW Bancroft	County Line	Improve pedestrian and bicycle crossings of Macadam and connections to the Willamette Greenway Trail.	$2,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Water Ave Corridor Improvements and Realignment	11786	SE Stark St	SE Caruthers St	From Stark to Clay, remove rails from roadway, repair pavement, build sidewalks, and provide an enhanced bikeway. South of Clay, realign SE Water Ave as shown in the OMSI Master Plan.	$22,500,000	2023-2030	Yes
Freight	Multnomah County	Portland	Portland	Central Eastside Access and Circulation Improvements	11841	Central Eastside	Central Eastside	Improve access and circulation in the Central Eastside by adding new signals and crossings at Salmon & Grand, Salmon & MLK, Washington & Grand, Ankeny & Sandy, and 16th & Irving.	$7,500,000	2023-2030	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Freight Improvements: Project Development	12004	NE 60th Ave	NE 82nd Ave	Alternatives analysis and project development to identify preferred street and intersection modifications to improve freight reliability and access to industrial properties. Analyze the feasibility and benefits of freight-only lanes to ensure improvements prioritize freight movement.	$2,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	148th Ave Corridor Improvements, Segment 1	10330	NE Halsey St	SE Powell Blvd	Construct safety and access to transit improvements from Halsey to Powell, including sidewalk infill, enhanced bike lanes, and crossings. Supports future bus service along the corridor.	$8,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	82nd Ave Corridor Improvements	11844	NE Lombard St	SE Clatsop St	Design and implement multimodal improvements to sidewalks, crossings, transit stops, striping, and signals to enhance ped/bike safety, access to transit, and transit operations. Address major asset needs including pavement, ADA ramps, and traffic signals.	$150,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Cesar Chavez Corridor Improvements	10315	NE Sandy Blvd	SE Woodstock Blvd	Repair street, upgrade sidewalks, and add pedestrian/bicycle crossing improvements. Upgrade signals and make striping changes to improve traffic safety and transit operations. Improve access to transit and provide transit priority treatments. Project includes lane reconfiguration south of Powell Blvd to add a center turn lane and bus priority, including ITS and NextGen TSP.	$14,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Columbia & Cully Intersection Improvements	10336	NE Cully Blvd & Columbia Blvd	NE Cully Blvd & Columbia Blvd	Reconstruct intersection to provide signalization, left turn pockets, enhancing turning radii and improving circulation for trucks serving expanding air cargo facilities south of Portland.	$4,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Columbia/Alderwood Intersection Improvements	11570	NE Columbia Blvd & Alderwood Rd	Columbia/Alderwood	Improve intersection and install traffic signal at Columbia & Alderwood.	$5,000,000	2023-2030	Yes

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Roadway (Capital)	Multnomah County	Portland	Portland	Cornfoot Rd Corridor Improvements	10340	NE 47th Ave	NE Alderwood Rd	Improve roadway and intersections to improve freight operations. Construct a multi-use path on the north side of Cornfoot Rd to separate pedestrians and bicyclists from motor vehicle traffic. Install guardrails where needed.	$7,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Gateway Local Street Improvements, Phase 2	10328	Gateway Regional Center, NE/SE	Gateway Regional Center, NE/SE	High priority local street and pedestrian improvements in regional center.	$5,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Inner Powell Blvd Corridor Improvements: Local Contribution to State-Owned Arterial	10259	SE 9th Ave	I-205	Retrofit existing street with multimodal safety improvements including enhanced pedestrian and bicycle crossings, pedestrian and bike activated signals, median islands with trees, redesign of selected intersections, and stormwater management facilities.	$10,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Inner W Burnside Corridor Improvements	11959	NW 15th Ave	NW 2nd Ave	Construct transportation improvements including pavement reconstruction, new and upgraded traffic signals, turn lanes, curb extensions, bicycle network improvements, transit priority and access improvements, and crossing improvements.	$4,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	N Lombard Corridor Improvements: Local Contribution to State-owned Arterial	10299	N Richmond St	NE MLK Jr Blvd	Design and implement transportation improvements including signal upgrades, lane reconfiguration, enhanced crossings, in-roadway and/or parallel bikeways, and pedestrian improvements along the corridor. Improve pedestrian safety and accessibility of the crossing of I-5. Project will coordinate with ODOT to identify locations and design treatments.	$5,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	N Lombard St (formerly N Burgard Rd) Viaduct Replacement	11797	N Lombard St (Bridge over UPRR near T4)	N Lombard St (Bridge over UPRR near T4)	Replace the existing N Lombard St (formerly N Burgard Rd) Viaduct (#001) over the UPRR tracks. Completes one element of the larger Barnes to T4 Port project.	$17,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE Airport Way Safety and Access to Transit	11811	I-205	Portland City Limits	Construct priority pedestrian and bicycle access to transit improvements in the Airport Way corridor, as identified in the Growing Transit Communities Plan.	$4,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE MLK Jr Blvd Corridor Improvements	10302	NE Hancock St	NE Lombard St	Multimodal safety and access to transit improvements including signal timing upgrades, enhanced pedestrian crossings, access management, and transit priority.	$4,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Foster Corridor Safety Improvements	11860	SE 101st Ave	City Limits	Improve safety and access by filling high-priority sidewalk gaps, adding pedestrian crossings, enhancing safety of existing bike lanes, and employing safety countermeasures to reduce motor vehicle crash severity. Improve access to transit and transit priority in segments with transit service.	$2,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Glisan Corridor Improvements, Segment 1	10318	82nd Ave	NE 122nd	Retrofit street with new traffic signals, bicycle facilities, improved pedestrian facilities and crossings, street lighting, and other safety and access improvements. Implement EPASS recommendations.	$5,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Outer Halsey Corridor Improvements	11849	114th	162nd	Construct enhanced crossings, enhance bicycle facilities, and redesign roadway to reduce crashes. Improve access to transit and transit priority.	$3,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Post Office Blocks Transportation Improvements, Phase 1	11840	Post Office Blocks	Post Office Blocks	Extend Johnson and Park Streets through the Post Office Blocks redevelopment site. Add traffic signals at 9th/Everett and 9th/Glisan.	$28,000,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SE Hawthorne Blvd Corridor Safety Improvements	11854	SE 12th Ave	SE 23rd Ave	Improve safety for all modes, including roadway redesign, crossings, and transit improvements.	$2,500,000	2023-2030	Yes

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Roadway (Capital)	Multnomah County	ODOT	Portland	South Portal Intersection Improvements	10164	Bancroft/Hood/Macadam	Bancroft/Hood/Macadam	Improve the South Portal to the North Macadam District (intersection of Bancroft, Hood, and Macadam) to address safety and capacity issues. Includes new extension of Lowell St.	$11,500,000	2023-2030	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	W Burnside Corridor Improvements	10250	NW 23rd Ave	NW 15th Ave	Design and construct corridor improvements including pavement reconstruction, sidewalk improvements, safer crossings, new traffic signals, transit priority improvements, and traffic management.	$6,500,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC: Portland Central City Portals Transit Enhancements	11761	Portland Central City	Portland Central City	Construct transit priority treatments to reduce transit delay and improve transit reliability and travel times.	$5,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC: SE Hawthorne/Foster Ave Enhanced Transit Corridor	11834	Portland Central City	SE 97th Ave	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times, including ITS and NextGen TSP.	$4,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County	Portland	Portland	HCT: Portland Streetcar Operational Improvements	11783	Portland Central City	Portland Central City	Design and construct improvements along streetcar line to add transit capacity. Construct turnbacks where needed to improve operations.	$4,000,000	2023-2030	Yes
Transit Capital - Other	Multnomah County	Portland	Portland	Passenger Ferry Pilot	12311	Cathedral Park	Riverplace	Ferry dock reinforcement/railings, boat build/lease to enable ferry service pilot with FTA Passenger Ferry Grant Program support.	$12,000,000	2023-2030	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Safe Routes to School, Phase 1	11127	N/A	N/A	Safe routes to school projects serving Title 1 schools within the City of Portland.	$5,000,000	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	122nd Ave Corridor ITS Improvements	10198	NE Airport Way	SE Powell Blvd	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	$4,500,000	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	ODOT	Portland	Barbur Blvd ITS	11826	I-405	Portland City Limits	Install ITS infrastructure (Next-Gen transit signal priority and queue jumps, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors).	$2,000,000	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	ITS Network Cyber Security Enhancement	12211	N/A	N/A	Evaluate existing PBOT ITS network and upgrade system for resiliency.	$2,500,000	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SE Powell Blvd ITS Improvements	12213	SE Milwaukie Ave	SE 82nd Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$6,500,000	2023-2030	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SW Capitol Hwy / Beaverton Hillsdale Hwy ITS Improvements	12212	SW Barbur Blvd	City Limits	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$7,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: East Burnside/SE Stark Enhanced Transit Project	12030	Central City Portland	Gresham Town Center	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: NE MLK Jr Blvd Enhanced Transit Project	12027	Central City Portland	N Vancouver Way and Jubitz	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: NE Sandy Blvd Enhanced Transit Project	12028	Central City Portland	Parkrose/Sumner Transit Center	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: SE Belmont Enhanced Transit Project	12033	Central City Portland	Gateway Transit Center	Planning, design and improvements for regional enhanced transit project..	$2,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County	TriMet	TriMet	ETC: SE Powell Blvd Transit Project	12035	Central City Portland	TBD	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: 82nd Ave Transit Project	12029	Clackamas Town Center	TBD	Contingent on federal, state and local funding commitments, the 82nd Ave Transit Project will improve travel between Clackamas Town Center and important destinations in NE Portland with easier, faster and more reliable bus service as well as necessary safety and accessibility improvements, paving and signals. Planning work will include identifying and prioritizing complementary multimodal safety improvements to make 82nd Avenue safer for all travel modes.	$300,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County	Portland Streetcar, In	TriMet	HCT: Streetcar Montgomery Park Extension	11319	NW Lovejoy/Northrup	Montgomery Park	Extend streetcar from NW Lovejoy/Northrup to Montgomery Park.	$80,000,000	2023-2030	Yes
Transit Capital - Other	Multnomah County	TriMet	TriMet	MAX Blue Line Station Rehabilitation	12261	Hollywood Transit Center	Cleveland MAX Station, Gresham	Multi-year, multi-location state of good repair project to make critical updates and improvements at eastside MAX Blue Line stations and surrounding station areas.	$28,700,000	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Center Street Bus Garage Improvements	11038	1851-1717 SE Center St, Portland	1851-1717 SE Center St, Portland	Improvements at Center Bus Garage.	$5,600,000	2023-2030	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: North Downtown Transit Mall Layover Terminal	12037	Central City Portland	Central City Portland	Terminal in northern portion of downtown Portland for bus layover.	$13,500,000	2023-2030	Yes

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Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Powell Bus Garage Improvements and ZEB transition	12291	9800 SE Powell Blvd, Portland	9800 SE Powell Blvd, Portland	Planning and design to support zero emissions bus improvements.	$23,550,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Troutdale	Troutdale	Troutdale Sandy Riverfront Trail	12109	Gateway to the Gorge Visitor Center, Troutdale	I-84 bike/ped interchange	Project includes a 1/4 mile, 12-ft wide paved trail and three parks. The trail connects the existing I-84 pedestrian/bike interchange to downtown Troutdale through the urban renewal area along the Sandy River.	$3,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	ODOT	ODOT	Jordan Road Trail	12293	I-84 Bridge	Entrance to Parking area	Paved multi-use path connection along Jordan Road paralleling the Sandy River	$3,000,000	2023-2030	Yes
Transit - Better Bus	Multnomah County, Washington County	TriMet	TriMet	ETC: SW Beaverton-Hillsdale Hwy Enhanced Transit Project	12032	Central City Portland	Washington County (54 to BTC and 56 to Washington Square)	Planning, design and improvements for regional enhanced transit project.	$2,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: MAX Red Line Improvements Project: Capital Construction	10922	Fairplex/Hillsboro Airport MAX	Portland Airport MAX	Capital construction to enable extension of Red Line service to the Hillsboro Airport/Fair Complex Station and improve reliability of the entire MAX light rail system. Project includes double-tracking and a new inbound Red Line station at Gateway Transit Center, double-tracking at Portland Airport, upgrades to signals and switches along the alignment, and purchase of new light rail vehicles needed to operate the extension and needed storage capacity at Ruby Junction to house the new vehicles.	$68,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: Southwest Corridor Project Development	12322	Bridgeport Village, Tualatin	Downtown Portland	Project Development for High Capacity Transit project between Portland and Tualatin via Tigard.	$4,000,000	2023-2030	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	Washington County	HCT: Southwest Corridor Project Development Support	12301	Bridgeport Village, Tualatin	Downtown Portland	Project development to address traffic mitigation and access improvements for SW Corridor High Capacity Transit project between Portland and Tualatin via Tigard.	$2,300,000	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	Cities and counties	Cities and counties	Local Roadway Operations, Maintenance and Preservation: 2024-2030	12098	N/A	N/A	Local roadway operations, maintenance and preservation activities	$3,441,327,000	2023-2030	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Corridor Investment Areas Activities for 2023-2030	11664	Regional	Regional	The RTP identifies mobility corridors and future high capacity transit capital investments needed to support the 2040 Growth Concept. Corridor investment areas activities focus on aligning investments around specific outcomes to support local and regional goals in locations with multijurisdictional interests. Investment areas activities include completing corridor refinement planning and developing multimodal projects in major transportation corridors identified in the RTP as well as developing shared investment strategies to align local, regional and state investments in economic investment areas that support the region's growth economy. Activities include ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.	$6,730,000	2023-2030	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Regional MPO Activities for 2023-2030	11103	Regional	Regional	Transportation planning, programming, monitoring and federal reporting that Metro must conduct in order to remain certified as an metropolitan planning organization (MPO) by the federal government for the region and be eligible to receive federal transportation funding dollars.	$14,230,000	2023-2030	Yes
Transit Oriented Development	Region-wide (all three counties)	Metro	Metro	Regional TOD Investments for 2023-2030	10855	2040 Centers, Stations Areas and Corridors	2040 Centers, Stations Areas and Corridors	Metro's TOD program helps build climate-friendly communities near transit that prioritize the needs of people with low-incomes and communities of color. The core program activity is to provide financial incentives and acquire land to increase affordable housing opportunities in areas that are well-served by transit, particularly those where communities are at risk of gentrification and displacement.	$35,510,000	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Safe Routes to School Program Activities for 2023-2030	12021	Regional	Regional	Educational and encouragement activities that help children safely walk and roll to school. Funded through the Regional Travel Options program with programs and services provided directly by Metro staff and by local agency and non-profit organizations through grants and agreements.	$5,400,000	2023-2030	Yes

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Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Travel Options (RTO) Program Activities for 2023-2030	11054	Regional	Regional	Education, services, and small capital projects that promote and make transit, bicycling, walking and ridesharing easier to use. Program elements are delivered by local government agencies, community non-profit organizations and colleges with US and Oregon Department of Transportation funding allocated by the Metro Regional Travel Options program. The program helps the region meet goals for increased access to jobs, education and services and to reduce motor vehicle miles traveled.	$28,000,000	2023-2030	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Corridors Priority Investments for 2023-2030	12024	Regional	Regional	As coordinated through the regional TSMO program, provide funding and secure discretionary grants for operators to work together to deploy safe, integrated corridor management with advanced technology in regional mobility corridors including decision support systems, real-time traveler information on route choice and estimated travel time that uses a variety of data sensors, software and systems (e.g., smart mobility hubs, internet of things, connected and automated vehicles). This also includes deployment of innovative technology systems, automated corridor management, and other active traffic management strategies.	$9,420,000	2023-2030	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Program Investments for 2023-2030	11104	Regional	Regional	Implement and maintain Transportations System Management and Operations (TSMO) investments used by multiple agencies (e.g., Central Signal System, traffic signal priority, data communications and archiving) and coordinate response to crashes. The regional program also includes strategy planning (e.g., periodic TSMO Strategy updates), coordination of activities for TransPort subcommittee to TPAC, updates to the blueprints for agency software and hardware systems (ITS Architecture), improving traveler information with live-streaming data for connected vehicle and mobile information systems (TripCheck Traveler Information Portal Enhancement), and improving "big data" processing (PSU PORTAL) to support analyzing performance measures.	$9,420,000	2023-2030	Yes
Bridge Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Bridge Rehabilitation & Repair: 2023-2030	12092	Region-wide	Region-wide	Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.	$149,000,000	2023-2030	Yes
Pricing Programs	Region-wide (all three counties)	ODOT	ODOT	I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	12304	I-205 Glenn Jackson Bridge/I-5 Interstate Bridge	I-5 Boone Bridge	Apply congestion pricing on all lanes of Interstate-5 (I-5) and Interstate-205 (I-205) to manage travel demand and traffic congestion on these facilities in the Portland, Oregon metropolitan area in a manner that will generate revenue for transportation system investments.	$400,000,000	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Culvert Replacement & Repair: 2023-2030	12093	Region-wide	Region-wide	Repair and replacement of culverts that have or are in danger of failure, do not provide adequate drainage or are a habitat barrier to Threatened & Endangered species that do not add motor vehicle capacity.	$75,000,000	2023-2030	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Highway Pavement Maintenance: 2023-2030	12094	Region-wide	Region-wide	Pavement rehabilitation/repair projects includes overlays, slurry seals, full pavement replacement, and other minor roadway improvements (curb and gutters, adding/widening shoulders) that do not add motor vehicle capacity.	$224,000,000	2023-2030	Yes
Roadway Operations	Region-wide (all three counties)	ODOT	ODOT	Safety & Operations Projects: 2023-2030	12095	Region-wide	Region-wide	Projects to improve safety and/or operational efficiencies such as pedestrian crossings, speed feedback signs, transit priority technology at signals on arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, sidewalks, bicycle lanes, and other improvements that do not add motor vehicle capacity.	$349,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	TriMet	TriMet	Access: Bike & Ride Facilities: Phase 1	11411	Regionwide	Regionwide	Provide and maintain secure bike parking facilities and enhancements at TriMet stations and stops.	$2,000,000	2023-2030	Yes
Transit - Better Bus	Region-wide (all three counties)	TriMet	TriMet	ETC: Better Bus Program Phase 1	12283	N/A	N/A	Program for roadway treatments, transit signal priority and other transit roadway improvements	$13,500,000	2023-2030	Yes
Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Optimization, Reliability and Station Improvements: Phase 1	12087	Regionwide	Regionwide	Improvements to HCT including optimizing and rehabilitating stations, station areas, and operational improvements including track, ties, signals and switches.	$119,000,000	2023-2030	Yes
Transit Capital - Other	Region-wide (all three counties)	To be determined	TriMet	Access: Bus Stop and Access to Transit Improvements: Phase 1	11331	Regionwide	Regionwide	Transit stop, right of way, sidewalk, crossing and ADA improvements to support expansion of services and amenities.	$2,000,000	2023-2030	Yes
Transit Maintenance	Region-wide (all three counties)	TriMet	TriMet	Transit Maintenance: Phase 1	12282	N/A	N/A	Maintenance of transit services, such as drivers, security, facilities and rolling stock.	$1,255,980,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: Columbia Bus Base	11041	4421 NE Columbia Blvd Portland	4421 NE Columbia Blvd Portland	Design and Construction of new Zero Emission Fleet operations center.	$250,000,000	2023-2030	Yes

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Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Equipment and Facilities: Phase 1	11335	N/A	N/A	Equipment and facilities to support system replacement, refurbishment, and growth.	$37,550,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Fleet Vehicles: Phase 1	10928	N/A	N/A	Replacement and refurbishment of zero emission buses, articulated buses, light rail and LIFT vehicles.	$694,600,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Information Technology: Phase 1	10927	N/A	N/A	Communication systems, information technology, cyber security and improvements to Hop.	$68,000,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Safety and Security: Phase 1	11334	N/A	N/A	Safety and security enhancements, CCTV, Rail crossing enhancements	$24,000,000	2023-2030	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Transit Center and Layover improvements: Phase 1	12255	N/A	N/A	Program to improve, expand or create new transit centers or layover facilities.	$20,900,000	2023-2030	Yes
Transit Oriented Development	Region-wide (all three counties)	TriMet	TriMet	Transit-Oriented Development: Phase 1	12271	N/A	N/A	Site acquisition, station area planning, activation or infrastructure improvements	$2,000,000	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	STIF Regional Coordination Funds: Phase 1	12273	N/A	N/A	Pass through funds for regional shuttle services.	$48,000,000	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	Streetcar STIF Funds: Phase 1	12275	N/A	N/A	Pass through funds for Portland Streetcar.	$25,500,000	2023-2030	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	TriMet Operations: Phase 1	12096	Region-wide	Region-wide	Operations of transit services, such as drivers, security, facilities and rolling stock.	$4,453,020,000	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	Access: Park & Ride Facilities: Phase 1	10988	Regionwide	Regionwide	Improvements or modifications to Park & Ride facilities.	$2,000,000	2023-2030	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	TriMet Fare Discount Programs: Phase 1	12258	N/A	N/A	TriMet programs to provide discounted fares for eligible groups.	$60,000,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Beaverton	Beaverton	Beaverton Access to Transit Sidewalk Infill	11888	Citywide	Citywide	Construct sidewalk where missing on arterials and collectors near transit (MAX stations and bus stops). Final project to complete: Laurelwood Avenue Sidewalk: Scholls Ferry to Laurelwood Court)	$2,600,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Beaverton	Canyon Road Multimodal Improvement: Hocken Ave to 117th Ave	11379	Hocken Avenue	117th Avenue	Construct a landscaped median for access control, enhanced midblock pedestrian crossings at Rose Biggi Ave, lighting, ADA ramp upgrades, crosswalk markings.	$6,300,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Beaverton	Beaverton	Watson/Hall: Cedar Hills to Allen (Pedestrian Safety)	10646	Cedar Hills Boulevard	Allen Boulevard	Reconstruct intersections on Hall Boulevard, between Cedar Hills and Crescent St. Reconstruct intersections on Hall Boulevard and Watson Ave, between 5th St. and Allen Boulevard. Curb extensions, lighting, landscaping, ADA ramp upgrades, and benches.	$4,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Blvd Complete Street: Murray Blvd to OR 217 (Design)	11900	Murray Boulevard	OR Highway 217	Design a Complete Street along Alan Boulevard, between SW Murray Boulevard and OR Highway 217. The project is anticipated to include investments in sidewalks, bike lanes, signals, and vehicle turn lanes where needed.	$2,300,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Denney Rd: OR 217 to Scholls Ferry (Ped/Bike/Turn Lanes)	10670	OR 217	Scholls Ferry Road	Construct bike lanes, sidewalks, and turn lanes where needed, along SW Denney Road, between OR 217 and Scholls Ferry Road.	$10,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Hall - Millikan Way to 1st	12121	Millikan Way	1st Street	Construct complete street on Hall Boulevard between Millikan Way and 1st Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	$13,700,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson - Millikan Way to 1st	10664	Millikan Way	1st Street	Construct complete street on Watson Avenue between Millikan Way and 1st Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	$12,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson/Hall - Crescent to 5th	12125	Crescent Street	5th Street	Preliminary design and engagement for project to construct complete street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	$2,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Barrows Rd: Tile Flat to Loon Dr (South Cooper Mtn Extension)	11892	Tile Flat Road	Loon Drive	Construct new three lane collector street with bike lanes, sidewalks, street trees, and lighting. (Partially Complete)	$18,200,000	2023-2030	Yes
Roadway (Capital)	Washington County	P&W RR	Beaverton	Downtown Beaverton Railroad Crossing Safety: 5th to Hocken	12120	5th Ave.	Hocken Ave.	Construct new sidewalks and curb ramps, bike lanes, traffic signals, and rail safety equipment at six railroad crossings. Implement a railroad quiet zone.	$9,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Hocken Ave: Canyon Rd to Farmington Rd (Railroad Crossing)	12127	Canyon Road	Farmington Rd	South bound, right turn lane extended, between Farmington Rd and Canyon Rd. Project includes sidewalk and railroad crossing safety treatments.	$2,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	McKernan Creek Parkway: Siler Ridge Lane to Kemmer Road	12129	Siler Ridge Lane	Kemmer Road	Design new collector street in Cooper Mountain area with shared use pathway adjacent to the street.	$2,300,000	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Millikan Way Extension: Watson Avenue to Lombard Avenue	10620	Watson Avenue	Lombard Ave.	Construct new two-lane collector street between Watson Avenue and Lombard Street with protected bike lanes, sidewalks and street trees. Complete sidewalk gaps. Realign Millikan between Watson Avenue and Hall Boulevard.	$15,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	SW Mountainside Way: Scholls Ferry Rd to UGB (New Collector)	11893	Scholls Ferry Road	Urban Growth Boundary	Construct three lane collector road with bike lanes, sidewalk, street trees and lighting.	$5,800,000	2023-2030	Yes

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Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	Cornelius Citywide Sidewalk Infill	11246	City-wide	City-wide	Sidewalk infill on Heather St (8th Ave - 10th Ave); 4th Ave (3F Railroad - Barlow); and 26th Ave (Holladay - S. City Limits)	$2,500,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	S. 29th Boulevard Connection	11917	SW 345th Ave.	450 feet south of S. Dogwood St.	Construct new collector into Cornelius SE UGB expansion area.	$5,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	Cornelius	Cornelius	S. 29th Blvd. - Phase 2	11918	250 feet east of 345th Avenue	SW 345th Avenue	Create new intersection of S. 29th Blvd and SW 34th Avenue, improve passive rail crossing, and complete the eastern portion of S. 29th Blvd.	$1,600,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Forest Grove	Forest Grove	Forest Grove Bike Lanes and Sidewalks Infill	12131	Forest Grove East City Limits	Forest Grove West City Limits	Enhance pedestrian and bicycle safety by infilling gaps and improve bike lane safety.	$2,300,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT, Forest Grove	Forest Grove	OR 8/Pacific/19th Corridor Safety and Complete Street	10779	Cornelius City Limits	Quince Street/OR 47	Retrofit the street from B Street to Cornelius City Limits including wider sidewalks, curb extensions, safer street crossings. Local match for TV Hwy HCT and Safety and Complete Street projects.	$14,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ Fernhill-Maple St. Intersection Improvements	11667	HWY 47	Fernhill-Maple	Construct intersection improvements to address safety issues at high crash intersection and improve access to employment area and regional recreational facility.	$3,200,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ Martin Road Intersection Improvements	11661	OR 47	Martin Road	Construct improvement (e.g. roundabout) at Highway 47 intersection with Holladay Street extension, Martin Road and 23rd Avenue extension. This project or a portion of the project is located outside the urban growth boundary.	$3,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT, Forest Grove	Forest Grove	Yew St / Adair St Intersection Improvements	11380	Yew St	Adair St	Construct intersection improvements at Yew Street/Adair and Yew Street/Baseline to improve safety.	$3,200,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Davis Rd Turn Lanes and Bike/Ped Improvements	10838	Brookwood Ave	Century Blvd	Widen from three to five lanes by adding one general travel lane in each direction; project includes widening bridge over light rail; rebuild bike facilities as cycle track	$5,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Hillsboro	Downtown Hillsboro Access and Safety Improvements	10849	City-wide	City-wide	Improve pedestrian and bicycle facilities, safety, and access in the Hillsboro Downtown Regional Center; special attention to pedestrian and bicycle access across Hwy 8 one-way couplet (Oak St and Baseline St).	$4,300,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Safe Routes to School Projects (Hillsboro)	11933	City -wide	City -wide	Implement Safe Routes to School projects around Hillsboro area Title I schools.	$3,900,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	194th Ave/Amberglen Pkwy Extension and Realignment	11277	Amberglen Pkwy	Cornell Rd	Construct three-lane realignment of Amberglen Pkwy with sidewalks and bike facilities; see AmberGlen "Crossroads" LPA	$10,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	198th Ave Widening and Bike/Ped Improvements	11386	TV Hwy	Alexander St	Widen roadway to five lanes (two through in each direction plus center turn lane) with bike/ped facilities; also see project 11390 - intersection improvements at TV Hwy & 198th	$5,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 1	10553	Alexander Street	Kinnaman Rd	Widen roadway from two/three lanes to five lanes; improve from rural to urban standard with bike facilities and sidewalks; improve intersections and railroad crossing; new signals at Blanton and Kinnaman; project to serve South Hillsboro UGB area	$12,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 2	11752	Blanton St	Vermont St	Widen and improve road to five lanes with sidewalks and bike facilities; include bridge widening across Butternut Creek; intersection improvements include new roundabout at McInnis and new signals at Deline and Vermont	$30,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	25th Ave Realignment	12135	NE Beacon Ct	Evergreen Rd	Construct three-lane realignment away from airport Runway Protection Zone (RPZ); see HIO Master Plan; additional refinement needed for the two intersections of NE 25th and NE 15th Ave on Evergreen	$9,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	30th Ave Extension	11388	Evergreen Rd	Meek Rd	Construct three-lane road; include intersection improvements at Evergreen and Huffman	$32,200,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Amberglen Parkway Extension	10825	Wilkins St	Stucki Ave (future extension)	Extend three-lane road with bike/ped facilities	$3,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Brookwood Ave Extension	12142	250' south of Davis Rd	River Rd	Construct three-lane arterial with pedestrian and bicycle facilities; include bridge over Gordon Creek; include improvement from Davis to Oakhurst according to LPA	$28,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Extension and Improvements (Baseline to Lois)	10818	Baseline Rd	Lois St	Construct three lane extension of Century from Main to Lois, including new segment to Borwick, realignment from Ariel to Lois, and bridge over Rock Creek	$21,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornelius Pass Rd Extension, Phase 2	11920	Blanton St	Vermont St	Construct five-lane road extension with new intersections at Kinnaman, McInnis, Butternut Creek, Deline, and Vermont; bridge at Butternut Creek (bridge is part of MSTIP Bonding program)	$25,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornell at Brookwood and NE 48th Intersections	11170	Brookwood	48th	Add second southbound through lane and extend receiving lane to Veterans Dr, second eastbound and westbound left-turn lanes, northbound right-turn lane; add westbound right-turn lane starting at Elam Young west to NE 48th	$13,500,000	2023-2030	Yes

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

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(projects are organized by time period alphabetically by County and nominating agency)

RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Cornell Rd & 25th Ave Intersection Improvements	11169	Cornell Rd & 25th Ave	Cornell Rd & 25th Ave	Construct second southbound left-turn lane, convert northbound right to second northbound through, construct second northbound receiving lane; extend bike lanes on west leg for 300'; MSTIP-3d committed project	$7,200,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornell Rd Realignment	12136	East of 34th	West of Brookwood	Realign Cornell Rd to avoid airport Runway Protection Zone (RPZ); see HIO Master Plan	$9,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Evergreen Rd Turn Lanes at 15th & 25th	12138	NE 15th	NE 25th	Construct side-by-side lefts; include cost estimate of signal modification at NE 15th Ave	$2,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Huffman St Extension, Phase 1	10821	Brookwood Pkwy	Sewell Rd	Widen to five lanes from Brookwood to Starr and three lanes from Starr to Sewell; preserve seven-lane right-of-way from Brookwood to Starr and five-lane right-of-way from Starr to Sewell; include intersection improvements at Brookwood	$17,100,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Kinnaman Rd Extension	11272	Century Blvd & 67th Ave (future intersection)	209th Ave & Kinnaman intersection	Construct three-lane road extension through South Hillsboro including intersections at Cornelius Pass Rd, 209th Ave, and two intersecting neighborhood routes	$12,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	River Rd Urban Upgrade	12144	WHVS nothern boundary	WHVS southern boundary	Widen and improve road to three-lane arterial standard with pedestrian and bicycle facilities; include arch culvert at Gordon Creek; include intersection controls at Pheasant and Brookwood	$9,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Sewell Ave	12104	Evergreen	Meek Rd	Construct two-lane Commercial and Industrial Collector; alignment north of Waibel Creek to be determined	$29,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	ODOT	Hillsboro	TV Hwy & 198th Ave Intersection Improvements	11390	TV Hwy & 198th Ave	TV Hwy & 198th Ave	Five lane north-south through intersection: Construct southbound right-turn lane, second westbound left-turn lane, and convert northbound right-turn to shared through-right; widen north leg for second northbound receiving lane	$6,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Walker Rd Extension and Realignment	11275	Amberwood Dr	Stucki Ave (future extension)	Construct three-lane extension of Walker from Overlook to Amberglen Pkwy realignment with bike facilities and sidewalks; see AmberGlen "Crossroads" LPA	$7,400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	SW Elsner Road: Sidewalks, Cycletrack, Turn-lanes - Phase 1	12157	River Terrace Blvd.	SW Beef Bend Road	Improve with pedestrian and bike facilities from SW Roy Rogers Road to SW Beef Bend Road. 2-lane street with sidewalks and a one-way cycle track on each side to the Tualatin River Trail, then shared use path on west side and left-turn lanes where needed.	$4,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 1	11946	Roy Rogers Rd.	150th Ave.	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	$10,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	King City	King City	SW River Terrace Boulevard Corridor Extension	12101	SW Beef Bend Rd	SW Elsner Road	Construct a Collector Street with bike/ped facilities. 2-lane street with parking, sidewalks and a one-way cycle track on each side, with 3-lanes at the Beef Bend intersection. Improve the Beef Bend Road, Fischer Rd and Elsner Rd intersections with signals or roundabouts.	$13,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Sherwood	OR 99W Regional Trail Crossing	10707	SW Pacific Hwy. (west side)	SW Pacific Hwy. (east side)	Constructs separated grade crossing for Cedar Creek Trail (regional trail system) under SW Pacific Hwy (OR 99W).	$23,900,000	2023-2030	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Oregon Street Improvements	10699	SW Murdock Rd	SW Langer Farms Pkwy	Widen existing substandard 2-lane road (no sidewalks, no median) to a 3-lane collector meeting current TSP standards (8' sidewalks, 5' landscape strip, 12' travel, 14' median, 12' travel, 5' landscape, 8' sidewalks, plus 2 on-street bike lanes or 4' added to each 8' sidewalk). On-street bike lanes vs. 2 multi-use paths TBD with future development.	$9,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Tonquin Area East-West Collector	12046	SW 124th Avenue	SW Tonquin Road	Construct 3-lane collector status road between SW 124th Avenue and SW Tonquin Road through the Tonquin employment area to serve recent UGB annexation area.	$14,800,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Tigard	Tigard	Downtown pedestrian improvements (urban renewal)	12167	Downtown Tigard	Downtown Tigard	Improve sidewalks, lighting, crossings, bus shelters and benches throughout Tigard Downtown.	$2,300,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Fanno Creek Connections Project	10766	Woodard Park	Milton	Construct 3 new segments of the Fanno Creek Trail and make improvements to existing segment from Ash Ave to Hall Blvd.	$11,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Templeton-Twality Safe Routes to School Improvements	12173	McDonald St	Sattler St	Improve pedestrian crossings, complete missing sidewalk segments, pave trail through East Butte Park.	$2,300,000	2023-2030	Yes
Bridge (Capital)	Washington County	Tigard	Tigard	North Dakota St (Fanno Creek) Bridge Replacement	12170	North Dakota Street at Fanno Creek	North Dakota Street at Fanno Creek	Replace bridge, with bike lanes and sidewalk.	$8,000,000	2023-2030	Yes
Bridge (Capital)	Washington County	Tigard	Tigard	Tigard St (Fanno Creek) Bridge Replacement.	11996	Tigard St at Fanno Creek	Tigard St at Fanno Creek	Replace bridge with bike lanes and sidewalk.	$6,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	72nd Ave. Improvements - 99W to Dartmouth	10755	99W	Dartmouth	Build complete street with separated cycletracks, sidewalks, and improved pedestrian crossings. Includes new bridge over Red Rock Creek.	$17,100,000	2023-2030	Yes

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Roadway (Capital)	Washington County	Tigard	Tigard	McDonald Street Improvements	11217	Hwy 99W	Hall Blvd	Widen roadway to a 3-lane complete street (with sidewalks, bike lanes, and center turn lanes where appropriate) and crossing enhancements at some locations.	$28,100,000	2023-2030	Yes
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Tualatin Valley Highway Transit Project	11589	Forest Grove	Beaverton Transit Center	Planning, design and construction of Rapid Transit Project along Tualatin Valley Highway to provide easier, faster and more reliable bus service as well as necessary safety and accessibility improvements and signals. Planning work will include identifying and prioritizing complementary multimodal safety improvements to make Tualatin Valley Highway safer for all travel modes.	$300,000,000	2023-2030	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Beaverton Transit Center Improvements	12254	Beaverton Transit Center, Beaverton	Beaverton Transit Center, Beaverton	Reconfigure, update and expand bus layover facilities and add zero emissions fleet charging infrastructure at TriMet's Beaverton Transit Center.	$9,000,000	2023-2030	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Bus: Merlo Bus Garage Improvements and ZEB Transition: Phase 1	11037	16130 SW Merlo Rd, Beaverton	16130 SW Merlo Rd, Beaverton	Zero emissions bus charging infrastructure and improvements to support new fleet at Merlo bus garage.	$52,000,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Nyberg Creek Greenway Trail - East	10745	65th	Martinazzi	Shared Use Path with boardwalk sections through wetland/natural areas. Trail will provide access to nature and jobs for communities of color, and English language learners. Includes grade-separated crossing under/over I-5.	$5,100,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Phase 1: 65th Ave - Safety Improvements NB Turn Lane	11426	Tualatin River	I-205	To improve safety for residents and employees, add a share use path on one side of this roadway section. Include northbound right-turn lane on 65th at Borland.	$6,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Boones Ferry Capacity Improvements (TS Rd Intersection)	11422	Tualatin- Sherwood Road	Tualatin-Sherwood Road	Improve traffic capacity through the addition of turn lanes and increased stacking distance on northbound or southbound Boones Ferry to Tualatin-Sherwood Road. Possible turn lanes on Tualatin-Sherwood, and possible side street closure interesecting Boones.	$11,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Herman Rd Widening (Cipole to 124th Ave)	10718	Cipole	124th Ave	Reconstruction: Widen to 3-lanes from Cipole to 124th.	$11,400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Beaverton Creek Trail (Regional) Seg. #3 & #4	12043	THPRD Nature Park	S.W. Hocken Blvd.	Design & construct a 12' wide regional, mulit-use trail connecting THPRD's trail system to Downtown Beaverton; improving safety, serving histrionically marginalized communities, filling a gap, and increasing access to jobs, transit, & 2040 Centers.	$6,900,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Bridge crossing of Hwy. 26 by the Westside Trail	11211	Powerline Corridor North of Hwy 26 near NW Science Park Drive	Powerline Corridor South of Hwy. 26 near SW Greenbrier	Construct a 12' wide multi-use trail bridge over US-26 eliminating out of direction bike/ped routes along high-injury/crash corridors; serving historically marginalized communities & improving safety/access to transit, schools, jobs, & 2040 Centers.	$19,900,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Westside Trail (Regional) Seg. 15 -17	11405	Bronson Creek just north of NW Kaiser Rd.	north side of Hwy. 26 just west of NW Science Park Dr.	Design & construct 12' wide multi-use regional trail linking the northern Westside Trail to the Westside Trail Bridge over US-26; improving safety, serving historically marginalized communities, and increasing access to jobs, schools, & 2040 Centers.	$4,900,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Westside Trail (Regional) Segment #14	10810	South of Hwy 26 at Greenbrier Pkwy.	THPRD Nature Park	Design & construct a 12' wide regional trail connecting the southern Westside Trail at 158th Ave & Walker Rd to the Westside Trail Bridge over US-26; serving historically marginalized communities, and improving safety/access to jobs & retail hubs.	$6,000,000	2023-2030	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Aloha Pedestrian Improvements	10608	Aloha Town Center	Aloha Town Center	Sidewalk infill and pedestrian crossing of 185th Ave. at Cascade Dr.	$9,400,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Council Creek Regional Trail (East-West)	10806	Forest Grove	Hillsboro	Multi-use trail from the end of the Westside MAX light-rail line in Hillsboro, through Washington County, the City of Cornelius, and extending into the City of Forest Grove. The project or a portion of the project is outside the designated urban growth boundary.	$39,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	School Access Improvement Projects	11922	Washington County	Washington County	Add sidewalks, neighborhood bikeways, signage, crossings.	$34,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	170th Ave. Improvements	10546	Merlo Rd.	Alexander St.	Improve roadway to 3 lanes with left turn lanes at major intersections, enhanced pedestrian crossings, sidewalks, and bike lanes or cycle tracks.	$38,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	205th Ave. Improvements	10592	Quatama Rd.	Baseline Rd.	Improve road to 3 lanes with bike lanes and sidewalks. Widen bridge over Beaverton Creek to four lanes with bike lanes and sidewalks.	$33,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Alexander St. Improvements	10584	192nd Ave	178th Ave	Add sidewalks, lighting, streetscape features, protected bicycle lanes, intersection improvements at 185th Ave, turn lanes at major intersections.	$23,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Basalt Creek Parkway	11470	Grahams Ferry Rd.	Boones Ferry Rd	Extend new 5 lane Arterial with bike lanes, sidewalks and street lighting.	$74,000,000	2023-2030	Yes

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Roadway (Capital)	Washington County	Washington County	Washington County	Blanton St. (198th to 209th)	12053	198th Ave	209th Ave	Construct two-lane road with sidewalk on south side and shared-use path on north side as a segment of the Tualatin Valley Trail, lighting, and turn-lane where necessary.	$8,500,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser	11477	County Line	Springville Rd.	Improve from 2 to three lanes with sidewalks, bike lanes, street lighting, and community features	$8,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser Improvements	10564	Springville Rd.	Bethany Blvd.	Improve from two to three lanes with bike lanes and sidewalks.	$10,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kinnaman Rd. Improvements	12183	209th Ave.	198th Ave.	Reconstruct with sidewalks, bike lanes and turn lanes at major intersections; consolidate offset intersection at 198th Ave.	$6,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Roy Rogers Rd	11914	UGB	Chicken Creek Bridge	Improve roadway to 4-5 lanes, includes sidewalks and bike lanes. The project or a portion of the project is outside the designated urban growth boundary.	$39,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	12192	Laidlaw Road	Bayonne Road	Improve to three lanes with bike lanes and sidewalks and realign roadway to the west including new structure over Bronson Creek, connecting to intersection of Laidlaw and 130th.	$22,200,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd	11915	Tile Flat Rd.	Roy Rogers Rd.	Improve roadway to 5 lanes on south side, includes sidewalks and bike lanes. The project or a portion of the project is outside the designated urban growth boundary.	$5,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11458	West property line of Sato Elementary	Kaiser Rd.	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany.	$15,900,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Springville Rd	11916	Kaiser Rd.	County Line	Improve south side from 2 lanes to 3 lanes with bike lanes and sidewalks.	$8,000,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Springville Rd. Improvements	10565	PCC	Joss St.	Improve from 2 to 3 lanes with bike lanes and sidewalks.	$13,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Thompson Rd	11581	Saltzman Rd.	Marcotte Rd.	Improve to three lanes with bike lanes and sidewalks.	$6,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Thompson Rd Realignment	11463	Saltzman Rd.	Circle A Dr.	Realign as 3 lane arterial to address safety and reduce crashes, with sidewalks, bike and street lighting.	$9,600,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Tile Flat Rd	11919	UGB	Scholls Ferry Rd.	Interim 3-lane and north side pedestrian/bicycle improvements. The project or a portion of the project is outside the designated urban growth boundary.	$4,300,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. double left and right turn lanes: Butner to Park Way	12186	Butner	Park Way	Add double lefts and right turn lanes on all approaches at Walker/Murray intersection.	$39,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	11233	185th Ave.	173rd Ave.	Improve from two to five lanes with bike lanes and sidewalks.	$30,700,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements - Ph. II	12189	Schendel	Butner	Improve to five lanes, including bicycle and pedestrian improvements.	$28,400,000	2023-2030	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. widen to 5 lanes: Park Way to Westfield	12187	Park Way	Westfield	Improve to five lanes, including bicycle and pedestrian improvements.	$39,800,000	2023-2030	Yes
Transit - Better Bus	Washington County	ODOT	Washington County	TV Hwy (and Canyon Rd) Corridor Safety and Access to Transit	11440	209th Ave.	107th Ave.	Bus stop improvements, ADA improvements, sidewalk infill, enhanced pedestrian crossings, signal priority, queue jumps.	$2,700,000	2023-2030	Yes
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS (Phase 1)	10605	County-wide	County-wide	Install advanced traffic management systems including adaptive signals, retrofit ADA ramps at traffic signals, communications, dynamic messaging signs, and surveillance and management equipment.	$16,800,000	2023-2030	Yes
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Garden Acres Road Extension	10853	Day Road	Ridder Road	Construct three lane road extension with sidewalks and cycle track and reconstruct/reorient Day Road/Grahams Ferry Road/Garden Acres Road intersection.	$22,800,000	2023-2030	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	82nd Ave. Bike and Ped Safety Improvements	10018	Monterey Ave.	Sunnybrook Blvd.	Improve safety for bike and pedestrian system by completing gaps and implementing proven safety counter measures at identified locations within the corridor. Improve ADA accessibility.	$2,840,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Clackamas County	82nd Ave. Multi-Modal Improvements	10014	Clatsop Ave.	Monterey Ave.	Improve safety for bicyclists and pedestrians by implementing proven safety counter measures, widening to add sidewalks, lighting, central median, planting strips and landscaping.	$23,520,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	82nd Drive Bike and Pedestrian Improvements	10022	Jennifer	Herbert Court	Improve safety for bicyclists and pedestrians by implementing proven safety counter measures and filling gaps in bikeways and pedestrian facilities.	$6,102,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Borland Rd: Tualatin to Stafford Rd	10043	Tualatin City Limits	Stafford Rd	Add paved shoulders and turn lanes at major intersections. The project or a portion of the project is outside the designated urban growth boundary.	$13,830,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Clackamas Industrial Area Bike/Ped Improvements (TSAP)	11772	Intersection of 106th Ave and OR 212	Intersection of Jennifer Rd and 122nd Ave	Improve intersection of 106th and OR 212, and Jennifer Drive and 122nd Ave to facilitate bike and pedestrian safety per county adopted TSAP, and provide ADA accessibility improvements as needed. Also improve intersection geometry to facilitate truck access to industrial park.	$4,556,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Clackamas Rd	11506	Johnson Road	Webster Road	Fill gaps in bikeways and pedestrian facilities including improvements to stormwater facilities and ADA accessibility as needed.	$8,786,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Concord Rd	11501	River Rd	Oatfield Rd	Fill gaps in bike and ped facilities as necessary including improvements to stormwater facilities and ADA accessibility. Main project segments are from Trolley Trail to McLoughlin Blvd, and from Harold Rd to Oatfield Rd.	$11,389,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Flavel Dr	11491	Alberta Ave	County boundary	Add bikeways to provide connection between Springwater/Powerline trail and bike facilities on Flavel Dr and 52nd Ave in Portland.	$5,614,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Fuller Rd. Improvements	10009	Otty Rd.	Johnson Creek Blvd.	Add pedestrian facilities, turn lanes, on-street parking, central median and landscaping, improve pedestrian treatments at intersections and improve ADA accessibility.	$7,159,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Harmony Road Improvements	10003	Linwood Ave	Fuller Rd	Add bikelanes and sidewalks where needed, including safety treatments at intersections and ADA accessibility improvements as necessary.	$12,107,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	I-205 Multiuse Path from OR 224 to OR 212	11767	OR 224 - Sunrise Multi-use Path	OR 212 - I-205 Multi-use Path	Improve safety for bicyclists and pedestrians by filling a gap of approximately 1 mile in the I-205 Multi-use path and implementing proven safety counter measures, as well as creating connections to other regional multi-use paths and implementing ADA accessibility improvements as necessary.	$10,251,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Johnson Rd., Clackamas Rd., McKinley Rd.	10050	Lake Rd.	Hwy 212	Bikeway and pedestrian facilities infill, including safety treatments at intersections, stormwater improvements, and ADA accessibility improvements.	$10,901,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	Clackamas County	North Clackamas Regional Parks Trail	11617	OR 213	Linwood Ave	Construct multi-use path from OR 213 to Linwood Ave through existing park, including ADA accessibility improvements as necessary.	$3,183,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Oatfield Road	12206	Park Ave	Courtney	Add bikelanes and sidewalks where needed, including safety treatments at intersections and ADA accessibility improvements as necessary.	$5,044,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	Clackamas County	Phillips Creek Regional Trail	12103	SE Otty Rd and I-205 Bike Path	SE Sunnybrook Blvd and SE 82nd Avenue	Construct new shared multi-use trail	$8,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	River Rd: Lark St to Courtney	11499	Lark St	Courtney	Improve safety on known high crash corridor by implementing proven safety counter measures, adding bicycle and pedestrian facilities including ADA accessibility features and improvements to stormwater.	$11,552,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	River Rd: Oak Grove Blvd. to Risley Ave.	11500	Oak Grove Blvd	Risley Ave	Improving safety on known high crash corridor by implementing proven safety counter measures, filling gaps in bikeways and pedways networks including improvements to ADA accessibility and stormwater as necessary.	$14,481,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Stafford Rd Improvements	10029	I-205	Rosemont Rd.	Add paved shoulders and turn lanes at major intersections. The project or a portion of the project is outside the designated urban growth boundary.	$20,188,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Sunrise Multi- use path Phase II	11668	122nd Ave	Rock Creek Junction	Improve safety for bicyclist and pedestrians by constructing a new multi use path from 122nd Ave to 172nd paralleling the Sunrise Phase 2 project.	$14,528,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Clackamas County	OR 212 Intersection Improvements	11670	172nd Ave	242nd Ave	Improve safety and reduce delay by making improvements as recommended in the Damascus Mobility Plan to the intersections of Sunnyside Rd/OR 212, Foster Rd/OR 212, 222nd Ave/OR 212 and 242nd Ave/OR 212.	$39,862,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Stafford Rd Improvements	12205	I-205	Boeckman Rd / Advance Rd	Implement needed safety investments as identified in Road Safey Audit.	$14,421,000	2031-2045	Yes
Transit Capital - Other	Clackamas County	TriMet	Clackamas County	Transportation demand management and transit supportive investments	11937	Countywide	Countywide	Implement Transportation Demand Management techniques and Transit supportive investments as identified in the Transit Development Plan, such as micro-transit, shuttles, mobility hubs, first and last mile options, shelters and park-and-rides	$10,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Gladstone	Gladstone	Portland Avenue Multi-Modal Project Construction	12265	Clackamas Blvd	Jersey St	Implement the Portland Avenue Streetscape Plan, including wider sidewalks, lighting, marked crossings, bike lanes, and street reconstruction.	$11,389,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Phase I	11886	Portland Avenue in Gladstone	Clackamas River Trail, Oregon City	First phase of construction of the Trolley Trail Bridge between Gladstone and the Oregon City Willamette River Trail.	$7,279,000	2031-2045	Yes
Active Transportation - Pedestrian	Clackamas County	Happy Valley	Happy Valley	169th Ave Sidewalk Infill: Sunnyside Rd - Stonybrook Ct	12198	Sunnyside Rd	Stonybrook Ct	Project performs sidewalk infill on east side of 169th Ave from Sunnyside Rd to Stonybrook Ct.	$8,700,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Butler Buttes Trail	12320	Borges Rd	Scouters Mountain Trail by Voyageurs Lp and 172nd	New regional trail connects Springwater Trail in Gresham to Happy Valley, traversing Gabbert, Towle, and Butler buttes along the way.	$3,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Clackamas Bluffs Trail	12319	Rock Creek Blvd	Richardson Creek Trail by OR 224	New regional trail in emerging urban area. Trail connects Sunrise Corridor Trail and Richardson Creek Trail.	$5,700,000	2031-2045	Yes

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	East Buttes Powerline Trail - Cheldelin to Sunnyside	12317	Cheldelin Rd	Sunnyside Rd	Multi-jurisdictional trail connecting Gresham and Clackamas River. Project connects Scouters Mountain Trail near 162nd Ave/Hagen Rd to Clackamas River Trail near OR 212/242 east of 132nd Ave.	$4,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 6	10070	Mount Scott Blvd./Ridgecrest Rd	Scott Creek drainage north of Sunnyside Rd	Project begins in Scott Creek drainage corridor north of Sunnyside Rd and runs north to end near Mt Scott Blvd/Ridgecrest Rd intersection. The proposed trail has separate routes for bicyclists and pedestrians.	$18,400,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	162nd Ave Extension South: Phase 1	10041	Rock Creek Blvd.	Hwy. 212	Extend 162nd Ave from Rock Creek Blvd to Hwy-212; construct new, 3 lane roadway with continuous left turn lane, sidewalks, bike lanes, intersection improvements at Hwy. 212/162nd on all four approaches. Project terminates at industrial employment sector. In addition, will improve safety on a High Injury Corridor.	$12,100,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd-190th Connector: Phase 1 - Design	12193	172nd Ave	190th	Phase 1 design to construct connector between 172nd and 190th Ave using adopted alignment; project includes bike lanes, sidewalks and continuous left turn lane; important connector in n/s freight route alternative to I-205 between I-84 and Hwy-212.	$5,400,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Foster Rd (Upper): Widening and Multimodal	10035	Cheldelin Rd	172nd 190th Connector	Widen two-lane minor arterial from the county line to the 172nd/190th connector, to include continuous left turn lane, sidewalks and bike lanes. Project segment length is 2,000 ft.	$10,700,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Misty Drive Extension: 162nd - 169th	11271	162nd Ave.	169th	Construct new 3 lane road with continuous left turn lane, sidewalks, bike lanes, traffic signal and bridge over Rock Creek. Project location improves access to government services, urban and employment centers.	$18,000,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Rock Creek Blvd: New Road and Multimodal	11135	172nd	177th Ave.	Construct new 3 lane road from 172nd Ave to 177th Ave. Facility improvements include signal modifications at 172nd with dedicated left and right turn lanes at the intersection, continuous left turn lane, sidewalks, and bike lanes.	$11,400,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Sunnyside Rd East Extension	10076	SE 172nd Ave.	Foster Road	Construct new 5 lane road with continuous left turn lane, sidewalks, bike lanes, and roundabouts. Project component of Happy Valley Boulevard.	$64,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Bonita Rd Sidewalks and Bike Lanes	11607	Windfield Way	Carman Drive	1,300' long, 5.5' sidewalks and 6' bike lanes on both sides. Widening of roadway involves tree removals and loss of on-street parking. Continuation of improvements toward I-5 expected to be incorporated into SW Corridor project.	$9,100,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Knaus Rd Pathways and Bike Lanes	11613	Boones Ferry Rd	Country Club Rd	4,000' long, 6' wide separated asphalt pathway and 5' wide bike lanes on both sides of roadway.	$20,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	South Shore Pathway	11396	Lakeview Blvd	McVey Ave	12,800' long, 6' wide separated asphalt pathway on south side of roadway. Retaining walls and storm water improvements required.	$27,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Stafford Road Improvements	11936	South Shore Blvd	Rosemont Road	6,000' long, 6' bike lanes and 8' pedestrian facilities on each side of the roadway. Modification to intersections, installation of retaining walls and stormwater improvements required for widening.	$18,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Tryon Creek Ped Bridge (@Tryon Cove Park)	11171	Foothills Park	Tryon Cove Park	500' long, 10' wide asphalt pathway completes a connection at the existing north end Foothills pathway with to Tryon Cove Park with a pedestrian bridge (per Foothills District Plan). Connects to future Willamette River Greenway Trail.	$6,800,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Lake Oswego	Lake Oswego	4th Street Reconstruction	11609	4th/A Ave	4th/B Ave	450' long, 60' wide roadway reconstruction. 12' travel lanes, 8' parking lanes, 10' sidewalks.	$5,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 10--19th Avenue Neighborhood Greenway Improvements	11622	Milwaukie Riverfront	River Rd at Sparrow St	19th Ave and Sparrow St Neighborhood Greenway Designate as a "neighborhood greenway" and install traffic-calming improvements. Project will improve bicycle and pedestrian network in an equity priority area and increase safety for cyclists and pedestrians. This would connect the south end of Kellogg Creek Trail to River Rd.	$6,150,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 5--Stanley Avenue Neighborhood Greenway Improvements	10097	Springwater Trail	Railroad Ave	Stanley Ave Neighborhood Greenway Pedestrian aspect: Fill in sidewalk gaps on both sides of street. Bicycle aspect: Designate as a neighborhood greenway and install traffic-calming improvements. Stanley Ave Connectivity at King Rd = Enhance connection along Stanley Ave at King Rd. Stanley Ave Connectivity at Monroe St = Enhance connection along Stanley Ave at Monroe St. Group 5 projects increase connectivity and bicycle and pedestrian safety in an equity priority area.	$15,717,000	2031-2045	Yes

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Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Group 4--Pedestrian Improvements at Hwy 224	11537	Harrison St	Freeman Way	Intersection Improvements at Hwy 224 and 37th Ave Consolidate the two northern legs of 37th Ave and International Way into one leg at Hwy 224. Intersection Improvements at Hwy 224 and Oak St Add left-turn lanes and protected signal phasing on Oak St approaches. Study of Pedestrian Crossings on Hwy 224 = Examine alternatives for improving pedestrian crossings at five intersections along Hwy 224 (Harrison St, Monroe St, Oak St, 37th Ave, Freeman Way). Intersection Improvements at Hwy 224 and Oak St = Improve pedestrian crossing. Intersection Improvements at Hwy 224 and 37th Ave = Improve pedestrian crossing. Hwy 224 Crossing Improvements at Oak and Washington St = Improve intersection crossing safety for bicyclists at Washington St and Oak St. Intersection Improvements at Hwy 224 and Freeman Way = Improve pedestrian crossing. Intersection Improvements at Hwy 224 and Harrison St = Improve pedestrian crossing.	$7,061,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Harrison St Capacity Improvements	11542	32nd Ave	42nd Ave	Widen to standard three lane cross section.	$8,656,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Linwood/Harmony Rd./ Lake Rd. Intersection	10000	Railroad Ave / Linwood Ave / Harmony Rd Intersection	Railroad Ave / Linwood Ave / Harmony Rd Intersection	Railroad crossing and intersection improvements based on further study of intersection operations including bikeways and pedestrian facilities to be undertake jointly by the City of Milwaukie and the County	$48,517,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	McLoughlin Blvd-River Rd Intersection Improvements	11539	Location-specific	Location-specific	Consolidate a single access point for the area at Bluebird St with full intersection treatment and signalization or add second northbound left-turn lane at River Rd. This project improves safety and reduces congestion in an equity priority area.	$2,278,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	North Clackamas Parl	Clackamas River Greenway Trail	12318	SE 142nd Avenue & Clackamas Highway	82nd Drive & SE Hanson Court	4-mile continuous public regional trail along the Clackamas River. Acquisition, development, and management of a regional trail along the Clackamas river, within the Clackamas Industrial Area, which will provide access to employment.	$39,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	North Clackamas Parl	Mt. Scott/Scouter Mountain Loop: Segment 4E (Powerline Corridor)	12252	SE Sunnyside Road & SE 142nd Avenue	Highway 212, between SE 132nd and SE 142nd.	Multi-jurisdictional trail connecting Gresham and Clackamas River. Project connects Sunnyside Road to Clackamas River Trail near OR 212/242 east of 132nd Ave.	$6,700,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	North Clackamas Parl	Mt. Scott/Scouter Mountain Loop: Segment 5E	12251	I-205 bike/ped path / Sunrise Corridor Bike Path	Highway 212, between SE 132nd and SE 142nd.	A multi-use route within road right-of-way between the I-205 bike/ped path and the intersection of Highway 212 and SE 135th. Alignment follows Lawnfield, Mather, SE 122nd and Hubbard Road.	$3,300,000	2031-2045	Yes
Throughways	Clackamas County	ODOT	ODOT	I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (UR, CN, OT)	11990	Wilsonville Rd	Wilsonville-Hubbard Hwy	Replace Boone Bridge with a seismically resilient structure and add an auxiliary lane on SB I-5 from Wilsonville Road to the Wilsonville-Hubbard Highway (OR 551), preserving the current NB auxiliary lane, to address crashes due to short merging distances, closely spaced interchanges and frequently congested conditions both on and just south of the Boone Bridge. Bike/ped access will be determined. A portion of the project is outside the designated urban growth boundary.	$670,000,000	2031-2045	Yes
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	11301	122nd Ave	172nd Ave.	Construct Phase 2 of the OR 212/224 Sunrise corridor, consisting of a 4-lane roadway from SE 122nd Ave to SE 172nd Ave, consistent with the FEIS/ROD.	$331,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Oregon City	Abernethy Road Bike & Pedestrian Improvements	11187	Redland Road	Washington Street	Add a bike lane to the south side. A shared-use path will be added on the north side. (TSP B8, S2)	$3,420,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Holcomb Boulevard Bike & Pedestrian Improvements	10047	Abernethy Road	UGB	Complete sidewalk and bike lane gaps on both sides, improve street lighting, add four enhanced street crossings, install a speed warning system near Winston Drive and smooth out the curve near Long View Way. (TSP W6, W11, W12, W13, B9, B12, D16, C3, C4, C5, C6)	$20,680,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Meyers/Beavercreek Shared-Use Path	11546	Morrie Drive	Beavercreek Road	Regional trail would generally follow the Power line alignment, beginning at the Oregon City Loop Trail, meander through a collection of residential neighborhoods on and off a collection of local roads, and into a essential Oregon City Business core area. (TSP S22)	$4,790,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Molalla Avenue Bike & Pedestrian Improvements, Phase 2	10124	Holmes Lane	Beavercreek Road	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. Also includes adaptive signal timing upgrades project (D1, W73 - Not shown in TSP Walking solutions map)	$12,760,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Oregon City Loop Trail, Phase 1	10148	Buetel Road	Hwy 99E	Regional trail would generally follow the Oregon City UGB on a collection of local roads, through new development, along Power line right-of-way, and down the bluff to link up with the Promenade in downtown Oregon City. (TSP S23, S26, C17, S30, C21, S33, C22, C23, S34, C27, FF10, FF15, FF16) The project or a portion of the project is outside the designated urban growth boundary.	$10,480,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Washington Street Bike & Pedestrian Improvements (South)	10120	Home Depot Drive	Abernethy Road	Complete the Boulevard project including stormwater low impact development design improvements, sidewalks, landscaping and street lighting. (TSP W5)	$4,330,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Willamette River Shared-Use Path	11186	S 2nd Street	UGB	Add a shared-use path along the railroad grade. Rehabilitate existing boardwalk between South 2nd Street and Hedges Street (TSP Project S37).	$12,990,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Holly Lane Extension (North)	11545	Maple Lane Road	Thayer Road	Construct new 3 lane roadway, sidewalks, bike lanes, turn lanes to serve UGB expansion area. (TSP D57) The project or a portion of the project is outside the designated urban growth boundary.	$10,940,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	Hwy 99E & I-205 SB Interchange Access	10144	Dunes Drive	I-205 SB Ramp Terminus	Dual left turn lanes on 99E approach to SB I-205 ramp, ramp widening to accommodate approach. (Closely related to TSP D75, D76 but not actually these projects)	$6,040,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 213 & Redland, Phase 2	10119	Redland Road	Redland Road Undercrossing	Add third through lane in both northbound & southbound directions. This is Phase 2 of the completed Jughandle Project. (TSP D79)	$22,780,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	ODOT	Oregon City	OR 99E & I-205 NB Interchange Access	11891	I-205 SB Ramp Terminus	I-205 NB Ramp Terminus	Dual left turn lanes on 99E approach to NB I-205 ramp, ramp widening to accomodate approach, dual left turn lanes from off-ramp on to Hwy 99E SB, signal modifications. (Closely related to TSP D75, D76 but not actually these projects)	$6,040,000	2031-2045	Yes
Transit Service and Operations	Clackamas County	SMART	SMART	SMART Service from Wilsonville to downtown Portland	11107	Wilsonville	Downtown Portland	Create bus commuter route from Wilsonville Transit Center to the Downtown Portland area.	$5,377,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	West Linn	OR 43 Multimodal Improvements - Holly St. to Mary S. Young State Park	10127	Holly St.	Mary S. Yound State Park	Improve roadway with widening, turn lanes, street trees, signal interconnections, cycle tracks, and sidewalks.	$50,339,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Ostman Road/Blankenship Road Improvements	11748	Johnson Rd.	Willamette Falls Dr.	Provide congestion relief, address safety issues, and improve bike/ped connectivity	$3,007,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Rosemont Rd./Carriage Way Multimodal Project	11755	Suncrest Dr.	Carriage Way	Includes construction of multimodal improvements to including turn lanes, sidewalks, and bike lanes.	$6,581,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Salamo Bike and Ped Project	11754	Tannler Dr.	Barrington Dr.	Provide bike lanes/cycle tracks and sidewalks. Project will allow for connection with existing bike/ped facilities on a high traffic arterial and encourage alternative modes of transportation.	$2,323,356	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Sunset Bike and Ped Project	11756	Cornwall St.	Willamette Falls Dr.	Provide bike lanes/cycle tracks and sidewalks. Project will allow for connection with exsiting bike/ped facilities.	$4,100,040	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	West Linn	West Linn	Willamette Falls Drive Multimodal Improvements - OR 43 to 10th St.	10128	OR 43	10th St.	Provide bike lanes/cycle tracks and sidewalks. This will provide a direct connection between commercial areas (including Downtown Oregon City).	$23,188,000	2031-2045	Yes
Freight	Clackamas County	To be determined	West Linn	Willamette Falls Locks Repair Project	12090	Willamette Falls Locks	Willamette Falls Locks	Capital improvements needed to repair and reopen the Willamette Falls Locks to support freight transportation, tourism and recreation activities. The project includes structural and electrical repairs, seismic upgrades, and other elements.	$45,556,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	West Linn	Stafford Rd./Childs Rd. Intersection Improvements	12073	Stafford Rd./Childs Rd. Intersection	Stafford Rd./Childs Rd. Intersection	Installation of traffic circle at existing intersection to improve traffic circulation and safety. Project was identified through the Clackamas County Road Safety Audit. This project or a portion of the project is located outside the urban growth boundary.	$5,694,500	2031-2045	Yes
Roadway (Capital)	Clackamas County	Clackamas County	West Linn	Stafford Rd./Rosemont Rd. Improvements	12074	Rosemont Rd./Stafford Rd. intersection	I-205 interchange	Addition of paved shoulders per the Clackamas County Active Transportation Plan. Addition of turn lanes at major intersections. Project identified through Clackamas County Road Safety Audit. This project or a portion of the project is located outside the urban growth boundary.	$4,555,600	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Boeckman Creek Trail	11555	Canyon Creek Park	Memorial Park	Construct multi-use trail along Boeckman Creek with connections to parks	$5,100,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	French Prairie Bicycle/Pedestrian/Emergency Bridge	10133	Boones Ferry Rd.	Butteville Rd..	New bicycle/pedestrian/emergency vehicle only bridge crossing the Willamette River. This project or a portion of the project is located outside the urban growth boundary.	$36,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Ice Age Tonquin Trail (Segments 1, 2, 3 and 4)	10092	Washington/Clackamas County line	Boones Ferry Landing	Shared use path with some on-street portions consistent with Metro Ice Age Tonquin Trail Master Plan. The project or a portion of the project is outside the designated urban growth boundary.	$22,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County	Wilsonville	Wilsonville	Wilsonville Town Center Cycle Track - Town Center Loop West to Memorial Drive	12201	SW Town Center Loop West	SW Memorial Drive	Construct two-way cycle track through Wilsonville Town Center.	$3,800,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Advance Road - Stafford to 60th: Complete Street	12200	SW Stafford Road	SW 60th Avenue	Widen to 3 lane section and add sidewalks and protected bike lanes. The project also adds a roundabout at the 60th Avenue intersection for traffic calming.	$14,000,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boones Ferry Road Extension	11764	Commerce Circle	Ridder Road	Construct 3-lane section with bike lanes and sidewalk	$4,800,000	2031-2045	Yes
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Printer Parkway Urban Upgrade	11776	Parkway Avenue	Canyon Creek Road	Widen to 3 lane section at intersections and add sidewalks, bike lanes and multi-use path.	$8,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Clackamas County, Multnomah County	To be determined	Lake Oswego	Lake Oswego to Portland Trail	10087	Hwy 43/A Ave	Sellwood Bridge	3.15 mile multi-use pathway adjacent to existing Willamette Shore (rail) Line. Connects Lake Oswego to Portland at Sellwood Bridge. Part of the Willamette River Greenway Trail. Full construction cost to be shared by all agency partners. Initial costs shown for planning, engineering, and possible acquisitions.	$22,800,000	2031-2045	Yes
Transit Service and Operations	Clackamas County, Washington County	SMART	SMART	SMART Service, Operations and Maintenance: 2031-2045	12324	N/A	N/A	Operations of transit services, such as drivers, security, facilities and rolling stock maintenance.	$86,869,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	162nd - I-84 RR Bridge: Reconstruct for Ped/Bike	10492	NE Russell Street	City Limits	Reconstruct RR bridge to accommodate sidewalks and bikeways.	$6,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	East Buttes Powerline Trail - Springwater to Cheldelin: New Multi-Use Path	10069	Springwater/Gresham-Fairview trail	Cheldelin Road	Construct new shared multi-use trail 14 ft. wide pervious asphalt.	$6,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Kelley Creek Multi-Use Path - Springwater Trail to Rodlun Road	11074	Springwater Trail	Rodlun Road	Construct new shared multi-use trail 14ft. wide pervious asphalt	$20,100,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	172nd - Giese to Foster: Complete Buildout	10465	Giese Rd.	Foster Rd.	Upgrade street to urban standards with sidewalks and bikelanes.	$27,900,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	182nd - Powell and Division Intersections: Add Turn Lanes and Transit Supportive Design	10498	181st at Division	181st at Powell	At Division: add second westbound left turn lane (TIF P1). At Powell, add northbound and southbound double left turn lanes (TIF P2 and TSP8).At Powell add SB and NB lanes. Transit/Enhanced Transit Corridor supportive project.	$4,100,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - 181st to 197th: Construct Boulevard Improvements	10421	181st	197th	Complete boulevard improvements: rain gardens, sidewalk enhancements, lighting.	$19,100,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Hogan to Powell: Safety Improvements	10522	Hogan	Powell	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	$21,300,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Butler - Binford to Rodlun: Extend Road and Bridge Crossing	10471	Binford	Rodlun	Construct new Butler road extension and bridge crossing.	$15,800,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Foster at Kelley Creek: Bridge Crossing in Pleasant Valley	10469	Foster Rd.	Kelley Creek	Reconstruct bridge crossing of Foster Road as bridge crossing for 172nd Avenue in Pleasant Valley area.	$6,400,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - 182nd to 172nd: Road, Bike, Ped Extension	10464	182nd	172nd	New extension of Giese Road, 182nd to 172nd.	$28,600,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - 182nd to 190th: Complete Buildout	10468	182nd Ave.	190th Ave.	Construct 3 lane street to urban standards with sidewalks and buffered bike lanes.	$8,600,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Halsey - 162nd to City Limits: Safety Corridor	11683	162nd	City Limits	Halsey safety corridor - Sidewalk infill, lighting, mid-block crossings.	$5,800,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Powell to Burnside: Boulevard Design + Intersection Improvements	10512	Powell	Burnside	Improve east side to boulevard standards with center median, second travel lane, planter strip, and new sidewalk. Bike lane east side between Powell and Burnside.	$9,900,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Powell to Palmquist: Complete Buildout	10527	Powell	Palmquist	Improve to urban arterial standards with sidewalks and buffered bikelanes.	$30,100,000	2031-2045	Yes
Active Transportation - Pedestrian	Multnomah County	Multnomah County	Multnomah County	ADA Curb Ramp Replacements: Tier 2	12243	N/A	N/A	Design and reconstruct all Tier 2 curb ramps not compliant with ADA standards in County right of way according to the County ADA Transition Plan.	$11,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	223rd Ave. (Sandy Blvd to 40 Mile Loop): Complete Street	10389	Sandy Blvd	40 Mile Loop	Improve 223rd Ave to major collector standards including 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes; to address safety and reduce crashes the project will use proven safety countermeasures. Project includes replacing a culvert for fish passage. Replacement of RR bridge not included in this proposal (10394) (503U)	$22,200,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Buxton Road- Historic Columbia River Highway to SE Cherry Park Rd: Bike and Crossing Improvements	12244	Historic Columbia River Highway	SE Cherry Park Rd	Add on-street bike lanes on Buxton Road between East Historic Columbia River Highway and SW Cherry Park Road and reconfigure existing crossings at SW 7th Street and at SW Cherry Park Road for walking and biking to be consistent with Safe Routes to School Action Plan. Install traffic signal at intersection of East Historic Columbia River Highway and Buxton Road. (508U, 542U)	$3,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Glisan St - 202nd Ave to 207th Ave: Complete Street	10386	202nd Ave./Gresham-Fairview Trail	207th Ave./Salish Ponds Natural Area	Reconstruct Glisan Street to provide multimodal connection between Gresham-Fairview Trail, Salish Ponds Natural Area, and area schools. Include bike lanes, sidewalks, and two travel lanes in each direction. Design green-street treatment for drainage improvements, including Fairview Creek culvert replacement. South side of Glisan St is in Gresham, north is City of Fairview. To address safety and reduce crashes the project will use proven safety countermeasures. (516U)	$27,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	NE 223rd Avenue: North Railroad Crossing Bridge Replacement	10394	2000' north of I-84	2000' north of I-84	Reconstruct railroad bridge on 223rd Ave, 2000' north of I-84 to accommodate wider travel lanes, sidewalks and bike lanes; to address safety and reduce crashes the project will use proven safety countermeasures. (504U)	$31,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Scholls Ferry, SW (Humphrey - County line): Multimodal Improvements	10188	SW Humphrey	County Line	Complete street improvements based on the Scholls Ferry Concept Plan, including bicycle and pedestrian facilities and improved stormwater drainage. Project also includes intersection improvements at SW Patton Road for a dedicated left turn lane for the southbound direction, ADA ramp improvements, and signals with permissive / protective phasing. Project includes complete overlay from SW Thomas Street to Sheridan Court. (535U, 536U)	$48,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Stark St - 257th Ave to Troutdale Rd: Complete Street	10382	257th Ave.	Troutdale Rd.	Reconstruct SE Stark Street between SW 257th Avenue and S Troutdale Road to minor arterial standards which includes filling gaps in bicycle lanes, sidewalks, and multimodal intersection improvements at SW 257th Avenue. Project also includes enhanced pedestrian crossings at SW Corbeth Lane, and at future regional trail crossing.	$16,700,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge Limited Seismic Retrofit	12248	Willamette River	Willamette River	Limited seismic upgrades to ensure life safety and to prevent collapse of the bridge during a major earthquake (BUN-BR-06).	$67,100,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Broadway Bridge West Approach Structural Rehab and Paint	12245	Willamette River	Willamette River	Lead paint removal and repainting of west approach; structural concrete and steel repairs (BUN-BR-09)	$37,900,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Limited Seismic Retrofit	12247	Willamette River	Willamette River	Limited seismic upgrades to ensure life safety and to prevent collapse of the bridge during a major earthquake (BUN-HA-06).	$65,100,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Rehabilitation	10413	Willamette River	Willamette River	Strengthen load capacity (BUN-HA-08) and operating machinery, trunnion, and trunnion tower structural rehabilitation (BUN-HA-01)	$30,800,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Hawthorne Bridge Structural Rehab	12246	Willamette River	Willamette River	Span lock and live load shoe rehab (BUN-HA-02) and main river spans structural rehab (BUN-HA-10)	$20,400,000	2031-2045	Yes
Bridge Maintenance and Preservation	Multnomah County	Multnomah County	Multnomah County	Morrison Bridge Rehabilitation: Phase 3	11958	Willamette River	Willamette River	Repave bridge asphalt approaches and upgrade drainage, repair concrete apparoach decks, and improve Illumination (BUN-MO-07) and movable span bearing and span lock improvements (BUN-MO-02).	$30,100,000	2031-2045	Yes
Freight	Multnomah County	Multnomah County	Multnomah County	Marine Dr - Interlachen to I-84: Freight and Multimodal Improvements	10401	Interlachen	I-84	Reconstruct Marine Drive to have a two-way, five-lane cross section. Project includes constructing sidewalks and bicycle lanes where there are currently gaps. (528U,529U,530U)	$81,700,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Multnomah County	Multnomah County	172nd - Cheldelin to Foster: Complete Buildout & Roundabout	10466	Foster	Cheldelin Rd.	Upgrade street to urban standards with sidewalks, bikelanes, and add roundabout at 172nd/Foster.	$17,200,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Multnomah County	Multnomah County	Wood Village Blvd: Intersection Safety	12249	Halsey St.	Glisan St	Evaluate and implement safety of intersections (both public and private roadways) on NE Wood Village Boulevard between Glisan Street and Halsey Street. (545U, 521U)	$4,300,000	2031-2045	Yes
Transportation Demand Management	Multnomah County	Multnomah County	Multnomah County	East Multnomah County: Transportation Demand Management	12018	East Multnomah County	East Multnomah County	Targeted programs and outreach to reduce single occupant vehicle travel and provide more travel options for underserved community members.	$3,300,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	238th/242nd Ave/Hogan Dr.: ACM with Adaptive Signal Timing	11300	Sandy	Palmquist	Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings, and making intersection improvements to lanes. Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. (506U)	$11,100,000	2031-2045	Yes

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Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	257th/Kane Dr.: Arterial Corridor Management (ACM) w/ Adaptive Signal Timing	11299	I-84	Orient Dr.	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	$6,800,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	NE 207th Ave.: Arterial Corridor Management (ACM)	11297	Sandy	Glisan	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. (500U)	$3,800,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Multnomah County	Multnomah County	NE Glisan Street: Fairview Parkway to NE 242nd Avenue: Arterial Corridor Management (ACM)	12225	Fairview Parkway	NE 242nd Avenue	Install upgraded traffic signal controllers, enhance communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings at up to five (5) traffic signals. Provide realtime and forecasted traveler information. (517U)	$5,100,000	2031-2045	Yes
Mega Project	Multnomah County	ODOT	ODOT	I-5 Interstate Bridge Replacement Program	10866	Victory Blvd.	Washington state line	Replace I-5/Columbia River bridges, add auxiliary lanes and improve interchanges on I-5, extend light rail transit from Expo Center to Vancouver, WA., add protected/buffered bikeways, cycletracks and a new trail/multiuse path or extension and implement variable rate tolling.	$6,000,000,000	2031-2045	Yes
Throughways	Multnomah County	ODOT	ODOT	I-405 Operational Improvements	11974	Fremont Bridge	I-5	Construct operational improvements to address bottlenecks and improve safety on I-405. Specific improvements as identified in operational analysis, mobility corridor analysis, and refinement planning	$98,000,000	2031-2045	Yes
Throughways	Multnomah County	ODOT	ODOT	I-5 Southbound Truck Climbing Lane	11984	Marquam Bridge	Multnomah Blvd	I-5 Truck Climbing Lanes SB (Marquam to Multnomah Blvd). Preliminary Engineering (PE) and Right-of-Way (ROW) and Construction (CON) phases.	$203,000,000	2031-2045	Yes
Throughways	Multnomah County	ODOT	ODOT	I-84 Operational Improvements	11993	I-5	Troutdale	Construct improvements to address bottlenecks and improve safety on I-84. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning	$41,000,000	2031-2045	Yes
Active Transportation - Pedestrian	Multnomah County	Portland	Portland	Eastside MAX Station Pedestrian Improvements	10312	122nd Ave	162nd Ave	Retrofit existing streets along eastside MAX and at intersecting streets to include better sidewalks and crossings, curb extensions, bus shelters, and benches at 122nd, 148th, and 162nd stations.	$7,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	102nd Ave Corridor Safety Improvements	12217	NE Weidler St	SE Washington St	Design and implement safety and access to transit improvements.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Alderwood Path	10338	NE Cornfoot Rd	NE Columbia Blvd	Construct a multi-use path on the west side of Alderwood to separate pedestrians and bicyclists from motor vehicle traffic.	$5,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Beaverton-Hillsdale Hwy Corridor Improvements	10279	SW Capitol Hwy	City Limits	Improve corridor safety and access to transit by adding a planted median, enhanced crossings at bus stops and other destinations, lighting improvements, and intersection redesigns.	$6,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Broadway/Weidler Corridor Improvements	11646	Broadway Bridge	NE 24th Ave	Enhance existing bike lanes and improve pedestrian/bicycle crossings. Add traffic signals, improve signal timing, improve transit stops, provide transit priority treatments, and construct streetscape improvements.	$19,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cascade Station Trail	11837	Cascade Station	NE Alderwood Rd & Glass Plant Rd	Construct a multi-use path connecting Cascade Station to Alderwood via Glass Plant Rd, and add eastbound bike lane to Alderwood underneath I-205.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Columbia Slough Trail Gaps	10234	Confluence of Columbia Slough and North Slough	NE 158th Ave	Close gaps in Columbia Slough Trail: North Slough to North Portland Rd; Vancouver to NE Elrod; NE Elrod to NE 47th Ave; I-205 to approx. NE 128th; NE 145th to 158th, Delta Park Trail.	$11,000,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cross-Levee Trail	11813	NE Marine Dr	NE Sandy Blvd	Construct a multi-use path, with crossing improvements at Sandy, Airport Way, and Marine Dr.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Cully to Columbia Connector	11804	NE Lombard St	NE Columbia Blvd	Upgrade Cully Blvd to include curbs, drainage, sidewalks, and bike lanes. Improve safety for all modes at railroad crossing.	$8,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Division-Midway Connected Centers Project, Phase 2	11824	Division-Midway Town Center	Division-Midway Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to Division-Midway Town Center and nearby neighborhood centers.	$10,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Fields Park Pedestrian / Bicycle Bridge	11780	NW Overton	NW Naito Pkwy	Construct a pedestrian/bicycle bridge over the railroad tracks and Naito Pkwy.	$15,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Foster Rd Corridor Improvements, Phase 2	11817	SE Powell Blvd	SE 90th Ave	Construct remaining elements from the Foster Rd Transportation and Streetscape Plan, including curb extensions along the corridor, bikeway improvements, and roadway widening or lane reconfiguration at 82nd/Foster in order to extend bike lanes through intersection.	$4,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Gateway 99th/96th Streetscape Improvements	10205	SE Stark St	SE Market St	Construct streetscape improvements including wider sidewalks, lighting, street trees, center turn lane, bike lanes, and new signals.	$9,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Gateway Pacific St Streetscape Improvements	10204	99th Ave	102nd Ave	Construct streetscape improvements including wider sidewalks, lighting, street trees, center turn lane, bike lanes, and new signals.	$16,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Halsey/Weidler Safety and Access to Transit	11851	NE 100th Ave	NE 122nd Ave	Construct the Halsey/Weidler area active transportation improvements identified in the Growing Transit Communities Plan to provide safe access to schools and transit.	$11,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Hollywood Town Center Safety Improvements	10268	Hollywood Town Center	Hollywood Town Center	Implement multimodal safety improvements including traffic signals, restriping, improved pedestrian crossings, and connections to transit center.	$15,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	I-405 South Portland Crossing Improvements	11787	SW Harbor Dr	SW Broadway	Improve opportunities for people walking and bicycling to cross I-405 on Harbor Dr, Naito Pkwy, 1st, 4th, 5th, 6th, and Broadway.	$11,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	I-84 Path Extension	11850	I-205 Path	NE 122nd Ave	Construct a multi-use path using existing bridge from I-205 Path to NE Fremont St and a two-way bikeway along the south side of NE Fremont St connecting to I-84 Path at 122nd, with sidewalk infill on the north side of NE Fremont St.	$15,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Capitol Hwy Corridor Improvements	10273	SW Terwilliger	SW Sunset	Construct sidewalks, crossing improvements for access to transit, and bike improvements, and install left turn lane at the Capitol/Burlingame intersection.	$6,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner E Burnside Corridor Improvements	11816	12th Ave	82nd Ave	Improve multimodal safety and access along the E Burnside corridor, including bikeway network improvements, enhanced crossings, roadway safety redesign, and transit access and priority improvements, including ITS and NextGen TSP.	$25,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner Milwaukie Streetscape Improvements	11818	Gideon	Mall	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Inner NE Glisan St Corridor Safety Improvements	12231	NE 60th Ave	NE 82nd Ave	Design and implement safety and access to transit improvements.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Killingsworth/Interstate Connected Centers Project, Phase 2	11805	Killingsworth / Interstate Town Center	Killingsworth / Interstate Town Center	Construct priority pedestrian and bicycle network improvements within and connecting to the Killingsworth / Interstate Town Center and nearby Neighborhood Centers.	$10,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Area Connected Centers Project, Phase 2	12009	Lents Town Center	Lents Town Center	Construct pedestrian and bicycle improvements to build out the active transportation network in and around Lents Town Center and other nearby Neighborhood Centers.	$10,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Lents Town Center Improvements, Phase 2	10186	SE 94th Ave	SE 101st Ave	Enhance bike facilities and implement Lents Town Center Business District Transportation Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, and street lighting.	$5,000,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Marine Dr Trail Gaps	10206	I-5	NE 122nd Ave.	Construct remaining gaps in the Marine Dr Trail, including two gaps in the Bridgeton area and one from 112th Ave to 122nd Ave. Coordinate with Army Corps of Engineers levee project and I-5 Bridge Replacement project to fill some of these gaps in the Bridgeton and East Columbia areas.	$11,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Markham School Pedestrian/Bicycle Overpass	10286	I-5 near Markham School	I-5 near Markham School	Construct pedestrian path and bridge over Barbur Blvd. and I-5 to connect SW Alfred and SW 52nd to the rear of Markham School.	$31,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Multnomah Viaduct Safety Improvements	11830	Multnomah Blvd, SW (I-5 Crossing)	Multnomah Blvd, SW (I-5 Crossing)	Construct new bicycle and pedestrian facilities at or parallel to Multnomah Blvd viaduct crossing I-5.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Argyle Corridor Improvements	10219	Columbia Blvd	Denver Ave	Design and implement pedestrian and bicycle facilities on N Argyle from N Columbia Blvd to N Denver Ave. Construct safety and connectivity improvements at the Columbia, Brandon, and Denver intersections.	$5,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE 82nd Ave to PDX Airport Corridor Improvements	11803	Alderwood	Lombard	Construct pedestrian and bicycle facilities and other safety improvements. Includes a portion of NE 82nd Ave under ODOT ownership from just south of NE Lombard St to just south of the Columbia Slough.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Killingsworth St Corridor Safety Improvements	11940	NE MLK Jr Blvd	NE Lombard St	From MLK Jr Blvd to 42nd Ave, add enhanced pedestrian crossings at regular intervals to improve safety and access to transit. From 42nd Ave to Lombard St, redesign roadway to enhance existing bicycle facilities, add and enhance pedestrian crossings, construct transit stop improvements, and support safety and access to transit.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Prescott Safety Improvements	11806	I-205	NE 122nd Ave	Construct bicycle facilities, sidewalks, and crossing improvements for pedestrian and bicycle safety and to improve access to transit.	$4,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Hayden Island Drive	11632	Burlington Northern Rail Bridge	Hayden Island	Construct a multi-use path on one side of N Hayden Island Dr, and install pedestrian/bicycle crossing improvements.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 3	11642	Cathedral Park	Swan Island	Build a multi-use trail connecting the Cathedral Park with Swan Island via University of Portland and Willamette Cove.	$32,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 4	11643	Swan Island	N. Going St	Build a multi-use trail connecting Waud Bluff Trail to N Going Street through Swan Island.	$11,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	North Portland Greenway Segment 5	11644	N. Going St	N. Tillamook/ Interstate	Build a multi-use trail along the Albina Yard connecting Swan Island to the Rose Quarter.	$16,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	NW Bridge Ave Multi-use Path	11814	St Helens Rd	St Johns Bridge	Construct a multi-use path along Bridge Avenue between both St Helens Rd intersections.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Glisan Corridor Improvements, Segment 2	10203	NE 122nd	City Limits	Retrofit street with new traffic signals, bicycle facilities, improved pedestrian facilities and crossings, street lighting, transit priority, and other safety and access to transit improvements.	$4,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Post Office Blocks Transportation Improvements, Phase 2	11795	NW 9th to Broadway; NW Lovejoy to Hoyt	NW 9th to Broadway; NW Lovejoy to Hoyt	Extend the Green Loop through the Broadway Corridor redevelopment site from North Park Blocks to Broadway Bridge. Enhance existing bike lanes along Broadway and Lovejoy viaducts.	$11,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Red Electric Trail, Segment 2	10354	SW Bertha Blvd	Willamette Park	Provide east-west route for pedestrians and cyclists in SW Portland that connects the Hillsdale neighborhood to the Willamette Greenway Trail.	$15,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sixties Neighborhood Greenway	11821	NE Sacramento St	Springwater Trail	Design and implement a neighborhood greenway, with traffic calming and enhanced crossings as needed.	$8,000,000	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Slavin Rd Ped/Bike Improvements	11829	SW Barbur Blvd	SW Corbett Ave	Build a pedestrian and bicycle connection on Slavin Road from Barbur to Corbett, and construct an improved pedestrian/bicycle crossing of Barbur at the Capitol Hwy on-ramp.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Springwater Gap Trail	10159	SE Linn St	SE 19th Ave.	Construct trail-with-rail multi-use path between Linn and 19th to fill in the "Springwater Gap."	$15,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sullivan's Gulch Trail: Jonesmore Segment	11808	NE 62nd Ave	NE 92nd Ave	Construct a multi-use trail for pedestrians and bicycles along Broadway and Jonesmore adjacent to the I-84 sound wall, with an improved crossing of 74th Avenue. Provide neighborhood greenway bikeway connections west to 62nd & Hancock and east to 92nd & Schuyler.	$4,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sunset Blvd Ped/Bike Improvements	10280	SW Dosch	SW 18th Dr.	Construct a pedestrian walkway and climbing bike lane.	$5,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW 30th/Hume/31st Pedestrian and Bike Improvements	12091	SW Capitol Highway	SW Barbur Boulevard	Construct a pedestrian walkway and bicycle facilities	$6,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW Multnomah Blvd Ped/Bike Improvements, Phase 2	11351	SW 31st Ave	SW 40th Ave	Provide separated pedestrian and bicycle facilities, along with stormwater management facilities.	$2,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SW Pomona/64th Ped/Bike Improvements	11825	Pomona & 61st	Barbur & 64th	Construct sidewalks and bicycle facilities.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Swan Island Active Transportation Improvements	11197	Various roadways on Swan Island	Various roadways on Swan Island	Improve access and mobility on Swan Island by constructing the recommended bikeway and trail network in the Portland Bicycle Plan for 2030, including an improved bikeway connection from Basin to Going Ct.	$10,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Upper I-405 Trail	11792	SW Water	SW 4th	Design and implement a pedestrian and bicycle connection along the I-405 off-ramp to 4th & Lincoln. Supports future Green Loop project.	$6,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	US 26 Multi-use Path	11831	Canyon Ct	Canyon Rd	Design and implement a multi-use path.	$8,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	West Portland Connected Centers Project	10287	West Portland Town Center	West Portland Town Center	Construct high-priority bikeways, pedestrian improvements, and transit priority treatments in and around West Portland Town Center.	$10,000,000	2031-2045	Yes
Bridge (Capital)	Multnomah County	Portland	Portland	Kittridge Bridge Seismic Retrofit	10244	NW Kittridge/Yeon Bridge	NW Kittridge/Yeon Bridge	Retrofit existing seismically vulnerable bridge (#010) across railroad tracks to ensure emergency response and access to petroleum supplies located along the Willamette River in the event of an earthquake.	$31,000,000	2031-2045	Yes
Bridge (Capital)	Multnomah County	BNSF	Portland	N Lombard St Bridge Replacement	12234	Lombard St, N (over railroad cut)	Lombard St, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	$31,000,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Cathedral Park Quiet Zone	10375	Cathedral Park UPRR Tracks, N	Cathedral Park UPRR Tracks, N	Address rail switching noise related to the Toyota operations at T-4 by improving multiple public rail crossings in the St. Johns Cathedral Park area.	$13,000,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Freight Improvements: Design/Construction	10376	NE 60th Ave.	NE 82nd Ave.	Construct street and intersection modifications to improve safety, freight reliability, and access to industrial properties, based on results of project development (RTP ID #12004).	$53,500,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd over Columbia Way and Railroad Bridge Replacements	10331	N Columbia Blvd over Columbia Way and BNSF railroad	N Columbia Blvd over Columbia Way and BNSF railroad	Replace the three existing bridges that carry N Columbia Blvd over to N Columbia Way and the BNSF Railroad, to improve seismic resiliency and address the risk of future weight restrictions.	$31,000,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Over-Dimensional Freight Improvement	11801	N Columbia Blvd at railroad bridge near I-5	N Columbia Blvd at railroad bridge near I-5	Reconstruct the UP Railroad Bridge over Columbia Blvd with a type that has more clearance underneath to enable more over-dimensional freight movement. Alternatively, lower the roadway underneath the railroad bridge (potentially requires moving a jet-fuel line).	$31,000,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Columbia Blvd Pedestrian Overpass Removal	11800	N Columbia Blvd west of N Midway Ave	N Columbia Blvd west of N Midway Ave	Remove the pedestrian overpass to enable the use of Columbia Blvd as an over-dimensional freight route.	$3,000,000	2031-2045	Yes
Freight	Multnomah County	Portland	Portland	Marine Dr & 33rd Intersection Improvements	10337	Marine Dr & 33rd Ave, NE	Marine Dr & 33rd Ave, NE	Construct a signal or roundabout to improve safety and freight movements.	$9,500,000	2031-2045	Yes

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Freight	Multnomah County	Portland	Portland	NE 60th Ave Rail Undercrossing Improvements	12312	Columbia	Lombard	Improve the NE 60th Ave Rail Undercrossing to improve vertical clearance for freight movement and to provide pedestrian and bicycle facilities.	$31,000,000	2031-2045	Yes
Freight	Multnomah County	ODOT	Portland	NE Lombard & 33rd Ave Ramp Redesign	12209	NE Lombard St	NE 33rd St.	Redesign ramps and intersections from Lombard to 33rd to reduce motor vehicle speeds, address turning conflicts, and consolidate access points. Close one ramp and signalize remaining. Provide a pedestrian and bicycle connection from Lombard to 33rd Ave.	$8,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	148th Ave Corridor Improvements, Segment 2	12214	NE Airport Way	NE Sacramento St	Widen 148th Ave roadway to three lanes, with pedestrian and bicycle facilities and crossings, from Airport Way to Sacramento St.	$15,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	B-H Hwy/Bertha/Capitol Hwy Improvements	10274	Intersection B-H Hwy/Bertha/Capitol Hwy	B-H Hwy/Bertha/Capitol Hwy	Redesign intersection to improve safety.	$3,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Burnside/Skyline Intersection Improvements	10166	Intersection NW Burnside/ Skyline Rd.	Intersection NW Burnside/ Skyline Rd.	Construct intersection improvements at both legs of the double intersection to improve safety for all modes.	$4,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy Bridge Seismic Retrofit	11828	Capitol Hwy, SW (over Barbur and along hillside)	Capitol Hwy, SW (over Barbur and along hillside)	Retrofit existing seismically vulnerable bridge over Barbur (#139) and semi-viaduct along hillside (#140) to ensure emergency response and economic recovery in the event of an earthquake.	$31,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol/Vermont/30th Intersection Improvements	10272	SW Vermont St & 30th Ave	SW Vermont St & 30th Ave	Realign the Capitol/Vermont/30th intersection and provide sidewalks, bike lanes, and drainage improvements.	$4,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Columbia/MLK Intersection Improvements, Phase 2	11877	Columbia/MLK	Columbia/MLK	Intersection and signalization improvements with a dedicated northbound right turn lane, a second dedicated southbound left turn lane, wider sidewalks adjacent to the roadway, and improvements to the geometry of the existing southbound through/right turn lane.	$15,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Interstate-Larrabee Overpass	10242	N Interstate/Larrabee Bridge	N Interstate/Larrabee Bridge	Remove the existing weight-restricted, low-clearance, poor-condition Interstate to Larrabee southbound flyover ramp (Bridge #153) and replace with a new overpass including a multi-use path to connect the future N Portland Greenway Trail to the Broadway Bridge. Assess the costs and benefits of providing vehicle access on the new structure as part of project development.	$31,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Marine Dr Corridor Safety Improvements	11864	N. Columbia Blvd	NE 33rd Dr	Improve corridor safety along Marine Dr, including improvements to address speeding and lane departure issues. From Bridgeton Rd to 33rd Dr, coordinate with the Army Corps of Engineers, Port of Portland, and Metro on street design changes associated with Levee projects and filling the Marine Drive Trail gap along this segment of the corridor.	$8,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Moody Ave Extension	11869	Bancroft	Hamilton	Extend SW Moody Ave and the streetcar line from Bancroft to Hamilton Ct to improve circulation and transit access within the South Waterfront Neighborhood.	$75,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 105th/Holman Corridor Improvements	11812	NE 102nd & Killingsworth	NE Holman St & 112th	Improve roadway and add pedestrian and bicycle facilities to enhance multimodal safety and access along 105th and Holman. Construct a roadway connection on NE Killingsworth from 102nd to 105th to improve connectivity for all modes.	$22,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 12th Ave Bridge Replacement	10243	NE 12th/Lloyd Blvd Bridge	NE 12th/Lloyd Blvd Bridge	Replace the existing fracture critical and seismically deficient 12th Ave bridge (Bridge #025) over I-84 and railroad tracks with a new structure. Provide multimodal transportation improvements on the new structure.	$46,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 158th Ave Corridor Improvements	11852	NE Sandy Blvd	NE Airport Way	Widen roadway and fill gaps in center turn lane, bicycle facilities, curbs, and sidewalks to improve safety and access to transit.	$6,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE 162nd Ave Corridor Improvements	11848	Sandy Blvd	Portland City Limits	Widen roadway with pedestrian and bicycle facilities and crossings, from Sandy Blvd to I-84.	$11,000,000	2031-2045	Yes

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Roadway (Capital)	Multnomah County	Portland	Portland	NE 33rd Ave Bridge Replacement	11807	33rd Ave, NE (over railroad tracks and Columbia Blvd)	33rd Ave, NE (over railroad tracks and Columbia Blvd)	Replace the existing seismically vulnerable 33rd Ave bridge (#009) over railroad tracks and provide pedestrian and bicycle facilities on the new structure. Improve and signalize the intersection of 33rd & Columbia, and remove the seismically vulnerable, fracture critical ramp over Columbia (#009A). Project design will consider freight movement needs, consistent with policies, street classification(s) and uses.	$46,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	NE Broadway Corridor Improvements	11943	NE 24th Ave	NE 42nd Ave	Construct traffic signals, enhanced crossings, transit priority treatments, and traffic safety improvements. Provide an enhanced bikeway along the corridor, within or parallel to the roadway.	$11,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	NE Lombard Corridor Safety Improvements: Local Contribution to State-owned Arterial	11865	NE MLK Jr Blvd	NE Sandy Blvd	Construct safety improvements to reduce rear end and lane departure crashes, including improvements at Lombard/11th rail crossing to address crash history. Upgrade existing bicycle facilities east of 11th Ave and extend an in-roadway or parallel bikeway along the corridor west of 11th Ave. Rebuild and add new traffic signals. Improve ped/bike safety at I-205 interchange. Project will coordinate with ODOT to identify locations and design treatments.	$5,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	North Portal Street Improvements	11782	SW Water	SW Bond	Improve access into the northern end of the North Macadam District by improving SW Corbett and SW Sheridan Street, including their connections with SW Kelly Way, SW Harbor Drive, and SW River Parkway.	$20,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	NW St Helens Rd Corridor Safety Improvements: Local Contribution to State-owned Arterial	11815	107th	Kittridge	Design and implement pedestrian and bicycle facilities and improve traffic safety for all modes.	$5,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	Outer Sandy Blvd Corridor Improvements: Local Contribution to State-owned Arterial	11810	I-205	Portland City Limits	Widen street to three lanes with a sidewalk and bike lanes from 141st Ave to Portland City Limits. Improve safety for all modes in the Parkrose main street segment.	$5,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Sandy Blvd Corridor Safety Improvements	10180	NE 14th	I-205	Design and implement multimodal corridor improvements including pedestrian lighting, new and enhanced crossings, new or modified signals, transit stop upgrades, transit priority treatments, bicycle network improvements, access management, and roadway design changes to improve traffic safety.	$11,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SE Yamhill /Taylor Couplet	11793	SE Water	SE Grand	Improve traffic safety and capacity by converting Yamhill and Taylor to couplet operation between Water and Grand Ave, including new traffic signals at Yamhill / MLK, Yamhill / Grand, and Taylor / Water. As part of the project, reconfigure the ramp from Belmont viaduct to MLK.	$6,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Southern Triangle Access Improvements	10237	Powell (12th/Ross Island Bridge)	Hawthorne Bridge (railroad mainline)	Improve vehicle access to the Southern Triangle district from eastbound Powell Blvd, and improve vehicle access from CEID to westbound Powell and southbound I-5.	$8,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	ODOT	Portland	SW Broadway Traffic Improvements	11788	SW Grant	SW 5th	Make improvements on SW Broadway and/or other city streets to reduce the vehicle queue on the I-405 SB Exit Ramp that connects to SW Broadway.	$4,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	SW Terwilliger Corridor Improvements, Segment 1	11827	SW Taylors Ferry	SW Palater	Construct sidewalks and bicycle facilities. Redesign intersection of Terwilliger & Boones Ferry to improve safety for all modes.	$8,500,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Tacoma Main Street Improvements	11820	Sellwood Bridge	McLoughlin Blvd	Implement boulevard design based on Tacoma Main Street study recommendations and incorporate McLoughlin Neighborhoods Project recommendations.	$8,000,000	2031-2045	Yes
Roadway (Capital)	Multnomah County	Portland	Portland	Vista Bridge Renovation	11789	Vista Bridge, SW	Vista Bridge, SW	Renovate and strengthen the structurally deficient Vista Bridge (Bridge #036).	$31,000,000	2031-2045	Yes

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Transit - Better Bus	Multnomah County	Portland	Portland	ETC: Inner North Portland Enhanced Transit Corridor Improvements	11833	Portland Central City	N Lombard St	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times on Vancouver, Williams, Mississippi, and Albina, including NextGen TSP.	$5,000,000	2031-2045	Yes
Transit - Better Bus	Multnomah County	Portland	Portland	ETC/Rose Lanes Transit Improvement Fund	12232	N/A	N/A	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	$5,000,000	2031-2045	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Citywide TDM Strategy	12078	Citywide	Citywide	Develop and implement a citywide Transportation Demand Management (TDM) strategy to reduce motor vehicle trip demand.	$10,000,000	2031-2045	Yes
Transportation Demand Management	Multnomah County	Portland	Portland	Portland Safe Routes to School, Phase 2	11779	N/A	N/A	Safe routes to school projects serving Title 1 schools within the City of Portland.	$10,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Central City Traffic Transportation System Management	10264	Central City	Central City	Implement Central City TSM improvements to arterials.	$6,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Gateway Regional Center TSM	10327	Gateway Regional Center, NE/SE	Gateway Regional Center, NE/SE	Implement a comprehensive traffic management plan throughout the regional center to reduce cut-through traffic on residential streets and improve traffic flow on regional streets. Project includes utility improvements.	$4,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Going St Connected/Automated Vehicle Connection	11796	Swan Island Industrial Area	I-5	Design and construct a Connected/Automated Vehicle connection between Swan Island and I-5.	$10,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Grand/MLK Lloyd District Traffic Signals	11794	NE Lloyd Blvd	NE Broadway	Construct traffic signals along Grand/MLK couplet in the Lloyd District.	$8,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	I-405 Corridor ITS Improvements	10266	SW Clay	NW Glisan	ITS improvements at six signals between Clay and Glisan including communications infrastructure and closed circuit TV cameras for remote monitoring and control of traffic flow.	$2,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Marine Drive ITS	10346	N Terminal Hg Rd	NE 185th Ave.	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, queue detection warning system, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	$4,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	N/NE Lombard St ITS	12218	N Columbia Blvd	NE MLK Jr Blvd	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$11,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	NW Northrup Traffic Signals	11791	NW 11th Ave.	NW 16th Ave.	Construct traffic signals along Northrup at 11th, 12th, 13th, 14th, and 16th to improve traffic flow and transit operations.	$8,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	NW Yeon Ave / St Helens Rd (Hwy 30) ITS Improvements	12230	NW Nicolai St	NW 107th Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$3,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Portland TSMO Maintenance and Improvements to implement Regional TSMO Plan	12086	Citywide	Citywide	Implement projects city wide consistent with the regional TSMO strategy and local plans, including priorities identified in PBOT ETC Plan and 2040 Freight Plan, including both maintenance/replacement or enhancements of signals and software to support improvements on arterial streets to better manage traffic flow and provide greater priority to transit and freight movement.	$35,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	Rivergate ITS	10373	N Lombard St	Rivergate Industrial Area	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	$4,000,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	S Macadam Ave ITS	12236	S Bancroft Ave	Sellwood Bridge	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$4,000,000	2031-2045	Yes

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Transportation System Management (Technology)	Multnomah County	Portland	Portland	Sandy Blvd ITS	10301	NE Couch St	NE 82nd Ave	Install ITS infrastructure (communication network, Next-Gen transit signal priority, truck priority detection, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system consistent with our policies of moving people and goods more effectively.	$4,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	SE Stark St ITS Improvements	12237	SE 82nd Ave	City Limits	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$3,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	Portland	Portland	W Burnside St/Rd ITS Improvements	12238	Naito Pkwy	SW Tichner Dr	Install ITS infrastructure (communication network, Next-Gen transit signal priority, CCTV cameras, and vehicle/bike/pedestrian detection system) and signal timing improvements for all road users.	$2,500,000	2031-2045	Yes
Transportation System Management (Technology)	Multnomah County	ODOT	Portland	Water/Yamhill Traffic Signal	11839	SE Water and Yamhill	SE Water and Yamhill	Construct traffic signal at Water/Yamhill to improve safety and capacity at freeway off-ramp.	$3,000,000	2031-2045	Yes
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Steel Bridge Transit Bottleneck Project Development	12050	Central City (West)	Central City (East)	Project Development to analyze Central City transit capacity and identify preferred options to address transit bottlenecks, delays, layover needs and improve transit speed, reliability, travel times and regional mobility. Include analysis of a potential tunnel option.	$67,500,000	2031-2045	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Bus: Powell Bus Garage Improvements and ZEB Transition Construction	12279	9800 SE Powell Blvd, Portland	9800 SE Powell Blvd, Portland	Expand bus operations, maintenance and storage facility to accommodate larger fleet and make zero emissions bus improvements.	$226,700,000	2031-2045	Yes
Transit Operating Capital	Multnomah County	TriMet	TriMet	Center Street Zero Emission Bus Transition: Phase 2	12277	1851-1717 SE Center St, Portland	1851-1717 SE Center St, Portland	Zero emissions bus improvements and expansion to support zero emissions fleet at Center Street Bus Garage.	$192,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County	Troutdale	Troutdale	Troutdale 2nd Street Ped/Bike Bridge	12108	SW Halsey ST	SW 2nd ST and SW Kendall Ave	Construct a pedestrian/bicycle bridge over 257th, a high-crash corridor. The project will connect the Halsey corridor project to downtown Troutdale bicycle/pedestrian facilities. Project emerged from 2020-2040 Town Center Plan, adopted in the 2022 amendment of the 2014 Transportation System Plan	$4,555,600	2031-2045	Yes
Throughways	Multnomah County, Washington County	ODOT	ODOT	US 26 (Sunset Highway) Operational Improvements	11971	I-405	West MPO Boundary	Construct Improvements to address bottlenecks and improve safety on US 26 (Sunset Highway) Specific improvements as identified in operational analysis, mobility corridor analysis, and refinement planning.	$98,000,000	2031-2045	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	TriMet	HCT: Southwest Corridor: PD, Engineering and ROW	12292	Bridgeport Village, Tualatin	Downtown Portland	Project Development, Engineering and Right of Way for High Capacity Transit project between Portland and Tualatin via Tigard.	$855,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Westside Regional Trail Segment #19	11967	Westside Trail at NW Skycrest Parkway	THPRD Eastern Boundary at NW 124th Ave.	Design and construct a 12' wide regional, multi-use trail segment connecting THPRD and Portland trail systems, completing a gap, serving historically marginalized communities, improving safety, increasing access to jobs, schools, and 2040 centers.	$4,900,000	2031-2045	Yes
Transit - High Capacity	Multnomah County, Washington County	TriMet	Washington County	HCT: Southwest Corridor Engineering and ROW Support	12300	Bridgeport Village, Tualatin	Downtown Portland	Support SW Corridor engineering and right-of-way for High Capacity Transit project between Portland and Tualatin via Tigard.	$20,700,000	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	Cities and counties	Cities and counties	Local Roadway Operations, Maintenance and Preservation: 2031-2045	12323	N/A	N/A	Local roadway operations, maintenance and preservation activities	$9,885,862,000	2031-2045	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Corridor Investment Areas Activities for 2031-2045	11964	Regional	Regional	The RTP identifies mobility corridors and future high capacity transit capital investments needed to support the 2040 Growth Concept. Corridor investment areas activities focus on aligning investments around specific outcomes to support local and regional goals in locations with multijurisdictional interests. Investment areas activities include completing corridor refinement planning and developing multimodal projects in major transportation corridors identified in the RTP as well as developing shared investment strategies to align local, regional and state investments in economic investment areas that support the region's growth economy. Activities include ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.	$16,080,000	2031-2045	Yes
Regional Activities	Region-wide (all three counties)	Metro	Metro	Regional MPO Activities for 2031-2045	11745	Regional	Regional	Transportation planning, programming, monitoring and federal reporting that Metro must conduct in order to remain certified as an metropolitan planning organization (MPO) by the federal government for the region and be eligible to receive federal transportation funding dollars.	$33,990,000	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Transit Oriented Development	Region-wide (all three counties)	Metro	Metro	Regional TOD Investments for 2031-2045	11977	2040 Centers, Stations Areas and Corridors	2040 Centers, Stations Areas and Corridors	Metro's TOD program helps build climate-friendly communities near transit that prioritize the needs of people with low-incomes and communities of color. The core program activity is to provide financial incentives and acquire land to increase affordable housing opportunities in areas that are well-served by transit, particularly those where communities are at risk of gentrification and displacement.	$84,830,000	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Safe Routes to School Program Activities for 2031-2045	12022	Regional	Regional	Educational and encouragement activities that help children safely walk and roll to school. Funded through the Regional Travel Options program with programs and services provided directly by Metro staff and by local agency and non-profit organizations through grants and agreements.	$12,870,000	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	Metro	Metro	Regional Travel Options (RTO) Program Activities for 2031-2045	12010	Regional	Regional	Education, services, and small capital projects that promote and make transit, bicycling, walking and ridesharing easier to use. Program elements are delivered by local government agencies, community non-profit organizations and colleges with US and Oregon Department of Transportation funding allocated by the Metro Regional Travel Options program. The program helps the region meet goals for increased access to jobs, education and services and to reduce motor vehicle miles traveled.	$66,900,000	2031-2045	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Corridors Priority Investments for 2031-2045	12025	Regional	Regional	As coordinated through the regional TSMO program, provide funding and secure discretionary grants for operators to work together to deploy safe, integrated corridor management with advanced technology in regional mobility corridors including decision support systems, real-time traveler information on route choice and estimated travel time that uses a variety of data sensors, software and systems (e.g., smart mobility hubs, internet of things, connected and automated vehicles). This also includes deployment of innovative technology systems, automated corridor management, and other active traffic management strategies.	$22,600,000	2031-2045	Yes
Transportation System Management (Technology)	Region-wide (all three counties)	Metro	Metro	Regional TSMO Program Investments for 2031-2045	12013	Regional	Regional	Implement and maintain Transportations System Management and Operations (TSMO) investments used by multiple agencies (e.g., Central Signal System, traffic signal priority, data communications and archiving) and coordinate response to crashes. The regional program also includes strategy planning (e.g., periodic TSMO Strategy updates), coordination of activities for TransPort subcommittee to TPAC, updates to the blueprints for agency software and hardware systems (ITS Architecture), improving traveler information with live-streaming data for connected vehicle and mobile information systems (TripCheck Traveler Information Portal Enhancement), and improving "big data" processing (PSU PORTAL) to support analyzing performance measures.	$22,600,000	2031-2045	Yes
Bridge Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Bridge Rehabilitation & Repair: 2031-2045	12294	Region-wide	Region-wide	Projects to repair or rehabilitate bridges, such as painting, joint repair, bridge deck repair, seismic retrofit, etcetera, that do not add motor vehicle capacity.	$441,000,000	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Culvert Replacement & Repair: 2031-2045	12295	Region-wide	Region-wide	Repair and replacement of culverts that have or are in danger of failure, do not provide adequate drainage or are a habitat barrier to Threatened & Endangered species that do not add motor vehicle capacity.	$221,000,000	2031-2045	Yes
Roadway Maintenance and Preservation	Region-wide (all three counties)	ODOT	ODOT	Highway Pavement Maintenance: 2031-2045	12298	Region-wide	Region-wide	Pavement rehabilitation/repair projects includes overlays, slurry seals, full pavement replacement, and other minor roadway improvements (curb and gutters, adding/widening shoulders) that do not add motor vehicle capacity.	$662,000,000	2031-2045	Yes
Roadway Operations	Region-wide (all three counties)	ODOT	ODOT	Safety & Operations Projects: 2031-2045	12299	Region-wide	Region-wide	Projects to improve safety and/or operational efficiencies such as pedestrian crossings, speed feedback signs, transit priority technology at signals on arterial roads, railroad crossing repairs, slide and rock fall protections, illumination, signals and signal operations systems, sidewalks, bicycle lanes, and other improvements that do not add motor vehicle capacity.	$882,000,000	2031-2045	Yes
Throughways	Region-wide (all three counties)	ODOT	ODOT	I-5 Freight Operational Improvements	11991	Columbia River	South MPO Boundary	Construct improvements to address bottlenecks and improve safety on I-5. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning.	$358,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	TriMet	TriMet	Access: Bike & Ride Facilities: Phase 2	11594	N/A	N/A	Provide secure bike parking facilities and enhancements at TriMet stations and stops.	$2,000,000	2031-2045	Yes
Transit - Better Bus	Region-wide (all three counties)	TriMet	TriMet	ETC: Better Bus Program Phase 2	12284	N/A	N/A	Program for roadway treatments, transit signal priority and other transit roadway improvements	$30,000,000	2031-2045	Yes

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Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Optimization, Reliability and Station Improvements: Phase 2	12269	N/A	N/A	Improvements to HCT including optimizing and rehabilitating stations, station areas, and operational items including track, signals and switches.	$255,000,000	2031-2045	Yes
Transit - High Capacity	Region-wide (all three counties)	TriMet	TriMet	HCT: Project Development for Future HCT	12285	N/A	N/A	Project Development for Rapid Transit Project	$40,000,000	2031-2045	Yes
Transit Capital - Other	Region-wide (all three counties)	TriMet	TriMet	Access: Bus Stop and Access to Transit Improvements: Phase 2	11230	N/A	N/A	Transit stop, right of way, sidewalk, crossing and ADA improvements to support expansion of services and amenities.	$10,000,000	2031-2045	Yes
Transit Maintenance	Region-wide (all three counties)	TriMet	TriMet	Transit Maintenance: Phase 2	12297	N/A	N/A	Maintenance of transit services, such as drivers, security, facilities and rolling stock.	$3,698,200,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: 5th Bus Base Land Acquisition	12280	N/A	N/A	Land acquisition and planning of a 5th bus base to support growth of TriMet bus service.	$80,000,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Equipment and Facilities: Phase 2	11338	N/A	N/A	Equipment and facilities to support system replacement, refurbishment, and growth.	$130,464,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Fleet Vehicles: Phase 2	10999	Regionwide	Regionwide	Replacement, refurbishment and/or expansion of zero emission buses, articulated buses, light rail and LIFT vehicles.	$2,364,900,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Information Technology Phase 2	10998	Regionwide	Regionwide	Communication systems, information technology, cyber security and improvements to Hop.	$145,710,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Operating Capital: Safety & Security: Phase 2	11016	N/A	N/A	Safety and security enhancements, CCTV, Rail crossing enhancements	$50,676,000	2031-2045	Yes
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Transit Center and Layover Improvements: Phase 2	12256	N/A	N/A	Program to improve, expand or create new transit centers or layover facilities.	$62,000,000	2031-2045	Yes
Transit Oriented Development	Region-wide (all three counties)	TriMet	TriMet	Transit-Oriented Development: Phase 2	12272	N/A	N/A	Site acquisition, station area planning, activation or infrastructure improvements	$5,000,000	2031-2045	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	STIF Regional Coordination Funds: Phase 2	12274	N/A	N/A	Pass through funds for regional shuttle services.	$140,000,000	2031-2045	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	Streetcar STIF Funds: Phase 2	12276	N/A	N/A	Pass through funds for Portland Streetcar.	$66,600,000	2031-2045	Yes
Transit Service and Operations	Region-wide (all three counties)	TriMet	TriMet	TriMet Operations: Phase 2	12296	N/A	N/A	Operations of transit services, such as drivers, security, facilities and rolling stock.	$13,021,800,000	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	Access: Park & Ride Facilities: Phase 2	12079	N/A	N/A	Additions or modifications to existing Park & Ride lots.	$2,000,000	2031-2045	Yes
Transportation Demand Management	Region-wide (all three counties)	TriMet	TriMet	TriMet Fare Discount Programs: Phase 2	12268	N/A	N/A	TriMet programs to provide discounted fares for eligible groups.	$90,000,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	173rd Avenue: Walker Road to Cornell Road (Bikeway)	12052	Walker Road	Cornell Road	Restriping (removing center turn lane) and construction of protected bike lane.	$11,400,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Hall Boulevard: 12th to Allen Blvd (Bike Lanes/Turn Lanes)	10669	12th Street	Allen Boulevard (approximately 600 ft south)	Construct bike lanes and turn lanes on Hall Boulevard, between 12th Street and Allen Boulevard.	$12,500,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Hall Boulevard: Cedar Hills Blvd to Crescent St (Bike Lanes)	10663	Cedar Hills Boulevard	Crescent Street	Construct bike lanes	$12,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Murray Blvd to Menlo Drive	12110	Murray Boulevard	Menlo Dr.	Construct complete street: sidewalks, street trees, bike lanes, lighting, signals, and turn lanes, where needed.	$38,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Hall Boulevard - 1st to 5th	12123	1st Street	5th Street	Construct complete street on Hall Boulevard, between 1st Street and 5th Street, with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	$29,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: Watson Ave - 1st to 5th	12122	1st Street	5th Street	Construct complete street on Watson Avenue between 1st Street and 5th Street with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks.	$29,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd Complete Street: Hocken to 117th (Design)	12113	Hocken Ave.	117th Ave./Broadway St.	Preliminary Design and engagement for a complete street on Canyon Road, from Hocken Ave. to 117th Ave. Wider sidewalks, street trees, bikes lanes, signal and intersection, lighting, and landscaped median investments. Explore jurisdictional transfer.	$3,300,000	2031-2045	Yes
Bridge (Capital)	Washington County	Beaverton	Beaverton	Hall Boulevard Bridge Reconstruction (Beaverton Creek)	12100	Crescent Street	Crescent Connection MUP	Construct new roadway bridge with wider sidewalks and protected bike lanes. Reconstruct intersection with SW Crescent Avenue/Crescent Connection multiuse path and replace traffic signal.	$26,000,000	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Cedar Hills Boulevard/Canyon Road Intersection (Reconfiguration)	12117	Cedar Hills Boulevard/Canyon Road	Cedar Hills Boulevard/Canyon Road	Construct new signal; Add NB and SB left turn lanes on Cedar Hills Blvd; add EB left turn lane on Canyon road; add sidewalks and ramps. Eliminate left turning movements around the Broadway jughandle; add protection for cyclists on SW Broadway St.	$9,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Cedar Hills/Dawson Way/Westgate (Intersection Realignment)	10618	Rose Biggi Avenue	Cedar Hills Boulevard	Construct realignment of Dawson Way/SW Westgate Drive at Cedar Hills Boulevard. Add turn lanes at intersection. Construct sidewalks on SW Westgate Drive and on-street bikeway (sharrows) on Westgate Drive and Dawson Way.	$21,600,000	2031-2045	Yes

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Roadway (Capital)	Washington County	Beaverton	Beaverton	Farmington Road/Cedar Hills Boulevard (Add Turn Lanes)	11895	Farmington Road/Cedar Hills Boulevard	Farmington Road/Cedar Hills Boulevard	At intersection of Farmington Road and Cedar Hills Boulevard, construct southbound double left turn lanes and southbound right turn lane. Restripe southbound through lanes as side-by-side left turn lanes. Construct second eastbound left turn lane.	$8,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	Hall Blvd/Allen Blvd Intersection (add turn lanes)	11896	Hall Boulevard/Allen Boulevard	Hall Boulevard/Allen Boulevard	Construct eastbound and westbound right turn lanes, and northbound and southbound double left turn lanes at the intersection of Hall Boulevard and Allen Boulevard.	$6,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Beaverton	Beaverton	McKernan Creek Parkway: Siler Ridge Lane to Kemmer Road	12128	Siler Ridge Lane	Kemmer Road	Construct new collector street in Cooper Mountain area with shared use pathway adjacent to the street.	$19,500,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Cornelius	TV Highway Pedestrian Infill	10805	Cornelius east city limits	Cornelius west city limits	Build out sidewalk gaps on TV Hwy. in Cornelius.	$6,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	19th/20th Avenue	11249	Council Creek	Between S. Ginger and S. Heather Streets	Improve to collector standards by building out sidewalk gaps, creating bike facilities, and improving rail crossing.	$11,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Cornelius	Cornelius	Davis Street Sidewalks and Bike Signage	11245	10th Ave	19th Ave	Add sidewalks on south side of this collector street. Also add bike markings (sharrows) and bike signage.	$7,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Cornelius	Cornelius	345th Avenue Traffic Signals and Crossing Gates	10802	TV Hwy (OR 8)	S. 29th Blvd.	Install traffic signals at intersection of Hwy 8 and SW 345th Avenue and install crossing gates and signals at SW 345th railroad crossing between Baseline and S. 29th Blvd.	$4,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Forest Grove	Gales Creek Road Improvement	11973	Thatcher Road	Forest Gale Drive/Willamina Avenue	To enhance the pedestrian safety by connecting gaps, improve bike lane safety, some storm drainage and road improvements.	$3,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	David Hill Road Improvement	10784	Thatcher Road	West UGB	Improve David Hill Road west of Thatcher Road to collector road standards to improve pedestrian and bicycle safety and improve multimodal access from nearby neighborhoods to community park.	$22,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	Heather Industrial Connector	12132	Mountain View	Poplar Street	Construct collector road to improve circulation	$3,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47 at David Hill Road Intersection Roundabout Improvement	11948	David Hill Road	Highway 47	Add an additional second circulating lane to the existing roundabout to provide separation for northbound left turning and through traffic as well as a separate lane for southbound turns.	$5,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47 at Purdin Rd/Verboort Rd Roundabout Improvement	11950	Highway 47	Purdin Road/Verboort Road	Add a northbound right turn slip lane on the south leg of the roundabout and a southbound right turn slip lane on the south leg of the roundabout to the overall roundabout intersection. The project or a portion of the project is outside the designated urban growth boundary.	$9,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Forest Grove	Forest Grove	Thatcher Road Improvement	10773	David Hill Road	Gales Creek Road	Improve Thatcher Road to arterial design standards and improve intersection with Gales Creek Road.	$26,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	15th Ave Bike/Ped Improvements	11165	Sunrise Ln	Evergreen Rd	Improve road to urban standards and construct missing sidewalks and bike facilities	$8,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	25th Ave Bike/Ped Gaps	11166	Intel Jones Farm/Hillsboro Fire Station 5 driveway	Evergreen Rd	Improve to three-lane urban arterial standards	$6,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	25th Ave Turn Lanes and Bike/Ped Improvements	11905	Cornell Rd	Griffin Oaks St	Widen to add concrete center turn lane and improve sidewalks and bike facilities	$18,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Century Blvd Turn Lanes and Bike/Ped Gaps (Baseline to Alder)	10819	Baseline Rd	Alder St	Complete missing urban sections including sidewalks, bike facilities, and center turn lane where appropriate	$4,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Hillsboro	Crescent Park Greenway - Brookwood Overcrossing	12133	Brookwood Parkway	Brookwood Parkway	Grade-separated over-crossing of Crescent Park Greenway at Brookwood Parkway	$6,000,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Elam Young Pkway Bike/Ped Improvements	12137	Cornell (West)	Cornell (East)	Construct sidewalks on inside loop; need widening at intersections to accommodate bike lanes; stripe bike lanes as part of pavement management program south of light rail tracks; future cycle track	$5,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Reedville Trail (South Segment)	11462	Tualatin Valley Highway	Rosedale Rd	Construct multi-use trail along BPA Pearl-Keeler power line corridor	$13,700,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Sunrise Ln Bike/Ped Improvements	11163	Jackson School Rd	25th Ave	Widen and improve road to urban standards with sidewalks and bike facilities; construct missing sidewalks	$20,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Walker Rd Turn Lanes and Bike/Ped Improvements	10823	Cornelius Pass Rd	206th Ave	Complete three-lane urban upgrade including center turn lane, sidewalks and bike lanes	$8,000,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	209th Ave Widening and Improvements, Phase 3	11753	Vermont St	Farmington Rd	Widen and improve road to five lanes with sidewalks and bike facilities; improve culvert at Rosedale Creek; improve intersections including new signal at Murphy and modified signal at Rosedale	$25,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	25th Ave Extension	11906	Evergreen Rd	Jackson School Rd	Construct three-lane road; also see 25th Ave realignement project (22-003)	$19,200,000	2031-2045	Yes

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Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Improvements (South Hillsboro)	11394	Kinnaman Rd	Rosedale Rd	Widen road to three-lane collector standard; include roundabout at Kinnaman, bridge over Butternut Creek and box culvert at tributary south of Rosa; include intersection improvements at Rosedale and signal at Murphy	$84,000,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Cornelius Pass Rd Extension, Phase 3	11921	Vermont St	Rosedale Rd	Construct five-lane road extension with new intersections at Murphy and Rosedale; box culvert at south tributary of Butternut Creek	$24,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Hillsboro Safety Action Projects	11932	City -wide	City -wide	Implement projects as identified in the Hillsboro Transportation Safety Action Plan to improve safety at locations with high fatal and/or serious crashes.	$10,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Huffman St Extension, Phase 2	11890	NW 273rd	Jackson School Rd	Construct three-lane road, preserve five-lane right-of-way (cost estimate represent higher cost option of Waible Creek alternative alignment with roundabout at Jackson School Road)	$38,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Hillsboro	Jackson School Rd Improvements	11907	Evergreen Rd	Storey Creek (UGB)	Widen and improve road to three-lane arterial standard; sidewalk on UGB side only; cycle track on east side and buffered bike lane on west side; additional refinement needed for future intersections with Huffman and 25th Ave extension	$15,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Murphy Rd Construction	11384	Century Blvd	209th Ave	Construct new three-lane road with new intersections at Century, Cornelius Pass, and 209th Ave	$24,200,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Rosedale Rd Turn Lanes and Bike/Ped Improvements	11911	Century Blvd (229th Ave)	209th Ave	Widen and improve road to three-lane collector standard; box culvert at Rosedale Creek east and west crossings	$26,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Stucki Ave Extension and Realignment	11276	206th Ave	Walker Rd	Construct three-lane extension with new intersections at Gibbs, Wilkins extension, Amberglen extension, and 205th; see AmberGlen "Crossroads" LPA	$45,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Hillsboro	US 26 at NE 185th Eastbound On-Ramp Widening	12148	185th	US 26 Eastbound	Widen on-ramp to two full lanes and allow shared right-turn from outside northbound through lane on 185th	$4,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Veterans Dr Extension	12140	Brookwood	Belknap	Construct three-lane extension east of Brookwood to connect to Elam Young Pkwy via Belknap Ct; require bridge over Dawson Creek; improve Belknap Ct to two-lane collector standard and remove on street parking to accommodate bike lanes	$26,400,000	2031-2045	Yes
Transit - Better Bus	Washington County	ODOT	Hillsboro	OR 8: TV Highway Transit Access and Multimodal Safety	10846	Maple St	Cornelius Pass Rd	Provide bike/ped improvements and safety and lighting improvements. Local match for TV Hwy HCT and Safety and Complete Street projects.	$45,600,000	2031-2045	Yes
Transit Capital - Other	Washington County	TriMet	Hillsboro	Transit Stop Enhancements (Hillsboro)	11381	City-wide	City-wide	Provide citywide improvements to transit stops including landing pads, shelters, and other amenities.	$8,500,000	2031-2045	Yes
Transportation System Management (Technology)	Washington County	Hillsboro	Hillsboro	Communications (ITS) Projects	11931	City -wide	City -wide	Install fiber, ITS, and other communications equipment and devices for improved signal coordination.	$2,600,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	King City	King City Sidewalk Infill	11692	1000' west of SW Royalty Pkwy	SW Beef Bend Rd.	Add sidewalks.	$3,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	OR 99W Connector Trail: OR 99W to south side of Tualatin River	12152	OR 99W N of Tualatin River	OR 99W S of Tualatin River	Construct a shared-use path from Tualatin River Trail (TRT) to SW Versailles Road along west side of OR 99W, from the TRT under 99W to fire signal along east side of 99W, & Construct bike/Ped crossing of the Tualatin River along the west side of OR 99W.	$3,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	SW Elsner Road Sidewalks, Cycletrack, Turn-lanes - Phase 2	12156	SW Roy Rogers Road	River Terrace Blvd	Improve with pedestrian and bike facilities from SW Roy Rogers Road to SW Beef Bend Road. 2-lane street with sidewalks and a one-way cycle track on each side to the Tualatin River Trail, then shared use path on west side and left-turn lanes where needed.	$6,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	Westside Trail: Segment 1	11947	Beef Bend Rd.	Tualatin River	Construct a shared-use path for bike/ped w/ connections to adjacent streets. Includes crossing of the Tualatin Rv. Realigns 137th Avenue to connect with Colyer Way with intersection improvements. Install an enhanced bike/ped crossing at the Fischer & Capulet intersections.	$13,200,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	King City	137th Avenue Corridor: Beef Bend Rd to Fischer Rd ext.	12154	SW Beef Bend Rd	SW Fischer Road Extension	Improve to include pedestrian (Neighborhood Pedestrian Overlay) and bike facilities (Neighborhood Bicycle Overlay). Cost assumes a 2-lane street, a sidewalk on the west side and shared lane markings for bikes, with 3-lanes provided at the SW Beef Bend intersection.	$14,000,000	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	154th Ave New Collector	12149	SW Beef Bend Rd	New E-W Collector (KT Blvd)	Construct a Collector Street with pedestrian and bike facilities. 2-lane street with parking, sidewalks on both sides, with 3-lanes provided at the SW Beef Bend intersection.	$6,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 2	12150	154th Ave	147th Ave	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	$19,800,000	2031-2045	Yes

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Roadway (Capital)	Washington County	King City	King City	Fisher Rd. Extension - Phase 3	12151	147th Ave	King Lear Way	Construct new 2 lane Collector Rd with sidewalks bike lanes, street lighting and traffic signals at key intersections. Project is currently outside UGB, but was adopted as part of a concept plan for the area. The project or a portion of the project is outside the designated UGB.	$5,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	King City	King City	SW 150th Avenue Corridor Improvements	12155	SW Beef Bend Rd	New E-W Collector	Construct a Collector Street with pedestrian and bike facilities. 2-lane street with parking, a shared-use path on the west side and a sidewalk on the east side, with 3-lanes provided at the SW Beef Bend intersection.	$7,200,000	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	I-5 Northbound Braided Ramps I-205 to Nyberg	11989	I-205	Nyberg Rd	Replace the inside merge at I-205 entrance by constructing braided ramps.	$98,000,000	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry - Phase 2	11402	Nyberg Rd. Interchange	Lower Boones Ferry Rd. Interchange	Extend existing auxiliary lane. This is Phase 2 (RTP ID 11583 is Phase 3 further north).	$26,000,000	2031-2045	Yes
Throughways	Washington County	ODOT	ODOT	OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	11988	Beaverton-Hillsdale Hwy	Allen Blvd	Design and construct braided ramps on southbound OR 217 at Canyon Rd and Beaverton Hillsdale Hwy, including expanded bridge.	$203,000,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Sherwood	OR 99W Pedestrian Improvements	10706	UGB Northern Boundary	UGB Southern Boundary	Pedestrian upgrades. Completes pedestrian links along 99W from north to south end of city limits. Includes ADA upgrades as required at intersection and local connections. Assumes bike lanes already provided along OR 99W (SW Pacific Highway).	$3,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Sherwood	Sherwood	Cedar Creek Trail	10701	SW Oregon St	SW Roy Rogers Rd	Regional trail between OR 99W (Pacific Highway) & SW Edy Rd and SW Edy Rd to SW Roy Rogers Rd, all-phases including additional Plan Development, Design, ROW Acquisition, Construction, Construction Administration, Inspections.	$15,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Baler Way Extension	11404	SW Langer Farms Parkway	SW Tualatin-Sherwood Road	Extend SW Baler Way (3-lane collector) between SW Tualatin-Sherwood Road and SW Langer Farms Parkway, possibly SW Pacific Highway depending upon results of widening of SW Tualatin-Sherwood Road project by Washington County.	$4,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Brookman Road Improvements	10682	SW Pacific Highway	SW Ladd Hill Rd.	Arterial road between OR 99W and SW Ladd Hill Road, all-phases including additional Plan Development, Design, ROW Acquisition, Construction, Construction Administration, Inspections.	$34,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Edy Rd Improvments	10692	SW Elwert Rd	SW Cherry Orchards Pl.	Reconstruct road to 3-lane collector standards w/ sidewalks and bike lanes. Partial Washington County jurisdictions and assumed to become City's jurisdiction upon completion of project.	$21,200,000	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Langer Farms Parkway Extension	12044	SW Pacific Hwy	SW Roy Rogers Rd	Extends SW Langer Farms Parkway (3-lane collector street) west across OR 99W to serve undeveloped land within city limits and UGA expansion areas.	$7,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	To be determined, W	Sherwood	Oregon-Tonquin Intersection Improvements	10674	SW Oregon Street	SW Tonquin Rd	Reconstruct and realign three leg intersection with a roundabout (partial two-lane roundabout) approx 400 feet northeast of existing roundabout at SW Oregon St & Murdock Rd. ROW, PE, design & construction.	$4,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Sherwood	Sherwood	Sherwood Blvd Improvements	10691	SW Century Dr.	SW 3rd St.	Reonstruct road to 3-lane arterial standards. Median/turn lane, landscape strip, ADA compliant sidewalks. Reconstruct intersection at 3rd St to increase capacity. Assume SW Century Drive improved by development and/or local funds.	$4,700,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Fanno Creek Trail Gap (Bonita to Cook Park)	12088	Bonita Road	Durham Park	Complete regional trail gap.	$15,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Hunziker St Sidewalks	12001	Near 7585 Hunziker	72nd Ave	Add sidewalk and bike lane on north side of Hunziker from current sidewalk end (near 7585 Hunziker) to 72nd Ave.	$4,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	OR 217 Ped-Bike Crossing at SW 95th Ave	12168	Oak Street	Shady Lane	Construct a new Highway 217 overcrossing for active transportation users connecting Metzger Neighborhood and WSRC area with the Greenburg Neighborhood, Tigard Heritage Trail, Fanno Creek Trail, and Downtown Tigard.	$24,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	SW 95th Ave Ped/Bike Rail Undercrossing at Commercial St and Heritage Trail	12171	SW 95th Ave	Tigard Heritage Trail	Build a railroad undercrossing for pedestrians and bicycles west of Pacific Highway (OR99W), connecting Grant Ave with 95th Ave.	$8,100,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard Triangle multi-modal Improvements (urban renewal)	10760	Tigard Triangle	Tigard Triangle	Upgrade and improve roads, improve sidewalks, lighting, crossings, implement curbside management strategies, bus shelters and benches throughout the Tigard Triangle.	$17,900,000	2031-2045	Yes
Bridge (Capital)	Washington County	ODOT	Tigard	Hall Blvd/Fanno Creek Bridge	12003	Over Fanno Creek in Tigard	Over Fanno Creek in Tigard	Replace bridge with new bridge meeting current standards with sidewalks and bike lanes.	$13,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Atlanta Street Extension to 74th Ave	11408	74th Ave	69th Ave	Extend Atlanta Street west to 74th Ave.	$16,600,000	2031-2045	Yes

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Roadway (Capital)	Washington County	ODOT	Tigard	Hall Blvd. Improvements - Locust to Durham	11220	Locust	Durham	Build protected bike facilities, complete sidewalks on both sides of the road, and provide new and improved pedestrian crossings throughout the corridor. Maximum roadway cross section of 3 lanes away from intersections. Combine and coordinate with ODOT State of Good Repair project and potential Washington County project north of SW Locust.	$32,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Tigard	Hall/Hunziker/Scoffins Intersection Realignment	11223	Hall Blvd.	Intersection with Hunziker & Scoffins	Realign offset intersection to cross intersection to alleviate congestion and safety issues.	$17,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Tiedeman Ave Complete Street	11998	Greenburg Rd	Walnut St.	Following the completion of a circulation study, construct the identified projects to improve circulation and bring the roadways up to urban standards with complete bicycle and pedestrian facilities.	$32,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tigard	Tigard	Walnut Street Improvements	11229	Tiedeman Ave	Hwy 99W	Build complete street with sidewalks and bike lanes on both sides and ped crossing improvements; may include turn lane approaching Hwy 99W.	$16,900,000	2031-2045	Yes
Transit Operating Capital	Washington County	TriMet	TriMet	Bus: Merlo Bus Garage Expansion and ZEB Transition: Phase 2	12278	16130 SW Merlo Rd, Beaverton	16130 SW Merlo Rd, Beaverton	Improvements at Merlo Bus Garage and to support ZEB transition and larger vehicles	$167,000,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	ODOT	Tualatin	OR 99W Sidewalks (S. to N. City Limits)	10743	South City Limits	North City Limits	Install sidewalks on both sides of 99W from Cipole to Tualatin River.	$3,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Tualatin	Boones Ferry Safety Improvements (Bridgeport to Tualatin Rd)	11961	Bridgeport Road	Tualatin Road	Provide mid-block crossings, buffered bike lane or shared use path.	$4,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segment 17)	11427	112th	Tualatin / Boones Ferry	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan.	$16,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Martinazzi Safety Improvements (Warm Springs to TS Rd)	11428	Warm Springs	Tualatin-Sherwood	To improve safety for employees and residents, add bike lanes or other improvements for pedestrians, cyclists, and vehicle flow/safety on this section of roadway.	$4,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Norwood Street Sidewalks and Bike Lanes	11431	Boones Ferry Road	East City Limits	Add sidewalks and bike lanes, upgrade to urban standards.	$4,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Tualatin River Pathway	10744	Eastern city limits	Western city limits	Fill in system gaps from eastern city limits to western city limits.	$8,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Boones Ferry Rd Upgrade (Norwood to I-5)	11419	Norwood	I-5	Uprgrade to urban standards and add sidewalks.	$16,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Cipole Street Reconstruction (OR 99W - Tualatin-Sherwood)	10717	OR 99W	Tualatin-Sherwood	Reconstruct/widen to 3 lanes from 99W to Tualatin-Sherwood Road and include shared-use path for the Ice Age Tonquin Trail. The project or a portion of the project is outside the UGB.	$16,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Tualatin	Grahams Ferry Rd Upgrade (SW Ibach to Helenius)	11962	SW Ibach Road	Helenius Road	Upgrade SW Grahams Ferry Road to roadway standards betweeen SW Ibach Road and Helenius Road.	$13,000,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Helenius Upgrade to Urban Standards (109th to Grahams Ferry)	11430	109th	Grahams Ferry Road	Uprgrade to urban standards.	$4,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Myslony Widening (Hedges Creek to 124th Ave)	10716	Hedges Creek	124th Ave	Reconstruct/widen from 112th to 124th to fill system. Improve the intersection of 124th and Myslony.	$8,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Tualatin	Nyberg On-Ramp Lane and Safety Enhancement	11420	I-5 on-ramp	I-5 on-ramp	Add an additional on-ramp lane for vehicles traveling westbound on SW Nyberg Street to I-5 northbound (northeast quadrant of the Nyberg Interchange). Reduce the pedestrian island and improve illumination to enhance safety.	$5,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Tualatin	Tualatin	Teton Ave Safety Improvements (Tualatin Rd to Avery)	10738	Tualatin	Avery	Safety and active transportation improvements: Widen Teton to three lanes, add bike lanes. Add right-turn lanes from NB Teton to WB T/S Road. Signalize intersection of Teton/Tualatin Rd. Add SB turn-pocket at Teton/Avery and signalize intersection.	$9,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Beaverton Creek Trail (Regional) Seg. #1 & #2	10811	SW 194th Ave.	Westside Trail at THPRD Nature Park	Design & construct a 12' wide regional multi-use trail segment connecting City of Hillsboro and THPRD trail systems; improving safety, completing a gap, serving historically marginalized communities, and increasing access to jobs, schools, & transit.	$16,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Tualatin Hills Park & I	McKernan Creek Trail	12106	SW Rigert Rd. at Summercrest Park	SW Grabhorn Rd. north of SW Tile Flat Rd.	Plan, design, and construct a 12' wide multi-use regional trail from Summercrest Park to SW Grabhorn Rd. serving the urbanizing Cooper Mountain area; improving safety, access to jobs, and linking the area to the regional trail network	$21,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	North Johnson Creek Trail	11966	Cedar Mill Creek Trail at Foege Park	SW Miller Rd.	Design & construct a 10'-12' wide multi-use community trail providing a safe alternative to high-injury corridors and connecting a high-density MAX light-rail station community, 2040 Centers, jobs, and other regionally connected trail systems.	$16,600,000	2031-2045	Yes

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Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Tualatin Hills Park & I	Reedville Trail - South	12107	SW Grabhorn Rd. at SW Stonecreek Dr.	SW Grabhorn Rd. at South Cooper Loop Trail	Plan, design, & construct a 12' wide multi-use regional trail connecting the Reedville Trail - North segment at SW Grabhorn Rd. & SW Stone Creek Dr to the South Cooper Loop & McKernan Creek regional trails, improving safety/access to new urban areas.	$6,500,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Waterhouse Community Trail Connection, Segment 9	11942	THPRD boundary	SW Springville Rd. just west of Sickle Terr.	Design & construct a short but significant 10' wide multi-use trail to connect a fast-growing urban area to the Rock Creek Regional Trail; serving historically marginalized communities, improving safety, and increasing access to jobs & 2040 Centers.	$4,100,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	ODOT	Washington County	Beaverton-Hillsdale Hwy Bike Lanes	11925	OR 217	Multnomah County Line	Completes 12,000 feet of bike lanes.	$4,600,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Butner Road Bike Lanes	10614	Cedar Hills Blvd.	Park Way	Completes 7800 feet of bike lanes to transit corridor.	$16,400,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Cornell Road Bike Lanes	10613	Saltzman Rd.	119th Ave.	Completes 1750 feet of bike lanes in town center.	$3,300,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Saltzman Road Bike Lanes	10610	Cornell Rd.	Barnes Rd.	Complete 950 feet of bike lanes in town center.	$3,300,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Science Park Drive Bike Lanes	10609	Murray Blvd.	Cornell Rd.	Complete 3,600 feet of bike lanes in town center.	$10,300,000	2031-2045	Yes
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Washington County Neighborhood Bikeways (Ph. 1)	11239	County-wide	County-wide	12 miles of neighborhood bikeways (bike boulevards) on low-traffic streets throughout unincorporated urban Washington County, including enhanced at-grade crossings of arterials.	$18,200,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	92nd Avenue Pedestrian Improvements	11089	Allen Blvd.	Garden Home Rd.	Completes 3800 feet of sidewalk improvements to transit corridor.	$9,600,000	2031-2045	Yes
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Oak St (Butternut to 179th) Sidewalks	12057	Butternut Dr	179th Ave	Add sidewalks between Butternut Dr and 179th Ave.	$3,400,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	95th Ave. Ped/Bike Connection	10589	Morrison St.	Barnes Rd.	Pedestrian/bicycle pathway, lighting, bridge over Johnson Creek.	$22,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Alexander St (192nd to 209th) Bike Lanes and Sidewalks	12062	192nd Ave	209th Ave	Add bike lanes, sidewalks and turn lanes where appropriate.	$18,200,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Locust Avenue Bike Lanes and Sidewalks	10611	Hall Blvd.	72nd Ave.	Completes 1650 feet of bike lanes and missing sidewalks in regional center.	$8,100,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Meadow Dr/Downing St (Murray to Walker) Bike Lanes and Sidewalks	12059	Murray Blvd	Walker Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	$17,700,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Metzger Area Sidewalks and Bikeways	11465	Metzger Area	Metzger Area	Washington Dr. sidewalks (Taylor's Ferry to Hall), Accessways, Oak St. sidewalks/bike lanes (Hall to 72nd).	$29,300,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Rigert Rd (185th Ave to 170th Ave) Bike Lanes and Sidewalks	12067	185th Ave	170th Ave	Add bike lanes, sidewalks and turn lanes where appropriate	$23,900,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Safe Access to Priority Transit Corridors	11468	add area	add area	Conduct project development, preliminary/system engineering, design, and construct enhanced pedestrian crossings Countywide on priority transit corridors.	$22,800,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Sunset TC Station Community Pedestrian Improvements	10607	Sunset TC Station Community	Sunset TC Station Community	Sidewalks, pedestrian crossings, accessways, ped/bike bridges over creeks.	$14,600,000	2031-2045	Yes
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Westside Trail: Segment 2	11484	Tigard City Limit	Beef Bend Rd.	Multi-use trail following BPA powerline.	$10,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	174th Ave. Improvements	10548	Meadowgrass Ln.	Bronson Rd.	Add turn lanes, bike lanes and sidewalks	$20,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	175th Ave (Kemmer Rd to Rigert Rd)	12066	Kemmer Rd	Rigert Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	$23,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	175th Ave.	12179	Barrows Rd.	Weir Rd.	Improve substandard curve, add bike lanes, sidewalks and turn lanes where appropriate.	$35,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	185th Ave (Farmington to Gassner)	12061	Farmington Rd.	Gassner Rd.	Add bike lanes, sidewalks, and turn lanes where appropriate.	$36,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	185th Avenue sidewalks and bike lanes: Kinnaman to Farmington	11480	Kinnaman Rd.	Farmington Rd.	Improve from two lanes to three lanes with bike lanes and sidewalks - interim improvement.	$52,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	197th/198th Ave. Improvements	10586	Baseline Rd	Tualatin Valley Highway	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	$46,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	80th Avene Complete Street	11578	Oleson Rd	Oak St	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	$31,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10579	Cedar Hills Blvd	118th	Construct sidewalks on north side.	$7,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Beef Bend Rd	11577	Roy Rogers	OR 99W	Improve to three lanes with bike lanes and sidewalks.The project or a portion of the project is outside the designated urban growth boundary.	$95,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Blanton St. (170th to 198th)	12180	170th Ave.	198th Ave.	Improve two-lane road with sidewalks, raised protected bike lanes, lighting, and turn-lane where necessary (near-term segment of Tualatin Valley Trail).	$35,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Boones Ferry Improvements	11487	Basalt Creek East-West Arterial	Day Rd.	Improve from 3 lanes to 5 lanes with bike lanes, sidewalks and street lighting.	$12,700,000	2031-2045	Yes

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

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Roadway (Capital)	Washington County	Washington County	Washington County	Cornell @ 143rd Improvements	10549	143rd Ave.	Science Park Dr.	Realign 143rd with Science Park Dr. @ Cornell as a 4-way signalized intersection.	$30,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell and 185th Intersection Improvements	11737	185th Ave.	Cornell Rd	Intersection improvements to maintain or improve mobility, safety and transit reliability. Prioritize near-term TSMO improvements and transit priority (TSP, queue bypass and BAT lanes).	$50,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Farmington Rd. realignment and widening, sidewalks, bike lanes,	10560	170th	209th	Widen by 2 to 3 lanes with turn lanes at major intersections, bike lanes, sidewalks, access management, realignment of Rosa/179th intersection.	$111,600,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Garden Home Rd Improvements	11481	92nd	Oleson Rd.	Improvements to enhance safety, and bike / ped accessibility.	$21,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Gassner Rd (Grabhorn Rd to 185th Ave) Bike Lanes and Sidewalks	12069	Grabhorn Rd	185th Ave	Add bike lanes, sidewalks and turn lanes where appropriate.	$27,300,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Glencoe Rd. Improvements	10591	Evergreen Rd.	Jackson Ave.	Improve to three lanes with bike lanes and sidewalks.	$63,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Grabhorn Rd	12181	Tile Flat Rd.	Farmington Rd	Interim 3-lane and east side pedestrian/bike improvements. Realign two 90 degree curves.	$48,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Grabhorn Rd	12182	Tile Flat Rd.	add entent	Construct intersection improvements.	$11,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Greenburg Road	10612	Hall Blvd.	OR 217	Upgrades roadway to up to 5-lane urban standard with 3400 feet of bike lanes and sidewalks in regional center.	$32,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Hall Blvd. Improvements	11739	Oleson Rd.	Locust	Improve to 2/3-lane cross section with bike lanes and sidewalks.	$33,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Washington County	Hall Blvd. Improvements	10595	Scholls Ferry Rd.	Oleson Rd.	Improve to five lanes with bike lanes and sidewalks.	$5,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Jenkins Rd. Improvements	11464	Murray Blvd.	Cedar Hills Blvd.	Improve from 3 lanes to 5 lanes with bike lanes, sidewalks and street lighting.	$24,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Johnson St. Improvements	10585	Cornelius Pass Rd	185th Ave	Add sidewalks, bike lanes, lighting, turn lanes as needed.	$22,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kaiser/143rd Ave. Improvements	10563	Bethany Blvd.	Cornell Rd.	Improve from two to three lanes with bike lanes and sidewalks.	$45,600,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Kinnaman Rd. Improvements	10593	198th Ave.	Farmington Rd.	Reconstruct with sidewalks, bike lanes and turn lanes at major intersections; consolidate offset intersection at 198th Ave.	$48,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Laidlaw Improvements	11466	Skycrest Pkwy.	Lakeview Dr.	Straighten curves, improve to 3 lanes with bike lanes and sidewalks.	$24,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Laidlaw Improvements	11471	Saltzman Rd.	County Line	Improve to three lanes with bike lanes and sidewalks.	$12,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Merlo/158th Improvements	10578	170th Ave.	Jenkins Rd.	Improve roadway to five lanes with bike lanes and sidewalks with an off-street multi-use trail on the south side to close gap for Beaverton Creek Trail.	$11,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Miller Hill Rd (Farmington to Gassner) Bike Lanes and Sidewalks	12058	Farmington Rd	Gassner Rd	Add bike lanes, sidewalks and turn lanes where appropriate.	$19,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	OR 10: Oleson Rd. Improvement Ph. 1	10545	Oleson Rd. south of OR10	Oleson Rd. at Scholls Ferry	Realign Oleson Rd. 500 feet to east and reconfigure Oleson intersections with OR10 and Scholls Ferry Rd. to address safety and reduce crashes.	$91,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Rigert Rd (170th Ave to 155 Ave) Bike Lanes	12068	170th Ave	155th Ave	Add bike lanes, and turn lanes where appropriate.	$5,200,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	11476	Thompson Rd.	Bauer Woods Dr.	Improve to three lanes with bike lanes and sidewalks.	$22,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Saltzman Rd	11451	Bayonne Road	Thompson Rd.	Improve to three lanes with bike lanes and sidewalks.	$8,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Improvements	10577	Allen Blvd.	Beaverton-Hillsdale Hwy.	Improve roadway from two to three lanes with bike lanes and sidewalks.	$54,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd. Improvements	11452	SW Pleasant Valley Road	SW Teufel Hill Road	Realign curves to improve safety and reduce crashes. The project or a portion of the project is outside the designated urban growth boundary.	$10,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11459	Kaiser Rd.	Eleanor Ave.	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany.	$13,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Taylors Ferry (65th Ave to Washington Dr)	12065	65th Ave.	Washington Dr.	Add bike lanes, sidewalks, and turn lanes where appropriate.	$34,200,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Taylors Ferry Extension	10567	Oleson Rd.	Washington Dr.	Construct new two lane extension with bike lanes and sidewalks	$10,700,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Tile Flat Rd	12184	Existing improvement extents in South Cooper Mountain	Grabhorn	Interim 3-lane and north side pedestrian/bike improvements	$9,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker and185th Intersection Improvements	11738	185th Ave.	Walker Rd.	Intersection improvements to maintain or improve mobility, safety and transit reliability. Prioritize near-term TSMO improvements and transit priority (TSP, queue bypass and BAT lanes).	$50,800,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	10569	Amberglen Pkwy.	185th Ave.	Improve from two to five lanes to address congestion and safety, reduce crashes, with bike lanes and sidewalks.	$42,600,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	Walker Rd. Improvements	12188	Westfield	123rd	Improve Cedar Hills/Walker to include double lefts and right-turn lanes on all approaches.	$32,500,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Washington County	West Union Rd.	10575	Cornelius Pass Rd.	185th Ave.	Improve from two to five lanes with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	$50,100,000	2031-2045	Yes

2023 RTP Public Review Draft Constrained Project List (2023-2045)
(projects are organized by time period alphabetically by County and nominating agency)

Exhibit A to Ordinance No. 23-1496

RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Roadway (Capital)	Washington County	Washington County	Washington County	West Union Rd. Improvements	10571	185th Ave.	143rd Ave.	Improve to five lanes from 185th to Laidlaw and from two to three lanes from Laidlaw to 143rd Ave, with bike lanes and sidewalks.	$66,100,000	2031-2045	Yes
Throughways	Washington County	ODOT	Washington County	Jackson School Road Traffic Signal	11454	US 26 and Jackson School Road	US 26 and Jackson School Road	Signalize ramp intersections. The project or a portion of the project is outside the designated urban growth boundary.	$3,300,000	2031-2045	Yes
Transit - Better Bus	Washington County	Washington County,	Washington County	ETC: Line 48 (Cornell/Barnes) safe access/enhanced transit corridor	12063	Sunset Transit Center	Hillsboro Transit Center	Improvements to enhance safety, and bike / ped accessibility including ADA improvements, sidewalk infill, enhanced pedestrian crossings, transit priority (TSP, queue bypass and BAT lanes) and bus stop improvements.	$48,800,000	2031-2045	Yes
Transit - Better Bus	Washington County	Washington County	Washington County	ETC: Line 52 (185th and Farmington) safe access/enhanced transit	12064	PCC Rock Creek	Beaverton Transit Center	Improvements to enhance safety, and bike / ped accessibility including ADA improvements, sidewalk infill, enhanced pedestrian crossings, transit priority (TSP, queue bypass and BAT lanes) and bus stop improvements.	$48,800,000	2031-2045	Yes
Transit - Better Bus	Washington County	ODOT	Washington County	TV Highway Safe Access to Transit	11441	Cornelius Pass Rd.	160th Ave.	Enhanced station access (ADA, bike lanes and sidewalk infill), lighting, access management, and intersection safety. Local match for TV Hwy HCT and Safety and Complete Street projects.	$70,000,000	2031-2045	Yes
Transit - High Capacity	Washington County	Washington County	Washington County	HCT: 185th Avenue/MAX Grade Separation	11045	185th Avenue	Baseline Road	Grade separate 185th Avenue/Baseline Road intersection and MAX line. Match funding only.	$27,700,000	2031-2045	Yes
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS (Phase 2)	11475	County-wide	County-wide	Install advanced traffic management systems including adaptive signals, retrofit ADA ramps at traffic signals, communications, dynamic messaging signs, and surveillance and management equipment.	$23,900,000	2031-2045	Yes
Roadway (Capital)	Washington County	ODOT	Wilsonville	Boones Ferry / I-5 off ramp improvements	11489	SB I-5 off ramp	Boones Ferry Rd	Construct second right-turn lane.	$2,400,000	2031-2045	Yes
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Day Road Improvements	11243	Grahams Ferry Rd.	Boones Ferry Rd.	Widen street from 3 to 5 lanes with buffered bike lanes, sidewalks and street lighting. Improve structural integrity for increased freight traffic and provide congestion relief. Sidewalk infill and creation of Tonquin Trail multi-use path spur will reduce pedestrian and vehicle conflicts. Bike buffers will reduce bicycle and freight conflicts.	$24,100,000	2031-2045	Yes
Roadway (Capital)	Washington County	Washington County	Wilsonville	Grahams Ferry Road Improvements	10588	Day Road	Basalt Creek Parkway	Widen Grahams Ferry Road to 3 lanes, with protected bike lanes, sidewalks and transit facilities. Protected bike lanes will reduce bicycle and freight conflcits.	$30,100,000	2031-2045	Yes

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX B

2023 Regional Transportation Plan

Unconstrained priorities

July 10, 2023

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Metro respects civil rights

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

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If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit oregonmetro.gov/civilrights or call 503-797-1536.

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

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

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

Project website: **oregonmetro.gov/rtp**

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2023 RTP Public Review Draft Strategic Project List (2031-2045)

(projects are organized alphabetically by County and nominating agency)

Exhibit A to Ordinance No. 23-1496

RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Clackamas County	North Clackamas Parl	Clackamas County	Bike and Pedestrian Bridge across the Willamette River	10085	Milwaukie City Limit	Abernethy Bridge	Provide an active transportation connection across the Willamette River by providing a new bike/ped bridge across the river	$69,961,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Borland Rd: Stafford Rd to West Linn City Limits	11618	Stafford Rd	West Linn City Limits	Add paved shoulders. The project or a portion of the project is outside the designated urban growth boundary.	$20,257,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Jennings Ave: Oatfield to Webster Rd.	11517	Oatfield Road	Webster Road	Improve safety by implementing proven safety counter measures, and widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities to fill existing system gaps.	$32,540,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Linwood Ave Capacity Improvements (north)	11538	Johnson Creek Blvd	Monroe St	Widen to standard three lane cross section. This project improves safety and connectivity in an equity priority area.	$15,932,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Rusk Rd Bike/Ped Improvements (TSAP)	11769	Aldercrest Road	OR 224	Provide bicycle and pedestrian improvements on Rusk Road between Aldercrest Rd and OR 224 to improve safety, fill an important system gap and provide ADA accessibility improvements as needed.	$13,911,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Clackamas County	Webster Rd Safety Sidewalks, Bike Lanes	11518	OR 224	Gladstone	Fill gaps in bikeways and pedestrian facilities, improve access to school, provide bike/ped safety counter measures at key intersections and improve ADA accessibility.	$39,374,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	82nd Dr. Improvements	10023	Hwy 212	Strawberry Lane Intersection	Improve safety by implementing proven safety counter measures on known high crash corridor, widening to a consistent 4 lane cross section and include bike/ped improvement and ADA accessibility improvements as necessary. Not including intersection improvements at Strawberry Lane.	$41,977,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Beavercreek Rd Phase 3B	12038	Meyers Rd	Urban Growth Boundary	Widen to four lanes and complete bike lane and sidewalks on both sides.	$40,675,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Johnson Creek Blvd. Improvements	10002	55th Ave	82nd Ave.	Implement proven safety counter measures and widen to 3 lanes with bikeways and pedestrian facilities from 55th Ave to 82nd Ave to improve safety, improving freight access to industrial area and increasing accessibility for historically marginalized communities.	$40,025,000	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Clackamas County	Johnson Creek Blvd. Interchange Improvements	10001	JCB/I-205 interchange	JCB/I-205 interchange	Increase safety at interchange by implementing proven safety counter measures, and improve interchange operations by adding a loop ramp and northbound on-ramp; realign southbound off-ramp and install dual right-turn lanes.	$16,949,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Clackamas County	Redland Road	10057	Abernethy Road	UGB	Improve Redland Road to urban standards, adding left turn lanes at major intersections, upgrading two bridges and completing sidewalk gaps on west/south side between Abernethy and Anchor Way, north side between Anchor and Livesay, and both sides from Livesay to the UGB (Oregon City TSP Projects D91, W7, W17, W18).	$30,019,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Metro	Gladstone	Trolley Trail Bridge Phase 2	11887	Portland Ave, Gladstone	Clackamas River Trail, Oregon City	Second phase of construction of the Trolley Trail Bridge across the Clackamas River from Gladstone to Oregon City.	$10,338,000	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Clackamas County	Happy Valley	152nd Ave Sidewalk Infill: City Limits - OR 212	12314	South of Sedona Dr	OR-212	Project adds sidewalks on both sides of 152nd Ave, from the Happy Valley City limits south of Sedona Drive to OR-212. Project fills gap in regional on-street pedestrian network.	$3,200,000	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Clackamas County	Happy Valley	Monner Rd Sidewalk Infill: 147th Ave - 162nd Ave	12315	147th Ave	162nd Ave	Performs sidewalk infill on both sides of Monner Rd from 147th to 162nd Ave.	$9,800,000	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	Happy Valley	Happy Valley	OR 224 Sidewalk Infill: Eckert Lane - City Limits	12302	Eckert Ln	City limits north of Grand St	Provides sidewalks in urbanizing area, between Eckert Lane and north of Grand.	$6,300,000	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	ODOT	Happy Valley	OR 224 Sidewalk Infill: Eckert Lane Intersection	12303	South of OR 212/224 Interchange	Eckert Ln	Sidewalk infill on east side of OR 224 at Eckert Lane.	$3,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Hubbard Rd	11508	122nd Ave	132nd Ave	Fill gaps in pedestrian facilities and improve ADA facilities as needed. In addition, will improve facilities in an Equity Priority Area.	$4,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Happy Valley	Happy Valley	Mt. Scott/Scouter Mountain Loop: Segment 2	12316	Clatsop Rd	Hagen Rd	Completes Segment 2 of Mt. Scott/Scouters Mountain Trail Loop. Segment includes (1) signed bicycle route, south of Clatsop on SE 162nd and Vradenburg and (2) bike/ped route from Buttes Natural Area to Scouters Mountain and the existing Powerline Trail.	$34,600,000	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	145th Ave/147th Ave	10036	Clatsop St.	Monner Rd.	Widen 145th/147th Ave to include continuous left turn lane, sidewalk and bike lane infill. Project provides safe route between residential and recreational land uses.	$15,500,000	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	162nd Ave Extension North	10040	Clatsop St.	Scouters Mountain Rd	Extend 162nd Ave from Clatsop to Scouters Mountain Rd, including two through lanes, left turn lanes, sidewalks, bike lanes and traffic signal. Project creates direct connection between circuitous bike/ped parkways, travel alternative to 172nd Ave arterial.	$13,400,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	172nd-190th Connector: Phase 2 - Construction	12194	172nd Ave	190th	Public right-of-way acquisition and construction to build new, 5-lane connector between 172nd and 190th. Project includes bike lanes, sidewalks and continuous left turn lane; important connector in n/s freight route alternative to I-205 between I-84 and Hwy-212	$40,700,000	2031-2045	No

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Exhibit A to Ordinance No. 23-1496

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Roadway (Capital)	Clackamas County	Clackamas County	Happy Valley	Foster Rd (Middle): Widening and Multimodal	11669	172nd 190th Connector	Sunnyside Rd Extension (Happy Valley Blvd)	Widen two-lane minor arterial from the 172nd/190th connector to Sunnyside Road east (Happy Valley Blvd), to include continuous left turn lane, sidewalk and multi-use path. Project segment is 10,700 feet in length and includes proposed roundabouts.	$36,400,000	2031-2045	No
Roadway (Capital)	Clackamas County	Happy Valley	Happy Valley	Mt. Scott Blvd - Widening and Multimodal	10082	Happy Valley City Limits	129th Ave	Widen Mt. Scott Blvd. facilities to three lanes, with continuous left turn lane, sidewalks and bike lanes.	$44,800,000	2031-2045	No
Active Transportation - Bicycle	Clackamas County	ODOT	Lake Oswego	OR 43 (State St) Bike Lanes	11172	Terwilliger Blvd	McVey Rd	5,500' long widening for bike lanes, NB and SB. NHS/AASHTO/ODOT stds apply. Improve access and connectivity to the Foothills area.	$22,800,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Lake Oswego	Lake Oswego	Bryant Rd bike lanes/pathway	11087	Boones Ferry Rd	Childs Rd	7,500' long widening for 6' bike lanes, 6' sidewalk/pathway, both sides. Railroad crossing reconstruction; retaining wall needed at crossing.	$36,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	ODOT	Lake Oswego	OR 43 Pathway: LO to West Linn	11397	Oak St	Arbor Dr	Implement the design plan for an active transportation corridor along Hwy 43 consistent with the Connecting Clackamas Plan.	$43,300,000	2031-2045	No
Active Transportation - Pedestrian	Clackamas County	ODOT	Milwaukie	McLoughlin Blvd Sidewalks	10098	Harrison St	UPRR	Fill in sidewalk gaps on both sides of street to increase pedestrian safety and access to equity priority area.	$12,983,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 3--Improved Bike/Ped Connections to Springwater Trail near Tacoma Station	11174	Various Locations	Various Locations	29th/Harvey/40th Neighborhood Greenway Designate as a neighborhood greenway and install traffic-calming improvements. Improved Connection from Springwater Trail to Pendleton Site (Ramps) Construct ramps to improve existing connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP) Improved Connection from Springwater Trail to Pendleton Site (Widened Undercrossing) = Widen existing undercrossing to improve connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP). Improved Connection from Springwater Trail to Tacoma Station = Construct stairs to connect Springwater Trail to Tacoma station. (TSAP) Improved Connection from Springwater Trail to Pendleton Site (Tunnel) = Construct tunnel under Springwater Trail to improve connection to Pendleton site at Clatsop St. (TSAP) Improved Connection from Springwater Trail to McLoughlin Blvd = Construct stairs or other facility to connect Springwater Trail to west side of McLoughlin Blvd. (TSAP) Springwater Trail Completion = Contribute to regional project to complete Springwater Trail ("Sellwood Gap") along Ochoco St. Bicycle/Pedestrian Improvements to Main St - Construct multiuse path or other improved bike/ped facilities on Main St to provide safer connection between downtown and Tacoma station. (TSAP). - Phase 1 Committed = Downtown to Ochoco. Bicycle/Pedestrian Connection over Johnson Creek - Construct bike/ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect Tacoma station area with adjacent neighborhood. (TSAP). Improved	$20,272,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Milwaukie	Milwaukie	Group 9--Downtown Pedestrian Improvements	10100	Downtown	Downtown	Group 9 – Downtown Pedestrian ImprovementsDowntown Streetscape Improvements Install sidewalk bulbouts, lighting, and pedestrian amenities. Downtown Parking Signage Install wayfinding and identification signage at McLoughlin Blvd intersections and around public parking lots. Downtown Public Parking Lot Improvements = Upgrade and maintain off-street public parking facilities with improved landscaping and lighting.	$31,434,000	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Milwaukie	Group 11--Intersection Improvements in North Industrial Area	11623	Ochoco St	Harrison St	Signage and Intersection Improvements at McLoughlin Blvd and Ochoco St Establish signage for trucks and improve intersection. (TSAP). Intersection Improvements at McLoughlin Blvd and 17th Ave Prohibit left-turn movement from 17th Ave to northbound McLoughlin Blvd and include in Hwy 224 & Hwy 99E Refinement Plan. Intersection Improvements at Main St and Mailwell Dr = Upgrade intersection turning radii to better accommodate freight movements. Projects will improve freight mobility in an equity priority area.	$5,239,000	2031-2045	No
Roadway (Capital)	Clackamas County	Milwaukie	Milwaukie	Public Parking Structure	11175	Location-specific	Location-specific	Construct 3- to 4-story public parking structure with retail at ground floor for visitor/employee parking.	$33,484,000	2031-2045	No
Transit Capital - Other	Clackamas County	Milwaukie	Milwaukie	Downtown Milwaukie Transit Center Improvements	11536	Location-specific	Location-specific	Construct new bus layover facility outside of the downtown core.	$2,506,000	2031-2045	No
Throughways	Clackamas County	ODOT	ODOT	I-205 Operational Improvements	11992	Columbia River	I-5	Construct improvements to address bottlenecks and improve safety on I-205. Specific improvements as identified in operational analysis, mobility corridor analysis and refinement planning.	$40,000,000	2031-2045	No
Throughways	Clackamas County	ODOT	ODOT	OR 212/224 Sunrise Project Phase 3	12020	I-205	172nd Ave	Construct remaining improvements in the Sunrise Corridor consistent with the FEIS/ROD. Construction may take place in multiple future phases. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$939,000,000	2031-2045	No

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Active Transportation - Pedestrian	Clackamas County	Oregon City	Oregon City	Linn Avenue Pedestrian Improvements	11760	Jackson Street/5th Street	Warner Milne Road	Construct Linn Avenue pedestrian improvements including sidewalk infill or multi-use path for safety and to connect pedestrian generators. (TSP D19, FF24, FF27, W62, W63, W77, W78, C19, C28, C31, C32, S52)	$13,220,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Barlow Road Shared-Use Trail	10150	Abernethy Road	UGB	Add a shared-use path on the west/south side of Redland Road, along the north side of the gully from the Redland/Livesay to Holcomb/Oak Tree intersection, and from Holcomb to Ames Street. Install enhanced crossings at Redland Road and Holcomb Blvd (TSP S6, S9, S10, S11, C5, C7).	$10,480,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Beaver Lake Shared-Use Trail	10149	Holly Lane Extension / Loder Road	Oregon City UGB	Add a shared-use path on the east side of the Holly Lane extension between Loder Road and Meadow Lane and on the north side of the Meyers Road extension between the Holly Lane extension and the UGB. (TSP S16, S19)	$4,560,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Division Street Bike & Pedestrian Improvements	11627	7th Street	18th Street	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, add bus stop amenities. (TSP D80, W70, B60)	$6,380,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Maple Lane Road Bike & Pedestrian Improvements	11626	UGB	Beavercreek Road	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. Intersection improvements (roundabouts) at Holly Lane & Walnut Grove Way. (TSP D37, D38, D84, W23, B21, C9)	$5,790,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Newell Creek Canyon/Holly Lane Shared-Use Path	10147	Hwy 213 and Redland Road	Maple Lane Road	Add a shared-use path along the west side of the gully between the Redland/Livesay and Holly/Donovan intersection and then along Holly Lane between Donovan and Maple Lane. Will require a bridge over the gully south of Redland Road (TSP Project S12, S13). The project or a portion of the project is outside the designated urban growth boundary.	$11,390,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	OR 99E Pedestrian Overcrossing	11552	Willamette River	McLoughlin Promenade	Construct a pedestrian and bicycle bridge over Highway 99E, connecting the McLoughlin Promenade to the Willamette Falls Shared-Use Path.	$14,810,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Oregon City	Oregon City	Washington Street Bike & Pedestrian Improvements (North)	11548	11th Street	7th Street	Boulevard improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities. (TSP D28 & D92 plus 50% of D1)	$3,650,000	2031-2045	No
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Holly Lane Extension (South)	11550	Thayer Road	Meyers Road	New 3 lane roadway, sidewalks, bike lanes, turn lanes to serve UGB expansion area. (TSP D58)	$10,940,000	2031-2045	No
Roadway (Capital)	Clackamas County	Oregon City	Oregon City	Regional Center Road Extension	11543	Washington Street/Home Depot Driveway	Abernethy Road	Construct new 3 lane roadway, sidewalks, bike lanes, turn lanes to serve a Regional Center. (TSP D63, S5)	$29,620,000	2031-2045	No
Roadway (Capital)	Clackamas County	Clackamas County	Oregon City	South End Road	11551	Partlow Road	UGB	Street improvements including lane reconfigurations, sidewalks, ADA accessibility, bike lanes, street lighting, and travel lanes. (TSP D89, D33, D23, D41, D42) The project or a portion of the project is outside the designated urban growth boundary as of March 2014.	$17,540,000	2031-2045	No
Transportation System Management (Technology)	Clackamas County	Oregon City	Oregon City	City Wide Transportation System Management & Operations	11630	Citywide	N/A	Blvd traffic surveillance, integrated corridor management, weather information systems, advanced warning systems, speed warning systems, school zone flashers. (TSP D2-D6, D9, D10, D13-D26)	$12,530,000	2031-2045	No
Transit - High Capacity	Clackamas County	P&W RR	SMART	HCT: WES Expansion to Salem	11751	Wilsonville	Salem	WES service expansion from Wilsonville to Salem	$34,167,000	2031-2045	No
Transit Operating Capital	Clackamas County	SMART	SMART	SMART Property Acquisition for In-Town Turnaround	11749	Wilsonville Road	Wilsonville Road	Obtain property to create easier crosstown turnarounds for local bus service	$18,222,400	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County	Clackamas County	Tualatin	Borland Road (65th Ave to Tualatin City Limits)	11553	City Limits	SW 65th Ave	Upgrade to urban standards and fill sidewalk gaps. The project or a portion of the project is outside the designated urban growth boundary as of March 2014. Project includes PE, ROW, Environmental and Construction.Add paved shoulders and turn lanes at major intersections.	$8,100,000	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Boeckman Rd./I-5 Overcrossing Improvements	10132	Boberg Rd.	Parkway Ave.	Widen Boeckman Road bridge over I-5 to 4 lanes. Add bike/pedestrian connections to regional trail system. Road has had a serious crash. Bikes and pedestrians travel on the road adjacent to freight in existing conditions.	$35,900,000	2031-2045	No
Roadway (Capital)	Clackamas County	ODOT	Wilsonville	Boones Ferry Road Urban Upgrade Phase 1	11765	Ridder Road	Boeckman Road	Widen to 3 lanes and construct bike lanes and sidewalks. Existing road has had two serious injuries. Project will create left turn pockets to reduce minor crashes. Complete sidewalk will remove pedestrian conflict from roadway.	$13,400,000	2031-2045	No

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Roadway (Capital)	Clackamas County	ODOT	Wilsonville	Boones Ferry Road Urban Upgrade Phase 2	11778	Barber Street	Wilsonville Road	Widen to 3-lane urban section with buffered bike lanes. Existing road has had two serious injuries. Project will create left turn pockets to reduce minor crashes. Complete sidewalk will remove pedestrian conflict from roadway.	$13,400,000	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Brown Road Extension Phase 2	11557	Wilsonville Road	Kinsman Road	New connection between Wilsonville Road/ Brown Road intersection and Kinsman Road	$8,000,000	2031-2045	No
Roadway (Capital)	Clackamas County	Wilsonville	Wilsonville	Weideman Road Extension - East	11771	Canyon Creek Road	Stafford Road	Construct new road with sidewalks and buffered bike lanes. This project or a portion of the project is located outside the urban growth boundary.	$20,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Clackamas County, Multnomah County	ODOT	ODOT	I-205 Multi Use Path	11985	Glen Jackson Bridge	82nd Drive (southern terminus)	Improve crossings and access to I-205 MUP at Parkrose Transit Center, Glisan, Burnside, Stark, Washington, Springwater Trail, Johnson Creek/Flavel, Crystal Springs, Clackamas Town Center, and other locations, as needed.	$20,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	17th - Kane to East City Limit: Bike/Ped Improvements	11680	Kane	East City Limit Boundary	17th Ave: Kane to Gresham east city boundary Bike/Ped Improvements	$4,800,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	182nd - Giese to Cheldelin: Complete Buildout	10541	Giese	Cheldelin	Improve 182nd to collector standards.	$28,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Division - 257th/Kane to City Limits: Complete Buildout	10422	257th Ave.	City limits	Improve to community street standards, including bikelanes.	$9,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	TriMet, Gresham	Gresham	Rockwood Town Center at 181st: Max Station Enhancements	11098	181st LRT Station	Local streets to LRT station	Improve sidewalks, lighting, crossings, bus shelters, benches at 181st LRT station, on Stark St. and other intersecting streets.	$21,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Gresham	Gresham	Towle - Butler to Binford Lake: Ped/Bike/Intersection Improvements	10461	Butler	Binford Lake	Construct sidewalks, bike lanes and intersection improvements.	$8,000,000	2031-2045	No
Bridge (Capital)	Multnomah County	Gresham	Gresham	190th - Highland Bridge	12239	200' south of SW 11th	Linneman Ave	Reconstruct and widen bridge to five lanes with sidewalks and bike lanes.	$26,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	181st at Stark and Sandy Intersections: Add Turn Lanes	10497	Sandy	Stark	At Sandy: Northbound right turn, 2nd westbound left turn. Overlap eastbound right turn. At Stark, add 2nd left turn lane on east and west legs.	$4,600,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th - Richey to Cheldelin: Complete Buildout	12263	30th	Cheldelin	Improve existing road to major arterial standards, signalize 190th at Giese, Butler, Richey, Cheldelin.	$42,100,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	190th/Highland - Linneman to 30th: Complete Buildout	10431	Linneman Ave	30th	Reconstruct and widen street to 5 lanes with sidewalks and bike lanes.	$52,100,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	202nd/Birdsdale - Division and Stark Intersections: Add Turn Lanes	10450	Division	at Stark	Division: SB, EB turn lanes. At Stark: add 2nd NB LT lane and exclusive RT lane.	$3,300,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Cleveland to Hogan: Complete Boulevard Design	12241	Cleveland	Hogan	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	$18,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Burnside - Eastman to Cleveland: Complete Boulevard Design	12240	Eastman	Cleveland	Boulevard safety improvements, including medians for access control, wider sidewalk and planter strip.	$20,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Division - Kelly to Burnside: Boulevard Improvements	10433	Kelly	Burnside	Complete boulevard design improvements, medians for safety, wider sidewalk and buffered bicycle lanes.	$25,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Giese - Jenne to 172nd: New Roadway, Bike/Ped Facilities	10463	Jenne	172nd	New north extension of Foster.	$37,300,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Burnside to Division: Complete Buildout	11603	Burnside	Division	Build out of Hogan to major arterial cross-section. Includes two travel lanes, center turn lane, multi-use path on the west side, bike lane and sidewalk on the east side.	$20,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Palmquist to Rugg: Complete Buildout (to arterial standards)	10417	Palmquist	Rugg Rd.	Complete project development and construct new principal arterial connection with multi-use path.	$82,300,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Hogan - Stark to Burnside: Complete Buildout	10416	Stark	Burnside	Interim capacity improvements and access controls.	$46,300,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Orient - South City limits to Kane Dr: Complete Buildout	10430	South City Limits	Kane Dr	Upgrades to arterial 4 lane standards.	$21,800,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Powell Valley Rd. - Burnside to 282nd: Complete Buildout	10429	Burnside	282nd. Ave.	Improve Powell Valley to complete build out, with sidewalks and bike lanes.	$35,500,000	2031-2045	No
Roadway (Capital)	Multnomah County	Gresham	Gresham	Regner - Roberts to Southern City Limits: Complete Buildout	10427	Roberts	Southern City Limits	Brings to minor arterial standard, adds pedestrian, bicycle facilities, improves Regner/Butler intersection by adding NB left-turn pocket and signalizing intersection.	$70,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Historic Columbia River Hwy - NE 244th Avenue to NE Halsey Street: Complete Street	10391	244th Ave.	Halsey St.	Reconstruct West Historic Columbia River Highway from NE 244th Avenue to NE Halsey Street, including two travel lanes, a center turn lane or median, bicycle lanes and sidewalks. Reconstruction of the railroad overcrossing is not included in this project	$25,200,000	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	SE Cochran Road: SE Troutdale Road to Gresham / Troutdale City Limits	12226	Gresham / Troutdale City Limits	SE Troutdale Road	Fully reconstruct SE Cochran Road between SE Troutdale Road and the Gresham / Troutdale City Limits to major collector standards with two travel lanes, a center lane/median, sidewalks, and bicycle lanes.	$8,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Stark St - Troutdale Rd to Evans Ave: Complete Street	10406	Troutdale Rd	Evans Ave	Reconstruct SE Stark Street between S Troutdale Road and SE Evans Avenue to two travel lanes, a center turn lane or median, sidewalks, and bicycle lanes. Project includes signal upgrades at the intersection of SE Stark Street and SW Evans Avenue for enhanced pedestrian safety. (538U)	$4,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Multnomah County	Multnomah County	Troutdale Road (SE Stark to SE Strebin): Complete Street	12242	SE Stark St	SE Strebin St	Reconstruct S Troutdale Road between SE Stark Street and SE Strebin Road to three lanes, with two travel lanes, center turn lane or median, bicycle lanes and sidewalks. Project includes pavement overlay.	$10,500,000	2031-2045	No
Freight	Multnomah County	Multnomah County	Multnomah County	Marine Drive and 223rd Ave Intersection: Freight and Multimodal Improvements	11600	Marine Drive at 223rd	Marine Drive at 223rd	Widen and improve intersection at NE Marine Drive and NE 223rd Avenue to accommodate freight traffic and provide bicycle and pedestrian facilities. Project includes reconstructing and upsizing a significant culvert under the intersection. (531U)	$30,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	ODOT	I-5 Multi-Use Path	11983	Hayden Island Drive	Victory Blvd	Construct improvements to the I-5 MUP in Jantzen Beach to bring path up to current standards, improve safety, and improve access to the I-5 Columbia River Bridge. Improve ped. crossings at Tomahawk Island Drive and Hayden Island Drive.	$20,000,000	2031-2045	No
Throughways	Multnomah County	ODOT	ODOT	I-5 Northbound: Lower Boones Ferry to Carman Auxiliary Lane Extension - Phase 3	11583	Lower Boones Ferry Rd. Interchange	Carman Dr. Interchange	Extend existing auxiliary lane between the Lower Boones Ferry Road interchange and the Carman Drive interchange. This is Phase 3 (RTP ID 11402 is Phase 2 further south). Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$49,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Port of Portland	Port of Portland	PIC Ped/Bike Network	10368	Mt. Hood MAX Station	NE Alderwood Road	Construct bike and pedestrian facilities as shown in the CS/PIC Plan District.	$2,820,000	2031-2045	No
Freight	Multnomah County	Portland	Port of Portland	Marine Dr. Improvement Phase 2	10379	BNSF grade crossing on Marine Drive	BNSF grade crossing on Marine Drive	Construct rail overcrossing on Marine Dr.	$23,107,000	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	SW Quad Access	10363	NE 33rd Ave.	SW Quad	Provide street access from 33rd Ave. into SW Quad.	$14,330,000	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	T6 Second Entrance from Marine Drive	11306	N. Bybee Lake Rd.	N. Pacific Gateway	Construct 2nd entrance from Marine Drive and internal rail overcrossing to Terminal 6. i.	$29,100,000	2031-2045	No
Freight	Multnomah County	Port of Portland	Port of Portland	T6 Suttle Road entrance	11307	Terminus of N. Suttle Road	Terminal 6	Access to the east end of Terminal 6 off the terminus of Suttle Road.	$7,300,000	2031-2045	No
Freight	Multnomah County	Troutdale	Port of Portland	Troutdale Airport Master Plan Transportation Improvements	11743	Sundial Road	Swigert Way/Graham Road	Implement transporation improvements developed as part of the Troutdale Airport Master Plan	$11,400,000	2031-2045	No
Roadway (Capital)	Multnomah County	Multnomah County	Port of Portland	Sundial Road Improvements	11190	Sundial Road	North of Marine Drive	Construct signal and turn lanes at Graham Road/Sundial Road intersection. Complete sidewalk gaps on Sundial Road	$7,600,000	2031-2045	No
Active Transportation - Bicycle	Multnomah County	Portland	Portland	Boones Ferry Rd Bikeway	10308	SW Terwilliger	Portland City Limits	Design and implement bicycle facilities.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian	Multnomah County	Portland	Portland	N Mississippi Streetscape Improvements	11876	Fremont	Skidmore	Construct streetscape improvements to enhance the area as a Pedestrian District.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	122nd Ave Safety Improvements: NE Marine to SE Foster	12307	NE Marine Dr	SE Foster Rd	Add proven safety countermeasures (sidewalks, crossings, lighting) to roadway to reduce severe injury and fatal crashes	$69,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Albina Vision Improvements	12310	Albina Vision Study Area	Albina Vision Study Area	Improvements to include: bus stop enhancements (wider platforms, bus pads, improved shelters and lighting), public art, placemaking elements (distinctive materials, special lighting, public spaces, planted medians and street trees), safer marked crossings, improved bikeways, pedestrian scale street lighting and sidewalk extensions	$69,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Barbur Blvd Walking and Biking Improvements	12313	I-405	Barbur Transit Center	Build continuous high quality sidewalks, bike facilities and crossings on Barbur between I-405 and the Barbur Transit Center.	$69,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Belmont Streetscape Improvements	10292	SE 25th	SE 43rd	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Flavel Dr Roadway Improvements	10222	SE 45th	Clatsop	Fully improve street from SE 45th to Clatsop Street with travel lanes, curbs, swales, sidewalks, and separated in-roadway bicycle facilities from 52nd to Clatsop.	$16,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Green Loop/Central City in Motion Improvements	12308	Green Loop	Green Loop	Transit priority, protected bikeway and crossing treatments to make it easier and safer to take transit, walk and bike in the Central City and help implement the Green Loop vision identified in the 2035 Comp Plan.	$69,000,000	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Inner Powell Blvd Corridor Improvements: Additional Local Contribution to State-owned Arterial	12229	Willamette River	I-205	Add sidewalks, lighting, enhanced pedestrian crossings and parallel greenway connections to reduce severe injury and fatal crashes.	$69,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	N Killingsworth St Corridor Improvements	10294	N Interstate Ave	N Greeley	Design and implement streetscape and safety improvements to enhance sidewalks, lighting, crossings, transit stops, and signals. Reconstruct pavement where it is in poor condition.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE 162nd Ave Complete Street Improvements	12309	NE Sandy Blvd	NE Glisan St	Add turn lanes, and improved/ continuous curbs, sidewalks, lighting, bike and stormwater facilities.	$69,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NE Fremont Streetscape Improvements	10293	NE 42nd	NE 52nd	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NW 13th Ave Ped/Bike Bridge	11790	NW Raleigh	NW Naito Pkwy	Construct a pedestrian and bicycle bridge over the railroad tracks to connect the North Pearl District to Naito and the waterfront.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	NW Marshall Pedestrian/Bicycle Bridge	11784	NW 9th	NW Naito Pkwy	Construct a pedestrian/bicycle bridge over the railroad tracks, potentially connecting to Broadway Bridge.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Milwaukie Streetscape Improvements	10295	SE Yukon	SE Tacoma	Design and implement streetscape improvements to enhance sidewalks, lighting, crossings, transit stops, and signals.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Outer Taylors Ferry Safety Improvements, Segment 2	11883	48th	City Limits	Widen shoulder to provide bicycle climbing lane and construct a walkway for pedestrian travel and access to transit.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	ODOT	Portland	Portland to Milwaukie Trail	11198	Various roadways following the PMLR alignment	Various roadways following the PMLR alignment	Construct a shared-use path along SE McLoughlin Blvd from 17th Ave to the Springwater Corridor Trail. This project will be coordinated with ODOT to determine the alignment along McLoughlin Blvd.	$31,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Reedway Ped/Bike Overcrossing	11819	SE 23rd Ave	SE 28th Ave	Construct a pedestrian/bicycle overcrossing of McLoughlin Blvd, light rail, and railroad tracks.	$54,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	SE 13th Ave Streetscape Improvements	11882	Malden	Tacoma	Plan and implement streetscape and transportation improvements, including crossing improvements, to increase opportunities to walk and enhance the main street character.	$15,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	Portland	Portland	Sullivan's Gulch Trail, Segment 1	11323	Eastbank Esplande	NE 21st	Multi-use path along Sullivan's Gulch. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	$87,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	UPRR	Portland	Sullivan's Gulch Trail, Segment 2	11878	21st Ave	Hollywood Transit Center	Construct a multi-use trail for pedestrians and bicycles within the Banfield (I-84) Corridor from 21st Ave to the Hollywood Transit Center. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	$65,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County	UPRR	Portland	Sullivan's Gulch Trail, Segment 3	11879	Hollywood Transit Center	Broadway	Construct a multi-use trail for pedestrians and bicycles within the Banfield (I-84) Corridor from the Hollywood Transit Center to Broadway. Project requires the use of Union Pacific right-of-way to be feasible, otherwise an alternate alignment will need to be developed.	$78,000,000	2031-2045	No
Freight	Multnomah County	Portland	Portland	Going/Greeley Interchange Improvements	11871	N Going/Greeley	N Going/Greeley	Redesign Going/Greeley interchange including climbing lane on Going to improve truck movement between Swan Island, Lower Albina, and I-5.	$39,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy / Bertha Blvd Bridge Replacement	11884	Capitol Hwy, SW (bridge over Bertha Blvd)	Capitol Hwy, SW (bridge over Bertha Blvd)	Replace existing weight-restricted bridge over Bertha Blvd (#081) with a new structure with improved vertical clearance.	$23,500,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Capitol Hwy / Multnomah Blvd Bridge Replacement	11885	Capitol Hwy, SW (bridge over Multnomah Blvd)	Capitol Hwy, SW (bridge over Multnomah Blvd)	Replace existing weight-restricted bridge over Multnomah Blvd (#082) with a new structure.	$39,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Clatsop Street Extension	10536	SE 162nd Ave	Portland City Limits	Extend street east into Pleasant Valley based on the Pleasant Valley Implementation Plan.	$15,500,000	2031-2045	No

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Roadway (Capital)	Multnomah County	Portland	Portland	Halsey St Bridge Seismic Retrofit	10316	NE Halsey/I-84	NE Halsey/I-84	Retrofit existing seismically vulnerable bridge across I-84 (#021) to ensure emergency response and economic recovery in the event of an earthquake.	$23,500,000	2031-2045	No
Roadway (Capital)	Multnomah County	BNSF	Portland	N Fessenden St Bridge Replacement	11872	Fessenden St, N (over railroad cut)	Fessenden St, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	$31,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	BNSF	Portland	N Willamette Blvd Bridge Replacement	11873	Willamette Blvd, N (over railroad cut)	Willamette Blvd, N (over railroad cut)	Replace existing structurally-deficient, weight-restricted bridge (owned by BNSF) over railroad cut.	$31,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Parkrose Connectivity Improvements, NE	10288	105th	109th	Supplement access route for commercial properties in Parkrose by improving 109th from Sandy to Killingsworth and Killingsworth from 109th to 105th, serving truck access functions, pedestrian, and bike connections.	$15,500,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	Pleasant Valley Foster Rd Extension	10347	SE Jenne Rd	SE Giese Rd.	Design and implement multimodal improvements based on the Pleasant Valley Implementation Plan recommendations.	$8,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	ODOT	Portland	Ross Island Bridgehead Improvements	10235	SW Naito Parkway	SW Barbur	Reconstruct Naito Pkwy as two-lane road w/bike lanes, sidewalks, left turn pockets, & on-street parking. Includes realignment/regrading at intersecting streets; removal of Barbur tunnel, Ross Is Br ramps, Arthur/Kelly viaduct & Grover ped bridge. This project will be coordinated with ODOT and with the Southwest Corridor Project, and will consider impacts to ODOT facilities including Naito Parkway and the Ross Island Bridge.	$156,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	Portland	Portland	W Burnside/Couch St Couplet Project	10171	Burnside Bridge	W 15th	Implements a one-couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes, on-street parking and street trees. This project will be coordinated with ODOT to address potential impacts to the I-405 interchanges, overcrossings and ramps.	$156,000,000	2031-2045	No
Roadway (Capital)	Multnomah County	BNSF	Portland	Willbridge Industrial Area Rail Overcrossing	11117	NW Balboa	NW St Helens Rd	Provide an alternative crossing of the BNSF Railroad to improve connectivity and safety between US 30 and the industrial properties served by NW Front Avenue in the Willbridge area of the NW Industrial District.	$46,500,000	2031-2045	No
Transit - High Capacity	Multnomah County	Portland	Portland	HCT Strategy, Tier 2 Improvements: Additional Local Contribution from Reg/State/Fed funding	12306	N/A	N/A	Improvements to improve transit speed, reliability, station access, amenities and rider experience; including enhancements to transit stations, and bus priority/queue bypass lanes, ITS and NextGen TSP investments from additional regional, state or federal funding that is in line with Strategic revenue forecast	$69,000,000	2031-2045	No
Transit Capital - Other	Multnomah County	Portland	Portland	Union Station, Phase 3	11870	Union Station	Union Station	Core building improvements, operational improvements, and railside improvements for Union Station.	$327,000,000	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Burnside/Stark Corridor High Capacity Transit	12286	Portland	Gresham	Project development of high capacity transit options and construction and implementation of high capacity transit from Portland to Gresham on the Burnside/Stark corridor.	$162,700,000	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Lombard/Cesar Chavez Corridor High Capacity Transit	12288	St. Johns	Milwaukie	Project development of high capacity transit options and construction and implementation of high capacity transit from St. Johns to Milwaukie on the Lombard/Cesar Chavez corridor.	$162,700,000	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Martin Luther King Corridor High Capacity Transit	12287	Hayden Island	Downtown Portland	Project development of high capacity transit options and construction and implementation of high capacity transit from Hayden Island to Downtown Portland on the Martin Luther King Boulevard corridor.	$162,700,000	2031-2045	No
Transit - High Capacity	Multnomah County	ODOT	TriMet	HCT: Steel Bridge Transit Bottleneck Capital Construction	10921	NW 1st and NW Everett, Portland	N Interstate and N Multnomah, Portland	Construction to address transit bottleneck at the Steel Bridge and Rose Quarter.	$5,696,000,000	2031-2045	No
Transit - High Capacity	Multnomah County	Portland Streetcar, In	TriMet	HCT: Streetcar Johns Landing	11639	SW Lowell	Willamette Park	Corridor Alternatives Analysis, public outreach, planning, design, engineering, and construction for future streetcar extension from Portland to Johns Landing. Potential future construction.	$150,000,000	2031-2045	No
Transit - High Capacity	Multnomah County	TriMet	TriMet	HCT: Swan Island to Parkrose TC (Killingsworth) Corridor High Capacity Transit	12325	Swan Island	Parkrose Transit Center	Project development of high capacity transit options and construction and implementation of high capacity transit from Swan Island to Parkrose TC on the Killingsworth corridor.	$162,700,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tigard	Tigard	Red Rock Creek Greenway Trail	12008	Dartmouth/217 area along Red Rock Ck	I-5 / 64th Ave	New trail parallel along Red Rock Ck in the Triangle from Near Dartmouth/217 to I-5.	$6,800,000	2031-2045	No

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

2023 RTP Public Review Draft Strategic Project List (2031-2045)
(projects are organized alphabetically by County and nominating agency)

RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Bethany Creek Community Trail #2	11945	Waterhouse Trail at Abbey Creek	Rock Creek/Westside Trail intersection south of Springville Rd.	Design, & construct a 10' wide multi-use trail connecting new urban area residents to the Waterhouse, Westside, and Rock Creek Trail networks, serving historically marginalized communities & improving safety/access to jobs, schools, and 2040 Centers.	$2,800,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Multnomah County, Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Bonny Slope West Trail	12105	NW Laidlaw Rd. at NW Saltzman Rd.	NW Cornell Rd. at Cedar Mill Creek	Plan, design, and construct a 10' wide paved, multi-use community trail. The off-street facility provides a safer alternate to on-street travel and increases access to 2040 regional centers near historically marginalized communities.	$19,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Region-wide (all three counties)	ODOT	ODOT	Active Transportation Critical Connections Region-Wide	11982	Region-wide	Region-wide	Construct improvements to address gaps and deficiencies in the regional active transportation network on ODOT facilities. Specific projects to be determined based on ODOT Region 1 Active Transportation Needs Inventory.	$198,000,000	2031-2045	No
Transportation System Management (Technology)	Region-wide (all three counties)	ODOT	ODOT	Active Traffic Management (ATM) & Connected & Automated Vehicles (CAV) Region-wide Phase 1	11584	N/A	N/A	Deploy ATM recommendations from the ODOT Active Traffic Management Strategy. Specific projects to be determined. Deploy Connected, Automated and Electric Vehicle strategies.	$46,000,000	2031-2045	No
Transportation System Management (Technology)	Region-wide (all three counties)	ODOT	ODOT	Active Traffic Management (ATM) and Connected and Automated Vehicles (CAV) Region-wide Phase 2	11980	Region-wide	Region-wide	Deploy ATM recommendations from the ODOT Active Traffic Management Strategy. Perform enhancements to existing infrastructure and deploy new infrastructure to support CAV applications. Specific projects to be determined.	$20,000,000	2031-2045	No
Transit Operating Capital	Region-wide (all three counties)	TriMet	TriMet	Bus: 5th Bus Base Design and Construction	12281	N/A	N/A	Construction of a 5th Bus Base	$350,000,000	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	6th St: Murray Boulevard to Erickson Avenue (Bike Lanes)	10665	Murray Boulevard	Erickson Avenue	Construct bike lanes along 6th Street, between Murray Boulevard and Erickson Avenue.	$8,600,000	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Baseline Road: 158th Avenue to Jenkins Road (Bike Lanes)	12051	158th Avenue	Jenkins Road	Install bike lanes along SW Baseline Road, between 158th Avenue and SW Jenkins Road.	$11,400,000	2031-2045	No
Active Transportation - Bicycle	Washington County	Beaverton	Beaverton	Farmington Road: Hocken Ave to OR Highway 217 (Bike Lanes)	10668	Hocken Avenue	OR Highway 217	Construct bike lanes along Farmington Road, between Hocken Avenue and OR Highway 217	$30,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Blvd: OR 217 to Western (ped/bike/signals/turn lanes)	10633	OR Highway 217	Western Avenue	Add sidewalks, street trees, bike lanes, traffic signals, and turn lanes along Allen Boulevard, from OR217 to Western Avenue.	$15,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Hall Boulevard to King Boulevard	12112	Hall Blvd.	King Blvd.	Construct complete street along Allen Boulevard, between Hall Boulevard and King Boulevard. Project includes sidewalks, street trees, bike lanes, lighting, signals, turn lanes where needed.	$38,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Allen Boulevard Complete Street: Menlo Drive to Hall Boulevard	12111	Menlo Dr.	Hall Blvd.	Construct complete street along Allen Boulevard, between Menlo Drive and Hall Boulevard. Project includes sidewalks, street trees, bike lanes, lighting, signals, and turn lanes where needed.	$38,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Cedar Hills Blvd: Walker to Farmington (ped/bike/turn lanes)	10634	Walker Road	Farmington Road	Construct sidewalks, bike lanes, and turn lanes where needed, along Cedar Hills Boulevard, between Walker Road and Farmington Road.	$46,000,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Denney Rd: Hall Blvd to OR 217 (Ped/Bike/Turn Lanes)	12118	Hall Blvd.	OR 217	Construct bike lanes, sidewalks, and turn lanes where needed along SW Denney Road, between Hall Boulevard and OR 217.	$17,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop Complete Street: 5th Street – Watson to Hall	12119	Watson Avenue	Hall Boulevard	Construct complete street on 5th Street, between Watson Avenue and Hall Boulevard, with wider sidewalks and protected bike lanes to make bikeway to bikeway connection. Plant street trees.	$3,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Downtown Loop: Watson/Hall - Crescent St to Millikan Ave	12124	Crescent Street	Millikan Way	Construct complete street on Watson Avenue and Hall Boulevard, between Crescent Street and Millikan Way with wider sidewalks, protected bike lanes, street trees, new signals and marked crosswalks. Remove third lane on Hall Blvd.	$32,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Beaverton	Beaverton	Millikan Way: 141st to Hocken (turn lanes, bike, sidewalks)	10636	141st Avenue	Hocken Avenue	Add buffered bike lanes, sidewalks, turn lanes, and signalize as warranted along Millikan Way, from 141st Avenue to Hocken Avenue.	$6,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd - Cedar Hills to Hall Blvd (Complete Street)	12114	Cedar Hills Blvd	Hall Blvd	Construct complete street on OR 8, between Cedar Hills Boulevard and Hall Boulevard. Include wider sidewalks with street trees, bikes lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	$32,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd – Hall Blvd to 117th Ave (Complete Street)	12116	Hall Blvd	117th Ave./Broadway St.	Construct complete street on OR 8, between Hocken Avenue and 117th Avenue. Include wider sidewalks with street trees, bike lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	$81,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Beaverton	OR 8: Canyon Rd – Hocken to Cedar Hills (Complete Street)	12115	Hocken Ave.	Cedar Hills Blvd	Construct complete street on OR 8, between Hocken Avenue and Cedar Hills Boulevard. Include wider sidewalks with street trees, bike lanes, signal and intersection treatments, lighting, landscaped median islands. Explore jurisdictional transfer.	$40,700,000	2031-2045	No

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Roadway (Capital)	Washington County	Beaverton	Beaverton	141st Ave/142nd Ave: TV Hwy to Farmington Rd (Realignment)	10631	Tualatin Valley Highway	Farmington Road	Realign intersection of 141st Avenue/142nd Avenue and OR 8: Tualatin Valley Highway. Add signals and turn lanes as warranted. Construct sidewalks and bike lanes on 142nd Avenue (Tualatin Valley Highway to Farmington Road).	$16,100,000	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Center St: Hall Blvd to Cabot St (turn lanes and sidewalks)	10628	Hall Boulevard	Cabot Street/OR Highway 217	Add turn lanes where needed along Center Street, between Hall Boulevard and Cabot Street. Construct sidewalks on the south side of the 113th Avenue and Cabot Street.	$14,200,000	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Millikan Way Extension: Lombard Avenue to 114th Avenue	12130	Lombard Ave.	114th Ave.	Construct new two-lane street from Lombard to 114th Avenue with protected bike lanes, sidewalks and street trees.	$12,000,000	2031-2045	No
Roadway (Capital)	Washington County	Beaverton	Beaverton	Rose Biggi Ave Extension: Tualatin Valley Highway to Broadway St	10625	Tualatin Valley Highway	Broadway Street	Extend Rose Biggi Avenue, between OR:8 Tualatin Valley Highway and Broadway Street, by constructing a new two-lane collector street with on-street bikeway, on-street parking, sidewalks, and street trees.	$7,300,000	2031-2045	No
Transportation System Management (Technology)	Washington County	ODOT, Beaverton	Beaverton	OR 10: Beaverton-Hillsdale/Farmington Rd (access/signals)	11894	Murray Boulevard	Scholls Ferry Road	Combine and or close approximately 100 driveways, and upgrade/add approximately 19 adaptive traffic signals along OR: 10 Beaverton-Hillsdale Highway/Farmington Road.	$7,500,000	2031-2045	No
Roadway (Capital)	Washington County	Forest Grove	Cornelius	Holladay Street Extension - West	10795	4th Ave	Yew St.	Construct new collector.	$6,000,000	2031-2045	No
Roadway (Capital)	Washington County	Cornelius	Cornelius	N. 29th Avenue	11251	3F Railroad	Baseline	Improve to collector standards including sidewalks.	$10,300,000	2031-2045	No
Transportation Demand Management	Washington County	Cornelius	Cornelius	Cornelius Park & Ride	10807	10th Ave	26th Ave	Build park & ride facilities at 10th and 26th Avenue.	$4,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Forest Grove	Council Creek Regional Trail: North-South Segment	11479	Banks	Forest Grove	Multi-use trail from Forest Grove through Washington County, the City of Banks, connecting to the Banks-Vernonia State Trail. The project or a portion of the project is outside the designated urban growth boundary.	$61,700,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Forest Grove	OR 47/ B St. Intersection Improvements	11662	OR 47	B Street	Construct intersection improvements (e.g. lighting and improved traffic control) to address safety issues at high crash intersection. The project or a portion of the project is outside the designated urban growth boundary.	$4,600,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Forest Grove	Thatcher Road Improvement - Phase 2	12191	Purdin Road	Purdin Road	Improve Thatcher Road to arterial design standards.	$16,300,000	2031-2045	No
Transit - High Capacity	Washington County	TriMet	Forest Grove	HCT: Forest Grove HCT Extension	10771	Hillsboro	Forest Grove	Assess high capacity transit options including BRT connecting Forest Grove with Hillsboro. Identify and evaluate alternatives, prepare preliminary design options and cost estimates, begin initial environmental review for preferred alternative, acquire necessary ROW, construct initial facilities such as transit signal priority and enhanced bus stops.	$68,300,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	ODOT	Hillsboro	OR 8: SW Baseline St Sidewalk Gaps	12145	SW 17th	Dennis	Complete missing north side sidewalks and curbs; south side gaps included in ODOT 2021-2024 STIP (project 21608)	$2,000,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	ODOT	Hillsboro	OR 8: SW Oak St Sidewalk Gaps	12147	SW 17th	Dennis	Complete missing sidewalks and curb	$2,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Beaverton Creek Trail	10850	Reedville Trail (North Segment)	SW 194th Ave	Design and construct Hillsboro segment of multi-use trail.	$9,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Bronson Creek Trail	11889	Beaverton Creek Trail at 206th Ave	185th Ave	Design and construct Hillsboro segment of multi-use trail.	$4,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Crescent Park Greenway	11485	Jackson School Rd	Cornelius Pass Rd	Multi-use trails and bike/ped crossings connecting North Hillsboro industrial area, Hillsboro stadium, Fred Meyer, Rock Creek Trail, Oregon Electric Railway Trail and Cornelius Pass Road multi-use path; part of larger Crescent Park Greenway plan	$29,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Jacobson Rd Turn Lanes and Bike/Ped Improvements	11150	Helvetia Rd	Century Blvd	Complete three-lane cross section with center turn lane, sidewalks, and bike facilities; restrict intersection at Helvetia Rd to right-in, right-out with future connection and improvement to Schaaf	$14,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Minter Bridge Rd Bike/Ped Improvements	11282	River Rd	Morgan Rd (UGB)	Improve west side to complete two-lane urban standards; include intersection improvement at Minter Bridge & River	$12,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Hillsboro	OR 219: S 1st Ave Complete Street Improvements	12141	Railroad	Wood St/Jackson Bottom Entrance	Construct sidewalks and bike facilities	$8,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Hillsboro	Oregon Electric Railway Trail: US 26 Crossing	11913	Cornelius Pass Rd Multi-Use Path at US 26	Power Line Trail at Rock Creek Blvd	Construct US 26 trail over-crossing near Cornelius Pass Rd interchange; include connecting trail segments at either end to connect to Cornelius Pass Rd multi-use path and Rock Creek Trail ("Power Line Trail") at Rock Creek Blvd.	$11,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Reedville Trail (North Segment)	11461	Wilkins St	Tualatin Valley Highway	Construct multi-use trail along BPA Pearl-Keeler power line corridor.	$15,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Rock Creek Trail Extension	10851	Rock Creek Trail at River Road	Rock Creek Trail at Wilkins St	Design and construct multi-use trail; connect to existing segments of Rock Creek Trail.	$13,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Rood Bridge Rd Bike/Ped Improvements	11161	River Rd	Pipers Dr (UGB)	Improve to two-lane urban standards with sidewalks and bike facilities	$16,100,000	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Hillsboro	Tualatin Valley Trail (Turf-to-Surf Trail)	11483	Century Blvd	Shaw St	Construct South Hillsboro/Reedville segment of Tualatin Valley Trail along south side of Portland & Western Railroad corridor.	$13,500,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Brookwood Pkwy Widening	11140	Ihly Wy	Cornell Rd	Widen from three to five lanes by adding one general travel lane in each direction; project includes widening bridge over light rail; rebuild bike facilities as cycle track	$33,000,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Century Blvd Extension and Over-Crossing at US 26	10831	Bennett St	Wagon Wy	Construct 3-lane, grade-separated over-crossing across US 26; cost estimate based on 3-lane bridge structure; design bridge abutments to accommodate five travel lanes if needed, reconstruct segment to Wagon Drive as 3-lane Commercial Collector	$64,100,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Dennis Ave Emergency Access Extension	12146	Wood	UP Railroad ROW (north side)	Construct Dennis Ave extension and railroad crossing to serve as emergency secondary access for Wood St	$5,200,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Evergreen Rd Widening and Bike/Ped Improvements	10836	Glencoe Rd	15th Ave	Widen roadway from three to five lanes to match Evergreen cross section east of NE 15th; sidewalks on UGB side (south) only; include intersection improvements at Evergreen & Glencoe, Jackson School (west), and Jackson School (east)	$31,200,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Hazeltine Ave	12143	Brookwood Extension	WHVS southern boundary	Construct three-lane road (two alignments based on Brookwood alternatives); cost estimate represents higher total cost WHVS alignment option (Alternative 1)	$6,300,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	Helvetia Rd Turn Lanes and Bike/Ped Improvements	11149	Schaaf Rd	West Union Rd	Widen road to three-lane arterial standard; stripe center turn lane at Schaff and Pubols for southbound left turn lane; complete east side sidewalks to Jacobson; sidewalk on UGB side (east) only; preserve five-lane right-of-way for future growth	$19,000,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Meek Rd Improvements, Phase 1	11387	Sewell Rd	Starr Blvd	Construct three-lane road; include intersection improvements at Evergreen and Huffman	$41,700,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Schaaf Rd Reconstruction	11147	Helvetia Rd	New north-south collector	Reconstruct gravel road to three-lane collector	$17,700,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Starr Blvd Reconstruction and Improvements, Phase 2	11364	Huffman St (future extension)	Meek Rd	Complete three-lane improvements to interim two-lane road with center turn lane, sidewalks, and bike facilities; inclide intersection improvements at Starr & Evergreen, Huffman, and Meek	$28,300,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Hillsboro	TV Hwy & River Rd Intersection Improvements	11392	TV Hwy & River Rd	TV Hwy & River Rd	Construct eastbound right-turn lane and second northbound left-turn lane; include railroad crossing modification	$7,500,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Hillsboro	US 26 & 185th Ave Interchange Refinement and Implementation	11279	US 26 & 185th	US 26 & 185th	Conduct interchange refinement study and implementation.	$60,500,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Hillsboro	West Union Rd Widening and Improvements	11341	Helvetia Rd	Cornelius Pass Rd	Widen road to three-lane arterial standard from Helvetia to Century and five-lanefrom Century to Cornelius Pass; preserve five-lane right-of-way from Helvetia to Century; include intersection improvements at Helvetia, Century, and Cornelius Pass	$67,800,000	2031-2045	No
Roadway (Capital)	Washington County	Hillsboro	Hillsboro	Wilkins St Extension	10829	Amberglen Pkwy	Stucki Ext.	Construct three-lane extension with new intersections at Amberglen Pkwy and Stucki extension	$7,300,000	2031-2045	No
Roadway Operations	Washington County	Washington County	Hillsboro	Cornell Rd Safety and Access Management	10824	Main St	17th	Long-term access management and safety improvements; future intersection improvements and accommodations at Grant and Lincoln to be determined	$6,500,000	2031-2045	No
Throughways	Washington County	ODOT	Hillsboro	US 26 Widening - Brookwood to Cornelius Pass	11393	Brookwood Pkwy/Helvetia Rd	Cornelius Pass Rd	Widen Sunset Hwy from four to six lanes by adding one general travel lane in each direction; include interchance ramp improvements at Brookwood eastbound and westbound ramps	$79,600,000	2031-2045	No
Transit - High Capacity	Washington County	Hillsboro	Hillsboro	HCT: AmberGlen/North Hillsboro Streetcar, Phase 1	11278	Quatama MAX Station	Proposed "Evergreen Transit Center" (at Evergreen & 194th)	Construct high capacity transit from Quatama MAX station through AmberGlen/Tanasbourne Regional Center; provide local match funding to leverage federal funds; also see project 11573.	$173,600,000	2031-2045	No
Transit - High Capacity	Washington County	Hillsboro	Hillsboro	HCT: AmberGlen/North Hillsboro Streetcar, Phase 2	11573	Proposed "Evergreen Transit Center" at Evergreen & 194th	Hillsboro Staduim, Intel Ronler Acres, Orenco Station	Extend high capacity transit from AmberGlen/Tanasbourne Regional Center to Hillsboro stadium, Intel Ronler Acres, and Orenco Station; provide local match funding to leverage federal funds; also see project 11278	$86,900,000	2031-2045	No
Transit - High Capacity	Washington County	ODOT	Hillsboro	HCT: Sunset Highway High Capacity Transit	11912	Sunset Transit Center	Fair Complex/Hillsboro Airport MAX Station	Study and implementation of high capacity transit from Sunset Transit Center to Fair Complex/Hillsboro Airport MAX Station via US 26.	$113,900,000	2031-2045	No
Transit Capital - Other	Washington County	TriMet	Hillsboro	Hillsboro Central Transit Center Expansion	12134	Hillsboro Central TC/SE 3rd Ave	Hillsboro Central TC/SE 4th Ave	Expand Hillsboro Central/SE 3rd Ave Transit Center	$4,100,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	King City	King City	OR 99W Plan and Pedestrian Improvements: SW Beef Bend to Tualatin River	12153	SW Beef Bend Rd	Tualatin River	Study the OR 99W Corridor through King City, along with Tigard and other neighboring agencies, to develop a corridor-wide improvement plan. Construct pedestrian facilities and buffer from the vehicle travel way. Provide enhanced crossings at key intersections.	$15,600,000	2031-2045	No

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Active Transportation - Pedestrian/Bicycle	Washington County	King City	King City	Tualatin River Trail: River Lane to OR 99W	12159	SW River Lane	OR 99W	Construct a shared-use path from the planned S. Kingston Terrace Trail to SW River Lane. Connect path through King City Community Park to SW River Lane. Construct a shared-use path from OR 99W to SW 131st Avenue.	$11,100,000	2031-2045	No
Throughways	Washington County	ODOT	ODOT	I-5/OR 217 Interchange Phase 2	11302	I-5/OR 217 Interchange	N/A	I-5/OR 217 Interchange Phase 2 - southbound OR 217 to southbound I-5 entrance ramp; southbound I-5 exit to Kruse Way loop ramp. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$105,000,000	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Capacity Improvements	11582	US 26 (Sunset Hwy)	I-5	Construct a 6-lane freeway with aux lanes between entrance and exit ramps and complete interchange reconstruction with ramp and overcrossing improvements per 2000 OR217 Corridor Study and 2005 Metro Highway 217 Corridor Study. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$814,000,000	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Interchange, Safety, and Operational Improvements	11978	US 26 (Sunset Highway)	I-5	Design and construct improvements to OR 217 between US 26 and I-5 interchange to improve safety, reliability and mobility. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$148,000,000	2031-2045	No
Throughways	Washington County	ODOT	ODOT	OR 217 Northbound Auxiliary Lane Extension Scholls Ferry to Allen/Denney	11976	Scholls Ferry Road	Allen/Denney Interchange	Extend OR217 auxiliary lane from Scholls Ferry to Allen/Denney by filling in the existing auxiliary lane and modifying related ramp connections. Evaluate and implement improvements to address bicycle and pedestrian needs, which will be identified.	$99,000,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	Sherwood	Sherwood	Pedestrian Links to Schools & Town Center	10703	Various	Various	Pedestrian upgrades, new sidewalks, sidewalk infill at: Sunset, Division, Edy, Elwert, Meinecke, Pine, Roy, Ladd Hill, Timbrel, Washington, Willamette, Old Pacific Hwy.	$16,600,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Arrow Street Improvements: Langer Farms Prkwy to Gerda Lane	10700	SW Langer Farms Parkway	SW Gerda Lane	Reconstruct 3-lane collector street to TSP standards between SW Langer Farms Parkway and SW Gerda Lane.	$18,700,000	2031-2045	No
Roadway (Capital)	Washington County	To be determined, Ol	Sherwood	Brookman Road Intersection Realignment	12047	SW Pacific Highway	SW Brookman Road	Realigns and relocates the SW Brookman Road intersection with SW Pacific Highway (OR 99W) to accommodate the expansion of SW Brookman Road for future development.	$35,300,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Cedar Brook Way: Elwert to 99W	10684	99W	Elwert Rd	Construct collector status road between SW Elwert Rd @ intersection with SW Handley St and SW Pacific Hwy (OR 99W).	$13,700,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Century-Langer Intersection Capacity and Safety Improvements	11660	Century Dr	Langer Dr	Improve intersection capacity and safety. Possible roundabout at Century Dr. Restrict Langer movements to right-in/right-out, possible EB left-in. In TSP. Can be combined with RTP 10691.	$4,700,000	2031-2045	No
Roadway (Capital)	Washington County	To be determined	Sherwood	Edy-Elwert Intersection Improvements	12045	SW Elwert Road	SW Edy Road	Reconstruct Edy/Elwert intersection and approach roads to arterial standards (roundabout or signal, elevate roadway to increase site distance, etc.).	$5,900,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Elwert Road Improvements	10681	SW Handley St	SW Edy Rd	Construct arterial status roadway between new roundabout (~800' NW of Pacific Hwy) and SW Edy Rd.	$17,100,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Ladd Hill Road Improvements	10693	SW Sunset Blvd	UGB Southern Boundary (SW Brookman Rd)	Widen SW Ladd Hill Road to 3-lane collector street standards between SW Sunset Blvd and UGB southern boundary, potentially between SW Brookman Rd improvements.	$14,300,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Old Town Arterials-Collectors	10689	SW 3rd St	SW Willamette St	Complete arterials and collector streets within old town overlay per City TSP.	$13,200,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Pine St Phase 2	11614	SW Division St	SW Sunset Blvd	Reconstruct SW Pine St to the 2-lane collector standard per City TSP. Existing street is 2-lanes w/ non-ADA compliant sidewalks and this project will improve storm drainage and address ADA issues, but not add any capacity increasing features.	$4,700,000	2031-2045	No
Roadway (Capital)	Washington County	Sherwood	Sherwood	Sunset Blvd.	10698	SW Aldergrove Ave	SW Eucalyptus Lane	Reconstruct road to 3 lane arterial standards in sections not already to TSP section for arterial. Fix vertical crest sight distance issue at Pine St intersection. Possible signal or roundabout at Sunset/Main/Ladd Hill and complete streets to west of SW Main St.	$18,900,000	2031-2045	No
Active Transportation - Bicycle	Washington County	Tigard	Tigard	Tigard Neighborhood Greenway Bicycle Improvements	11221	City-wide	City-wide	Make spot improvements on key low-volume, low speed through-routes to facilitate bike & pedestrian travel; identify them as bike/pedestrian neighborhood greenway routes.	$9,800,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	Tigard	Tigard	Pedestrian Improvements	11226	Multiple locations	Multiple locations	Fill gaps in sidewalk & pedestrian network.	$20,700,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	121st Ave Complete Street - phase 2	12006	Walnut St	North Dakota St	Build complete street with bicycle and pedestrian facilities from Walnut to N Dakota.	$13,700,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Buffered Bikeways and Sidewalks: Bonita to Durham	10757	Bonita Road	Durham Road	Complete street upgrade with buffered bikeways and complete sidewalks.	$13,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Improvements - Dartmouth to OR 217	12163	Dartmouth	HWY 217	Widen to 4/5 lanes, with one travel lane in each direction, one flex travel/parking lane, protected bike lanes and sidewalks.	$26,000,000	2031-2045	No

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Exhibit A to Ordinance No. 23-1496

RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	72nd Ave. Improvements - Hwy 217 to Bonita	10756	Hwy 217	Bonita Road	Widen to 3 lanes with bikeways and sidewalks.	$26,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Ash Ave Ped/Bike Bridge	12165	Burnham Street	Commerical Street	Design and construct grade-separated pedestrian and bicycle bridge connecting Ash Ave across railroad.	$16,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Ash Ave Trail Connection	12166	Walnut Place	Fanno Creek Trail	Creates new active transportation connection from Walnut Pl east of Pacific Highway (OR99W) to Ash Ave, connecting to the Fanno Creek Trail.	$14,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Bull Mountain Rd Sidewalks	12002	Roshak Rd	Hwy 99W	Complete gaps in sidewalks and bike lanes from Benchview Terrace (Tigard City Limits) to Hwy 99W.	$11,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	ODOT	Tigard	Hunziker & Sandburg sidepath to Kruse Way Bike/Ped Bridge	12016	Hunziker Rd and Sandburg St	Kruse Way Trail	Bike/Ped Trail and bridge from Hunziker Rd and Sandburg St to Kruse Way Trail in Lake Oswego.	$11,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Neighborhood Trails & Regional Trail Connections	11227	Multiple locations	Multiple locations	Construct high priority neighborhood trails to regional trails, sidewalks & transit.	$8,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	OR 217 Ped/Bike Overcrossing	12169	Tigard Triangle	Downtown	Construct a new Highway 217 overcrossing for active transportation users connecting the Tigard Triangle with Downtown Tigard. May be coordinated with the Southwest Corridor Light Rail and the Red Rock Creek Trail planning efforts.	$17,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Regional Trail Gap Closure and Improvements	12172	Multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Infill gaps and improve deficiencies in regional trail network. Affected trails include Fanno Creek, Washington Square Loop, Tigard-Lake-O, and Westside Trails.	$16,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard Safe Routes to School Projects	12000	City-wide	City-wide	Pedestrian upgrades, new sidewalks, new bike lanes, sidewalk infill on Tigard Streets facilitating walking and biking to school.	$6,800,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Tigard-Lake-O-Red Rock Creek-Fanno Creek Rail Overcrossing	12175	Wall St	Tigard Public Library	Construct new bike and pedestrian overcrossing.	$16,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Washington Square Regional Center Greenbelt Shared Use Path	10763	Hall Blvd.	OR 217	Complete WSRC shared-use path.	$4,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tigard	Tigard	Washington Square Regional Center Pedestrian Improvements	10749	Washington Square local street connections	Washington Square local street connections	Improve sidewalks, lighting, crossings, bus shelters, and benches in the Washington Square area.	$4,100,000	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	74th Ave extension in Triangle	11999	End of 74th from 99W	Hermosa/Beveland	Extend 74th Ave at 99W south to Hermoso/Beveland. Street to include two travel lanes, bicycle lanes, parallel parking, sidewalks, and street trees with a 70-foot right-of-way.	$10,700,000	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Downtown Circulation Plan Implementation	11225	Downtown Tigard	Between Hwy. 99W, Hall & Fanno Creek	Acquire ROW, construct streets and streetscape improvements in downtown Tigard.	$9,800,000	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Greenburg Road Improvements - N Dakota to Cascade	10748	Hwy 217	North Dakota	Build complete street with separated cycle tracks and sidewalks.	$35,000,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tigard	OR 99W Improvements Design Phase	10770	64th Ave.	King James Pl.	Intersection improvements to maintain or improve mobility and safety for TPR compliance and upgrading pedestrian crossings.	$11,400,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tigard	Pacific Highway (OR99W) Corridor Plan Construction	11666	64th Ave.	King James Pl	Safety and mobility improvements, ETC treatments, boulevard treatments, improved sidewalks and bike facilities, pedestrian crossings, and access management from I-5 to King James Pl.	$62,000,000	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Upper Boones Ferry Complete Street and Intersection	10768	Interstate 5	South of Durham Rd	Capital project to implement preferred design resulting from circulation and connectivity study.	$32,500,000	2031-2045	No
Roadway (Capital)	Washington County	Tigard	Tigard	Washington Square Connectivity Improvements	10746	Washington Square local street connections	Washington Square local street connections	Increase local street connections at Washington Square Center based on recommendations in regional center plan.	$3,300,000	2031-2045	No
Transit - Better Bus	Washington County	ODOT	Tigard	ETC: OR 99W Transit Supportive Treatments	12176	SW 64th Ave	Durham Road	Support existing high frequency bus service on the Pacific Highway (OR99W) corridor by implementing transit treatments such as bus queue bypass lanes and transit signal priority at key intersections.	$9,800,000	2031-2045	No
Transit - Better Bus	Washington County	ODOT, Tigard	Tigard	ETC: Tigard Transit Access and Signal Priority Improvements	12012	City -wide	City-wide	Access to transit and other improvements such as improved stations and station access; possible queue jumps and signal preemption.	$6,200,000	2031-2045	No
Transportation System Management (Technology)	Washington County	Tigard	Tigard	Tigard Triangle Adaptive Signals	12174	Tigard Triangle	Tigard Triangle	Upgrade signals throughout the Tigard Triangle with adaptive signal coordination technology.	$5,700,000	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Beaverton-Hillsdale Highway Corridor High Capacity Transit	12290	Beaverton	Portland	Project development of high capacity transit options and construction and implementation of high capacity transit from Beaverton to Portland on the Beaverton-Hillsdale Highway corridor.	$162,700,000	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: Southwest Corridor: Capital Construction	11587	Bridgeport Village, Tualatin	Downtown Portland	Capital construction of High Capacity Transit project between Portland and Tualatin via Tigard.	$4,000,000,000	2031-2045	No
Transit - High Capacity	Washington County	TriMet	TriMet	HCT: SW 185th Corridor High Capacity Transit	12289	Bethany	Beaverton	Project development of high capacity transit options and construction and implementation of high capacity transit from Bethany to Beaverton on the SW 185th/Farmington corridor.	$162,700,000	2031-2045	No

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

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RTP Investment Category	County(s)	Primary Owner	Nominating Agency	Project Name	RTP ID	Start Location	End Location	Description	Estimated cost (in YOE dollars)	Time Period	Financially Constrained
Active Transportation - Bicycle	Washington County	Tualatin	Tualatin	Nyberg Rd Bike Lanes: Tualatin-Sherwood Rd to 65th	10739	Tualatin-Sherwood	65th	Add bike lanes on Nyberg from Tualatin-Sherwood to 65th.	$8,100,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	Tualatin	Tualatin	Sagert St I-5 Overpass Sidewalks Safety Improvements	11429	I-5	I-5	To improve safety for residents and employees, add sidewalks on I-5 bridge overpass.	$8,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	108th Avenue Pedestrian and Bicycle Bridge	10742	Tualatin River Greenway Trail - South Bank of the Tualatin River	Tualatin River Greenway Trail - North Bank of the Tualatin River	Pedestrian/bike bridge over Tualatin River and connecting paths.	$18,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	I-5 Shared-use Path (Lower Boones Ferry to Norwood)	11432	Lower Boones Ferry Road	Norwood	Construct shared-use path parallel to I-5.	$34,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segments 12 and 13)	11597	Cipole	Tualatin RIver	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan. The project or a portion of the project is outside the designated urban growth boundary.	$35,500,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Ice Age Tonquin Trail (Segments 18 & 19)	12190	112th	Tualatin / Boones Ferry	Construct shared-use path consistent with Metro Ice Age Tonquin Trail Master Plan.	$36,600,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Saum Creek Greenway (Sagert St to Tualatin River)	11433	Sagert	Tualatin River	Construct a shared-use path.	$5,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin	Tualatin	Westside Trail Pedestrian and Bicycle Bridge	11435	Cipole	North of Tualatin River	Multi-use trail and bridge over the Tualatin River connecting Westside Trail and Ice Age Tonquin Trail. The project or a portion of the project is outside the designated urban growth boundary.	$20,700,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Tualatin	Boones Ferry Rd Widening (Martinazzi to Lower Boones Ferry)	10712	Martinazzi	Lower Boones Ferry	Reconstruction/widen to 5-lanes from Martinazzi to Lower Boones Ferry Road.	$16,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Bronson Creek Trail (Community)	10809	Bronson Creek Park Cornell Rd. (THPRD)	NW Laidlaw Rd. at NW Saltzman Rd.	Design & construct a 10'-12' wide, community trail connecting Cornell Rd at 173rd Ave to the Westside Trail that will serve historically marginalized communities and improve access to 2040 Centers, jobs, transit & other regionally significant trails.	$19,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	South Cooper Loop Trail	11944	SW Grabhorn Rd. just north of Scholls Ferry Rd.	SW 175th Ave	Design and construct a 12' wide regional multi-use trail serving the emerging South Cooper Mountain community.	$8,900,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	South Johnson Creek Trail Seg. 5	12072	S.W. Davis Rd at S.W. 152nd Ave.	S.W. Hart Rd at Lowami Hart Woods	Construct a 10' wide community trail to provide road separated connections with in the community.	$4,100,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Tualatin Hills Park & I	Tualatin Hills Park & I	Tualatin Valley Trail Seg #3 to #5 (Turf to Surf Regional Trail)	11941	160th Ave./Westside Trail	Beaverton Creek Trail at SW 5th St & SW Lombard Ave	Plan, design, & build three 12' wide regional multi-use trail segments connecting Washington County's surf-to-turf trail to Downtown Beaverton; improving safety, serving historically marginalized communities, & increasing access to jobs & transit.	$15,500,000	2031-2045	No
Active Transportation - Bicycle	Washington County	ODOT	Washington County	Canyon Road and 110th Bike Lanes	11926	Beaverton-Hillsdale Hwy.	91st Ave	Completes 7,000 feet of bike lanes.	$5,700,000	2031-2045	No
Active Transportation - Bicycle	Washington County	Washington County	Washington County	Washington County Neighborhood Bikeways (Ph. 2)	12049	Washington County	Washington County	9 miles of neighborhood bikeways (bike boulevards) on low-traffic streets throughout unincorporated urban Washington County, including enhanced at-grade crossings of arterials.	$13,700,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	111th / Rainmont Rd / 113th Avenue Sidewalks	11473	McDaniel Rd	Cornell Rd	Construct sidewalks.	$21,800,000	2031-2045	No
Active Transportation - Pedestrian	Washington County	Washington County	Washington County	Leahy Road Sidewalks	11575	Cornell Rd.	Barnes Rd.	Construct sidewalks.	$6,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Hillsboro	Washington County	206th Ave Bike/Ped Improvements	11158	Baseline Rd	Rock Rd	Complete sidewalk gaps and construct bike lanes.	$7,300,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Barnes Road Ped/Bike Overcrossing	12070	North of Barnes	Sunset Transit Center	Grade separated pedestrian/bicycle over-crossing at Barnes Rd.	$13,700,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Washington County	Bike lanes and sidewalks on collectors and arterials (Wash Co)	12039	Countywide	Countywide	Complete 35 miles of bike lanes and sidewalks on County arterials and collectors.	$143,200,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	To be determined	Washington County	Tualatin Valley Trail (Turf-to-Surf Trail)	12185	SW 160th Ave.	198th Ave.	Design & construct a 12' wide regional multi-use trail on north side of Shaw St. includes half-signals at crossings of 160th Ave, 170th Ave and 185th Ave.	$38,100,000	2031-2045	No
Bridge (Capital)	Washington County	Washington County	Washington County	Shackelford Rd Bridge	11457	add extent	add extent	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany. The project or a portion of the project is outside the designated urban growth boundary.	$35,500,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	113th Ave	11474	McDaniel Rd	Rainmont Rd	Construct new 2 lane Collector Rd with sidewalks bikelanes and street lighting.	$14,600,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	119th Avenue Improvements	11579	McDaniel Rd	Cornell Rd.	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	$29,100,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	124th Ave Improvements	11469	Tualatin-Sherwood Rd.	Grahams Ferry Rd	Improve 124th from 2 lanes to 5 lanes with bike lanes and sidewalks.	$34,000,000	2031-2045	No

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Roadway (Capital)	Washington County	Washington County	Washington County	160th Ave Improvements	11472	Tualatin Valley Highway	Farmington Rd	Improve to three lanes with bike lanes and sidewalks and construct off-street trail between TV Highway and Blanton Street to close gap on Westside Trail.	$36,300,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	185th Ave. Complete Street	10582	Farmington Rd.	Blanton St.	Improve as a five-lane complete street with center turn lane, planter strip, lighting, bike lanes and sidewalks	$29,400,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	185th Avenue Improvements	11478	Shackelford Rd.	Springville Rd.	Improve from two lanes to three lanes with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	$81,400,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10573	Leahy Rd.	Multnomah. Co. Line	Improve from two to three lanes to address congestion and safety, with bike lanes and sidewalks.	$42,000,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Barnes Rd. Improvements	10572	St. Vincent's Hosp. entrance	Leahy Rd.	Improve from two to five lanes with bike lanes and sidewalks.	$21,600,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Brookman Rd	11930	OR 99W	Ladd Hill Rd	Improve to 4/5 lane arterial standard.	$45,600,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Bull Mountain Rd	11576	Roy Rogers Rd.	OR 99W	Improve to three lanes with bike lanes and sidewalks.	$82,200,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Butner Rd. Improvements	10580	Murray Blvd.	Cedar Hills Blvd.	Improve to 3 lanes with bike lanes and sidewalks.	$44,900,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell Improvements	10559	Hwy. 26	Murray Blvd.	Improve Cornell from three to five lanes with bike lanes and sidewalks.	$56,900,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell Road	11574	107th	County Line	Improve from 2 to three lanes with sidewalks, bike lanes, street lighting, and community features.	$50,800,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Cornell/Cornelius Pass Intersection	10552	Cornell/Cornelius Pass Intersection	Cornell/Cornelius Pass Intersection	Prioritize near-term TSMO improvements. Intersection improvements (and/or other reasonable replacement improvements) are to be implemented and prioritized as funding allows, following completion of congestion management process documentation.	$51,300,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Day Rd Overcrossing	11490	Boones Ferry Rd	Elligsen Rd	Extend new 4-lane overcrossing over I-5 from Boones Ferry Rd to Elligsen Rd. The project or a portion of the project is outside the designated urban growth boundary.	$106,900,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	East-West Arterial Overcrossing	11436	Boones Ferry Rd	East of I-5	Extend new 4-lane overcrossing over I-5 from Boones Ferry Rd to 65th and Stafford Rd. The project or a portion of the project is outside the designated urban growth boundary.	$92,100,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Grahams Ferry Road (Helenius to Tonquin)	11923	Helenius St	Tonquin Rd	Improve roadway to 3 lanes, includes sidewalks and bike lanes.	$9,100,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Grahams Ferry Road (Tonquin to Day)	11924	Tonquin Rd.	Day Rd.	Improve roadway to 5 lanes, includes sidewalks and bike lanes.	$13,700,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	I-5/99W Connector Southern Arterial (ROW and Construction)	10598	OR 99W	I-5	Purchase ROW. Construct 2/3 lane arterial with bike lanes and sidewalks. The project or a portion of the project is outside the designated urban growth boundary.	$318,900,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	I-5/99W Connector Southern Arterial Widening	11340	OR 99W	Boones Ferry Rd.	Improve road from three lanes to five lanes to address congestion. The project or a portion of the project is outside the designated urban growth boundary.	$232,300,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	McDaniel Rd sidewalks, bike lanes, turn lanes	11580	119th Ave.	County Line	Add sidewalks, bike lanes, lighting, turn lanes at major intersections.	$50,800,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Murray/TV Hwy. Intersection	10557	Farmington Rd.	TV Hwy.	Intersection improvement at TV Hwy. and Farmington with Murray Blvd.	$60,500,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT	Washington County	OR 10: Oleson Rd. Improvement Ph. 2	11460	Beaverton-Hiilsdale Hwy.	Oleson Rd. and Scholls Ferry	Beaverton-Hillsdale/Oleson/Scholls Ferry Phase 2 improvements to project 10545 to address safety and reduce crashes.	$91,100,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Scholls Ferry Rd. Improvements	10596	Hwy. 217	121st Ave.	Widen to seven lanes with bike lanes and sidewalks.	$47,800,000	2031-2045	No
Roadway (Capital)	Washington County	Washington County	Washington County	Shackelford Rd	11456	185th Ave.	Bridge	Build new 3 lane road with bike/ped facilities, storm drainage, street lighting to serve North Bethany. The project or a portion of the project is outside the designated urban growth boundary.	$29,100,000	2031-2045	No
Roadway (Capital)	Washington County	ODOT, Beaverton	Washington County	Walker Rd (Cedar Hills to OR 217)	12054	123rd	OR 217	Improve to five lanes, including bicycle and pedestrian improvements.	$56,900,000	2031-2045	No
Throughways	Washington County	ODOT	Washington County	OR 217/72nd Ave. Interchange Improvements	10599	OR 217/72nd Avenue	OR 217/72nd Avenue	Complete interchange reconstruction with additional ramps and bridge structure replacement.	$48,500,000	2031-2045	No
Transit - Better Bus	Washington County	TriMet	Washington County	Transit Priority on Frequent Service Routes (Washington County)	11970	County-wide	County-wide	Enhanced transit priority spot treatments (queue jumps, bypass and BAT lanes) along planned frequent service routes.	$113,900,000	2031-2045	No
Transportation System Management (Technology)	Washington County	Washington County	Washington County	Washington County ITS/TSMO (Strategic)	11446	County-wide	County-wide	Conduct project development, preliminary/system engineering, design, construct, and integrate ITS projects Countywide on key freight, transit, and commuter corridors.	$36,400,000	2031-2045	No
Active Transportation - Pedestrian/Bicycle	Washington County	Washington County	Wilsonville	Elligsen Road Urban Upgrade	11798	Parkway Center Drive	65th	Reconstruct street to 3 lanes with buffered bike lanes and sidewalks. The project will install sidewalks and bike lanes to remove bikes and pedestrians from vehicle travel lanes. The project has had two serious crashes. The project or a portion of the project is outside the designated UGB.	$13,700,000	2031-2045	No
Roadway (Capital)	Washington County	Wilsonville	Wilsonville	Java Road Connection and Signal	11809	Grahams Ferry Road	Garden Acres Road	Construct new Java Road with buffered bike lanes and sidewalks, disconnect Clutter Street from Grahams Ferry Road, and install traffic signal at Grahams Ferry Road.	$3,400,000	2031-2045	No

Projects listed were submitted by jurisdictional partners.

Download the draft project list in excel at www.oregonmetro.gov/rtp
View an online map of projects https://arcg.is/09LHnu

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX C

2023 Regional Transportation Plan

Federal air quality attainment status certification

July 10, 2023

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Project website: **oregonmetro.gov/rtp**

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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

JAN 16 2017

OFFICE OF
AIR AND WASTE

Portland Transportation Conformity Interagency Consultation Group
c/o Ms. Martha Bennett, Chief Operating Officer
Metro Regional Center
600 NE Grand Avenue
Portland, Oregon 97232-2736

Dear Portland Transportation Conformity Interagency Consultation Group:

Congratulations on reaching the end of the 20-year maintenance period for carbon monoxide!

The U.S. Environmental Protection Agency is providing this letter in its consultative role to document that the transportation conformity requirements under Clean Air Act (CAA) section 176(c), for the Portland, Oregon carbon monoxide (CO) area ended on October 2, 2017. This date marks 20 years from the effective date of redesignation of the area to attainment for the CO National Ambient Air Quality Standard (NAAQS). See 62 FR 46208 (October 2, 1997).

Under 40 CFR 93.102(b)(4) of the EPA's regulations, transportation conformity applies to maintenance areas through the 20-year maintenance planning period, unless the maintenance plan specifies that the transportation conformity requirements apply for a longer time period. Pursuant to CAA section 176(c)(5) and as explained in the preamble of the 1993 final rule, conformity applies to transportation related pollutants and their precursors for which an area is designated nonattainment or is subject to a maintenance plan approved under CAA section 175A for areas redesignated to attainment. The EPA further clarified this conformity provision in its January 24, 2008 final rule (73 FR 4420, 4434-5).

This letter documents that, because the approved maintenance plan for the Portland CO area did not extend the maintenance period beyond 20 years from redesignation, transportation conformity requirements for CO ceased to apply after October 2, 2017 (i.e., 20 years after the effective date of the EPA's approval of the first 10-year maintenance plan and redesignation of the area to attainment for the CO NAAQS). As a result, Metro may reference this letter to indicate that the transportation conformity requirements of 40 CFR Part 93 no longer apply for the CO NAAQS. In addition, project sponsors can reference this letter to indicate that as of October 2, 2017, transportation conformity requirements also no longer apply for the CO NAAQS for FHWA/FTA projects as defined in 40 CFR 93.101. Even though the conformity obligation for CO has ended, the terms of the maintenance plan remain in effect and all measures and requirements contained in the plan must be complied with until the state submits, and the EPA approves, a revision to the state plan. See *GM Corp.* v. *United States,* 496 U.S. 530 (June 14, 1990). Such a State Implementation Plan revision would have to comply with the anti-backsliding requirements of CAA section 110(1), and if applicable, CAA section 193, if the intent of the revision is to remove a control measure or to reduce its stringency.

If you have questions about the transportation conformity requirements in the Portland area, please contact Karl Pepple, of my staff, at (206) 553-1778 or pepple.karl@epa.gov.

Sincerely,

Timothy B. Hamlin
Director

cc: Mr. Mark Smith
Oregon Department of Environmental Quality

Ms. Natalie Liljenwall
Oregon Department of Transportation

Ms. Carol Newvine
Oregon Department of Transportation

Ms. Michelle Eraut
Federal Highway Administration

Mr. Ned Conroy
Federal Transit Administration

Ms. Grace Cho
Metro

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July 10, 2023

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APPENDIX D

2023 Regional Transportation Plan

Public and stakeholder engagement and consultation summary

This appendix is under development and will be included in the final RTP Appendices. This appendix will document the engagement and consultation process to inform development of the 2023 RTP and comments received during the final public comment period from July 10 to August 25, 2023.

July 10, 2023

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Appendix E
Regional Mobility Policy Documentation
2023 Regional Transportation Plan

Note: This appendix is under development and will be part of the final 2023 RTP Appendices.

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Exhibit A to Ordinance No. 23-1496

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APPENDIX F

2023 Regional Transportation Plan

Environmental assessment and potential mitigation strategies

July 10, 2023

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Contents

Tables and Figures

Purpose

In accordance with federal regulations 23 CFR 450.320 (development of programmatic mitigation plans) and 23 CFR 450.324 (development and content of the metropolitan transportation plan) Metro developed the 2023 Regional Transportation Plan (RTP) environmental assessment and mitigation activities. The purpose of the assessment is to identify vegetation, aquatic, and terrestrial wildlife species and habitat, wetlands, floodplains, and other biological, tribal, and historic resources that intersect with and may be affected by projects in the plan and identify mitigation activities to address the potential environmental impacts of future transportation projects.[1, 2]

To complete the assessment, Metro consulted with Tribes, Federal, State, land management, wildlife, and regulatory agencies, and Metro Parks and Nature staff, during the planning process to review the RTP update work plan, to identify the data, methods, and approach to be used in this assessment, and to review and identify mitigation activities. Following these consultations, Metro shared the preliminary results of the assessment with the agencies and interested Tribes, and incorporated input into the public review draft of the RTP. Summaries of Tribal Consultation and Agency discussions will be created with the respective interested Tribes and Agencies who responded to Metro's invitation to consult on the development of the RTP and included in the public comment report for the RTP.

Consistent with the federal regulations listed above, the environmental assessment and identified mitigation activities focus on water and fish; high value habitat and connectivity; floodplains and flood hazard areas; federally recognized Tribal lands[3]; historic places; and urban heat islands. In addition to the environmental data included in the previous RTP, new data for urban heat islands, White Oak prairie habitat, habitat connectivity, and wildlife collisions on state highways were added to the assessment for the 2023 RTP.

[1] The federal government defines Metropolitan Transportation Planning requirements in the Code of Federal Regulations for Title 23, Chapter 1, Subchapter E, Part 450, Subpart C, §450.324 Development and content of the metropolitan transportation plan, sections (f) (10) and (g) (1) and (2).

[2] As defined in the Code of Federal Regulations (CFR) for Title 23 §450.104, Environmental mitigation activities means strategies, policies, programs, and actions that, over time, will serve to avoid, minimize, rectify, reduce or eliminate impacts to environmental resources associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. Appendix E documents the system-level transportation equity evaluation conducted for the RTP and environmental justice mitigation strategies.

[3] As defined by the U.S. Bureau of Indian Affairs, federally recognized tribal lands refers an area of land reserved for a Tribe or Tribes under treaty or other agreement with the United States, executive order, or federal statute or administrative action as permanent Tribal homelands, and where the federal government holds title to the land in trust on behalf of the Tribe. Approximately 56.2 million acres are held in trust by the United States for various Indian Tribes and individuals. Some reservations are the remnants of a Tribe's original land base. Others were created by the federal government for the resettling of Indian people forcibly relocated from their homelands. Not every federally recognized Tribe has a reservation. Federal Indian reservations are generally exempt from state jurisdiction, including taxation, except when Congress specifically authorizes such jurisdiction.

Findings from the assessment are also included in Chapter 7 of the RTP. Greenhouse gas emissions and air quality are addressed separately in Appendix J and Chapter 7, respectively, of the RTP.

Refer to the 2023 RTP Glossary of Terms for definitions for terms used in this Appendix.

Introduction: Protecting the Environment

Transportation facilities and vehicles affect the natural and built environment in many ways, with significant negative impacts on climate change, air quality, water quality, noise levels, and fish and wildlife and habitat, and public health. When asked about the most important goals for the future of the region, people have consistently identified improving air and water quality, caring for and restoring streams and rivers and protecting natural areas and wildlife habitats as priorities.[4]

Approaches to Environmental Protection
The way we think about the environment and consider environmental protection has changed over the years and differs from culture to culture. Below are definitions of some key frameworks for which to consider the natural environment.

Reciprocity: A moral and practical obligation for humans and biota to care for and sustain one another (Example: First Foods)

Sustainability: The goal of preserving the natural environment and resources for future generations of humans

Conservation: The management of natural resources to ensure proper use and prevent exploitation, destruction, or neglect

The transportation system planning process provides an opportunity to identify natural resources that could be affected by proposed projects and warrant special consideration during the more detailed project development process. While specific project designs and mitigation strategies are identified during the project development process, it is necessary to identify impacts during planning so that project costs can be accurately and to provide an accurate assessment of which projects and type of projects intersect with and could damage water and fish, habitat quality and connectivity, floodplains, and tribal, historic, and unique and irreplaceable cultural places or archeological resources. Identifying these areas of greatest potential conflict early in the transportation planning and design process allows for more meaningful application of mitigation strategies, including project alignment, design and construction features that avoid or minimize impacts on the resource area, or correcting environmental problems created by previous projects at the site such as road projects with insufficient permeability to support effective fish and wildlife migrations.

The greater Portland region is situated at the northern end of the Willamette Valley ecoregion, a fertile river valley surrounded by dramatic natural features - the Coast range to the west, the Cascades to the east and the Columbia River to the north (including the Columbia River Gorge National Scenic Area). In the region the natural landscape is created by broad river valleys with wetlands, narrow river canyons with riparian vegetation, buttes and forests, mountains and meadows, foothills, and farms.

4 Portland Metro 2040 Vision Survey. Conducted by Fairbank, Maslin, Maullin, Metz & Associates on October 24-30, 2017 and Oregon Values and Beliefs Project led by DHM Research, statewide survey conducted in April and May 2013.

The lands now known as the greater Portland metropolitan area are part of the aboriginal homelands, traditional use areas and trade networks of numerous Tribes. For millennia, Indian people resided throughout the Willamette Valley and along the Willamette and Columbia Rivers and their tributaries in traditional villages, permanent communities and seasonal encampments. The relationship of Tribes, their lands and interests extend from time immemorial to the present day and beyond. Each Tribes interests are distinct. These interests may overlap and intersect with the static boundaries of Metro's service area, metropolitan planning area boundary for the RTP and the urban growth boundary in various ways.

The protection of natural resources has been a key concern of Metro since its founding in 1979. The preamble of the 1992 Metro Charter proclaims that "Metro's most important service is to preserve and enhance the quality of life and the environment for ourselves and future generations." This ethic of sustainability is central to Metro plans and programs, including the Regional Transportation Plan, Climate Smart Strategy, Greenspaces Master Plan, Nature in Neighborhoods Initiative and the region's overarching land use and transportation strategy for managing growth, the 2040 Growth Concept. Clean air and water and healthy ecosystems is one of the six desired outcomes adopted by the Metro Council in 2008.

The **2040 Growth Concept** is a long-range plan that reflects input given by thousands of Oregonians in the 1990s and adopted by the Metro Council in 1995. Policies in the 2040 Growth Concept encourage:

- safe and stable neighborhoods for families
- compact development that uses land and money efficiently
- a healthy economy that generates jobs and business opportunities
- protection of farms, forests, rivers, streams and natural areas
- a balanced transportation system to move people and goods
- housing for people of all incomes in every community.

Ten urban design components are identified in the 2040 Growth Concept as the focal points for growth – the central city, town centers, main streets, regional centers, station communities, neighborhoods, transportation corridors, industrial areas and freight, parks and natural areas (lands that will remain undeveloped, both inside and outside the urban growth boundary. These include parks, stream and trail corridors, wetlands and floodplains), rural reserves (large areas outside the urban growth boundary that will remain undeveloped through 2060; these areas are reserved to provide long-term protection for agriculture, forestry or important natural landscape features that limit urban development

or help define appropriate natural boundaries for development, including plant, fish and wildlife habitat, steep slopes and floodplains), and neighboring cities.

Section 1. Environmental Regulations and Protections

Construction of projects identified in the Regional Transportation Plan (RTP) are subject to Federal, State, and local regulations concerning impacts to biological and historic resources.[5]

The project-level environmental review and permitting process is a separate and more detailed process than what is required for the RTP. This is because many regionally significant projects identified in the RTP are conceptual in nature, with exact alignment, design, and other project scope elements to be determined in the project development process. Further, for many projects, this process may not occur for years, or even decades. The specific types of environmental mitigation activities implemented are ultimately determined by the governing regulatory authority and are dependent upon the resource being impacted and the severity of that impact.

Transportation agencies partner with Federal and State natural, cultural, and historic resource agencies for the environmental review of transportation projects. Additionally, transportation agencies consult with federally recognized Tribes.

During project development, transportation agencies determine what environmental mitigations are needed in consultation with numerous Federal, State, and local agencies, and federally recognized tribes, as well as interested parties responsible for and interested in environmental stewardship, including but not limited to (listed in alphabetical order):

Native American Tribes

- Confederated Tribes of Grand Ronde
- Confederated Tribes of Siletz Indians
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of Warm Springs
- Confederated Tribes and Bands of the Yakama Nation
- Nez Perce Tribe
- Cowlitz Indian Tribe

Resource agencies

- Clackamas County Water Environment Services
- Clean Water Services

5 Federal regulations apply to any federally funded project or a state or locally funded project requiring a federal action.

- Metro Parks and Nature
- National Marine Fisheries Service (NOAA)
- National Park Service (Pacific West Region)
- Oregon Department of Agriculture
- Oregon Water Resources Department
- Oregon Watershed Enhancement Board
- Oregon Department of State Lands
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Portland Bureau of Environmental Services
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- United States Forest Service
- United States Bureau of Land Management

Federal, state, and local agencies

- Bonneville Power Administration
- Federal Aviation Administration
- Federal Highway Administration
- Federal Railroad Administration
- Federal Transit Administration
- Federal Transit Administration
- United States Army Corps of Engineers
- United States Department of Labor
- United States Department of Veterans Affairs
- United States Coast Guard
- Oregon Bureau of Labor and Industries
- Oregon Department of Energy
- Oregon Department of Environmental Quality
- Oregon Department of Land Conservation and Development
- Oregon Department of Transportation
- Oregon Department of Veterans Affairs
- Oregon Parks and Recreation Department

- Oregon State Historic Preservation Office
- Portland of Portland
- Port of Vancouver
- TriMet
- South Metro Area Regional Transit (SMART)
- C-TRAN
- Southwest Washington Regional Transportation Council (RTC)

1.1 Threatened and endangered species, including vertebrate species and plants

Table 1 identifies potentially occurring threatened and endangered wildlife species in Oregon as of May 2018. This list has been updated from the list of species that were considered during Metro's Goal 5 inventory process (Title 13 of the Urban Growth Management Plan) in 2001.[6] The Endangered Species Act of 1973 (ESA; 16 U.S.C. § 1531 et seq.) is one of the U.S. environmental laws passed in the 1970s, and was designed to protect critically imperiled species from extinction as a "consequence of economic growth and development un-tempered by adequate concern and conservation."

Section 7 of the Endangered Species Act directs all Federal agencies, including the Federal Highway Administration, to ensure that any action they authorize, fund, or carry-out does not jeopardize the continued existence of an endangered or threatened species or designated or proposed critical habitat (collectively, referred to as protected resources). The implementing regulations, 50 CFR 402, specify how Federal agencies are to fulfill their section 7 consultation requirements.

Under the implementing regulations of Section 7 of the Endangered Species Act (50 CFR 402), Federal agencies must review their actions and decide whether the action may affect federally listed and proposed species or proposed or designated critical habitat. Section 7(a)(2) of the ESA requires Federal agencies to ensure that their actions are not likely to jeopardize, destroy or adversely change the continued existence of a listed threatened or endangered species. To do this, Federal agencies must request from the U.S. Fish and Wildlife Service a list of species and critical habitat that may be in the project area.

[6] While Pacific Lamprey (Lampreta Tridenta) are not listed here, the species is traditionally and culturally significant to multiple Tribes and is crucial to the conservation of Pacific ecosystems and indigenous culture. While lampreys are not listed as threatened or endangered status – pacific lamprey is currently listed as protected status – their conservation should still be prioritized due to their cultural value. Transportation project managers should consult and collaborate with Tribes to build awareness and understanding of how the traditional, cultural or religious significance of all impacted species can be incorporated into planning processes.

For transportation projects the Federal Highway Administration (FHWA) determines whether their actions may affect any of those species or their critical habitat. If no species or their critical habitats are affected, no further consultation is required. If they may be affected, consultation with the U.S. Fish and Wildlife Service is required. This consultation will conclude either informally with written concurrence from the U.S. Fish and Wildlife Service or through formal consultation with a biological opinion provided and recommendations to avoid or minimize adverse effects to proposed species or proposed critical habitat.[7]

[7] Refer to the AASHTO Practitioner's Handbook for Complying with Section 7 of the Endangered Species Act for Transportation Projects (November 2016) for an overview and advice on carrying out Section 7 consultation for transportation projects.

Table 1 Threatened and endangered vertebrate species potentially occurring in the RTP planning area as of June 2018[1]

Common name	Scientific name	State status	Federal status
FISH			
Bull trout	*Salvelinus confluentus*		T
Chinook Salmon, Lower Columbia River	*Oncorhynchus tshawytscha*		T
Chinook Salmon, Snake River (Fall)	*Oncorhynchus tshawytscha*	T	T
Chinook Salmon, Snake River (Spring/Summer)	*Oncorhynchus tshawytscha*	T	T
Chinook Salmon, Upper Columbia River (spring)	*Oncorhynchus tshawytscha*		T
Chinook Salmon, Upper Columbia River Spring	*Oncorhynchus tshawytscha*		E
Chinook Salmon, Upper Willamette River	*Oncorhynchus tshawytscha*		T
Chum Salmon, Columbia River	*Oncorhynchus keta*		T
Coho Salmon, Lower Columbia River	*Oncorhynchus kisutch*	E	T
Coho Salmon, Oregon Coast	*Oncorhynchus kisutch*		T
Pacific Eulachon/Smelt (Columbia River Smelt), Southern DPS	*Thaleichthys pacificus*		T
Sockeye Salmon, Snake River	*Oncorhynchus nerka*		E[1]
Steelhead, Lower Columbia River	*Oncorhynchus mykiss*		T
Steelhead, Middle Columbia River	*Oncorhynchus mykiss*		T
Steelhead, Snake River	*Oncorhynchus mykiss*		T
Steelhead, Upper Columbia River	*Oncorhynchus tshawytscha*		T
Steelhead, Upper Willamette River	*Oncorhynchus mykiss*		T
AMPHIBIANS AND REPTILES			
Oregon Spotted Frog	*Rana pretiosa*		T
BIRDS			
Marbled Murrelet	*Brachyramphus marmoratus*	T	T
Northern Spotted Owl	*Strix occidentalis caurina*	T	T
Streaked Horned Lark	*Eremophila alpestris strigata*		T
Yellow-billed Cuckoo (Western DPS)	*Coccyzus americanus*		T
MAMMALS			
Columbian White-tailed Deer (Columbia River DPS)	*Odocoileus virginiana leucurus*		E
Gray Wolf	*Canis lupus*		E[2]
Red Tree Vole (North Oregon Coast DPS)	*Arborimus longicaudus*		C

* Listed under the Oregon Endangered Species Act (ORS 496.171 through 496.192) *Revised October 2021*
Source: Oregon Department of Fish and Wildlife Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon
T = Threatened, E = Endangered, C = Candidate, DPS = Distinct Population Segment
(1) Many or most of these species have cultural significance to Tribes.
(2) A small remnant run of the historical population migrates through the Columbia River.
(2) The gray wolf is protected as endangered under the authority of the federal Endangered Species Act in Oregon west of Highways 395, 78, and 95.

Project managers should check in with ODFW or NOAA Fisheries when project planning is initiated to ensure the most current status. [8]

All federally listed plant species occurring in Oregon are administratively protected by the State of Oregon. At least the following plants occurring in the Portland metropolitan region are federally Threatened or Endangered at the state of Oregon or federal level (more are listed as federal or state Species of Concern):

- Golden paintbrush – federally Threatened, state Endangered (limited re-introductions have taken place in Oregon)
- White-rock (pale) larkspur (Delphinium leucophaeum) – State Endangered
- Peacock larkspur (Delphinium pavonaceum) – State Endangered
- Willamette Valley daisy (Engeron decumbens) – Federally and state Endangered
- Water howellia (Howellia aquatilis) – Federally and state Threatened
- Bradshaw's lomatium (Lomatium bradshawii) – Federally and state Endangered
- Kincaid's lupine (Lupinus sulphureus ssp. kincaidii (=oreganus) – Federally and state Threatened
- White-topped aster (Sericocarpus rigidus) – State Threatened
- Nelson's sidalcea (Sidalcea nelsoniana) – Federally and state Threatened

1.2 Regulations, ordinances, and permit actions

Principal regulations, ordinances and permit actions that could apply to implementation of transportation projects are summarized in **Table 2**. Many of the laws, requirements and processes are addressed in detail during the project development design and permitting phase after selection of a preferred alternative, as part of the environmental and land use review, consultation and permitting processes all construction projects must undergo.

There are several important federal and state environmental laws related to biodiversity conservation, such as the Clean Water Act, which specifically mandates water quality and

[8] Oregon Department of Fish and Wildlife: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf
Refer to Appendix E of the Regional Conservation Strategy for information about sensitive species that are not currently formally listed as threatened and endangered (for example, the Bald Eagle has been de-listed). These species (as of 2018) are classified under the ESA as either Endangered, Listed Endangered, Threatened, Listed Threatened, Proposed Endangered, Proposed Threatened, Candidate, or a Species of Concern. This list includes all known native vertebrate species (and nonnative vertebrate species with established breeding populations) that currently exist within the greater Portland region for at least a portion of the year. Vagrant species (those that do not typically occur every year) are not included on this list. The species list is based on the opinion of more than two-dozen local wildlife experts.

wetland protection, and the Endangered Species Act, which was designed to protect and recover imperiled species and the ecosystems on which they depend.

Early consideration of environmental impacts in the planning stage helps address National Environmental Policy Act (NEPA) requirements more effectively when federal funding or federal action is involved than if such issues would be left for consideration later in the project development process.

The Federal Highway Administration keeps information on legislation, regulations and guidance in an Environmental Review Toolkit which provides a one-stop-shop for questions on process and requirements. [9]

Table 2 Environmental Laws, Regulations and Permit Requirements

Law/ Regulation/ Permit	Responsible Agency	Documentation or Processes Required	Regulated Resource(s)
Federal			
National Environmental Policy Act (NEPA)	Federal Transit Administration (FTA) and Federal Highway Administration (FHWA)	NEPA Finding of No Significant Impact (FONSI), Categorical Exclusion (CE), Environmental Assessment (EA) or Environmental Impact Statement (EIS) addressing natural resource conditions, impacts and mitigation	Human and natural environment, and related social and economic effects
Clean Air Act, 1990 Clean Air Act Amendments; (40 CFR Parts 51 and 93)	Environmental Protection Agency (EPA), Federal Transit Administration (FTA) and Federal Highway Administration (FHWA)	Approved transportation conformity determinant with concurrence from the EPA; the region is no longer subject to transportation conformity as of October 2, 2017, when the region completed its obligations under the second 10-year maintenance plan	Air quality (regulating criteria pollution from mobile sources)
Clean Water Act (CWA), Section 404 Individual Permit	U.S. Army Corps of Engineers (USACE)	Alternatives analysis; wetland delineation study; wetland functional assessment and impact analysis; mitigation plan	Waters of the U.S., including wetlands

[9] FHWA Environmental Review Toolkit. https://www.environment.fhwa.dot.gov/env_initiatives/eco-logical.aspx#:~:text=The%20Eco%2DLogical%20approach%20organizes,programmatic%20approaches%20to%20recurring%20natural

Law/ Regulation/ Permit	Responsible Agency	Documentation or Processes Required	Regulated Resource(s)
Clean Water Act (CWA), Section 402 National Pollution Discharge Elimination System (NPDES) permit	Oregon Department of Environmental Quality, as authorized by the Federal government	Site specific data for construction projects on 1 or more acre	Waters of the U.S., including wetlands
Pre-Construction Assessment for in-water work	U.S. Army Corps of Engineers (USACE) and Oregon Department of State Lands	Assessment describing preferred timing window for work and other stipulations	Waters of the U.S., aquatic species, and habitat
Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation Management Act, Section 7 consultation	National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), Federal Highways Administration (FHWA)	Biological Assessment addressing project impacts to listed species, species proposed for listing and candidate species provided by US Fish and Wildlife Service or National Marine Fisheries Service	Threatened and endangered and sensitive vegetation, wildlife, fisheries
Fish and Wildlife Coordination Act	US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and Oregon Department of Fish and Wildlife (ODFW)	Agency consultation; identify impacts to fish and wildlife resources; recommend mitigation	Vegetation, wildlife, fisheries
Federal Migratory Bird Treaty Act; "take" permits	US Fish and Wildlife Service (USFWS)	Identify impacts to migratory birds; avoid destruction of active nests or eggs, and killing of individuals	Wildlife
Bald Eagle and Golden Eagle Protection Act	US Fish and Wildlife Service (USFWS)	Identify bald eagle nesting habitats; agency consultation	Wildlife
Section 4(f) of the Department of Transportation Act (1966)	Federal Transit Administration (FTA) and Federal Highway Administration (FHWA)	Conduct 4(f) review and document no feasible and prudent avoidance alternative and include all possible planning to minimize harm	Publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites
National Historic Preservation Act (NHPA)	National Parks Service, State Historic Preservation Office	Section 106 review process to consider the effect a project may have on historic places	Historic places[10]

[10] National Register Bulletin. How to Apply the National Register Criteria for Evaluation https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

Law/ Regulation/ Permit	Responsible Agency	Documentation or Processes Required	Regulated Resource(s)
Flood Insurance Reform Act, National Flood Insurance Program	Federal Emergency Management Agency (FEMA)		
36 CFR Part 800 – Protection of Historic Properties			
American Indian Religious Freedom Act of 1978			
Antiquities Act of 1906			
Archeological Resource Protection Act of 1979			
Archeological and Historical Preservation Act of 1974			
Native American Graves Protection and Repatriation Act			
Executive Order No. 13007 Indian Sacred Sites			
Executive Order No. 12898 Environmental Justice			
Executive Order No. 11593 Protection and Enhancement of the Cultural Environment			
Section 4(f) of the Department of Transportation Act of 1966			
State			
Statewide Planning Goal 5			

Law/ Regulation/ Permit	Responsible Agency	Documentation or Processes Required	Regulated Resource(s)
Oregon Removal – Fill Permit	Oregon Department of State Lands (DSL)	Alternatives analysis; wetland and/or waterway delineation study; wetland and/or waterway functional assessment and impact analysis; mitigation plan for removal or filling in waters of the state	Waters of the state, including wetlands
Oregon State Endangered Species Act (ESA)	Oregon Department of Fish and Wildlife (ODFW) and Oregon Department of Agriculture (ODA)	Identify project impact to state-listed and candidate species not currently listed under federal ESA	Vegetation, wildlife, fisheries
Clean Water Act (CWA) Section 401 Water Quality Certification	Oregon Department of Environmental Quality (DEQ)	Assess project compliance with state water quality standards; implement mitigation measures; issued in conjunction with the Corps Clean Water Act, Section 404 permit	Rivers, streams, other bodies of water
Oregon Fish and Wildlife Habitat Mitigation Policy	Oregon Department of Fish and Wildlife (ODFW) (reviews other agency permits and makes recommendations)	Evaluate the potential impact of development actions on fish and wildlife habitat; follow guidelines to reduce, offset, or avoid the impact on fish and wildlife habitat	Wildlife and fish habitat
Oregon Fish Passage Act[11] consultation and approval	Oregon Department of Fish and Wildlife (ODFW)	Agency consultation; identify crossed streams with native migratory fish (or history of); implement passage at identified streams	Native migratory fish[12]

[11] The Oregon Fish and Wildlife Commission adopted new fish passage administrative rules on December 16, 2022. These new rules take effect January 1, 2023. These new fish passage administrative rules are intended to provide clarity to the public and owners and operators of fish passage barriers or "Artificial Obstructions". The rules also close loopholes around fish passage triggers for existing dams, incorporate multi-species needs, update fish passage design criteria and provide more fish passage design alternative solutions, improve ODFW Program efficiency, better align state and federal stream simulation culvert design standards and compel designers to consider future climate changing conditions into design alternatives and engineering analyses.
These new rules take effect January 1, 2023 and can be found on the Oregon Secretary of State's Office administrative rule website located at: https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=2988 .

[12] "Native migratory fish" means naturally or hatchery produced native fish (as defined under OAR 635-007-0501) indigenous (i.e., not introduced) to Oregon that migrate for their life cycle needs. These fish include all sub-species and life history patterns of the following species listed by scientific name in use as of 2022. Common names are provided for reference but are not intended to be a complete listing of common names, sub-species, or life history patterns for each species. https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=2988

Law/ Regulation/ Permit	Responsible Agency	Documentation or Processes Required	Regulated Resource(s)
State of Oregon Archaeological Permits	Oregon State Historic Preservation Office	For any excavation in known archeological sites or for exploratory excavations to determine if archeological deposits are present in lands owned by local or state agencies	Historic and archeologically significant sites
National Flood Insurance Program (NFIP) in Oregon	Department of Land Conservation and Development	Permits and regulations apply to real estate, which could apply to some transportation related structures; applies to governments enrolled in the program	Designated Special Flood Hazard Areas
ORS 97.740-97.760 Indian Graves and Protected Objects			
ORS 192.345 (11) Public Records Conditionally Exempt from Disclosure			
ORS 358.653 Protection of Publicly Owned Historic Properties			
ORS 358.905-358.961 Archeological Objects and Sites			
ORS 390.805-390.925 Scenic Waterways			

Under Oregon land use regulations, local and state jurisdictions are required to compile inventories of wetland and other natural areas and protect the highest-ranking inventoried sites. This protection is provided by local regulations such as local environmental zones, sensitive lands overlay zones and other locally identified regulated areas and resources. Such areas include sites that meet the standards of Statewide Planning Goal 5 for open space, scenic or natural values.

1.3 2040 Growth Concept, and Title 3 and Title 13

Metro meets the requirements of Statewide Planning Goal 5 through Title 3: Water Quality And Flood Management and Title 13 of the Urban Growth Management Functional Plan.[13], [14] Title 3 of the Urban Growth Management Functional Plan applies to development in water quality resource and flood management areas and was adopted in 1997. Title 3 includes the Metro Water Quality and Flood Management Area Map and a model ordinance. The purpose of Title 3 is to protect the beneficial water uses and functions and values of resources within the water quality and flood management areas by avoiding, minimizing, or mitigating the impact on these areas from development activities.[15] Cities and counties comply with Title 3 in their comprehensive plans and implementing ordinances.

Through Title 13, Metro developed the Regionally Significant Fish and Wildlife Habitat Inventory Map and the Habitat Conservation Areas Map, which were adopted by the Metro Council in 2005.[16] Title 13 includes requirements for conserving, protecting, and restoring habitat conservation areas and habitats of concern but does not outright prohibit development in these areas. In adopting Title 13, the Metro Council chose to rely on a combination of land use protections designed to conserve the highest value habitats and voluntary measures to be implemented by public and private partners.[17] As of December 2022, all cities and counties were in compliance with Title 13. Local jurisdictions have adopted Title 13 maps and use the policy to issue permits for development.[18]

In general, the overlay zones are intended to allow development in situations where adverse impacts from the development cannot be avoided. Regulations implementing these ordinances provide requirements for, among other things, identifying, protecting, and mitigating impacts, and managing important natural resources. Each jurisdiction has its own process for assessment and approval of transportation projects in the vicinity of

[13] Title 3 and 13 data was compiled in the early 2000s. Since that time geographic information system tools have improved and new data has been made available through a variety of efforts and agencies, including the Regional Conservation Strategy (which Metro and some local agencies have been actively involved) and the Oregon Conservation Strategy. In response to public comments received during the final comment period and consultation process, Metro used Title 3 and Title 13 data as well as the data developed by the Regional Conservation Strategy and state and federal resource agencies.

[14] Link to UGMFP: https://www.oregonmetro.gov/sites/default/files/2018/04/16/urban-growth-management-functional-plan-04162018.pdf

[15] Title 3 map available from Metro in RLIS http://rlisdiscovery.oregonmetro.gov/?action=viewDetail&layerID=2116# and on Data Basin https://databasin.org/datasets/88691cc47cbd4992838864c29dbb147f

[16] The inventory and maps includes lands along local rivers and streams and significant fish and wildlife habitat areas. No changes have been made to the maps since adoption in 2005.

[17] Title 13 of the Urban Growth Management Functional Plan (Sections 3.07.1310 – 3.07.1370). https://www.oregonmetro.gov/urban-growth-management-functional-plan

[18] Title 13 inventory and map are available on Data Basin https://databasin.org/datasets/afdbf390255549418f26855af59b2f79 and Metro RLIS http://rlisdiscovery.oregonmetro.gov/?action=viewDetail&layerID=2087#

sensitive ecosystem resources. The processes include an assessment of existing conditions, analysis of potential impacts from a project, and documentation of actions taken to avoid, minimize or compensate for impacts to the resources. In addition, each jurisdiction has local requirements for storm water management and treatment, and many have urban forestry or tree code requirements designed to conserve tree canopy.

1.4 ODOT Environmental Performance Standards and Technical Guidance

ODOT has developed technical guidance for environmental performance standards for designing and constructing state highway construction projects, including local agency highway construction projects funded by ODOT.[19] The standards were developed as required by Section 18 of the Jobs and Transportation Act enacted by the 2009 Oregon Legislature. The documents defines environmental performance standards as the "acceptable levels of environmental performance specified for the projects activities." Levels of environmental performance can range from high-level environmental standards (avoid or minimize) down to more specific quantitative criteria required by permit condition.

[19] ODOT Project Delivery Operational Notice PD-04. Jobs and Transportation Act (JTA) Section 18 Environmental Performance Standards and Technical Guidance. May 13, 2013. Prepared by ODOT JTA Steering and Working Teams.

Section 2. Environmental Assessment

Considering the complexity and diversity of the environment across the region, Metro used readily available and best available published data for the environmental assessment. Attachment 4 provides a list of projects in the RTP and identifies which environmental and historical resources the project intersects with.

2.1 Indigenous Knowledges and Tribal Approaches to Environmental Protection

Note: Metro staff invite consultation, suggestions and recommendations to include TEK, Tribal priorities, strategies, Tribal-led efforts or other resources in this section.

Tribes are leaders in the fields of environmental protection, mitigation and conservation. Transportation agencies are encouraged to learn about the frameworks, strategies and world views utilized by Tribes to advance this work.

Transportation agencies are also encouraged to respectfully engage with interested Tribes to learn about and co-create approaches for how Tribe-specific Traditional Ecological Knowledge or Indigenous Knowledge developed over millennia of relationship between Tribes and the land and resources can be incorporated into planning processes, where appropriate.

The White House Office of Science and Technology Policy (OSTP) and the White House Council on Environmental Quality (CEQ) have issued a memorandum to recognize Indigenous Knowledge – also known as Traditional Ecological Knowledge – as one of the many important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of the United States and to our collective understanding of the natural world in decision-making.

2.2 Environmental resources and mitigation areas of importance

Metro, in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies, and Metro Parks and Nature staff, identified the areas listed below to address in the environmental assessment.

1. Water and fish
2. High value habitat and connectivity
3. Floodplains and flood hazard areas
4. Tribal lands
5. Historic places
6. Urban heat islands

2.3 Summary of environmental assessment

The negative effect that transportation infrastructure has on the health of the natural environment, particularly urban waterways and habitat connectivity, is well documented. Transportation infrastructure has the potential to degrade water quality, create barriers to corridors for animal travel and increase air, noise and light pollution. Projects also have the potential to negatively impact cultural and historical resources if not planned and implemented carefully.

As shown in the following sections, hundreds of transportation projects, ranging from new roadways and bridges to improvements to pedestrian, bicycle and fregith connections, may intersect with vegetation, aquatic, and terrestrial wildlife species and habitat, wetlands, floodplains, and other biological, tribal, and historic resources.

Only capital projects were included in the analysis. A capital project is a project to construct either new facilities or make significant, long-term renewal improvements in programs or to existing facilities. Out of the 1,068 projects in the RTP project list, 937 were included in the analysis, while 137 projects did not meet the spatial criteria to be included. Of the 937 capital projects included in the analysis, 657 projects intersected with one or more of the environmental areas of concern.

The environmental concern areas with the highest percentage of intersecting projects (77% of capital projects) are Urban Heat Islands and areas with Potentail Habitat Connectivity; after those areas, Title 13 Habitat Conservation Areas and Regional Conservation Strategy High Value Habitat Areas have the highest percentage of intersecting capital proejcts. Seventy percent of the projects intersecting one or more area of environmental concern are in Equity Focus Areas. No one project intersects with every environmental concern area.

2.3.1 Water and fish

All living things need clean water to survive. Several major rivers in the region, including the Clackamas, Columbia, Lewis, Molalla, Salmon, Sandy, Tualatin, Washougal, and Willamette, have thousands of tributaries and numerous associated wetlands and lakes, as well as floodplains and bottomland habitat. Collectively, these water features contribute enormous value to biodiversity in the region. Coho salmon continue to spawn in area streams, despite many challenges, as they have for thousands of years. An increase in impermeable surfaces and transportation related pollutants increases stormwater runoff quantity and degradation of water quality. Fish passage in rivers and streams is blocked by culverts, dams, bridges, and other barriers.

Recent research[20] attributed coho salmon death to an acutely toxic chemical degradation product (6PPD-quinone) from tire particles in stormwater. Concentrations in stormwater were found to be lethal for coho following exposures lasting only a few hours. Additional (forthcoming) research has shown that steelhead are vulnerable, and other species of ESA-listed salmonids tested (e.g., Chinook), are also affected. More recently, the Tian et al. team published that 6PPD-Q also was 8.3 times more toxic than previously calculated and should be categorized as a "very highly toxic" pollutant for aquatic organisms.[21] 6PPD-quinone is acutely toxic to coho salmon, is ubiquitous in tires, and no substitute has been identified yet. However, Green Stormwater Infrastructure (GSI) is effective at reducing mortality rates for coho exposed to stormwater, and relatively inexpensive mitigation measures like bioswales can dramatically improve water quality and promote salmon survival.[22] Stormwater is an extremely complex chemical mixture, and 6PPD is only one of many stormwater contaminants.[23] There are thousands of chemicals in road runoff (including PAHs, metals, pharmaceuticals, pesticides, and other contaminants of emerging concern), many of which are uncharacterized and have the potential to be toxic.

With respect to runoff quantity, development in the region at increasing density results in less pervious surface available to absorb the combined runoff volumes from transportation surfaces, structures and associated impervious area. Runoff volumes of winter peak flows can more than double from predeveloped conditions in the face of urban development, with associated flow reductions in summer. Climate change is expected to reinforce this pattern. Higher runoff volumes result in channel erosion, aquatic and floodplain habitat degradation, and damage to infrastructure (including transportation infrastructure such as bridges and culverts). Low summer flows reduce the vigor of vegetation that helps stabilize streambanks. Yet more than half of the region, including nearly all the area west of the Willamette River, has subsurface conditions that do not promote easy infiltration of large volumes of urban runoff.

The assessment identifies RTP projects that intersect with or fall within a 100-foot buffer of fish bearing streams, barriers to fish passage, Title 3 lands, and wetlands in the greater Portland region. Data used in the analysis is listed in **Table 12**.

[20] Published in the journal Science and authored by Puget Sound scientists, (Tian et al., 2021). https://www.science.org/doi/10.1126/science.abd6951
[21] (Tian et al., 2022). https://pubs.acs.org/doi/10.1021/acs.estlett.1c00910
[22] (Spromberg et al., 2016). https://besjournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/1365-2664.12534
[23] (Du et al., 2020). https://pubs.acs.org/doi/abs/10.1021/acs.estlett.0c00749

Table 3 Projects intersecting water and fish habitat

Environmental Concern Area Name	# of projects	% of projects
All Fish-Bearing Streams	262	40%
Fish Passage Barriers	180	27%
Title 3 Land	350	53%
Wetlands	349	53%

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 262, or 40%, of capital projects intersect with fish-bearing streams, including essential salmonoid habitat (ESH), using Oregon Fish Habitat Distribution Data, describe areas of suitable habitat believed to be used currently or historically by native or non-native fish populations. The term "currently" is defined as within the past five reproductive cycles. Historical habitat includes suitable habitat that fish no longer access and will not access in the foreseeable future without human intervention.[24] Of the 262 projects intersecting with fish-bearing streams, 202 of the projects intersect with streams identified as salmon habitat. Major capital projects estimated to cost $100 million or more and intersecting salmon-bearing streams are listed in Table 4. The 2023 Essential Salmonoid Habitat map tool provided by the Department of State Lands, shows the rivers and streams in the planning area that are essential salmonoid habitat.[25]

[24] This information is based on sampling, the best professional opinion of Oregon Dept. of Fish and Wildlife or other natural resources agency staff biologists or modeling (see the fhdBasis field). Due to natural variations in run size, water conditions, or other environmental factors, some habitats identified may not be used annually. These data now comply with the Oregon Fish Habitat Distribution Data Standard that was adopted by the Oregon Geographic Information Council in April 2020. The Standard document can be found at: https://www.oregon.gov/geo/standards/OregonFishHabitatDistributionDataStandard_v4.pdf. Historical habitat distribution data are within the scope of the standard and are identified via the habitat use (fhdUseType) attribute. Historical habitats are only identified outside of currently accessible habitat and are not comprehensive. Data representing current habitat for anadromous and resident salmonid species are generally more comprehensive than data for non-game and non-native fish species. All datasets are subject to update as new information becomes available. Key features of the Oregon Fish Habitat Distribution Data include: species, run, life history, habitat use, origin, production, the basis for each record, originator name, originator entity and reference. Habitat distribution data are mapped at a 1:24,000 scale statewide and are based on the National Hydrography dataset. The data are made available as GIS files in both shapefile and ESRI geodatabase format. The data were developed over an extensive time period ranging from 1996 to 2022. The data are now managed on the National Hydrography Dataset and have been synchronized to December 2021 NHD geometry.
https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=1167.xml

[25] Available at: Essential Salmonoid Habitat map, Department of State Lands, https://maps.dsl.state.or.us/esh/

Figure 1 Fish Bearing Streams and Barriers to Fish Passage Map

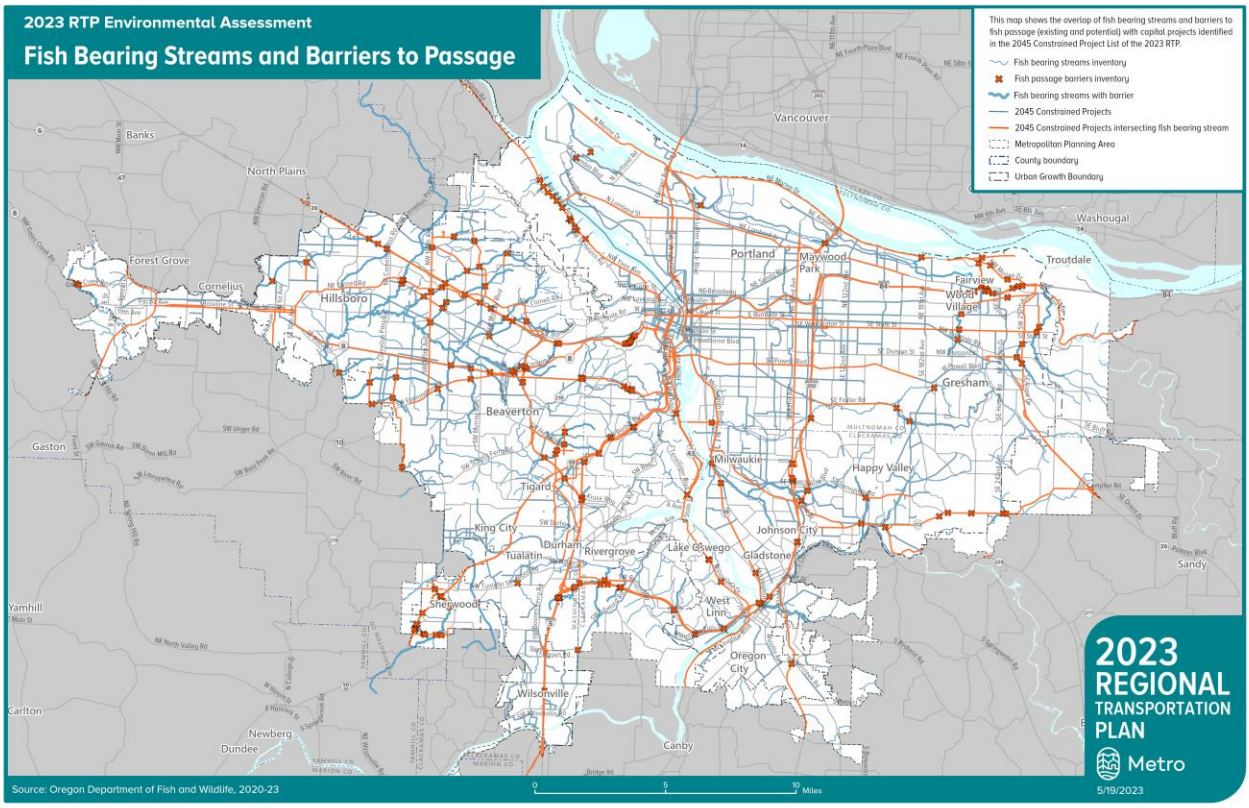


Table 4 Major capital projects intersection salmon-bearing streams

Project Name	RTP ID	RTP Investment Category Group	Estimated cost (in YOE dollars)
HCT: Steel Bridge Transit Bottleneck Capital Construction	10921	Transit Capital	$ 5,696,000,000
OR 212/224 Sunrise Project Phase 3	12020	Throughways	$ 939,000,000
OR 217 Capacity Improvements	11582	Throughways	$ 814,000,000
Earthquake Ready Burnside Bridge: Phase 3 (Construction)	12076	Roads and Bridges	$ 767,200,000
I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (UR, CN, OT)	11990	Throughways	$ 670,000,000
I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	11904	Throughways	$ 557,000,000
I-205 Abernethy Bridge (CON)	11969	Roads and Bridges	$ 545,000,000
I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	12304	Throughways	$ 400,000,000
I-5 Freight Operational Improvements	11991	Throughways	$ 358,000,000
OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	11301	Throughways	$ 331,000,000
I-5/99W Connector Southern Arterial (ROW and Construction)	10598	Roads and Bridges	$ 318,900,000
HCT: 82nd Ave Transit Project	12029	Transit Capital	$ 300,000,000
HCT: Tualatin Valley Highway Transit Project	11589	Transit Capital	$ 300,000,000
I-5/99W Connector Southern Arterial Widening	11340	Roads and Bridges	$ 232,300,000
OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	11988	Throughways	$ 203,000,000
HCT: Beaverton-Hillsdale Highway Corridor High Capacity Transit	12290	Transit Capital	$ 162,700,000
HCT: Burnside/Stark Corridor High Capacity Transit	12286	Transit Capital	$ 162,700,000
HCT: Lombard/Cesar Chavez Corridor High Capacity Transit	12288	Transit Capital	$ 162,700,000
HCT: Martin Luther King Corridor High Capacity Transit	12287	Transit Capital	$ 162,700,000
HCT: SW 185th Corridor High Capacity Transit	12289	Transit Capital	$ 162,700,000
82nd Ave Corridor Improvements	11844	Roads and Bridges	$ 150,000,000
OR 217 Interchange, Safety, and Operational Improvements	11978	Throughways	$ 148,000,000

Project Name	RTP ID	RTP Investment Category Group	Estimated cost (in YOE dollars)
Earthquake Ready Burnside Bridge: Phase 2 (Design)	11376	Roads and Bridges	$ 127,600,000
HCT: Sunset Highway High Capacity Transit	11912	Transit Capital	$ 113,900,000

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 180, or 27%, of capital projects on the financially constrained list intersect with fish passage barriers, or streams that are used for fish passage, using the Oregon Fish Passage Barriers Data (OFPBDS).[26] These are barriers of any type, including The Fish Habitat Distribution and Barriers map tool provides an interactive platform to explore the location of barriers within the planning area.[27]

Five projects on the financially constrained list intersect with Priority Barriers identified in the OFPBDS data. The projects are listed in Table 5. There are only a handful of Priority Barriers in the planning area. Two of the projects, RTP 10101 and 11673, identify elements to improve and restore fish passage. Other projects that include fish passage in the project description (though do not cross Priority Barriers) are RTP ID 10399 and 10389.

[26] This dataset is intended to support the need for accurate, current and complete representation of the fish passage barriers affecting fish migration throughout the state of Oregon. The OFPBDS database is the most comprehensive compilation of fish passage barrier information in Oregon however, it does not represent a complete and current record of every fish passage barrier within the state. Efforts to address deficiencies in data currency, completeness and accuracy are ongoing. The Oregon Fish Passage Barrier Data Standard (OFPBDS) provides a consistent and maintainable structure for both producers and users of fish passage barrier data. https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=44.xml

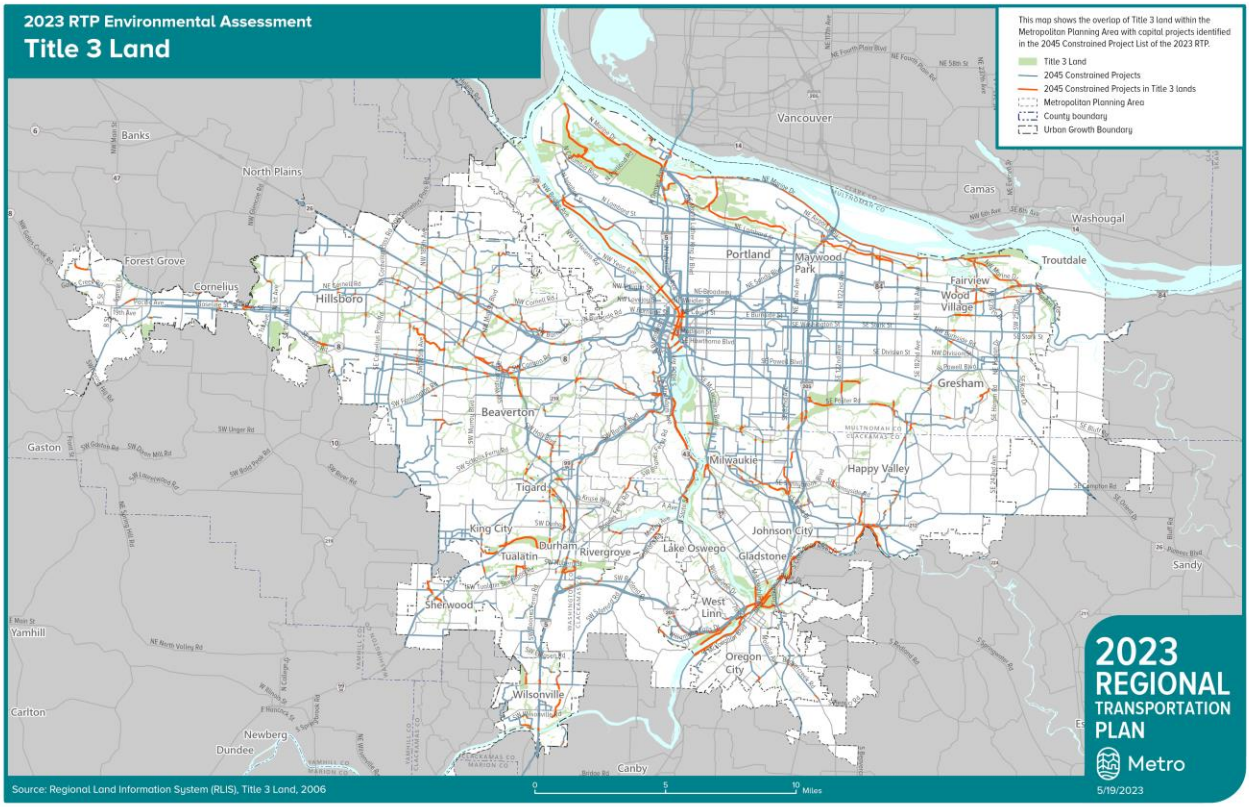
[27] Available at: https://nrimp.dfw.state.or.us/FHD_FPB_Viewer/index.html

Table 5 Projects intersecting Priority Barriers for fish passage

Project Name	RTP ID	Estimated cost (in YOE dollars)
Kellogg Creek Dam Removal and OR 99E Underpass	10101	$ 40,654,000
Lake Oswego to Portland Trail	10087	$ 22,800,000
McLoughlin Blvd. Improvement	10024	$ 8,746,000
Troutdale Road at Beaver Creek: Fish Passage Restoration and Fill Bike and Pedestrian Gap	11673	$ 11,600,000
Troutdale Road: Bike and Pedestrian Safety Improvements	11674	$ 12,100,000

The analysis shows that 350, or 53%, of capital projects on the financially constrained list intersect with Title 3 land. The Title 3 Land data delineates places protected by Title 3: Water Quality And Flood Management of the Urban Growth Management Functional Plan, which aims to protect the region's health and public safety by reducing flood and landslide hazards, controlling soil erosion, and reducing pollution of the region's waterways. This data specifically delineates areas impacted by Title 3 for the following purposes: 1. protect against flooding, 2. enhance water quality in the region's streams, rivers, and wetlands, and 3. protect regionally significant fish and wildlife habitat areas.

Figure 2 Projects intersecting with Title 3 Lands Map



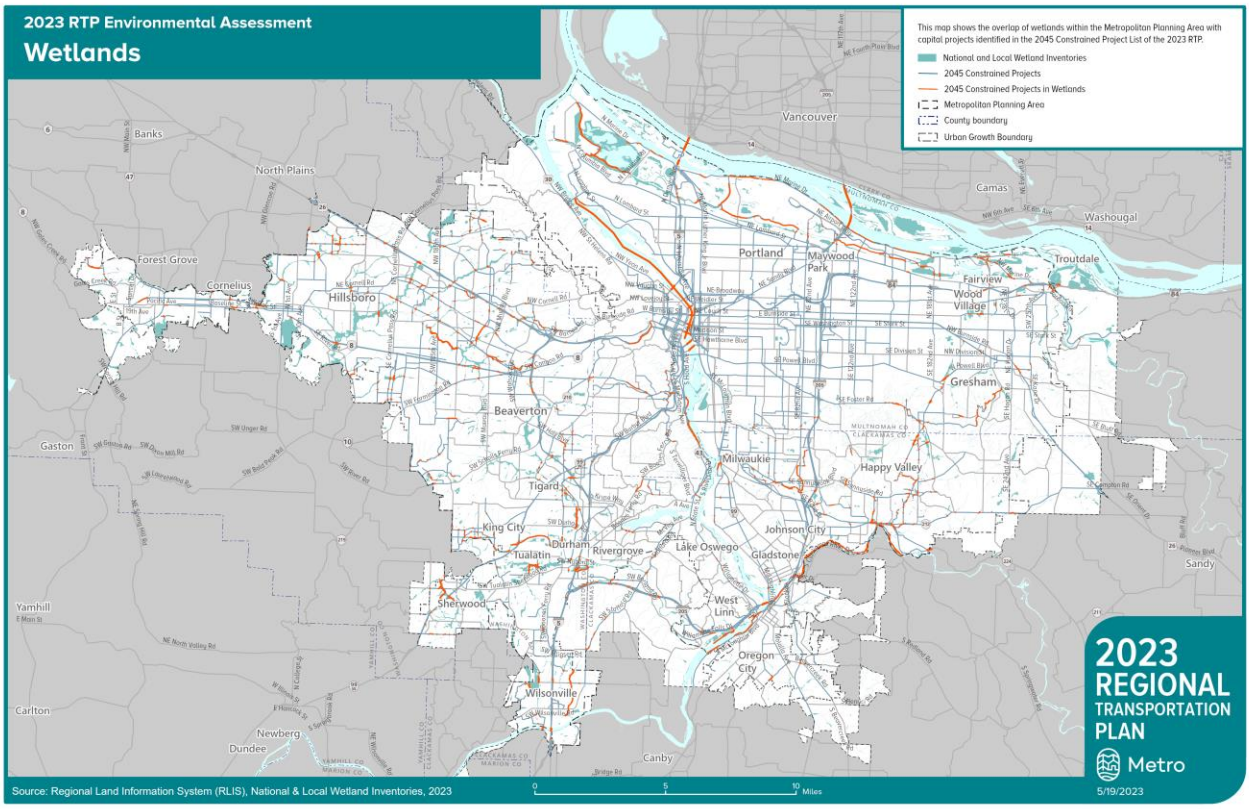
The analysis shows that 349, or 53%, of capital projects on the financially constrained list intersect with wetlands. Wetlands store even more carbon than forests, and that carbon is much less vulnerable to being released back into the atmosphere during a wildfire. Three wetland inventories were used in the analysis: Local Wetland Inventory (LWI), National Wetland Inventory (NW) and RLIS Wetlands. There is overlap in the inventories, but some wetlands are only represented in one of the three, so all three data are used. RLIS Wetlands capture wetlands not represented in either LWI or NWI, especially along the Columbia River. This method follows that of the Oregon Wetlands Database (2019).[28] This source is a combination of LWI, NWI, and "More Oregon Wetlands (MOW)". These MOW capture many of the same additional wetlands captured in RLIS Wetlands.

Metro did not include all the areas shown in the Statewide Wetlands Inventory (SWI) tool in the analysis.[29] The tool shows some other natural resource mapping like NHD waters and predominately hydric type soils ("Percent Hydric" greater than 50%). The analysis may

[28] https://spatialdata.oregonexplorer.info/geoportal/details;id=51b33a5392404b8f83be5a36b5d25e72
[29] Available at: https://maps.dsl.state.or.us/swi/ disclaimers and information on how to use the tool are available at: https://www.oregon.gov/dsl/WW/Pages/SWI.aspx

include these areas in the future as they may better support the project planning and scoping phase.

Figure 3 Projects intersecting with Wetlands Map



2.3.2 High value habitat and connectivity

The greater Portland region's ecosystem provides habitat to hundreds of wildlife species. To help protect these species and the biodiversity of the region, the Intertwine Alliance's Regional Conservation Strategy identified high value habitat areas. [30] A Regional Connectivity Work Group has recently developed data on habitat connectivity, which are key habitat areas and the best remaining, feasible connections between these "anchor" habitats. The work group has created a Connectivity Toolkit that uses GIS to identify wildlife habitat areas and potential connectivity zones, followed by ground-truthing to assess habitat conditions and potential barriers to wildlife movement.

[30] Regional Conservation Strategy data inventories are compatible with Metro Title 13 Regionally Significant Fish and Wildlife Habitat Inventory and the Habitat Conservation Areas inventories and local jurisdiction Title 13 inventories. Development of the Regional Conservation Strategy inventories used similar techniques as the Title 13 inventories, but benefited from better Geographic Information Systems (GIS), better land cover data and lidar tree canopy. Metro and partners continue to develop new data and inventories, such as White Oak mapping and connectivity corridors mapping that can complement future environmental analysis.

Other natural resource data can be overlain to enrich the Regional Conservation Strategy habitat models for transportation planning. Many of the datasets use similar data that overlap; however, using a variety of data in project planning and scoping ensures that projects are using the best available data, including:

- Essential Salmonid Habitat (ESH)31
- Local jurisdiction adopted Title 13 compliant habitat conservation maps;
- Oak Prairie High Priority Area
- Habitat Connectivity (Omniscape)
- Locations of wildlife collisions
- Conservation Opportunity Areas
- Willamette River Greenway Inventory includes fish and wildlife habitat32

The assessment identifies RTP projects that intersect with or fall within a 100 foot buffer of sensitive and critical habitat in the greater Portland region. Data used in the analysis is listed in Table 6.

[31] The ESH dataset is determined by ODFW and stewarded by DSL. The significance is that all ground disturbance within ESH waters and hydrologically connected wetlands requires DSL permits. https://maps.dsl.state.or.us/esh/ Salmonid critical habitat data available at: http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/salmon_and_steelhead_listings/steelhead/lower_columbia_river/lower_columbia_river_steelhead.html

[32] Willamette River Greenway Inventory https://www.portlandoregon.gov/bps/article/508803 and Goal 15 Willamette River Greenway https://www.oregon.gov/LCD/docs/goals/goal15.pdf

Table 6 Projects intersecting high-value habitat

Environmental Concern Area Name	# of projects	% of projects
RCS High Value Habitat Areas	404	61%
Title 13 Habitat Conservation Areas	475	72%
Oak Prairie High Priority Area	313	48%
Potential Habitat Connectivity (Omniscape)	503	77%
Wildlife Collisions (ODOT Highways)	111	17%
Conservation Opportunity Areas	141	21%

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 404, or 61%, of capital projects in the financially constrained list intersect with the top 25 percent of Regional Conservation Strategy (RCS) habitat areas. The top 25 percent scoring habitat areas inventory are referred to as high-value habitat. High value areas ranked in the top quarter of all areas based on the type, location, and size of their habitat.[33] The RCS habitat model was developed using separate upland and riparian models, which were then combined. Where the two inventories overlapped, high value riparian habitat took precedence. The inventory was based on many sources of data, including:

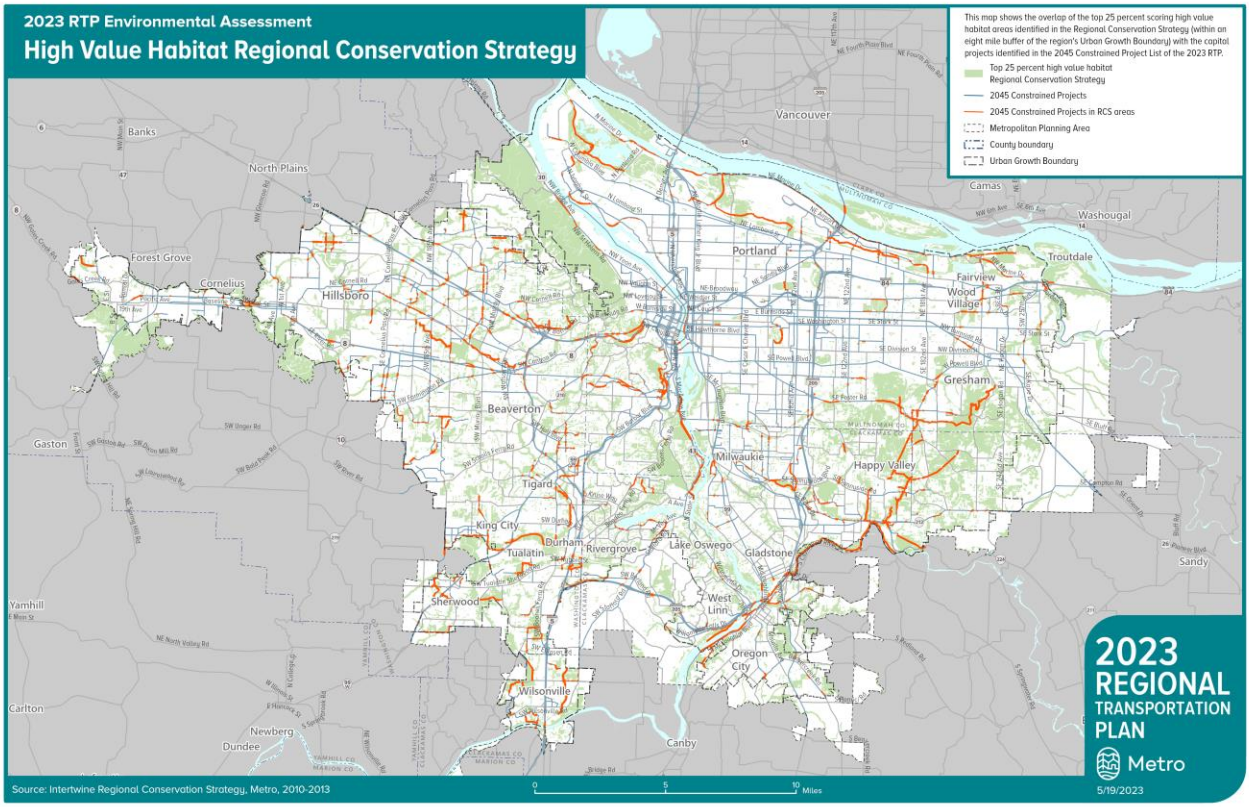
- 5-meter resolution land cover map developed for this process by the Institute for Natural Resources
- combined national and local wetland inventories (including those identified in the National Wetland Inventory)
- U.S. Geological Survey stream and hydrography data
- SSURGO soil data collected by the National Cooperative Soil Survey developed by the U.S. Department of Agriculture
- LiDAR data and land cover data.
- 100-year floodplains identified by the Federal Emergency Management Agency (FEMA)
- regional data on forest lands, streams, rivers, bodies of water, soil types including hydric soils, existing vegetation, wetlands, habitat patch size and shape, distance from streams and wetlands, and the influence of roads, an estimate of how difficult it is for organisms to move across the landscape, and infiltration potential.

It should be noted that while the Regional Conservation Strategy data made use of the best available data at the time, key elements such as wildlife connectivity, Oregon white oak and

[33] Regional Conservation Strategy information, mapping tools and data are available at www.regionalconservationstrategy.org

prairie habitats (an Oregon Conservation Strategy habitat type as well as a Habitat of Concern under Metro's Title 13) were not available at the time. It is important to consider these two habitat categories because they may not fall within the Regional Conservation Strategy top 25 percent of habitat and transportation infrastructure can interrupt wildlife movement across the landscape. However, these data have since been developed and are included in the analysis.

Figure 4 Projects intersecting with High Value Habitat RCS Map



The analysis shows that 475, or 62%, of capital projects in the financially constrained list intersect with Metro Title 13 data. Adopted by the Metro Council in 2005, the Title 13 inventory combines Regionally Significant Riparian & Upland Wildlife habitat, Habitats of Concern, and impact areas into one integrated layer.[34] The Habitat Conservation Areas Layer depicts the Metro Fish and Wildlife regulatory program defined in Exhibit A to Metro Resolution No. 04-3506A. The layer divides the region's significant habitat into high, moderate, low, or no conservation area. Metro established these designations by comparing ecological values to competing development and policy values. Major capital projects estimated to cost $100 million or more and intersecting Title 13 areas are listed in Table 7.

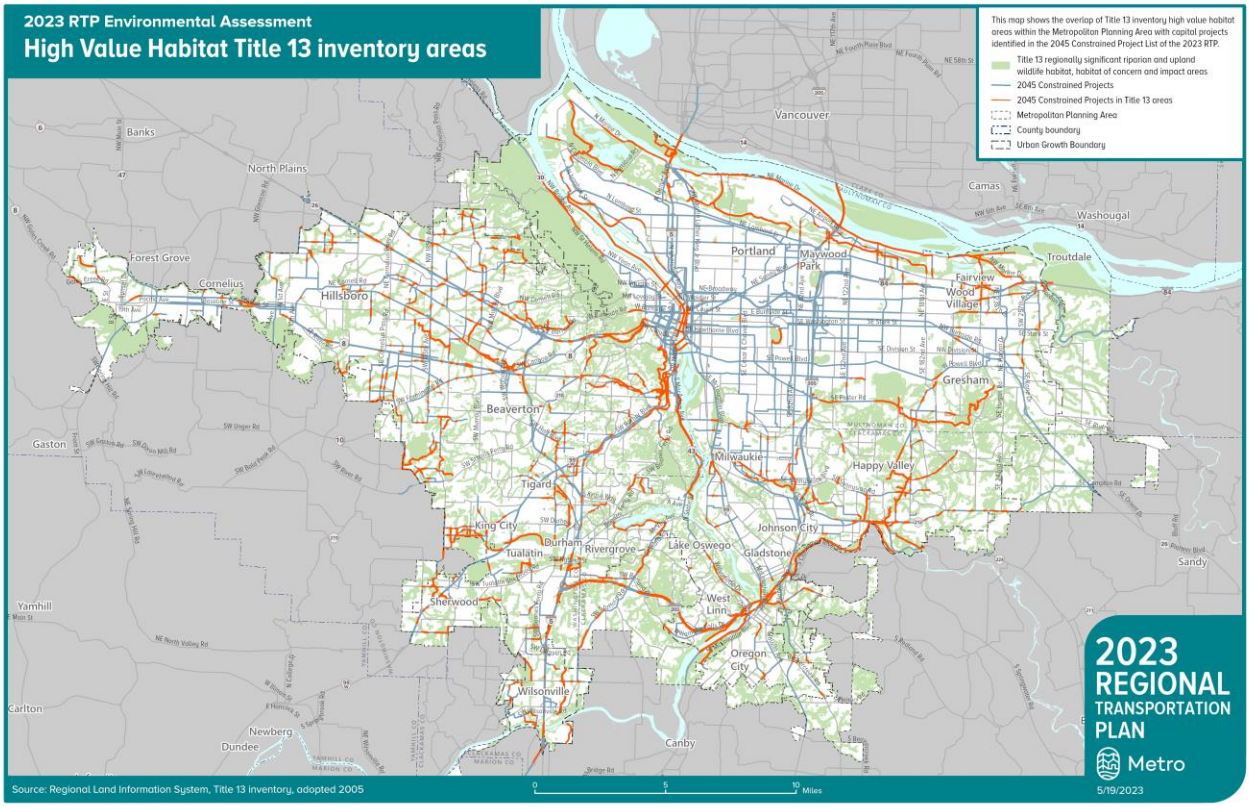
[34] https://rlisdiscovery.oregonmetro.gov/datasets/drcMetro::title-13-habitat-conservation-areas/about

Table 7 Major capital projects intersecting Title 13 Habitat Conservation Areas

Project Name	RTP ID	Estimated cost (in YOE dollars)
I-5 Interstate Bridge Replacement Program	10866	$ 6,000,000,000
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (UR, CN, OT)	11176	$ 975,000,000
HCT: Southwest Corridor: PD, Engineering and ROW	12292	$ 855,000,000
Earthquake Ready Burnside Bridge: Phase 3 (Construction)	12076	$ 767,200,000
I-5 Boone Bridge and Seismic Improvement: SB Wilsonville Rd to Wilsonville-Hubbard Hwy (UR, CN, OT)	11990	$ 670,000,000
I-205 Southbound and Northbound Widening and I-205 Toll Project (UR, CON, OT)	11904	$ 557,000,000
I-205 Abernethy Bridge (CON)	11969	$ 545,000,000
I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	12304	$ 400,000,000
I-5 Freight Operational Improvements	11991	$ 358,000,000
I-5 Rose Quarter/Lloyd District: I-405 to I-84 (PE, NEPA, ROW)	10867	$ 338,000,000
OR 212/224 Sunrise Hwy Phase 2: SE 122nd to SE 172nd (CON)	11301	$ 331,000,000
HCT: 82nd Ave Transit Project	12029	$ 300,000,000
HCT: Tualatin Valley Highway Transit Project	11589	$ 300,000,000
I-5 Southbound Truck Climbing Lane	11984	$ 203,000,000
OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	11988	$ 203,000,000
82nd Ave Corridor Improvements	11844	$ 150,000,000
Earthquake Ready Burnside Bridge: Phase 2 (Design)	11376	$ 127,600,000
Powell, SE (I-205 to 174th) Multi-Modal Improvements, Phase 2	11742	$ 120,000,000
Farmington Rd. realignment and widening, sidewalks, bike lanes	10560	$ 111,600,000

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

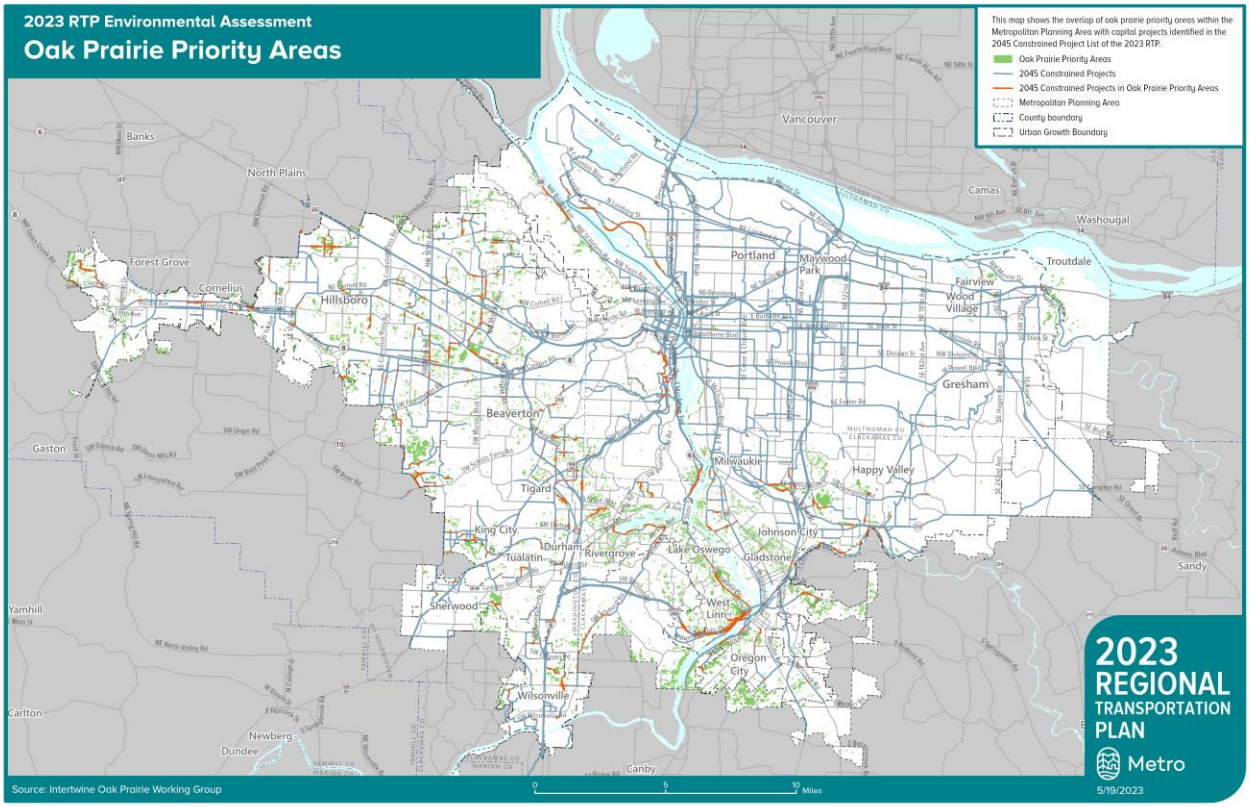
Figure 5 Projects intersecting with High Value Habitat Title 13 Inventory Areas Map



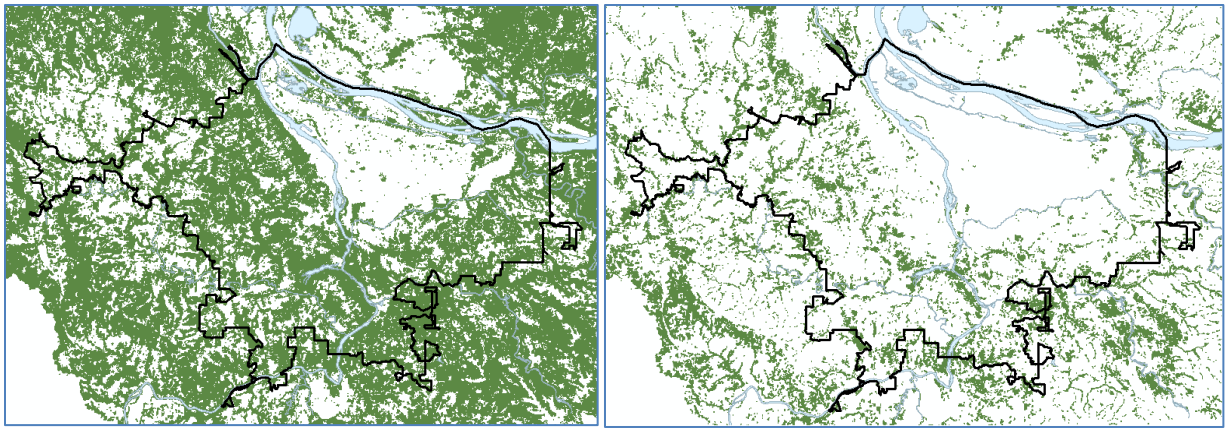
The analysis shows that 313, or 48%, of capital projects in the financially constrained list intersect with Oak Prairie Priority Areas.[35] This data is new to the RTP environmental assessment. Oregon's imperiled Oregon white oak ecosystems harbor high biodiversity and represent a top conservation priority in Oregon. In 2011, the Intertwine Oak Prairie Work Group (OPWG) formed to improve conservation outcomes, support enhanced stewardship and public education, and coordinate a regional partnership of over 30 public agencies, park districts, non-profits, and community-based organizations.

[35] Oregon white oak data viewer: https://drcmetro.maps.arcgis.com/apps/MapSeries/index.html?appid=c79f386100d340e2999ea7ec6e1dc0d4

Figure 6 White Oak Prairie Priority Areas Map



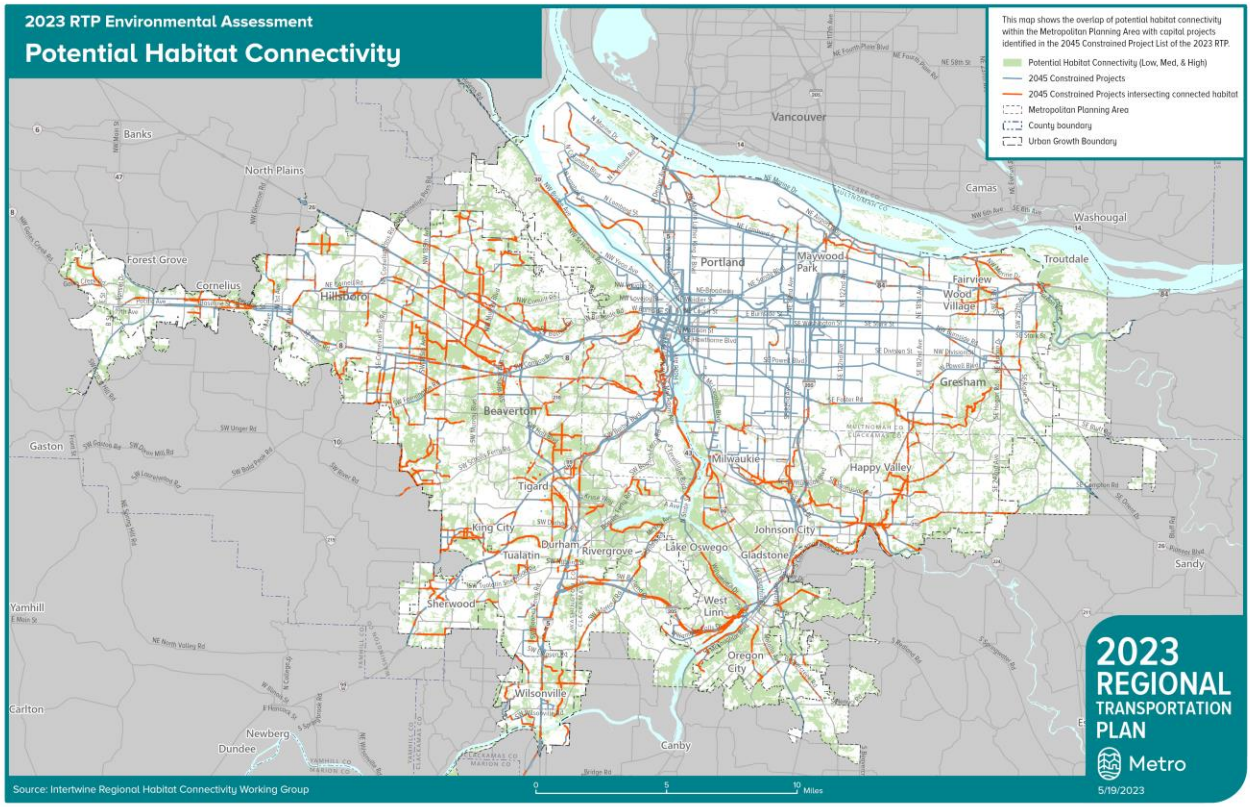
The analysis shows that 503, or 77%, of capital projects in the financially constrained list intersect with areas of habitat connectivity, as shown in the Omniscape data, which are key habitat areas and the best remaining, feasible connections between these "anchor" habitats. For the analysis areas identified as having Low, Medium, and High habitat connectivity were included, as shown in the image on the left below. The image on the right is only Medium and High.



Low-Med High and Low-Med habitat connectivity

The intention is to identify areas with the potential for habitat connectivity, even if it is not the highest quality habitat. Including only areas with only Medium and High habitat connectivity eliminates many patches that could be critical connections.

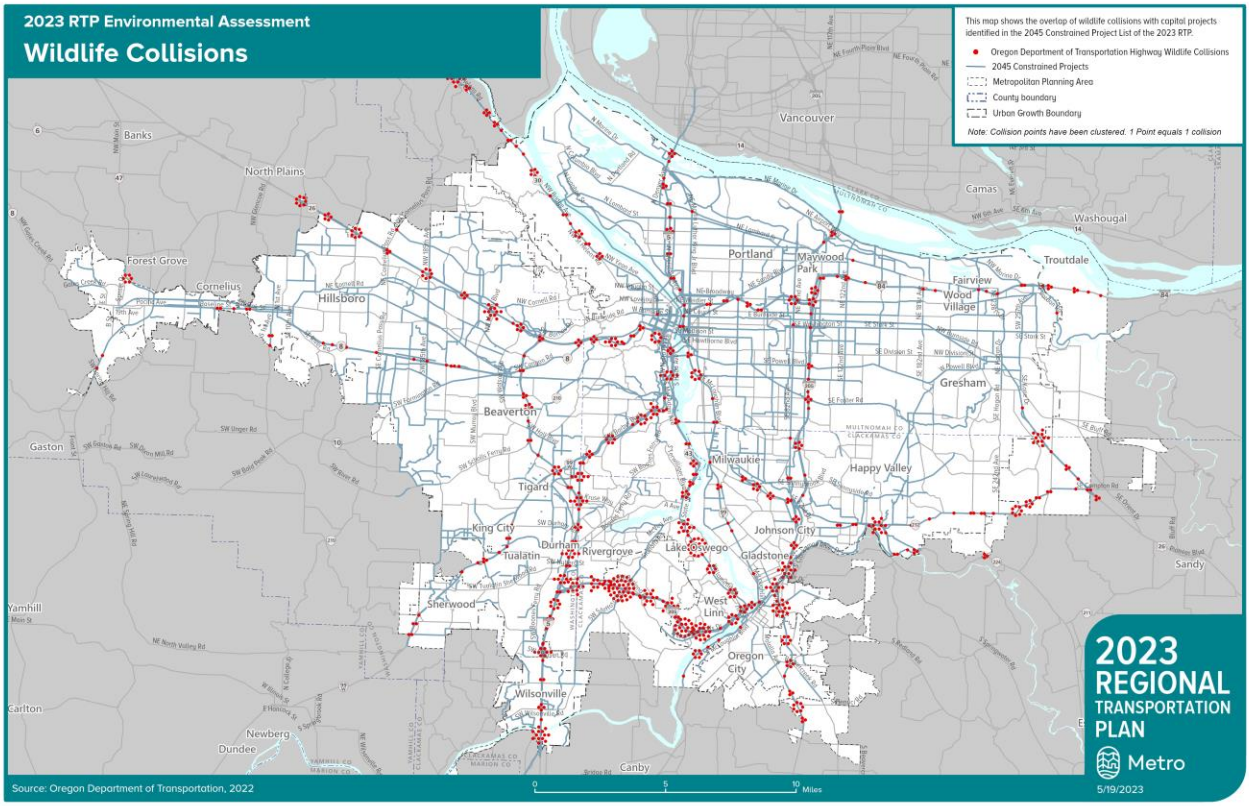
Figure 7 Projects intersecting with Potential Habitat Connectivity Map



The analysis shows that 111, or 17%, of capital projects in the financially constrained list intersect with ODOT owned highways with documented wildlife

collisions, using ODOT data. Data for the entire planning area is only available for wildlife collisions that occurred on ODOT highways.

Figure 8 Wildlife Collisions on State Highways Map



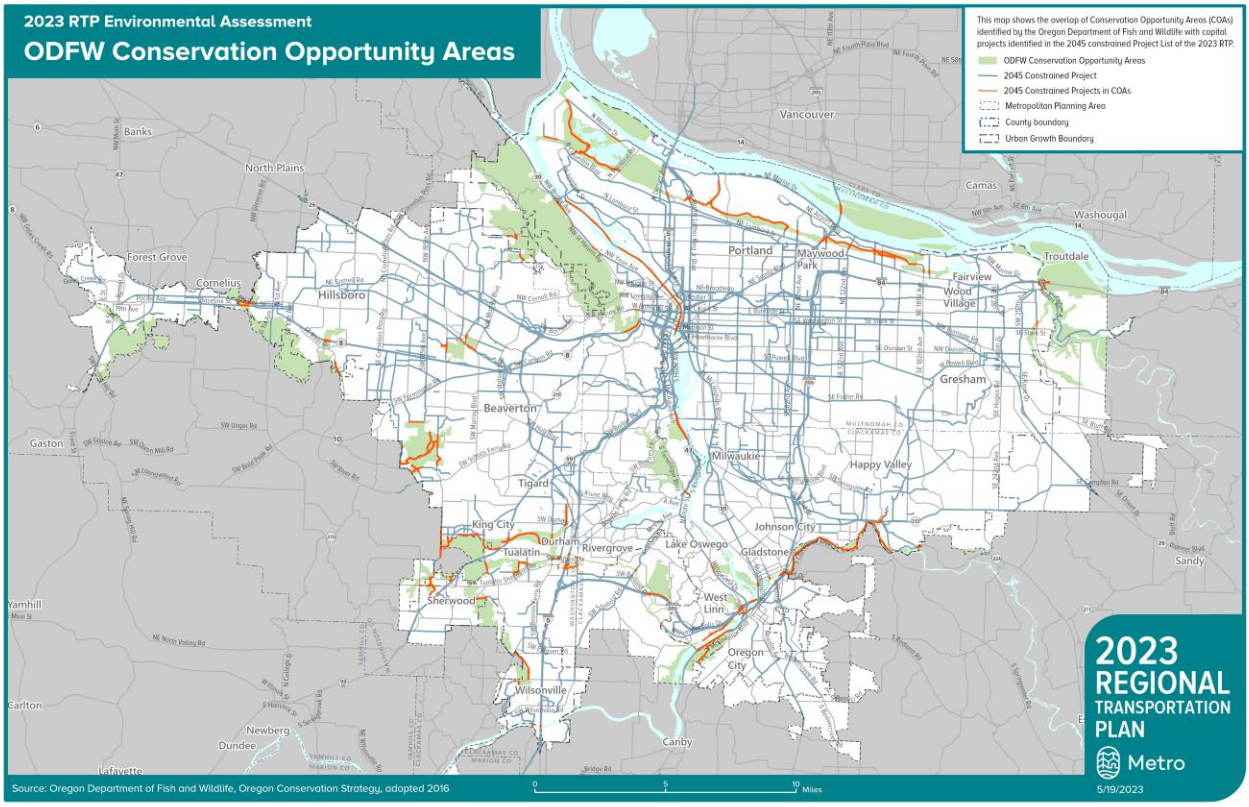
The analysis shows that 141, or 21%, of capital projects in the financially constrained list intersect with Conservation Opportunity Areas, identified by the Oregon Department of Fish and Wildlife in the Oregon Conservation Strategy, which was approved by the agency in August 2016. The Oregon Conservation Strategy is an overarching plan to conserve Oregon's fish and wildlife, and their habitats. It combines the best available science and conservation priorities with recommended voluntary actions and tools for all Oregonians to define their own conservation role. The U.S. Fish and Wildlife Service approved the 10-year revision of the Oregon Conservation Strategy in August 2016. There are 206 Conservation Opportunity Areas in the state, and approximately ten are wholly or partially within the greater Portland region. Data used for this analysis are Conservation Opportunity Areas updated by the Oregon Department of

Fish and Wildlife in 2016.[36] Conservation Opportunity Areas are places where broad fish and wildlife conservation goals would best be met.

Multiple data sets were used to identify the boundaries of the Conservation Opportunity Areas:

- Wildlife (Amphibians, Birds, Mammals, Reptiles) (multiple data sources)
- Fish (ODFW Crucial Habitat Assessment: Aquatic Species of Concern)
- Habitats (multiple data sources)
- Climate Change (TNC Topo-Climate Diversity Model and Willamette River Cold Water Sources)
- Floodplains (FEMA 100 year flood zones)
- Barriers to Animal Movement (TNC Resistance Model and Species Permeability Model)
- U.S. Geological Survey (USGS) Protected Areas Database

Figure 9 Projects intersecting with ODFW Conservation Opportunity Areas Map



[36] Conservation Opportunity Areas data, maps and information can be found in the Oregon Conservation Strategy , here: http://oregonconservationstrategy.org/conservation-opportunity-areas/

2.3.3 Floodplains and flood hazard areas

Floodplains are usually flat areas near a prominent water feature such as a river, creek, or lake. Transportation projects and land development can change natural drainage and create new paths for runoff, with potentially dangerous consequences. Floodplains provide important habitat areas including river channels, riparian buffers, and wetlands. The variety of habitat types, the presence of water, and other factors result in a rich diversity of plant and animal species. Additionally, vegetation that grows in the floodplain influences how water flows across the land and can play a major role in controlling erosion and sediment deposition. When these features are lost, habitat and species diversity suffer.

This analysis looks at the potential impacts of projects to flood hazard areas and floodplains. The assessment identifies RTP projects that intersect with or fall within a 100-foot buffer of floodplains or flood hazard areas in the greater Portland region. Data used in the analysis is listed in Table 8.

Table 8 Projects intersecting floodplains or flood hazard areas

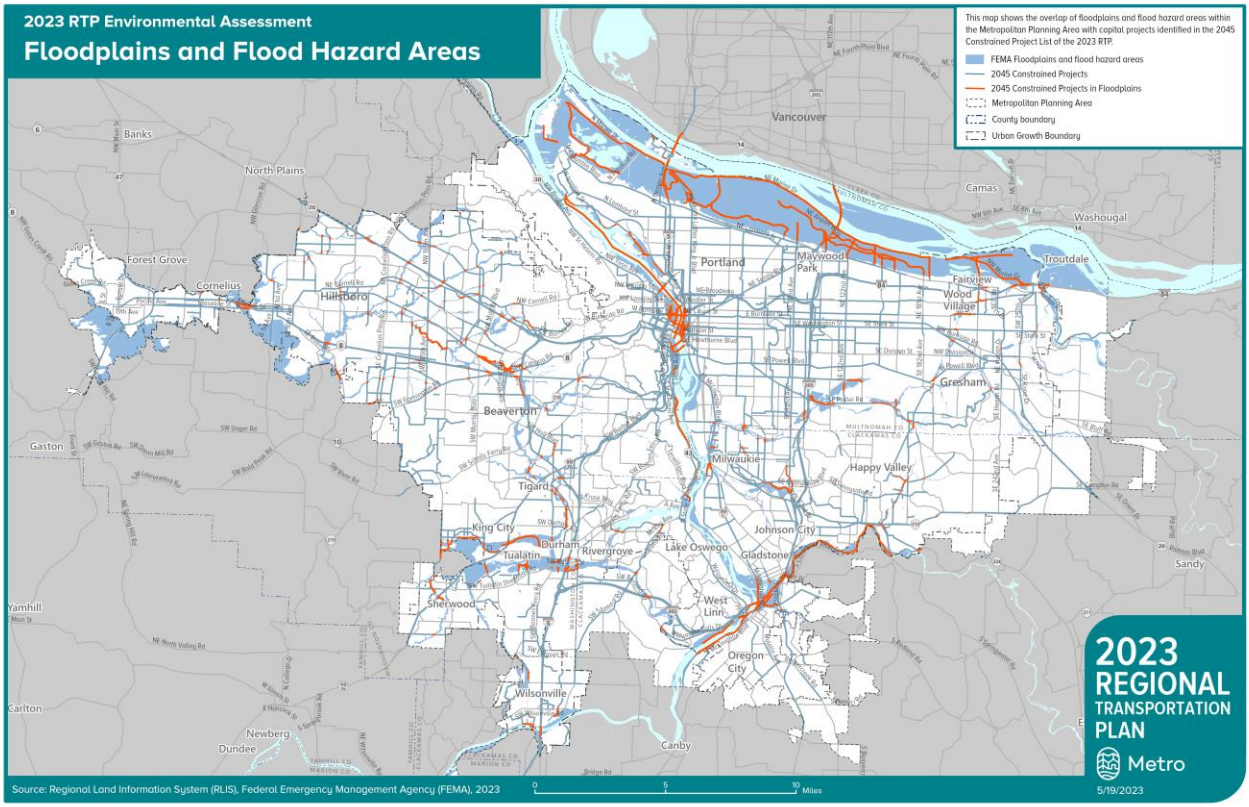
Environmental Concern Area Name	# of projects	% of projects
FEMA Floodplains and flood hazard areas	289	44%

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 291, or 44%, of capital projects on the financially constrained list intersect with areas identified as floodplains and flood hazard areas in the FEMA data.[37] The National Flood Hazard Layer (NFHL) data incorporates all Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The primary risk classifications used are the 1-percent-annual-chance (or 100-year) flood event, the 0.2-percent-annual-chance (or 500-year) flood event, and areas of minimal flood risk.

[37] Available at: Floodplains (FEMA) https://rlis-discovery drcmetro.hub.arcgis.com/datasets/bce509afe2b046bca63888feae7d48ad/about

Figure 10 Projects intersecting with Floodplains and Flood Hazard Areas Map



2.3.4 Tribal lands

This analysis looks at the potential impacts of projects to Tribal lands. **There are no Federally designated Tribal lands[38] in the planning area.**

The lands now known as the greater Portland metropolitan area are part of the aboriginal homelands, traditional use areas and trade networks of numerous Tribes. For millennia, Indian people resided throughout the Willamette Valley and along the Willamette and Columbia Rivers and their tributaries in traditional villages, permanent communities and seasonal encampments. The relationship of Tribes, their lands and interests extend from time immemorial to the present day and beyond. Each Tribes interests are distinct. These interests may overlap and intersect with the static boundaries of Metro's service area, metropolitan planning area boundary for the RTP and the urban growth boundary in various ways.

[38] Federally recognized Tribal lands refers an area of land reserved for a Tribe or Tribes under treaty or other agreement with the United States, executive order, or federal statute or administrative action as permanent tribal homelands, and where the federal government holds title to the land in trust on behalf of the Tribe. Approximately 56.2 million acres are held in trust by the United States for various Indian Tribes and individuals. Some reservations are the remnants of a Tribe's original land base. Others were created by the federal government for the resettling of Indian people forcibly relocated from their homelands. Not every federally recognized Tribe has a reservation. Federal Indian reservations are generally exempt from state jurisdiction, including taxation, except when Congress specifically authorizes such jurisdiction.

2.3.5 Historic places

This analysis looks at the potential impacts of projects to historic places as defined in the National Register of Historic Places.

Table 9 Projects intersecting with designated historic places

Environmental Concern Area Name	# of projects	% of projects
Historic properties data from the National Register of Historic Places	48	7%

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 48, or 7%, of capital projects in the financially constrained list intersect with places identified as historic. The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. More than 650 historic places and structures have been listed in the National Register in the metropolitan planning area.

Table 10 lists the names of historical places that fall within the 100-foot buffer of the RTP projects on the financially constrained list of projects. Most of the historical places are buildings on the street right-of-way, but some, such as the Burnside Bridge or the Vancouver-Portland Bridge, are transportation facilities.

Table 10 Historical places in proximity of projects

Project Name	RTP ID	Historical Places List
Earthquake Ready Burnside Bridge: Phase 3 (Construction)	12076	Burnside Bridge
I-5 and I-205: Regional Mobility Pricing Project (PE, RW, UR, CN, OT)	12304	Vancouver-Portland Bridge
I-5 Freight Operational Improvements	11991	Vancouver-Portland Bridge
HCT: Tualatin Valley Highway Transit Project	11589	Rice-Gates House
Earthquake Ready Burnside Bridge: Phase 2 (Design)	11376	Burnside Bridge
Broadway/Weidler Corridor Improvements	11646	Olsen and Weygandt Building
Central Eastside Access and Circulation Improvements	11841	New Logus Block

Project Name	RTP ID	Historical Places List
HCT: MAX Red Line Improvements Project: Capital Construction	10922	Brown Apartments; Pacific Building; Ray, Harold Wass, House; Zion Lutheran Church; Journal Building; Mallory Hotel; Vista Avenue Viaduct
Cesar Chavez Corridor Improvements	10315	Kendall, Joseph, House; Piper, Charles, Building; Ruby, Alfred C. and Nettie, House
Cornell Road Bike Lanes	10613	Young, John Quincy Adams and Elizabeth, House
ETC: Line 48 (Cornell/Barnes) safe access/enhanced transit corridor	12063	Young, John Quincy Adams and Elizabeth, House
ETC: Inner North Portland Enhanced Transit Corridor Improvements	11833	Rinehart Building; Vancouver Avenue First Baptist Church
ETC: SE Hawthorne/Foster Ave Enhanced Transit Corridor	11834	Douglas Building; Frances Building and Echo Theater; San Farlando Apartments
Harrison St Capacity Improvements	11542	Shindler, William, House
HCT: Streetcar Montgomery Park Extension	11319	Bergman, Joseph, House; Campbell Hotel; Landenberger, C. A., House
Lake Oswego to Portland Trail	10087	Sherrard--Fenton House
I-405 Corridor ITS Improvements	10266	Franklin Hotel; Brown Apartments; Neighbors of Woodcraft Building
I-5 Interstate Bridge Replacement Program	10866	Vancouver-Portland Bridge
Inner E Burnside Corridor Improvements	11816	Murphy, Paul C., House
Inner Holgate Blvd Corridor Improvements	10307	Palestine Lodge
Inner Powell Blvd Corridor Improvements: Local Contribution to State-Owned Arterial	10259	Gatehouse, Portland City Reservoir No. 2
Inner W Burnside Corridor Improvements	11959	Flatiron Building; Broadway Hotel; Hotel Alma
Marine Dr Corridor Safety Improvements	11864	Fisher, Raymond and Catherine, House
Marine Drive ITS	10346	Fisher, Raymond and Catherine, House
N Interstate Ave Bike and Ped Safety Improvements	11843	Cole, David, House; Smithson and McKay Brothers Blocks; Bunyan, Paul, Statue
N Lombard Corridor Improvements: Local Contribution to State-owned Arterial	10299	Yeon, John, Speculative House

Project Name	RTP ID	Historical Places List
NE MLK Jr Blvd Corridor Improvements	10302	Clovelly Garden Apartments
Passenger Ferry Pilot	12311	Broadway Bridge; Burnside Bridge; Morrison Bridge
Sandy Blvd Corridor Safety Improvements	10180	Hollywood Theatre; Oregon State Bank Building
Sandy Blvd ITS	10301	Hollywood Theatre; Oregon State Bank Building
Scholls Ferry Improvements	10577	Watkins, J. F., House
SE Powell Blvd ITS Improvements	12213	Gatehouse, Portland City Reservoir No. 2
SE Yamhill /Taylor Couplet	11793	International Harvester Company Warehouse; Enterprise Planing Mill
Sixties Neighborhood Greenway	11821	Wells--Guthrie House
South Shore Pathway	11396	Bates, John M. and Elizabeth, House No. 4
Springwater Gap Trail	10159	Portland Railway, Light and Power Sellwood Division Carbarn Office and Clubhouse
Vista Bridge Renovation	11789	Vista Avenue Viaduct
W Burnside Corridor Improvements	10250	Campbell, David, Memorial; Hill Hotel
W Burnside St/Rd ITS Improvements	12238	Campbell, David, Memorial; Flatiron Building; Broadway Hotel; Hill Hotel; Hotel Alma
ETC: East Burnside/SE Stark Enhanced Transit Project	12030	Campbell, David, Memorial; Flatiron Building; Page and Son Apartments; Murphy, Paul C., House; Broadway Hotel; Hill Hotel; Hotel Alma; Burnside Bridge
ETC: Lombard/Cesar Chavez Enhanced Transit Project	12034	Kendall, Joseph, House; Piper, Charles, Building; Oregon State Bank Building; St. Johns Signal Tower Gas Station; Ruby, Alfred C. and Nettie, House; Yeon, John, Speculative House
ETC: NE MLK Jr Blvd Enhanced Transit Project	12027	Clovelly Garden Apartments; West, Nathaniel, Buildings; University Club; New Logus Block; Osborn Hotel; West's Block; St. James Lutheran Church; Italian Gardeners and Ranchers Association Market Building; Oregon Portland Cement Building; Cumberland Apartments; Ladd Carriage House; Vancouver-Portland Bridge; Hawthorne Bridge

Project Name	RTP ID	Historical Places List
ETC: NE Sandy Blvd Enhanced Transit Project	12028	Hollywood Theatre; Bank of California Building; Equitable Building; Sovereign Hotel; Wells Fargo Building; Lipman--Wolfe and Company Building; Bedell Building; Wilcox Building; Page and Son Apartments; Selling Building; Broadway Hotel; Lumbermen's Building; Kress Building; Public Service Building and Garage; Corbett Brothers Auto Storage Garage; Oregon State Bank Building; Ambassador Apartments; Burnside Bridge
ETC: SE Belmont Enhanced Transit Project	12033	Campbell, David, Memorial; Spalding Building; Commodore Hotel; Hyland, Olive and Ellsworth, Apartments; Postal Building; Elks Temple; Dekum, The; Waldo Block; Imperial Hotel; Arminius Hotel; Wilcox Building; Deere, John, Plow Company Building; Weist Apartments; Smith, Blaine, House; Packard Service Building; Hill Hotel; Neighbors of Woodcraft Building; Morgan Building; Genoa Building; Stevens Building; Yale Union Laundry Building; Morrison Bridge
ETC: SE Powell Blvd Transit Project	12035	Bank of California Building; Oregon Cracker Company Building; Equitable Building; Sovereign Hotel; Wells Fargo Building; Lipman--Wolfe and Company Building; Bedell Building; Wilcox Building; Gatehouse, Portland City Reservoir No. 2; New Houston Hotel; Selling Building; Lumbermen's Building; Kress Building; Public Service Building and Garage; Ambassador Apartments; Harrison Court Apartments
Water Ave Corridor Improvements and Realignment	11786	Auto Freight Transport Building of Oregon and Washington; Enterprise Planing Mill
Water/Yamhill Traffic Signal	11839	Enterprise Planing Mill
ETC: SW Beaverton-Hillsdale Hwy Enhanced Transit Project	12032	Bank of California Building; Equitable Building; Sovereign Hotel; Wells Fargo Building; Lipman--Wolfe and Company Building; Bedell Building; Wilcox Building; Selling Building; Broadway Hotel; Lumbermen's Building; Kress Building; Public Service Building and Garage; Corbett Brothers Auto Storage Garage; Ambassador Apartments; Harrison Court Apartments; Swetland Building

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

2.3.6 Urban heat islands

This analysis looks at the intersection of projects with urban heat islands in the greater Portland region.

Table 11 Projects intersecting with urban heat islands

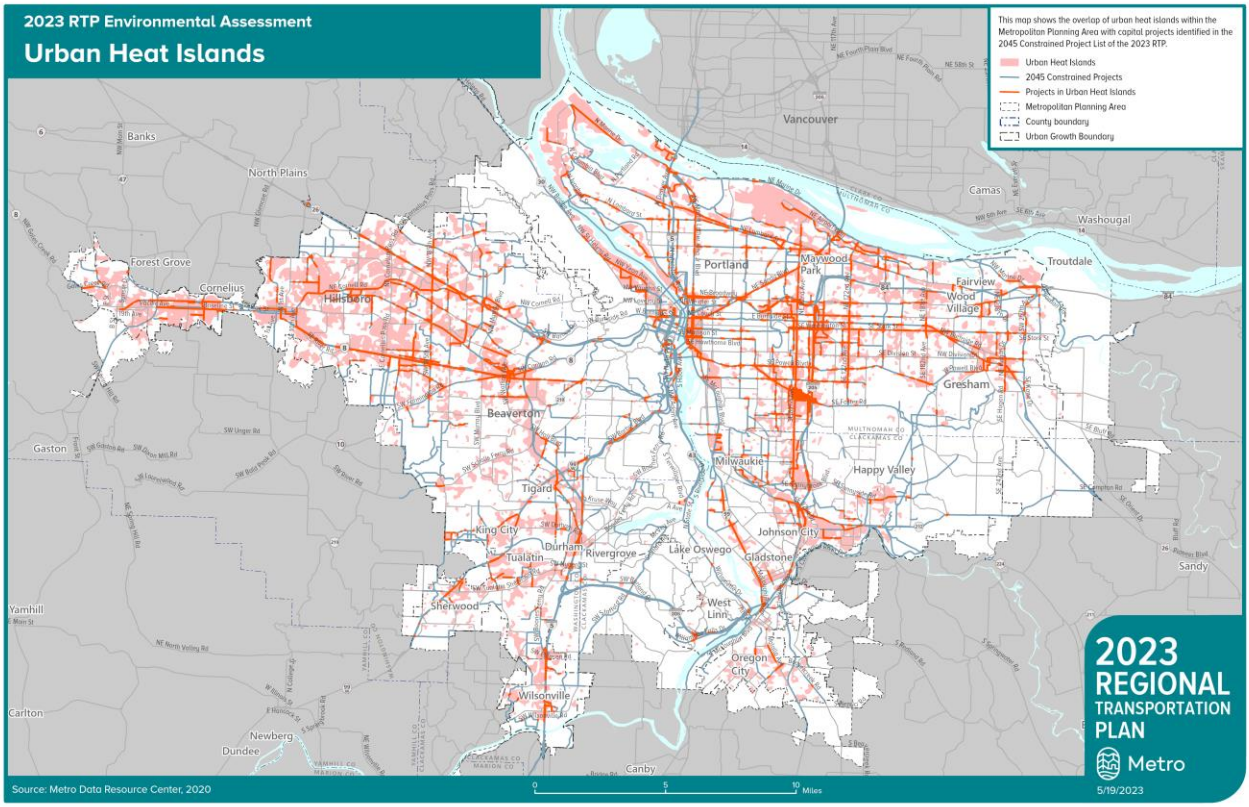
Environmental Concern Area Name	# of projects	% of projects
Urban Heat Island	504	77%

Note: Maintenance and operations projects are excluded from the analysis. Analysis is for projects on the fiscally constrained list of projects, of the 1,066 projects on the list, 655 capital projects were analyzed.

The analysis shows that 7% of capital projects intersect with urban heat islands, using Metro's Urban Heat Island Index (2020). Heat islands are urban or developed areas that experience higher than average temperatures due to heat retained or even amplified by the built-out urban environment. Metro's methodology identifies areas with the highest susceptibility to extreme urban heat conditions. The data displays the difference in surface temperature from the regional average. Attachment 6 provides the methodology identifying the Metro urban heat island index.

The analysis also shows that 61% of the projects intersecting urban heat islands are in areas identified as Equity Focus Areas by Metro.

Figure 11 Projects intersecting with Metro Urban Heat Islands Map



Section 3. Methodology and Data

Metro developed a simple methodology to answer the following questions for the environmental assessment:

1. What percentage of the region's 2023 RTP transportation projects are in proximity to and may have a potential conflict with the region's resource areas and therefore requires further assessment of environmental considerations as the project goes through more detailed planning, project development and implementation?

2. What percentage of the region's 2023 RTP transportation projects are in proximity to and may have a potential conflict with designated historic resources, and therefore requires further assessment as the project goes through more detailed planning, project development and implementation?

3. What percentage of the region's 2023 RTP transportation projects are in proximity to and may have a potential conflict with federally recognized tribal lands, and therefore requires further assessment as the project goes through more detailed planning, project development and implementation?

To answer these questions, Metro took the following steps:

1. Consulted with Federal, State, and Tribal land management, wildlife, and regulatory agencies, and Metro Parks and Nature staff, in the RTP planning process to review the RTP update work plan, develop the data, methods, and approach used in the RTP environmental assessment and to review and refine identified mitigation activities.

2. Assembled datasets listed in Table 12.[39]

3. Added a 100' buffer from the center of the line or point in either direction (200' diameter) for all capital projects in the RTP project list. A 100' buffer is used because most of the projects are represented as centerlines so using a 50' buffer on each side would, in some cases, barely place the buffer outside the right-of-way; this is especially true for highways and throughways. Additionally, many of the environmental layers are mapped with limited precision, for example streams and wetlands may move over time, so a wider buffer helps account for these variations. The downside of this approach is a wider buffer ends up being applied to regional trails and other projects with a relatively narrow right-of-way. Polygon projects with areas less than 138,208,177 sq ft are included in the analysis but not buffered. Typically, there are very few polygons that

39 Metro and many partners from the Intertwine Alliance are actively working to improve regional prioritization data. Coordination with Metro staff is the best way to ensure the most current data are used in project planning.

met the area criteria, so the bulk of the analysis is for projects with point and line geometry. For this analysis, only 3 polygons met that size criteria.

4. Used Geographic Information System (GIS) mapping software to intersect capital projects in the RTP financially constrained list with the environmental and historical places data listed in Table 12.

5. For each data, found the number and percent of projects intersecting the environmental and historical places data. See Attachment 2 for information about the project list.

6. Identified the number by type of projects by 2023 RTP investment category[40] intersecting with environmental and historical places data. Only capital projects are included in the analysis. A capital project is a project to construct either new facilities or make significant, long-term renewal improvements in programs or to existing facilities. Out of the 1,068 projects in the RTP project list, 937 were included in the analysis, while 137 projects did not meet the spatial criteria to be included. Of the 937 capital projects included in the analysis, 657 projects intersected with one or more of the environmental areas of concern

7. The analysis results in a high level "flagging" of projects. Inclusion on this list does not necessarily mean that the project will negatively impact a given environmental or historical resource. Conversely, just because a project is not flagged on the list does not mean that there are not potential environmental or historical places impacts.

3.1 Data and Sources

Table 12 Data and Sources

Dataset	Type and Source of Data
Geospatial project information for proposed transportation projects	GIS data provided by transportation agencies
Regional Conservation Strategy High Value Habitat (top 25% scoring) Areas Inventory (2013)[41]	GIS data The Intertwine Regional Conservation Strategy http://www.regionalconservationstrategy.org/page/home

[40] The investment categories included in the analysis are: Mega Project, Active Transportation: Pedestrian, Active Transportation: Bicycle, Active Transportation: Pedestrian & Bicycle, Freight, Roadways (Capital), Bridge (Capital), Throughways, Transit: High Capacity, Transit: Better Bus, Transit-Oriented Development (TOD). While TOD projects were included in the analysis, the 4 TOD projects were in GIS as large polygons, so no projects in this category were actually included in the analysis.

[41] Regional Conservation Strategy high value habitat areas are those areas with the top 25% modeled score of high value habitat or riparian quality. Habitat quality took into account factors such as habitat interior, influence of roads, total patch area, relative patch area, habitat friction, wetlands, and hydric soils. The riparian areas took into account criteria of floodplains, distance from streams, and distance from wetlands. The analysis and modeled scoring was conducted for the entire Portland-Vancouver region and conducted through a collaborative effort with partners across the region and topic area experts through the development in the Resource Conservation Strategy process. More detail about the high value habitats can be found at www.regionalconservationstrategy.org

Dataset	Type and Source of Data
Metro Title 13 Habitat Conservation Areas Layer (2005)[42]	GIS data Metro Data Resource Center, OregonMetro.RLIS https://rlis-discovery-drcmetro.hub.arcgis.com/
White Oak: presence of Oregon white oak trees (Quercus garryana), and whether the Oak Prairie Work Group has identified the oak area as a high priority	GIS data The Intertwine and Oak Prairie Work Group (https://www.theintertwine.org/projects/oak-prairie-work-group) https://databasin.org/maps/06b9e1ffb404403fa6d0079c69989289/active/ Oak data viewer: https://drcmetro.maps.arcgis.com/apps/MapSeries/index.html?appid=c79f386100d340e2999ea7ec6e1dc0d4 Access data locally at T:\zNAPP_GIS\mData\habitat\Oak2022\OakOPWG_2020_2022.gdbOakWoodlandPatches
Habitat Connectivity Omniscape modeled	GIS data from The Intertwine: Regional Habitat Connectivity Working Group
ODFW Conservation Opportunity Areas (2016)[43] Conservation Opportunity Areas data, maps and information can be found in the Oregon Conservation Strategy , here: http://oregonconservationstrategy.org/conservation-opportunity-areas/	GIS data Oregon Department of Fish and Wildlife, the Oregon Conservation Strategy https://databasin.org/datasets/9f79ce2035b7402fb60ef70e63c72142
Oregon Fish Habitat Distribution Data (fish-bearing streams, including essential salmon habitat and lamprey)	GIS data Oregon Department of Fish and Wildlife https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=1167.xml Lamprey https://maps.dsl.state.or.us/esh/
Oregon Fish Passage Barriers (2020) [44]	GIS data from the Oregon Department of Fish

[42] Information on the date in which data was created or updated is available in the Metro "RLIS Metadata Viewer" under the data "time period of content" date listed.

[43] Multiple data sets were used to identify the boundaries of the Conservation Opportunity Areas:

- Wildlife (Amphibians, Birds, Mammals, Reptiles) (multiple data sources)
- Fish (ODFW Crucial Habitat Assessment: Aquatic Species of Concern)
- Habitats (multiple data sources)
- Climate Change (TNC Topo-Climate Diversity Model and Willamette River Cold Water Sources)
- Floodplains (FEMA 100-year flood zones)
- Barriers to Animal Movement (TNC Resistance Model and Species Permeability Model)
- U.S. Geological Survey (USGS) Protected Areas Database

[44] The following types of fish passage barriers were included in the analysis: Bridge, Culvert, Other and Unknown. Of those fish passage barrier types, those with the status of Blocked and Partial, Passable and Unknown and UnkAnad ("unknown passage within the range of anadromy") were included in the analysis. Passable barriers were included to flag projects that would need to preserve passage and possibly make improvements.

Dataset	Type and Source of Data
	and Wildlife Available at: https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=44.xml https://www.dfw.state.or.us/fish/passage/inventories.asp Metro included the following types of fish passage barriers in the analysis: Bridge, Culvert, Other and Unknown. Within these types, those with the status of Blocked and Partial, Passable and Unknown and UnkAnad ("unknown passage within the range of anadromy") were included in the analysis. Passable barriers were included to flag projects that would need to preserve passage or make improvements.
National Wetlands Inventory (NWI), Local Wetlands Inventory (LWIs) and RLIS wetlands inventory. (SWI (Statewide Wetlands Inventory) (includes the NWI and LWI and DSL approved delineations, subsets of the National Hydrography Dataset (NHD) and subsets of the NRCS combined SSURGO/STATSGO dataset for Oregon[45] may be used in future analysis.	GIS data from the Oregon Department of State Lands https://www.oregon.gov/dsl/WW/Pages/SWI.aspx Local inventory: https://www.oregon.gov/dsl/WW/Pages/Inventories.aspx There are no GIS data for the DSL approved delineations documents, however, DSL does provide cities and counties with the approved mapping with their copy of the approval letter. Some local governments with the capacity to do so have digitized this mapping. The datasets that make up the SWI may either be brought into local GIS using DSL's services or may be downloaded and configured to match the SWI rendering using the directions in the "How to Configure" document found at the bottom of the SWI web page.
Title 3 Land (2006) delineates places protected by the Stream and Floodplain Protection Plan	GIS data Metro Data Resource Center, OregonMetro.RLIS https://rlis-discovery-drcmetro.hub.arcgis.com/ https://rlisdiscovery.oregonmetro.gov/datasets/drcMetro::title-3-land-1/about

[45] For the purposes of planning/scoping level of work the SWI provides better information than the NWI alone both for waters, as represented by the NHD subsets, and representing wetlands that are likely unmapped on the NWI including small, forested, seasonal and farmed wetlands. These areas are captured by the "SWI soils subsets" as a "flag" showing where these unmapped wetlands might exist. In all cases and by rule (141-086-) within their study areas the approved LWI mapping replaces the NWI as the LWIs are the approved and adopted Goal 5 documents and are more accurate than the above listed SWI datasets, including the NWI (other than approved delineations).

Dataset	Type and Source of Data
FEMA flood hazard areas and floodplains (multiple years): 100-year Flood Plains (FEMA, January 2023) This is an export of FEMA's National Flood Hazard Layer that shows the following categories (regulatory floodway, 1% annual chance flood event, the 0.2% annual chance flood event, and areas of minimal flood risk, areas with reduced flood risk due to levee).	GIS data from FEMA Available at https://rlis-discovery-drcmetro.hub.arcgis.com/datasets/bce509afe2b046bca63888feae7d48ad/about This is a copy of the National Flood Hazard Layer clipped to the region republished by Metro.
Wildlife Collisions (Animal Incident) Data on ODOT highways (2009-2022)	ODOT (Metro requested the data from ODOT; provided to Matthew Hampton 03/03/23) Metadata: https://geoportalprod-ordot.msappproxy.net/geoportal/catalog/search/resource/details.page?uuid=%7B1138484E-89A5-4456-9E24-44E5F2369CB2%7D
2020 Urban Heat Index as derived from LandSat Data – Sorted by quantile classification with 5 classes, and select the top fifth quantile, areas with the greatest difference between their surface temperature and the regional average.	Satellite acquired difference in surface temperature from the regional average. Source: Landsat, LIDAR, Metro's Data Resource Center. Available at the Regional Barometer: https://regionalbarometer.oregonmetro.gov/pages/climate-adaptation Metro data: \\alex\work\plan\drc\projects\22036_UHI_2020\C_Data
Historic properties data from the National Register of Historic Places	GIS data from the National Register of Historic Places Database Available at: https://www.nps.gov/subjects/nationalregister/database-research.htm
Bureau of Indian Affairs Federal Indian Land Area Representation (LAR) Dataset The LAR dataset depicts the exterior extent of a Federal Indian land area. Not all Federally-recognized Tribes have a designated land area; therefore, they may not have an associated land area represented in the land area dataset. There are currently no Federally recognized Tribal lands in the metropolitan planning area.	GIS data from U.S. Department of the Interior Indian Affairs; branch of geospatial support https://www.bia.gov/bia/ots/dris/bogs https://bia-geospatial-internal.geoplatform.gov/indianlands/

3.2 Environmental data not included

As noted in the Purpose section, greenhouse gas emissions, air quality, and environmental justice and equity impacts are not included in this assessment and instead are addressed separately in Appendix J and Chapter 7.

Other data, listed below, has been suggested for inclusion by the Federal Highway Administration and Environmental Protection Agency. Metro has not included these due to a lack of a comprehensive regional database, not readily available and/or outdated and/or incomplete data. For future updates of the Regional Transportation Plan, Metro may explore using EPA's NEPAssist for additional datasets.[46]

These data should be considered as projects are planned and developed.

- Scenic/Historic/Backcountry Roads
- Superfund sites
- Brownfield sites
- Hazardous waste (RCRA) sites
- Previous ODOT mitigation sites
- Potential ODOT mitigation banks
- Division of State Lands existing mitigation banks
- Impaired streams and waterbodies/ water quality limited bodies [303(d) list (defined by the Department of Environmental Quality)
- National Marine Fisheries and U.S. Fish and Wildlife recovery/conservation plans

Oregon State law includes protections regarding the safekeeping and disclosure of information regarding archeological resources, including ORS 192.501(11) which protects the sharing of location information for archaeological sites in Oregon. [47] As a result, archeological data is not included in the assessment; however, this is important data for transportation planning agencies to consult on with appropriate agencies, including Oregon State Historic Preservation Office, when planning projects.

46 NEPAssist is a web-based application that draws environmental data dynamically from EPA GIS databases and web services, providing immediate screening of environmental assessment indicators for a user-defined area of interest. Datasets include impaired streams and waterbodies; and Superfund, Brownfields, and hazardous waste (RCRA) sites. NEPAssist is available at https://www.epa.gov/nepa/nepassist.

[47] ORS 97.740, ORS 358.905-358.961, ORS 390.235, OAR 736-051-0090 and ORS 192.501(11).

Section 4. Mitigation Approach, Activities, and Resources

This section includes an overview of mitigation activities and resources that are used by governments and transportation agencies to preserve, restore, and maintain the environmental functions affected by transportation projects in the RTP. The information focuses on policies, programs, and strategies, rather than project specific mitigation. The mitigation activities listed here were identified by Metro in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies.

Mitigation means the reduction of adverse effects of a proposed project by considering, in the following order:[48]

1. Avoiding the impact altogether by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures.
5. Compensating for the impact by replacing or providing comparable substitute water quality resource areas or habitat conservation areas.

Best practice for transportation agencies is to identify and apply mitigation activities using this hierarchical 'avoid, minimize or mitigate' approach. This ordered approach is known as "sequencing" and involves understanding the affected environment and assessing transportation effects throughout the project development process. As is clear in the name of the approach, avoiding disturbance of habitat is most desirable to preserve these resources, and where transportation improvements do have negative impacts, such impacts should be minimized and mitigated. Transportation agencies should follow this sequence when planning and scoping projects.

It is important for transportation agencies to identify negative impacts and mitigation activities early in the planning process, and to document needs and solutions throughout the planning and project development process. Early consideration of environmental

[48] Definition of mitigation is from TITLE 10: FUNCTIONAL PLAN DEFINITIONS, 3.07.1010 Definitions, of the Urban Growth Management Functional Plan https://www.oregonmetro.gov/sites/default/files/2018/04/16/urban-growth-management-functional-plan-04162018.pdf

impacts also helps address National Environmental Policy Act (NEPA) and other requirements more effectively.

Specific project mitigations are developed as part of the environmental review and permitting process during project development activities, and may be established in consultation with numerous Federal, State, Tribal, and local agencies as well as interested parties responsible for and interested in environmental stewardship. Identification of potential transportation impacts during project development is done using Title 3 and Title 13 resource inventory data as a baseline, with acknowledgement that this data may be complemented with more current, jurisdictionally adopted inventory data.

It is cheaper and more effective to prevent water pollution and species declines through mitigation activities such as strategic habitat protection and restoration than it is to clean up polluted streams and rebuild species populations and habitats after they have declined.

Table 13 provides a short list of mitigation activities by environmental resource or mitigation area.

Table 13 Mitigation activities by environmental resource or mitigation area

Mitigation Activities	Regional Conservation Strategy high value habitat	Wildlife corridors	Oregon white oak habitat	Vegetation and wildlife	Fisheries and fish bearing streams	Wetlands and waterways	Flood hazard areas/floodplains	Threatened and endangered species	Stormwater management	Soil erosion/ sediment control	Historic resources	Air pollutants, including greenhouse gases
Allow narrow street right-of-ways through stream corridors	●	●	●	●	●	●	●	●	●	●		
Create new wetland areas at ratios established by the permitting agency	●	●		●	●	●	●	●	●	●		
Restore or rehabilitate damaged wetlands and waterways	●	●		●	●	●	●	●	●	●		
Purchase wetland credit acres from an existing wetland mitigation bank within the same watershed	●	●		●	●	●	●	●	●	●		

Prevent sedimentation and erosion to the greatest extent possible	●			●	●	●	●	●	●	●		
Reduce habitat fragmentation and maintain wildlife travel routes and fish passage by strategic placement of projects	●	●	●	●	●	●	●	●				
Restore all fish and wildlife habitat to pre-construction condition and enhance if possible	●	●	●	●	●	●	●	●				
Screen sensitive habitats from transportation facility view and noise	●	●	●	●	●	●		●				
Enhance vegetation associated with wetlands and water courses for wildlife	●	●		●	●	●		●				
Limit in-water construction to designated fisheries windows					●							
Limit fill within floodplains and effects to floodplain functions					●		●					
Carefully integrate fencing into the landscape to guide wildlife toward crossings under, over, or around transportation corridor[49]	●	●		●				●				
Use bridge crossings rather than culverts wherever possible, unless a culvert would provide better wildlife passage	●	●			●			●				

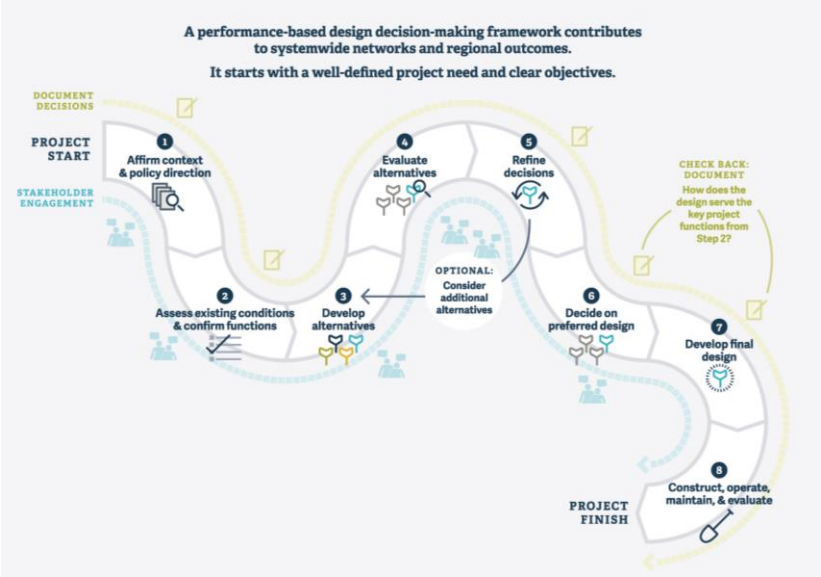
[49] Wildlife crossings: Providing safe passage for urban wildlife, Metro (2009).

If culverts are utilized, install slab, arch, or box type culverts, preferably using bottomless designs that more closely mimic stream bottom habitat	●	●			●			●				
Design stream crossings for fish passage with shelves and other design features to facilitate terrestrial wildlife passage	●	●		●				●				
Include appropriate wildlife crossings	●	●	●	●	●							
Extend vegetative cover through the wildlife crossing in the migratory route, along with areas for wildlife to shelter	●	●	●	●		●		●				
Use native trees and plants when replanting or adding vegetation	●	●	●	●		●	●			●		
Minimize light pollution by following dark sky best practices[50]	●	●	●	●	●	●		●				
Preserve and maintain existing trees and tree canopy coverage, and plant trees, where appropriate, to maximize future tree canopy coverage	●	●	●	●		●	●		●	●		●
Document historic assets and use context-sensitive design of new or renovated infrastructure to complement existing streetscape or architectural features											●	

[50] Best practices can be accessed here: https://www.nps.gov/articles/000/protecting-tranquility-in-a-bright-noisy-world.htm
and Cinzano P., Falchi F. Elvidge C. 2001. The First World Atlas of the Artificial Night Sky Brightness, Monthly Notices of the Royal Astronomical Society, 328, 689-707. [646 KB PDF]

4.1 Use best available data

Transportation agencies should use the best available environmental data early in the planning and project scoping process. Even if the data is not required through regulation, seeking out the most up-to-date and comprehensive data will provide a better understanding of the environmental resources that need to be protected and conserved. Using a performance-based decision-making process in conjunction with the avoid, minimize, mitigate approach and documenting environmental impacts early in the process is an effective approach.



Source: Metro Designing Livable Streets and Trails Guide
https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails

In addition to required data, such as Title 3 Lands and Title 13 Habitat Conservation Areas, other natural resource data should be used for transportation planning, including:

- Essential Salmonid Habitat (ESH)[51]
- Regional Conservation Strategy
- Oak Prairie High Priority Area
- Habitat Connectivity (Omniscape)
- Locations of wildlife collisions

[51] The ESH dataset is determined by ODFW and stewarded by DSL. The significance is that all ground disturbance within ESH waters and hydrologically connected wetlands requires DSL permits. https://maps.dsl.state.or.us/esh/ Salmonid critical habitat data available at: http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/salmon_and_steelhead_listings/steelhead/lower_columbia_river/lower_columbia_river_steelhead.html

- Conservation Opportunity Areas
- Willamette River Greenway Inventory includes fish and wildlife habitat[52]

4.2 Consult with tribes, natural resource agencies and natural resource scientists early

Formal consultations with tribes and Federal and State resource agencies in the RTP planning process illustrates the importance of early assessment of environmental impacts early in the process of developing projects.

Ongoing environmental mitigation consultation with relevant federal and state agencies occurs through Metro's Transportation Policy Alternatives Committee (TPAC) and Joint Policy Advisory Committee on Transportation (JPACT), which includes representatives from the Oregon Department of Environmental Quality (DEQ), the Oregon Department of Transportation (ODOT), and port and transit districts; the Metro Technical Advisory Committee (MTAC) and Metro Policy Advisory Committee (MPAC), which include representatives from the Oregon Department of Land Conservation and Development (DLCD), and port and transit districts.

As projects develop, a multidisciplinary project team improves decision-making to develop design-based solutions Agencies should strive to create multidisciplinary project teams that collaborate throughout the planning and design process. Including multidisciplinary technical staff and teams helps ensure the needs of the community are addressed, that projects are feasible and that desired outcomes are met.

Involving people with relevant technical skills early in the project in areas such as civil engineering, landscape architecture, natural resource preservation, cultural resources, and geotechnical engineering, particularly in developing and evaluating alternatives, allow teams to identify and address feasibility or implementation challenges early on.

Consulting with interested and federally recognized tribes and Federal, State, and regional agencies early in the process, and involving people with policy and community engagement skills throughout the development of the final design can help ensure that later design decisions continue to meet environmental regulations align with policy goals and community needs and priorities.

[52] Willamette River Greenway Inventory https://www.portlandoregon.gov/bps/article/508803 and Goal 15 Willamette River Greenway https://www.oregon.gov/LCD/docs/goals/goal15.pdf

4.3 Mitigation activities for vegetation and wildlife

Mitigation for vegetation and wildlife impacts should be coordinated with mitigation for other related environmental impacts, such as wetlands.

Mitigation strategies available include:

- Avoiding disturbance of the area.
- Reducing habitat fragmentation and maintaining wildlife travel routes by strategic placement of the projects.
- Screening sensitive habitats from project view and noise.
- Installing appropriate wildlife crossings.
- Enhancing vegetation associated with wetlands and water courses for wildlife.

4.4 Mitigations activities for fisheries

It is the policy of the State of Oregon to provide for the upstream and downstream passage for native migratory fish. Concerns with stream crossings include the potential for water quality degradation during construction, long-term storm water treatment and loss of floodplain functions. Agency coordination with the project design team should develop potentially effective stream crossing methods and stormwater management plans.

Five touchstones for preserving a healthy river:[53]

- Hydrology
- Geomorpholoy
- Connectivity
- Native riparian vegetation
- Native aquatic biota

Fish passage barriers can be man-made or natural blockages to the free movement of fish species through a waterway. Upstream blockages that prevent spawning of fish, especially those that are identified as threatened or endangered, are of significant importance. Fish barriers can come in the form of culvert blockages, dams, shallow water, or a combination of factors that prevent fish from reaching their spawning grounds. Transportation projects that may develop new barriers, or intersect existing barriers will require adequate fish passage as directed by State law.

Mitigation strategies available include:

[53] Umatilla River Vision

- Following New 2023 Fish Passage Administrative Rules - Div 41254 including 635-412-0035 Fish Passage Criteria and 635-412-0040 Fish Passage Mitigation Criteria
- Limiting in-water construction to designated fisheries windows.
- Provide treatment of storm water run-off.
- Limit removal of riparian vegetation and restore/replant all areas temporarily distributed during constructions.
- Limit fill within floodplains and effects to floodplain functions.
- Construct bridges or open bottom culverts.
- Provide restoration and enhancement of fish habitat.
- Green Stormwater Infrastructure (GSI) is effective at reducing mortality rates for coho exposed to stormwater, and relatively inexpensive mitigation measures like bioswales can dramatically improve water quality and promote salmon survival.

4.5 Mitigation activities for wetlands and waterways

Generally, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.[55] Restoration of wetland hydrology to more historical patterns (i.e., before the Columbia River dam era) has the potential to reverse the levels of plant invasions and at least partially restore native plant communities.[56]

Mitigation strategies available include:

- Designing transportation facility to avoid or minimize the “footprint” of new impervious surfaces.
- Creating new wetland areas at ratios established by the permitting agency.
- Restoring or rehabilitating damaged wetlands and waterways.
- Purchasing wetland credit acres from an existing wetland mitigation bank within the same watershed, if available.

[54] https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=2988
[55] http://www.epa.gov/owow/wetlands/what/definitions.html
[56] Intertwine Alliance Regional Conservation Strategy https://www.theintertwine.org/sites/default/files/Regional%20Conservation%20Strategy%20for%20the%20Greater%20Portland-Vancouver%20Region_0.pdf

- Providing a vegetated corridor to separate Protected Water Features from development.
- Maintaining or reducing stream temperatures;
- Maintaining natural stream corridors.
- Minimizing erosion, nutrient and pollutant loading into water
- Filtering, infiltration and natural water purification.
- Stabilizing slopes to prevent landslides contributing to sedimentation of water features.

Wetlands and waterway mitigation should be coordinated with other environmental mitigation planning to minimize mitigation costs and to ensure a comprehensive approach to mitigation is achieved. In 2008, EPA and the U.S. Army Corps of Engineers, through a joint rulemaking, expanded the Clean Water Act Section 404(b)(1) Guidelines to include more comprehensive standards for compensatory mitigation.[57]

Mitigation Banks

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 or a similar state or local wetland regulation. A mitigation bank may be created when a government agency, corporation, nonprofit organization, or other entity undertakes these activities under a formal agreement with a regulatory agency.

[57] Refer to the Compensatory Mitigation for Losses of Aquatic Resources under CWA Section 404 (Final Rule). Available at https://www.epa.gov/cwa-404/compensatory-mitigation-losses-aquatic-resources-under-cwa-section-404-final-rule

Table 14 Wetland mitigation banks serving the greater Portland region (as of July 2018)[58]

For service area maps and contact information for each bank:
https://www.oregon.gov/dsl/WW/Pages/MitigationMap.aspx

Foster Creek Bank
Nearest City: Estacada
Service Area: Lower Clackamas basin and Abernethy Creek watersheds
Potential wetland credits remaining: 8

Butler Mitigation Bank
Nearest City: Hillsboro
Service Area: Tualatin watershed
Potential wetland credits remaining: 30

Tualatin Valley Environmental Bank
Nearest City: Hillsboro
Service Area: Tualatin watershed
Potential wetland credits remaining: 12

Halfmile Lane In-Lieu-Fee Mitigation Project
Nearest City: Forest Grove
Service Area: Tualatin watershed
Potential wetland credits remaining: 8
Currently offering stream credits

Bobcat Marsh Mitigation Bank – Available ONLY to Port of Portland, City of Hillsboro, and ODOT
Nearest City: Hillsboro
Service Area: Tualatin watershed
Potential wetland credits remaining: 3.7

4.6 Mitigation activities for floodplains and flood hazard areas

A floodplain is an area designated either by the state or federal governments as being susceptible to flooding (the inundation of water in an otherwise dry area). Any development within a regulated flood hazard zone or floodplain is required to take all reasonable measures necessary to minimize adverse environmental impacts resulting from the construction of the proposed project.

Title 3 of the Urban Growth Management Functional Plan applies to development in water quality resource and flood management areas and was adopted in 1997. Title 3 includes the Metro Water Quality and Flood Management Area Map and a model ordinance. The

[58] For service area maps and contact information for each bank:
https://www.oregon.gov/dsl/WW/Pages/MitigationMap.aspx

purpose of Title 3 is to protect the beneficial water uses and functions and values of resources within the water quality and flood management areas by avoiding, minimizing, or mitigating the impact on these areas from development activities.

Mitigation strategies available include:

- Building in and maintaining effective drainage systems, including ditches, culverts, and catch basins are critical in infrastructure improvements and maintenance.
- Restoring temporarily disturbed vegetation with vegetation of equal or higher quality.
- Restoring all habitats to their pre-construction condition.
- Restoring all land and water features to their pre-construction condition.
- Preventing sedimentation and erosion to the greatest extent possible.

4.7 Mitigation activities for stormwater management

Impervious surfaces have been linked to flooding and changes in hydrology, the shape of streams, water quality, water temperature and the biological health of waterways.

Mitigation activities available include:

- Limit construction of impervious surfaces.
- Use Green Infrastructure and low impact development approaches such as pervious surfaces and the use of natural landscaping that encourage absorption of stormwater at the source rather than channeling it elsewhere are encouraged where practicable.
- Preserve and maintain existing trees and tree canopy coverage, and plant trees, where appropriate, to maximize future tree canopy coverage.

With respect to runoff quality, recent research by the National Marine Fisheries Service and Washington State University points to the high aquatic toxicity of runoff from roadway surfaces. This toxicity is directly proportional to traffic volumes. Stormwater facilities that are vegetated and contain compost-amended soils represent the only currently effective treatment options to address these often unidentified toxic compounds. Such facilities are also required to be prioritized in current National Pollutant Discharge Elimination System (NPDES) municipal stormwater permits across the region.

In 1987 Congress amended the Clean Water Act to include nonpoint sources of pollution. Nonpoint pollution occurs when runoff from land carries pollutants to receiving waters. Section 402 of the CWA provides the legal basis for the National Pollutant Discharge

Elimination System (NPDES) permit program, which regulates point and nonpoint discharges. The U.S. Environmental Protection Agency (EPA) has delegated the implementation of the NPDES program to the state of Oregon. The Oregon Department of Environmental Quality administers the NPDES program through Oregon Revised Statute (ORS) 468B and associated Oregon Administrative Rules (OAR). ORS 468B.025 explicitly prohibits the discharge or placement of wastes into waters of the state, prohibits the discharge of waste that causes violations of water quality standards, and prohibits violations permit conditions. In addition to Federal requirements, many local jurisdictions have developed storm water management programs that include erosion and sediment control requirements.

Non-point pollution or uncontrolled and untreated stormwater runoff from paved and other impervious surfaces carries pollutants into surface and ground waters, with negative effects on aquatic life, drinking water and recreational resources. Additionally, fast moving surface runoff erodes stream banks, channeling meandering streams into fast moving torrents during storm events. Storm water management rules regulate discharges of pollutants to surface and ground water by controlling the construction of impervious surfaces. These include paved roads and paths, parking facilities, and other development. With respect to runoff quantity, development in the region at increasing density results in less pervious surface available to absorb the combined runoff volumes from transportation surfaces, structures and associated impervious area. Runoff volumes of winter peak flows can more than double from pre-developed conditions in the face of urban development, with associated flow reductions in summer. Climate change is expected to reinforce this pattern. Higher runoff volumes result in channel erosion, aquatic and floodplain habitat degradation, and damage to infrastructure (including transportation infrastructure such as bridges and culverts). Low summer flows reduce the vigor of vegetation that helps stabilize stream banks. Yet more than half of the region, including nearly all the area west of the Willamette River, has subsurface conditions that do not promote easy infiltration of large volumes of urban runoff.

Some communities in the region, such as the City of Portland, have formally adopted these practices. Clean Water Services in Washington County, for example, updated their Design and Construction Standards in 2017. Clean Water Services also has developed a Low Impact Development Approaches (LIDA) handbook – last updated in 2016 – to promote and encourage use of low impact development approaches in the Tualatin River Watershed.[59] The handbook is a supplement to the Standards and is to be used in conjunction with them and other applicable regulations.

[59] The updated standards and low impact development approaches (LIDA) handbook can be accessed at https://www.cleanwaterservices.org/permits-development/design-construction-standards/

4.8 Mitigation activities for soil erosion and sediment control

To minimize unavoidable soil displacement occurring during construction and prevent future soil erosion, Soil Erosion and Sediment Control Plans are developed to prevent pollution of water resources as required by National Pollutant Discharge Elimination System permits and by other laws, permits, agencies and agreements. Soil Erosion and Sediment Control Plans help ensure that the proper soil stabilizing techniques have been fully incorporated into the project design prior to construction. In addition to Federal requirements, many local jurisdictions have developed stormwater management programs that include erosion and sediment control requirements.

Mitigation activities available include:

- Maintaining natural vegetation to the greatest extent possible.
- Limiting the amount of exposed soil.
- Seeding to establish vegetation in disturbed areas.
- Dust control measures.
- Stabilizing steep slopes.
- Installing silt fencing, sediment barriers and other best management practices to secure the project area.
- Re-vegetating all temporarily disturbed areas with native plants.
- Properly directing, collecting and conveying storm water runoff to reduce the volume and velocity of surface water runoff.

4.9 Mitigation activities for cultural and historic places and resources

Cultural and historical resources are unique, and by nature, irreplaceable. Potential transportation project related impacts may include physical changes to culturally important places, including natural features, historic transportation infrastructure, effects of road widening on cultural and historic places, settings or structures, effects on historic roadside elements, effects of air pollution on resources due to increased traffic, and disturbance or infringement on cultural landscapes. The nature of these impacts is highly site and project specific, and the information about historic resources is constantly evolving.

It is important for each project to be evaluated in the specific context and timeframe in which it is designed with up-to-date information.

There are several state and federal laws and regulations that call for preservation and/or enhancement of historic and cultural resources where appropriate mitigation and design

elements should be addressed. Of specific relevance to transportation projects are Section 106 of the National Historic Preservation Act (NHPA) of 1966 and Section 4(f) of the Department of Transportation Act of 1966.

Section 106 of the National Historic Preservation Act (NHPA) requires all federal agencies to consider the effects of their actions on historic properties. All properties listed in the National Register are protected by the Oregon State Historic Preservation Office.

Mitigation activities available include:

- Avoidance of unique and irreplaceable cultural and historical places and resources.
- Preservation and documentation of these assets along with context-sensitive design of new or renovated infrastructure to complement existing streetscape or architectural features as closely as possible.

4.10 Implement land use plans, air quality, and greenhouse gas reduction strategies

Implementing land use plans and greenhouse gas reduction strategies that will reduce travel by motor vehicle and the need to expand highways and roads are key strategies to protecting the environment. More information about the region's efforts to reduce on-road vehicle emissions can be found in Appendix J.

Activities in these plans that will reduce improve air quality, reduce greenhouse gas emissions, and reduce stormwater runoff:

- Building walkable communities and job centers facilitated by focusing growth and development in designated areas in combination with walking, biking and transit connections;
- supporting state efforts to advance cleaner, more fuel-efficient vehicles, including low- and zero-emission vehicles;
- implementing policies and investments that support increased use of transit, walking and biking, including expanded transit service coverage and frequency and improvements in the right-of-way to increase speed and reliability of buses and MAX;
- improving multimodal network connectivity, including a well-connected network of streets and new biking and walking connections to transit, schools, jobs, downtowns and other community places;
- expanding use of parking management, commuter travel options programs, and household individualized marketing programs
- system management and operations investments to smooth traffic flow, including variable message signs and speed limits, signal timing and ramp metering, transit signal priority, bus-only lanes, and incident response detection and clearance.

These approaches seek to reduce vehicle miles traveled and related vehicle emissions, including greenhouse gas emissions, in accordance with the federal Clean Air Act and Oregon Metropolitan Greenhouse Gas Emissions Reduction Rule.

The Department of Environmental Quality (DEQ) has convened a work group to develop a regional clean air construction strategy for clean diesel equipment and vehicles on select public improvement projects. The region and RTP will adhere to DEQ air quality program changes that are implemented through the State Implementation Plan as part of ongoing implementation of the Transportation Control Measures.

4.11 Resources for Mitigation Activities

- **FHWA Eco-Logical Environmental Review Toolkit** [60] The Eco-Logical approach organizes current methods for addressing natural resource identification, avoidance, minimization and mitigation into a systematic, step-wise process that starts at the beginning of the transportation planning process and concludes with establishing programmatic approaches to recurring natural resource issues that are implemented at the project level.
- **EPA's NEPAssist**. NEPAssist is a web-based application that draws environmental data dynamically from EPA GIS databases and web services, providing immediate screening of environmental assessment indicators for a user-defined area of interest. Datasets include impaired streams and waterbodies; and Superfund, Brownfields, and hazardous waste (RCRA) sites. NEPAssist is available at https://www.epa.gov/nepa/nepassist
- **Protecting Cultural Resources & Transportation**

  When planning transportation projects, it is always important to consider cultural resources and materials. Center for Environmental Excellence AASHTO
- AASHTO Practitioner's Handbook for Complying With Section 7 of the Endangered Species Act for Transportation Projects (November 2016) for an overview and advice on carrying out Section 7 consultation for transportation projects.[61]
- https://www.oregon.gov/odot/Planning/Documents/ODOT%20_Guide_to_Linking_Planning_and_NEPA.pdf

[60] https://www.environment.fhwa.dot.gov/env_initiatives/eco-logical.aspx#:~:text=The%20Eco%2DLogical%20approach%20organizes,programmatic%20approaches%20to%20recurring%20natural

[61] https://environment.transportation.org/resources/practitioners-handbooks/complying-with-section-7-of-the-endangered-species-act-for-transportation-projects/

- **Technical Assistance for Natural Resource Data** – Metro staff are available to provide information and assistance on the most up-to-date natural resource data available as projects are planned and developed. Lori Hennings, Senior Natural Resource Scientist is the key contact for technical assistance. Email: lori.hennings@oregonmetro.gov and phone: 503-797-1940.
- **Metro Complete Streets Program** – published six best practices in transportation design handbooks – (1) Designing Livable Streets and Trails[62] (2019), (2) Green Streets: Innovative Solutions for Stormwater and Stream Crossings (2002), (3) Trees for Green Streets (2002)[63], (4) Green Trails: Guidelines for Environmentally Friendly Trails (2004)[64], (5) Wildlife Crossings (2009)[65], (6) Lighting Regional Trails Best Practices and Recommendations (2016)[66] – to provide design and construction guidelines to minimize transportation impacts on natural resources and wildlife when avoidance is not possible. The first three handbooks are currently being updated and will incorporate and reference the last three more recent handbooks related to trails and wildlife.
- **Top Ten Natural Resource Considerations for Trails Planners** (Regional Active Transportation Plan 2014) The plan recommends "Top 10 Natural Resource Considerations for Trails Planners" and mapped the Regional Active Network with the Regional Conservation Strategy high value habitat areas to show places where these considerations should be applied during future planning, project development and construction.

Top 10 Natural Resource Considerations for Trails Planners (Metro 2014)

1. Engage natural resource experts and professionals early and often.
2. Identify natural resource information sources.
3. Do you really need a trail there?
4. Early reconnaissance on what wildlife or fish species you might disturb – what surveys will you need?
5. Use complementary funding sources to incorporate more wildlife considerations.
6. Engage wildlife experts for surveys and site-specific information.
7. Avoid impacts on fish, wildlife and their habitats. If you can't avoid it, minimize the harm and make up for the damage.
8. Stay out of the water.
9. Some animals need large, private homes; avoid habitat fragmentation.
10. Fish and wildlife need "trails," too; explicitly consider wildlife corridors and barriers.

[62] https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails
[63] https://www.oregonmetro.gov/trees-green-streets
[64] https://www.oregonmetro.gov/green-trails-guidelines-environmentally-friendly-trails
[65] https://www.oregonmetro.gov/wildlife-crossings-providing-safe-passage-urban-wildlife
[66] https://www.oregonmetro.gov/sites/default/files/2019/05/28/LightingRegionTrail_April2016_rev.pdf

- **Climate Smart Strategy** – adopted in 2014 by the Metro Council, the strategy defines policies, strategies and near-term actions to guide how the region integrates reducing greenhouse gas emissions with on-going agency efforts to implement the 2040 Growth Concept and Regional Transportation Plan. Implementation of the strategy, through the Regional Transportation Plan, will reduce stormwater run-off and related water pollution and air pollution, including air toxics and greenhouse gas emissions.
- **Metro Growth Management Program** – This program is responsible for managing the region's urban growth boundary. Land inside the urban growth boundary supports community development and urban services such as roads, water and sewer systems, parks, schools and fire and police protection. The boundary is one of the tools to protect farms, forests and natural areas from urban sprawl and promote the efficient use of land, public facilities and services inside the boundary. In 2007, a system for designating urban and rural reserves was put in place, further honing criteria for bringing land into the boundary.
- **Regional Functional Plans** – Metro's Urban Growth Management Functional Plan (UGMFP) and Regional Transportation Functional Plan (RTFP) direct how local governments implement the 2040 Growth Concept and Regional Transportation Plan. Title 3 of the UGMFP addresses water quality and flood management, Title 13 addresses protection of riparian and upland wildlife habitat and use of habitat-friendly development practices. Metro reviews local plans as they are amended and publishes an annual compliance report. Title 1 of the RTFP addresses system design to ensure the street designs and best practices set forth in the Complete Street program handbooks can be implemented in local planning and project development. Title 1 of the RTFP also provides direction on limiting new street connections and bike and pedestrian accessways that cross water resources. As of February 2023, all cities and counties were in compliance with these functional plan provisions.
- **Metropolitan Greenspaces Master Plan** – Adopted in 1992 by the Metro Council, provides a vision for a regional system of parks, natural areas, greenways, and trails and identifies 57 urban natural areas and 34 trail and greenway corridors that define the green infrastructure for wildlife and people in the Portland metropolitan region.
- **Parks and Nature System Plan** – Adopted in 2016 by the Metro Council, the Parks and Nature System Plan spells out Metro's role in protecting clean water, restoring fish and wildlife habitat and connecting people with nature close to home – and sets priorities for this unique park system into the future. The plan also describes Metro's 17,000-acre portfolio of parks, trails, natural areas and historic cemeteries.
- **Regional Natural Areas Acquisition program** – Initiated in 1996 and expanded in 2006 and again in 2013 and 2016, directs Metro to purchase natural areas, trails and

greenways to be held for future use as open space, parks, trails and fish and wildlife habitat. More than 17,000 acres and 90 miles of river and stream banks have been acquired by Metro since the program was initiated. In addition, Metro has investment more than $90 million to support a broad range of community nature projects across greater Portland, helping to preserve land, restore habitat, build visitor amenities, expand nature education programs and provide outdoor experiences for historically marginalized communities.

- **Nature in Neighborhoods Initiative (Title 13)** – Includes Metro's fish and wildlife protection program, conservation education, and restoration.
- **Nature in Neighborhoods Title 13 Performance Evaluation (2016) –** Recommends continued support and investment in The Intertwine Alliance's Regional Conservation Strategy, continued local government compliance with Title 13, ensure that Title 13 policies are implemented in future urban growth boundary expansion areas and commit Metro to a 2025 review (or earlier) of the Title 13 environmental indicators.
- **Regional Conservation Strategy** – The Intertwine Alliance published the Regional Conservation Strategy in 2012 as a way to identify high value habitat and develop strategies to promote effective protection and enhancement of the region's fish and wildlife habitat, water quality, and other vital ecosystems services through strong, clear vision and strategic, science-based approaches. When combined with its companion document, the Biodiversity Guide for the Greater Portland-Vancouver Region, the Regional Conservation Strategy presents a shared understanding of the nature of our region. It defines the challenges facing local wildlife and ecosystems and offers a vision, framework and tools for moving forward collaboratively to protect and restore our natural systems. The Intertwine Alliance is a coalition of more than 140 private firms, public agencies and nonprofit organizations. Representatives from Alliance partner organizations collaborated for 2 years to create the Regional Conservation Strategy (with its supporting Biodiversity Guide for the Greater Portland-Vancouver Region) to guide the expansion, restoration and management of The Intertwine—the region's network of parks, trails, natural areas and watersheds. The Alliance has also produced management tools, research and best practices resources on urban forestry, public engagement and other topics to advance Regional Conservation Strategy goals. This includes:
- **Regional Urban Forestry Assessment** – Completed in partnership with the Audubon Society and Portland State University.
- **Intertwine trail counts and survey data** – Every September since 2008, volunteers count and survey people who are biking and walking the Intertwine – the region's trails, parks and natural areas – using nationally standardized surveying and recording methods. The count is part of the National Bicycle and Pedestrian Documentation

Project's annual gathering of trail use data at over 90 sites nationwide. Sites are selected by their link to current or future trail projects.

- **Wildlife corridors and connectivity inventory** – The Regional Connectivity Work Group (RCWG) was formed in 2016 to identify key habitat areas and the best remaining, feasible connections between these "anchor" habitats. The group's mission is to "understand, create, and protect connectivity to support an ecologically viable, interconnected habitat system for native fish, wildlife, and plants that allows for healthy populations, safe movement and migration across rural and urban landscapes." The RCWG has created a Connectivity Toolkit that uses GIS to identify wildlife habitat areas and potential connectivity zones, followed by ground-truthing to assess habitat conditions and potential barriers to wildlife movement. The group is currently writing a strategic action plan, which includes a collaborative process for prioritizing the most important remaining habitat and connectivity areas for conservation.
- **Wildlife Corridors and Permeability** – a literature review[67] (April 2010)
- **Oregon white oak distribution inventory** [68] – The Regional Oak Prairie Work Group (OPWG) was formed in 2012 to address conservation needs for declining Oregon white oak habitats and associated species. Only approximately 8 percent of Oregon white oak remains in the Willamette Valley. Oregon white oak is a Habitat of Concern under Metro's Title 13 and a high priority for many agencies and conservation organizations. The group has just completed mapping Oregon white oak on the Oregon side of the Portland-Vancouver Regional Conservation Strategy and the data is publicly available. The OPWG recently completed a Strategic Action Plan, which will guide the group's future collaborative efforts including identifying high priority areas for future conservation. The OPWG coordinates a regional partnership of over 30 public agencies, park districts, non-profits and community-based organizations.
- **Indigenous and Native American Tribes Legacies** – Metro regularly hires a consultant to check Metro-owned sites for Indigenous and Native American Tribes legacies. Metro has developed an application process for the use of cultural resources and public lands that are managed by Metro (such as Metro's parks and natural areas).

[67] https://www.oregonmetro.gov/sites/default/files/2019/08/22/wildlife-corridors-and-permeability-report-April-2010.pdf

[68] There are several ways to access or view the Oregon white oaks habitats data.
Metro download: https://oregonconventioncenter.sharefile.com/d-s472cac9545048b09
ESRI Story Map tool: View the oak data in different ways, including points, oak patch polygons, oak density by two different grid cell sizes, as well as historic vegetation and the top 25% of the Regional Conservation Strategy high value habitat. See https://arcg.is/1OaCCO
Data Basin download : https://databasin.org/maps/813aa1c6e5834a44b5844a07ed1b93ae
Intertwine Alliance data link: https://www.theintertwine.org/projects/oak-prairie-work-group

Members of Native American Tribes and Indigenous communities have the option to bypass this application by coordinating directly with Metro's Indigenous Community Liaison.[69] Additionally, Metro works in partnership with the regional Native American Community Advisory Council to host special events and opportunities for community members to access First Foods and cultural resources in regional parks and natural areas.

- **Metro Culvert Inventory** – Identifies areas where fish passage was blocked. Because this data has not been updated since 2002, Metro relies on culvert data maintained by the Oregon Department of Fish and Wildlife for planning projects.
- **Wildlife Hotspot Crossing Inventory** - In August, 2002, Metro completed a study that compiled wildlife mortality data for the three-county portion of the greater Portland region. It used several sources, including: city, county and state road maintenance department road kill pick-up records; ODOT's Crash Analysis and Reporting Unit; County animal control agencies; and animal care and rehabilitation centers. The study reported more than 2,000 deer and elk deaths between 1992 and 2001 due to collisions with vehicles. The analysis began with a wider scope but was restricted to elk and deer due to limitations of available data—many agencies do not consistently report other wildlife mortalities. Due to the age and limitations of the wildlife hotspot incident data, this information is ancillary rather than comprehensive in nature. In a second study in 2005, the Oregon Department of Transportation used an expert-opinion approach to identify 86 hot spots along state maintained roads in ODOT Region 1. Most of these hot spots are locations where deer-vehicle collisions are frequent, although the experts also identified hot spots that served as crossing locations. ODOT maintains this database and updated the data in 2016 for the 2007-2016 time period for state-owned roadways in the region.
- At the state level, Oregon Department of Fish and Wildlife and Oregon Department of Transportation have undertaken steps to identify wildlife linkages, important wildlife habitat areas that are near or span paved roads. In 2007, Oregon Department of Fish and Wildlife and Oregon Department of Transportation convened workshops to identify these linkage areas. The workshops included state, regional and federal agency staff; transportation maintenance workers and transportation and land use planners. ODOT will combine this information gained from this effort with its wildlife mortality data, daily usage modeling and other information to start identifying possible high priority sites for wildlife crossings. ODFW has just re-started this project to take a

[69] The Indigenous Community Liaison can be reached at indigenouscommunityliasion@oregonmetro.gov or 503-517-6981. Additional information can be found here: https://www.oregonmetro.gov/intertribal-cultural-resources

more science-based approach. This ODFW project was based on best professional opinion, unlike Metro/PSU's Biodiversity Corridor Toolkit.[70]

[70] Additional information can be found here:
https://www.dfw.state.or.us/conservationstrategy/docs/Linkages_Report_Final_2009.pdf
Resulting ODFW map link and metadata here:
https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=806.xml

Section 5. Recommendations for Future Evaluations

This section provides high level recommended actions that Metro's Planning and Development Department have identified to improve future environmental evaluations and consideration of the mitigation strategies identified in this appendix.

1. Engage federal and state resource, land management, wildlife and other regulatory agencies, Tribes and the Metro Parks and Nature Department early and throughout future Regional Transportation Plan update processes, including the development of the work plan for the next update of the plan and confirmation of data and methods to be used in future analysis.[71] The environmental analysis element of work plan for the next RTP update is contingent on Metro Council and JPACT policy direction and adequate resources and data.

2. Continue to support ongoing coordination between Metro's Planning and Development Department and the Parks and Nature Department.

3. Coordinate with Metro's Nature in Neighborhoods Program on implementation of the recommendations outlined in the 2016 Nature in Neighborhoods Title 13 Performance Evaluation.

[71] For example, Clean Water Services has commented that including an analysis of impacts to water quality would be appropriate. DEQ data for water quality limited bodies exists in a regional database although there is some additional detail that could be added.

Attachment 1: Project list assessment fields

An Excel spreadsheet list of projects from the 2023 RTP 'flags' projects that intersect with or fall within a 100-foot buffer of the data listed in **Table 12** is available on the RTP project webpage. Fields with a "1" indicate that the project intersects with the data. Fields with a "0" indicate that the proejct does not intersect/fall within the 100-foot buffer. Projects not included in the analysis because they are not geolocated, indicate "Not Evaluated" in the field. **Table 15**can be used to decipher the field names in the list of proejcts.

Table 15 Field names for list of projects

Environmental Concern Area Name	Field Name in Excel Spreadsheet
Regional Conservation Strategy High Value Habitat Areas	Result_rcs
Title 13 Habitat Conservation Areas	Result_title13
Oak Prairie High Priority Area	Result_oak
Potential Habitat Connectivity (Omniscape) - low, med, and high	Result_habConnect_lowMedHigh
Urban Heat Island	Result_uhi
Wildlife Collisions (ODOT Highways)	Result_roadkill
Conservation Opportunity Areas	Result_coa
All Fish-Bearing Streams	Result_all_fish
Fish Passage Barriers Priority Fish Passage Barriers	Result_barriers Result_priority_barriers
Title 3 Land	Result_title3
Wetlands	Result_wetlands
FEMA Flood hazard areas	Result_floodplain
Historic properties data from the National Register of Historic Places	Result_historic_places
All rivers and streams in the planning area	Result_streams
Essential salmonoid habitat	Result_salmon
February 1996 flood levels	Result_flood96
Potential Habitat Connectivity (Omniscape) - med and high	Result_habConnect_medHigh
Equity Focus Areas	Result_efa
Equity Focus Areas - people of color	Result_efa_bipoc
Equity Focus Areas - limited English proficiency	Result_efa_lep
Equity Focus Areas - low income	Result_efa_li

Attachment 2: Transportation Funding Opportunities for Habitat Connectivity

Created April 2023 by Erin Abernethy (US Fish and Wildlife Service), reviewed by Rachel Wheat (Oregon Department of Fish and Wildlife).
BIL = Bipartisan infrastructure law; HB = House Bill
Blank cells were unknown at the time of document creation

Table 16 Transportation Funding Opportunities for Habitat Connectivity

Grant program	Funder	Max Award or Total Amount	Current Deadline	Year Ends	Funding Focus	Website
HB 4130 (wrapped into budget in HB 5202 and passed)	Oregon Legislature	$7 M (total amount)	Not a competitive process		Projects that will reduce wildlife-vehicle collisions and improve wildlife habitat connectivity throughout Oregon. Funding went directly to ODOT for use.	Link1 Link2 (HB 5202 text and tracking)
HB 2999 (Feb 27, 2023: Referred to Ways and Means, not passed yet)	Oregon Legislature	$5 M (total amount)	Not passed yet		Bill tasks Oregon Department of Transportation wildlife-vehicle collision program to describe and make recommendations for ongoing funding strategy for program. Directs State Department of Fish and Wildlife to carry out projects to support species mobility and habitat connectivity.	Link (HB 2999 text and tracking)
Oregon Conservation and Recreation Fund	Oregon Department of Fish and Wildlife	$50,000 (max award)	March 27, 2023	No end	Projects that protect and enhance the species and habitats identified in the Oregon Conservation Strategy and create new opportunities for wildlife-associated recreation. Projects that have a clear nexus with drought, wildfires, and aquatic resilience were prioritized for funding in the March 2023 call for proposals.	Link

Grant program	Funder	Max Award or Total Amount	Current Deadline	Year Ends	Funding Focus	Website
Many	Oregon Watershed Enhancement Board	$15,000 to over 100k (max awards vary by grant)	Varies	No end	Overall purpose to restore watersheds and habitat for native fish or wildlife, includes crossing projects. Grant programs for land, coastal, and water acquisition, emergency post-fire restoration and drought relief, monitoring, restoration, stakeholder engagement, technical assistance, supporting operating capacity and collaboration, creation of strategic plans, incentives for conservation focused agriculture.	Link
America the Beautiful	National Fish and Wildlife Foundation	$91 M in 2022 / $1 B (total amount through 2027)	April 20, 2023	2027	For locally led ecosystem restoration projects that invest in watershed restoration, resilience, equitable access, workforce development, corridors and connectivity, and collaborative conservation, consistent with the America the Beautiful Initiative.	Link1 (Funding website) Link2 (Press release)
Urban and Community Forestry Program	Forest Service (USDA)	Min $100 K, max $50 M (award) / $1.5 B (total amount)	May 2023		A technical, financial, and educational assistance program, delivering nature-based solutions to ensure a resilient and equitable tree canopy in urban areas.	Link
Many	BIL/ Federal Highways	$350 B (total amount through 2026)	Varies	2026	Used to fund various types of transportation projects and activities.	Link1 (Competitive Grants) Link2 (Funding Authorizations)
Federal Lands Access Program	BIL/ Federal Highways	$292 M (total amount in 2023)		2026	Improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands.	Link1 (General info) Link2 (BIL fact sheet)
Wildlife Crossings Pilot Program	BIL/ Federal Highways	$350 M (total amount through 2026)		2026	Reduce motorist-wildlife collisions and provide better habitat connectivity.	Link

Grant program	Funder	Max Award or Total Amount	Current Deadline	Year Ends	Funding Focus	Website
National Culvert Removal, Replacement & Restoration Grants	BIL/ Federal Highways	Min $10 K, max $20 M / $196 M (total amount in 2023)	February 6, 2023	2026	Projects for the replacement, removal, and repair of culverts or weirs that meaningfully improve or restore fish passage for anadromous fish.	Link
Nationally Significant Multimodal Freight and Highway Projects	BIL/ Federal Highways	$8 B (total amount through 2026)		2026	Eligible projects expanded to include wildlife crossing projects.	Link
Bridge Investment Program	BIL/Federal Highways	$2.5 B (total amount in 2023)		2026	Eligible projects include "a project to replace or rehabilitate culverts of the purpose of improving flood control and improved habitat connectivity for aquatic species."	Link
Surface Transportation Block Grant Program	BIL/Federal Highways	$14 B (total amount in 2023)		2026	Eligible projects expanded to include projects and strategies designed to reduce the number of wildlife-vehicle collisions, including project-related planning, design, construction, monitoring, and preventative maintenance.	Link

Attachment 3: Metro Urban Heat Island Index Methodology

The four-county Metro Urban Heat Island (UHI) index – including Washington, Multnomah, and Clackamas counties in Oregon, and Clark County in Washington – was derived from fifteen Landsat 8 Collection 2 Analysis Ready Data (ARD) images, utilizing measurements of surface temperature from band 10.

The images were selected between the years of 2016 and 2020, and between the months of May and October. The images were selected for having less than 2.6% cloud cover. Areas of cloud cover were removed from the analysis using the QA band.

A mean surface temperature raster was created using the mean of each pixel location across all fifteen images, excluding pixel values with cloud cover. Mean and standard deviation statistics were derived for the four-county area, which were then used to create a Z-score UHI index.

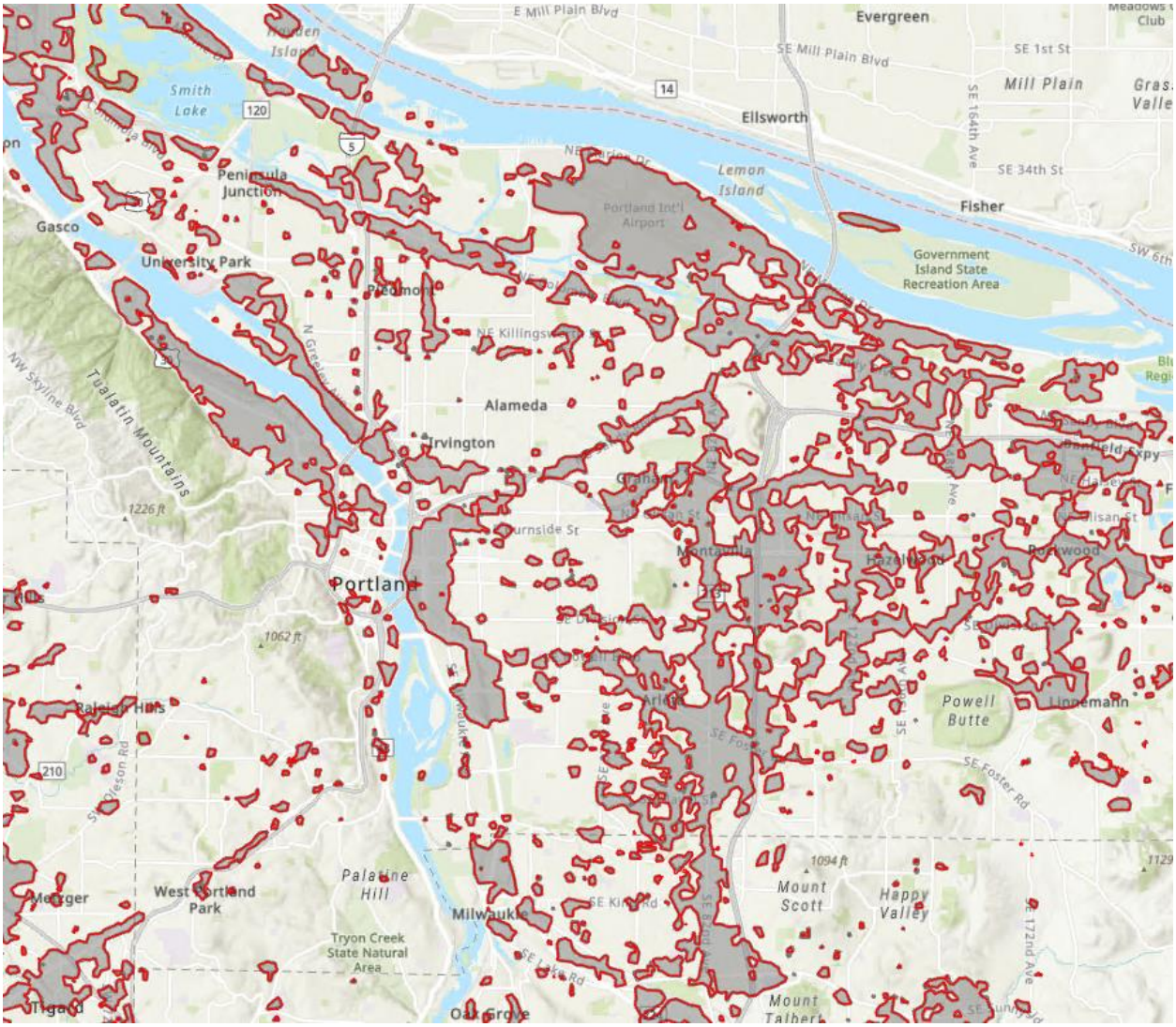
The four-county area was clipped to the metropolitan planning area (MPA) boundary, and the UHI index scores were ranked by quintiles. The top quintile – or top 20% of UHI index values – were selected to represent the areas with the highest susceptibility to extreme urban heat conditions.

The following table shows the individual collection dates for the Landsat 8 imagery, along with associated daily high temperature data collected at the Portland International Airport (PDX).

Landsat Collection Date	Temperature at PDX Airport
6/25/2016	78
7/27/2016	88
8/12/2016	97
9/13/2016	81
5/27/2017	89
7/14/2017	85
7/30/2017	87
5/14/2018	89
7/17/2018	90
8/18/2018	87
5/1/2019	69
7/20/2019	87
8/5/2019	91
10/24/2019	68
8/23/2020	83
Average	85

To test the effect of including lower temperatures, a UHI index was created using only temperatures that exceeded 85 degrees. The two indices – one with all fifteen images, the other with ten images above 85 degrees – had a Pearson's correlation of 0.997 and an R-squared of 0.994. In other words, they were almost identical.

The following image shows the top quintile of the unfiltered 15-image index in gray, overlayed with red lines for the top quintile of the filtered 10-image index.



Attachment 4: DRAFT Regional Transportation Plan Habitat Connectivity Assessment Report

A draft report developed by Metro Parks and Nature staff in collaboration with the Regional Conservation Habitat Working Group (RCHWG).

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

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For more information, visit
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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX G

2023 Regional Transportation Plan

Coordinated transportation plan for seniors and people with disabilities

July 10, 2023

oregonmetro.gov/rtp

Metro respects civil rights

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

Metro fully complies with Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act that requires that no otherwise qualified individual with a disability be excluded from the participation in, be denied the benefits of, or be subjected to discrimination solely by reason of their disability under any program or activity for which Metro receives federal financial assistance.

If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit oregonmetro.gov/civilrights or call 503-797-1536.

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

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

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

Project website: **oregonmetro.gov/rtp**

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

Exhibit A to Ordinance No. 23-1496

Tri-County Metropolitan Transportation District of Oregon (TriMet)

COORDINATED TRANSPORTATION PLAN FOR SENIORS & PERSONS WITH DISABILITIES

JUNE 2020

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1. INTRODUCTION

Decisions we make today on how best to invest in transportation options for seniors and persons with disabilities will affect the future quality of life for thousands of tri-county residents. By 2040, there is expected to be approximately 155,600 more people 65 years and older in the tri-county area, growing from a 17.3 percent share of the population today to a 20.7 percent share in 2040[1]. According to the 2010 US Census, over 11 percent of the region's population reported that they had a disability.

Seniors will represent the fastest growing segment of population in years to come, far outpacing the rate of population growth. As the Portland metro region is projected to become proportionally older, many seniors are likely to become disabled due to physical frailty caused by the effects of aging. Existing resources are inadequate to meet the growing demand for services for these populations.

Transportation is a key determinant of health. The World Health Organization has developed a "Checklist of Essential Features of Age-friendly Cities" (2007) as a tool for a city's assessment and map for charting progress. All of the data indicates that 80-90% of individuals want to stay in their home as long as possible. One of the key elements of a Livable Community is adequate transportation to access medical care and other essential services. The concept of Age-friendly Communities or Livable Communities is being actively promoted by AARP, The National Council on Aging and the National Association of Area Agencies on Aging. The Institute on Aging at PSU is a leading expert in Age-friendly Communities.

These changing demographics challenge the conventional solutions of more buses, light rail service, and paratransit vans. While such traditional modes of transportation will surely be needed, there is a limit to how much the region can afford. Improved coordination among existing services, innovative collaboration to deliver new types of services and a regional commitment to placing public facilities and social services at locations served by public transit will also be needed. The 2020 update to the Coordinated Transportation Plan for Elderly and Persons with Disabilities (CTP) builds upon the foundation of the 2016 CTP as well as the 2009 update, known as the Tri County Elderly and Disabled Transportation Plan (EDTP), all of which described the

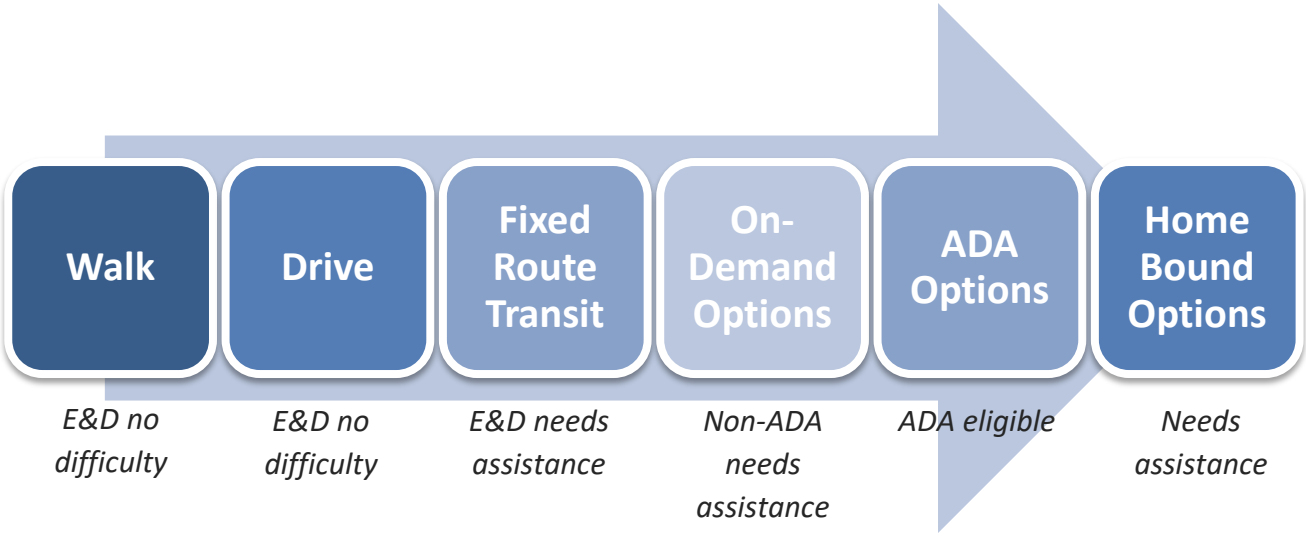
[1] State of Oregon, Oregon Population Forecast, Office of Economic Analysis, 2013.

region's vision of a continuum of transportation services that takes into account people's abilities as they transition through various stages of age and disability.

Figure 1-1 illustrates a Continuum of Transportation Options beginning with transportation for seniors and persons with disabilities who have no difficulty with mobility, through the life stages where they need some accommodation, to services for people who stay at home because of limited mobility or fragile health, either temporarily or long-term. This continuum recognizes the different stages that every resident of the region may experience at some point in their lives. It also recognizes the different transportation-related needs at different points along the continuum. Because both expectations and costs vary along the continuum, it is useful to help guide thinking about service standards as well as action items.

Since the development of the 2006 EDTP, the region has made significant advances and implemented new programs, such as creating new low cost or no cost transportation options, starting new community based shuttle services, and launching a new paratransit certification process. The region will continue to focus on developing an innovative continuum of services, one that takes in to account individuals' abilities throughout life. Additional paratransit services will be needed to take seniors and/or persons with disabilities customers to fixed route, particularly in areas without sidewalks and safe pedestrian crossings. As a result, new sources of funding will need to be identified and the Special Transportation Fund Advisory Committee (STFAC), which provided guidance and oversight of this plan update, has recognized such efforts as a high priority. During this update, the STFAC advised TriMet on updates to the application processes for State of Oregon's Special Transportation Funds (STF) grant and the Federal Transit Administration's Enhanced Mobility of Seniors & Individuals with Disabilities Section 5310 (§5310) grant , to streamline the process and better support funding decisions. Other strategies of particular interest for this update focus on taking steps to encourage use of regularly scheduled transit, and to continue the regional commitment to placing new public facilities and social services near transit services. To implement these strategies, the STFAC supports the reinstitution of a subcommittee to help implement the actions laid out in the CTP.

Figure 1-1.Continuum of Transportation Options for Seniors and People with Disabilities



DEVELOPMENT OF THE CTP

The CTP was developed under the guidance and oversight of the STFAC, a 25-member group appointed by the TriMet Board of Directors who reside in the tri-county area, are knowledgeable about the transportation needs of seniors and persons with disabilities, and are users of or familiar with public or community based transportation services. The STFAC convenes to advise TriMet in making recommendations about formula and discretionary grant distributions funded by the State of Oregon's STF funds and federal §5310 funds, all of which are focused on meeting transportation needs of seniors and/or persons with disabilities. All STFAC meetings are open to the public, formally noticed by TriMet, and accessible by Americans with Disabilities Act (ADA) standards.

In 2019, the STFAC's main charge was to also help update the Coordinated Transportation Plan for seniors and/or persons with physical and/or cognitive disabilities. More than one-half of the committee is comprised of seniors and/or persons with disabilities representing geographic diversity in the tri-county area, both within and outside of the TriMet service district. This includes members of the TriMet Committee on Accessible Transportation (CAT). The remaining members are staff representing organizations such as the County Aging and Disability agencies; TriMet, which is the regional transit agency; transit systems in the City of Sandy and the City of Wilsonville; and Ride Connection, which is a network of over 30 partners delivering transportation for seniors and persons with disabilities. TriMet coordinates planning

efforts with the South Clackamas Transit District (SCTD) and Canby Area Transit (CAT), though those organizations are not represented on the STFAC. *Attachment C lists the STFAC members.*

Over the course of 16 months, the STFAC met five times to review the progress made since 2016 and revise elements of the previous plan to reflect current circumstances. The rest of this document reflects the results of this work. *Attachment D includes the meeting summaries for each of the STFAC meeting related to the 2020 CTP update.*

The CTP fulfills the planning requirements of the State's STF administrative rules and the federal requirement for a coordinated human services plan. The federal Fixing America's Surface Transportation (FAST) Act requires that transportation providers and human service agencies plan jointly in order to be eligible for Enhanced Mobility of Seniors and Individuals with Disabilities Program (§5310), Formula Grants for Rural Areas (§5311), Public Transportation Innovation (§5312), and other sources of federal funds. Federal guidance specifies four required elements of a coordinated plan, as follows:

- An assessment of available services that identifies current transportation providers (public, private, and non-profit).
- An assessment of transportation needs for individuals with disabilities, seniors, and persons with low incomes. This assessment can be based on the experiences and perceptions of the planning partners or on more sophisticated data collection efforts, and gaps in service.
- Strategies, activities, and/or projects to address the identified gaps between current services and needs, as well as opportunities to achieve efficiencies in service delivery.
- Priorities for implementation based on resources (from multiple program sources), time, and feasibility for implementing specific strategies and/or activities.

The CTP is divided into seven chapters, as outlined below:

- Chapter 1 introduces the CTP and sets forth a vision and priorities for the Plan.
- Chapter 2 highlights the existing transportation services currently available to seniors and persons with physical and/or cognitive disabilities in the tri-county region.

- Chapter 3 presents service goals that providers should strive to meet and evaluates how well the region is meeting these goals.
- Chapter 4 presents a demographic profile and summary of stakeholder outreach to identify the transportation needs, gaps and challenges specific to persons with cognitive and/or physical disabilities and seniors.
- Chapter 5 presents a set of prioritized actions for the STFAC and the region's transit and social-service providers to implement to improve the delivery of transportation services.
- Chapter 6 describes the current funding climate and outlines the process the STFAC will follow in making funding recommendations to implement the initiatives and strategies outlined in Chapter 6.
- Chapter 7 concludes the CTP with an overview of the types of projects that the STFAC has funded since the original Elderly and Disabled Transportation Plan was completed, and sets forth an updated process and evaluation criteria for considering funding decisions in the future.

PRINCIPLES OF THE CTP

Vision: Guide transportation investments toward a full range of options for seniors and people with disabilities, foster independent and productive lives, strengthen community connections, and strive for continual improvement of services through coordination, innovation and collaboration, and community involvement.

Coordinate. To make best use of service hours and vehicles, assure that services are coordinated and well organized. Assure that customer information is useful and widely provided throughout the region. Work with others to achieve results.

1. **Innovate and Collaborate.** Increase options available to seniors and/or persons with disabilities by providing innovative, collaborative, flexible, attractive and cost-effective alternatives to standard fixed route buses, rail and paratransit. Expand outreach and education on how to use services.
2. **Involve the Community.** Include seniors and/or persons with disabilities, social services staff, private non-profit providers, and other community partners in the dialogue and decisions about services. Advisory committees working on issues for seniors and/or persons with disabilities should have over 50% representation of seniors and persons with disabilities.
3. **Improve the Service Foundation.** Fixed route service frequencies and coverage in some suburban areas, as well as ways to get to the fixed routes,

need continuous improvement. Continually improve the total fixed route transit system including the waiting area, customer service of the operators, priority seating, security and accessibility. Include performance measure.

4. **Integrate Land Use and Transportation Decisions.** Communicate importance of land use and transportation for seniors and/or people with disabilities. Advocate at the local, state and federal level for facilities for seniors and/or persons with disabilities and work to encourage local zoning and regulations to incentivize placement of essential destinations for seniors and/or persons with disabilities to be in fully accessible locations with frequent fixed transit service. Seek opportunities to influence land use decisions and eliminate environmental barriers to using transit.
5. **Improve Customer Convenience.** Minimize physical and psychological impediments to using fixed-route transit services relative to other modes. Make transit system and trip planning tools easy to understand and use. Facilitate transfers between transit services with the use of wayfinding information and high-amenity transfer facilities.
6. **Improve Safety.** Assure that real and perceived safety concerns are addressed at passenger waiting areas and on board transit vehicles. Utilize transit provider staff, volunteers and other riders to increase sense of security along with investments in physical infrastructure where appropriate.
7. **Measure Performance.** Strive to implement performance measures to create baselines for tracking progress on improvements to service, customer convenience and safety, and to evaluate the effectiveness of funding decisions.

The CTP includes a series of attachments which provide additional detail to supplement the report text. Two attachments are intended to guide the reader with respect to common acronyms, and to provide a Glossary of Terms. *These are included as Attachment A and Attachment B, respectively*.

OVERVIEW OF RELEVANT GRANT PROGRAMS

The STFAC reviews applications and makes funding recommendations to the TriMet Board for the following two grant programs.

§5310 Federal Funds

The 49 U.S.C 5310 program (§5310) provides formula funding to states and metropolitan regions for the purpose of assisting private nonprofit groups in meeting the transportation needs of seniors and persons with disabilities. Funds are apportioned based on each state's share of the population for these two groups. The purpose of the program is to improve mobility for seniors and persons with disabilities by removing barriers to transportation service and expanding transportation mobility options. Eligible projects include both "traditional" capital investment and "nontraditional" investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

The Federal Transportation Bill, also known as the Fixing America's Surface Transportation (FAST) Act, replaced the Moving Ahead for Progress in the 21st Century Act (MAP-21) which previously merged the New Freedom program (49 U.S.C. 5317) into the §5310 program. As a result, activities eligible under the New Freedom program, including operating expenses, are eligible under §5310. Consistent with Section 5317, funds are apportioned among large urbanized areas, small urbanized areas, and rural areas instead of only to states (see C_9070.1G, p.I-6 and II-1). MAP-21 also repealed the Job Access and Reverse Commute (JARC) program, under 49 U.S.C. 5316. Under the FAST Act, JARC activities are eligible under Section 5307 and are covered under TriMet's Employment Transportation Services Plan.

Traditional Section 5310 project examples include:

- Purchasing buses and vans for providing service to seniors and/or persons with disabilities
- Wheelchair lifts, ramps, and securement devices for such vehicles
- Transit-related information technology systems, including scheduling/routing/one-call systems
- Mobility management programs
- Acquisition of transportation services for seniors and/or persons with disabilities under a contract, lease, or other arrangement

Nontraditional Section 5310 project examples include:

- Travel training to help seniors and/or persons with disabilities make transit trips on fixed-route where they have more convenience in choosing when to travel and more independence
- Volunteer driver programs
- Building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- Improving signage, or way-finding technology
- Incremental cost of providing same day service or door-to-door service (compared to curb-to-curb with 24 hours' notice)
- Purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs
- Mobility management programs

The federal share of eligible capital costs may not exceed 80 percent. The federal share of eligible operating cost assistance may not exceed 50 percent.

State Special Transportation Funds (STF)

The Special Transportation Fund (STF) was created in 1985 by the Oregon Legislature. It is funded by cigarette tax revenue, excess revenue earned from sales of photo ID Cards, and other funds from Oregon Department of Transportation. The STF Program provides a flexible, coordinated, reliable and continuing source of revenue in support of transportation services for people who are senior and persons with disabilities of any age. The Oregon Legislature intended that STF funds be used to provide transportation services needed to access health, education, work, and social/recreational opportunities so that seniors and persons with disabilities may live as independently and productively as possible. The funds may be used for any purpose directly related to transportation services, including transit operations, capital equipment, planning, travel training and other transit-related purposes.

TRIMET ROLE AS THE SPECIAL TRANSPORTATION FUND AGENCY

TriMet is the federally-designated agency to disburse the Federal Transit Administration's (FTA) 49 U.S.C. 5310 (§5310) Enhanced Mobility of Seniors and Individuals with Disabilities funds for Clackamas, Multnomah, and Washington Counties portion of the Urbanized area. TriMet administers the §5310 program and coordinates with other providers in the region to ensure coordinated, effective provision of service that meets federal and state requirements. TriMet also receives

funds through the Oregon Department of Transportation (ODOT) §5310 program for urban and rural projects.

TriMet is also the designated "STF Agency" to receive and distribute STF funds from the State of Oregon. Both of these sources of funds are focused on supporting transit service for seniors and persons with disabilities.

TriMet develops a coordinated public transit-human services transportation plan (CTP) and updates the plan at least every four years to meet the Federal Transit Administration's (FTA) requirement that projects selected for funding under the §5310 program be included in such plans. Federal law requires these plans to be "developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers and other members of the public." TriMet develops the Coordinated Transportation Plan for Seniors and Persons with Disabilities (CTP) in coordination with the STF Advisory Committee (STFAC) and members of the public who engage in the STFAC process.

TriMet Board of Directors

The TriMet Board of Directors receives STFAC recommendations and is responsible for approval of the STFAC recommended funding levels to endorse federal §5310 and STF funds disbursement to support coordinated transportation services for seniors and persons with disabilities in the three-county region. This action also authorizes the TriMet General Manager to enter into funding agreements with transportation providers.

OTHER STATE FUNDING

Statewide Transportation Improvement Fund (STIF)

The Statewide Transportation Improvement Fund (STIF) administers the Keep Oregon Moving Act, enacted by the Oregon Legislature under House Bill 2017 (HB 2017) in 2017. Keep Oregon Moving includes a statewide employee payroll tax that equates to less than $1 per week for the average Oregon worker, and is dedicated to funding the expansion of public transportation services. The payroll tax became effective on July 1, 2018. Ninety percent (90%) of the STIF funds are disbursed by formula to Qualified Entities (QE) based on the amount of payroll tax generated in their area.

The Oregon Legislature designated TriMet as the Qualified Entity (QE) for the tri-county region for the purpose of administering the STIF planning process, and

receiving and distributing STIF funds for Clackamas, Multnomah and Washington counties. As the QE, TriMet is responsible for drafting and submitting the Tri-County Public Transportation Improvement Plan (PTIP) for approval by the Oregon Transportation Commission (OTC). TriMet adopted their PTIP in 2018 and the plan was later approved by the OTC.

The PTIP provides a 5-year roadmap for the roll-out of possible future services and programs to improve service in low-income communities. It also provides for planned revenue and service improvements and programs within a 2.5 year timeframe. The plan establishes a method to sub-allocate STIF Formula Fund moneys to the region's transit service providers, and carefully considers targets of expected HB 2017 revenue within each of the region's individual service areas and counties.

Within the 2.5-year period the PTIP targets significant investment within specific areas of the tri-county region:

- **TriMet Service District** - nearly $49 million in on-going, annual investments, including about $3 million annually in the Regional Coordination Program; and, approximately $50 million in one-time investments
- **Clackamas County** - almost $4.4 million in investments outside of the TriMet service district, through the cities of Canby (CAT), Sandy (SAM) and Wilsonville (SMART), the South Clackamas Transportation District (Molalla) County and the remainder of rural Clackamas County
- **Multnomah County** - almost $131,000 in investments outside the TriMet service district
- **Washington County** - almost $1.3 million in investments outside of the TriMet service district, approximately half through the city of Wilsonville (SMART)

INTERIM STATE GUIDANCE COMBINING STF AND STIF FUNDING PROGRAMS

In 2019, the Oregon State Legislature directed the transfer of $10.1 million from the STIF to STF. The transfer is designed to distribute funds to transit entities to support public transportation services benefiting seniors and persons with disabilities.

The Oregon Department of Transportation (ODOT) 2019-2021 Legislatively Adopted Budget (House Bill 5039) directed ODOT to merge STF and STIF into one public transit program.

In November, the Oregon Transportation Commission endorsed the ODOT Rail and Public Transit Division's STF/STIF Consolidation Report and Plan. ODOT updated the Formula Allocation Comparison in December of 2019 to include the most recent STIF revenue forecast.

It is expected that ODOT and its partners will bring forward the recommendation for statutory change to combine STF and STIF fund programs in the 2020 legislative session. The Oregon Legislature may consider implementing the recommended concepts in late 2020.

COORDINATION WITH METRO AND JOINT POLICY ADVISORY COMMITTEE (JPACT)

Metro is the Metropolitan Planning Organization (MPO) for the greater Portland, Oregon metropolitan area and includes twenty four cities surrounding Portland in Clackamas, Multnomah, and Washington Counties. Metro is also a regional governing body and includes a Metro Council which includes an elected president and six elected councilors. The Metro Council is advised by JPACT. JPACT is made up of mayors, city councilors, county commissioners, that represent the cities and counties of the region as well as executive staff from TriMet, the Port of Portland and ODOT. JPACT recommends priorities and develops plans for the region. The Metro Council must adopt the recommendations before they become transportation policies.

Metro is the federally mandated MPO designated by the governor to develop an overall transportation plan and to manage the decision-making process on how federal funds are spent in the region. TriMet coordination with Metro staff ensures that all projects funded with §5310 funds (see description of §5310 funds below) are listed in the Metropolitan Transportation Improvement Program (MTIP), the federally mandated four year schedule of expenditures of federal transportation funds as well as significant state and local funds in the Portland metropolitan region. JPACT and Metro Council coordinate with ODOT and transit (TriMet and SMART) prioritization processes for the MTIP adoption, including §5310 and STF funding distribution.

Metro has many regional planning documents that the CTP must consider, complement, and fill in the gaps for seniors and persons with disabilities including the Regional Transportation Plan (RTP), the Regional Transit Strategy within the RTP, and Metro’s Growing Transit Communities strategy.

2. EXISTING TRANSPORTATION SERVICES

TriMet operates fixed-route and ADA paratransit services within Clackamas, Multnomah, and Washington Counties. Other fixed-route transit agencies serving parts of the tri-county area include:

- South Metro Area Rapid Transit (SMART) serving Wilsonville with links to Salem and Canby.
- Canby Area Transit (CAT) serving Canby with links to Oregon City and Woodburn.
- Mount Hood Express providing service between Gresham, Sandy, Rhodedendron and Timberline Lodge.
- Sandy Area Metro (SAM) serving Sandy with links to Estacada and Gresham.
- Yamhill County Transit providing service from McMinnville and Newberg to Hillsboro and Tigard.
- South Clackamas Transportation District serving Molalla with links to Canby, Oregon City (Clackamas Community College).
- Columbia County Rider connecting Columbia County to Hillsboro and downtown Portland.
- Columbia Area Transit operating intercity bus service between The Dalles, Hood River, Cascade Locks and Portland; and, the Columbia River Gorge Express between Gateway Transit Center, Multnomah Falls, Hood River and The Dalles.

In addition, Tillamook WAVE connects to Banks and North Plains on its way to serving Tillamook County on the Oregon Coast and connecting to Union Station in downtown Portland. Deviated fixed-route service is operated by Ride Connection who contracts to provide GroveLink service in Forest Grove, King City RideAbout in King City, Tualatin Shuttle in Tualatin, North Hillsboro Link in Hillsboro and westLink linking Banks and North Plains to the Hillsboro Transit Center.

The Ride Connection partner network of over 30 private nonprofit and volunteer service providers complements the services provided by the region's transit agencies. The Ride Connection network provides more than a quarter of the region's door-to-door rides for seniors and persons with disabilities. TriMet also provides funding to Ride Connection to support the provider network and provide volunteer transportation and local shuttle services for seniors and persons with disabilities.

This chapter provides a summary of the regional transit agency service providers and community-based transit providers operating in the plan area, the transit providers

that provide statewide service or provide connections to and from areas outside of the plan area, and takes note of new services that have been established since the 2016 CTP. Tables 2-1 A-C (separate table for each county) identify the existing transportation providers in each of the three counties. A map of the service areas is provided in Figure 4-1. *Information on each agency's fleet of vehicles is included in Attachment E.*

Table 2-1a. Continuum of Transportation Services-Washington County

	Washington County														
	Incorporated Cites														*Rural Communities*
	King City	Hillsboro	Tigard	Tualatin	Beaverton	Forest Grove	Rivergrove	West Linn	Sherwood	Durham	Cornelius	Banks	North Plains	Gaston	Other
Regularly Scheduled Fixed Route															
TriMet District	TriMet Service District														
Other Transit Agency															
Smart Transit (ST)				ST	ST										
Yamhill County Transit (YCT)		YCT	YCT			YCT					YCT			YCT	
Columbia County Rider (CCR)		CCR													
Tillamook Wave (TW)												TW			
Deviated Fixed Route Service															
RC - King City	RC														
RC - North Hillsboro Link		RC													
RC - Tualatin Shuttle				RC											
RC - Grove Link						RC									
RC - westLink Bus												RC	RC		
Shuttle Service															
RC Beaverton RideAbout					RC										
Paratransit Service (1)															
ADA Paratransit															
LIFT	TriMet Service District														
Medicaid															
DMAP Brokers															
Non-Medical-Medicaid															
Ride Connnection															
Community-Based Transportatin															
(includes RideWise) (2)															
Ride Connnection															

Table 2-2b. Continuum of Transportation Services-Multnomah County

	Multnomah County									
	Incorporated Cites						Unincorporated Urban Areas			*Rural Communities*
	Portland	Gresham	Troutdale	Fairview	Wood Village	Maywood Park	Other			Other
Regularly Scheduled Fixed Route										
TriMet District	TriMet Service District									
Other Transit Agency										
CC Rider SMART (CC)	CC									
Portland Streetcar (PS)	PS									
Columbia Gorge Express (CGE)	CGE									
Tillamook Wave (TW)	TW									
Deviated Fixed Route Service										
None										
Shuttle Service										
Columbia Gorge Express										CGE
Washington Park Shuttle	WPS									
County RideAbout	CRA									
MFS Project Linkage-Mid-Country RideAbout	MFS									
Neighborhood House-Downtown RideAbout	NH									
N/NE RideAbout	NNE									
Gateway Shuttle	GS									
MFS Project Linkage	MFS									
Paratransit Service (1)										
ADA Paratransit										
LIFT	TriMet Service District									
Medicaid										
DMAP Brokers										
Non-Medical-Medicaid										
Ride Connnection										
Community-Based Transportatin (includes RideWise) (2)										
Ride Connnection										

Table 2-3c. Continuum of Transportation Services-Clackamas County

Clackamas County	*Incorporated Cites*													Unincorporated Urban Areas	*Rural Communities*	
	Lake Oswego	West Linn	Happy Valley/Damascus	Gladstone	Oregon City	Milwaukie	Johnson City	West Linn	Wilsonville	Molalla	Estacada	Sandy	Canby	Other	Villages at Mount Hood	Other
Regularly Scheduled Fixed Route																
TriMet District	TriMet Service District													TriMet Service District		
Other Transit Agency																
Smart Transit (ST)									ST							
SAM (SA)											SA	SA				
CAT (CA)													CA			
Mount Hood Express (MH)															MH	
Deviated Fixed Route Service																
SCTD (SC)										SC						
Mount Hood Express (MH)															MH	
West Linn Community Center																
Shuttle Service																
Mary's Woods (MW)	MW															
CCC Xpress Shuttle (CC)														CC		
Paratransit Service (1)																
ADA Paratransit																
LIFT	TriMet Service District								ST	SCTD, STAR & CAT				TriMet Service District		
Medicaid																
DMAP Brokers																
Non-Medical-Medicaid																
Ride Connnection																
Community-Based Transportatin																
(includes RideWise) (2)																
Ride Connnection																

REGIONAL TRANSIT SERVICE PROVIDERS

The following describes the transit agency service providers in the three county area and, as applicable, describes their services and programs, structure and advisory committees, background, future plans. The agencies include:

- Tri-County Metropolitan Transportation District (TriMet);
- City of Portland;
- Canby Area Transit (CAT);
- Mount Hood Express;
- Sandy Area Metro (SAM);
- South Clackamas Transit District (SCTD);
- South Metro Area Regional Transit (SMART);

TriMet

Fixed Route Service

TriMet operates a fixed-route network consisting of 87 bus lines, a 60-mile, 97-station MAX light rail system and a 14.7 mile commuter rail service. Since 2017, all fixed-route buses have low floors, allowing people to conveniently board the bus without climbing stairs or using a lift. All MAX trains have at least one low-floor car and all WES commuter rail trains have level boarding with accessible platforms.

In the TriMet district, 91 percent of people 65 years and older live within one-half mile and 76 percent live within one-quarter mile of fixed-route bus or MAX service.[2] During the 2019 fiscal year (FY19), Seniors and persons with disabilities boarded TriMet bus and MAX approximately 16.4 million times a year out of a total of 95.7 million boardings[3].

During FY19, TriMet's system cost to provide each fixed route originating ride on bus was approximately $5.46. On MAX, it was $4.32. For comparison, the average cost per ride on LIFT was $43.74.

[2] ACS 2018 5-year summaries: Table B01001, Oregon Metro/RLIS: master address point & tax lots, TriMet: service district polygon, route geometries.

[3] TriMet 2018 Fare Survey.

TriMet is committed to continually improving the total transit system with enhanced customer information, access to transit, amenities at bus and rail stops, frequency, reliability, passenger comfort, enforced priority seating, safety and security.

TriMet Complementary Paratransit

TriMet LIFT Paratransit Service provides origin to destination ADA (Americans with Disabilities Act) paratransit service for persons with disabilities who are unable to ride regular buses or trains. TriMet operates 278 LIFT buses.

The LIFT paratransit service area and hours of operation match nearby bus/MAX service. There are six time-of-day LIFT paratransit service boundaries that coincide with different fixed route coverage areas: weekdays, weekday evenings, Saturdays, Saturday evenings, Sundays, and Sunday evenings. As allowed under the ADA, LIFT trips are only provided if there is nearby fixed-route bus or rail service in operation during that time. These requirements for complementary paratransit do not apply to commuter bus, commuter rail, or intercity rail systems.

Rides must be reserved by 5 p.m. the day before and can be reserved up to seven days in advance.

There are 0.9 million annual boardings on TriMet LIFT service. The cost to TriMet is approximately $44 per one-way trip, net of fares.

TriMet's Advisory Committee on Accessible Transportation (CAT)

TriMet's Committee on Accessible Transportation (CAT) was formed in 1985 to advise the TriMet Board of Directors and staff on plans, policies and programs for seniors and persons with disabilities. CAT has 15 community members: eight seniors and/or persons with disabilities who use TriMet, six representatives of seniors and/or persons with disabilities and one member of the TriMet Board of Directors. The remaining members are consumers of TriMet transportation services or representatives of consumers. All CAT members are appointed by the TriMet Board president for a two-year term. The CAT has a business meeting every two months, an executive committee, and ad-hoc committees to address special issues as needed. Together with TriMet staff, CAT develops an annual work plan to identify major issues and prioritize the year's activities.

TriMet Operator Training

TriMet operators and supervisors receive ADA information and updates through Training Bulletins and as part of the yearly Bus Operator Recertification Training program. New operators receive nearly 20 hours of ADA and disability awareness training as part of their initial training. Much of this training focuses on procedural issues, but also includes experiential exercises.

Disability awareness and ADA training is given to new operators during their 6-month probationary period. Over 4,300 operators, supervisors, managers and others have attended since 2012. Riding Together makes use of procedural and experiential exercises, including interaction with a panel of persons with disabilities. Panel members provide information about the nature of their disability and the challenges they face in riding public transit. One of TriMet's challenges in providing this training has been to secure panel members who are consistently willing to attend the training and including updated mobility devices to be used for training purposes.

Pedestrian Network Analysis (PNA) Project [www.trimet.org/walk]

Through the Pedestrian Network Analysis Project, TriMet partnered with cities and counties to identify areas around the region where pedestrian improvements will provide safer and more comfortable access to transit. In particular, TriMet looked at areas where sidewalks are missing, traffic volumes are high, speed limits are high and pedestrian crashes have occurred in the past and where destinations more likely to be used by seniors and/or persons with disabilities were located among other measures. This work continues to guide TriMet and their partners for continued investment in access to transit. This study included a focus of maintaining independence, and included objectives such as addressing the needs of seniors, persons with disabilities, the economically disadvantaged, and school children; and making existing transit customers walking trips safer, more direct, and comfortable.

Improving Pedestrian Access to Transit (www.trimet.org/walk)

In the Fall of 2019 TriMet kicked off the first steps in developing its pedestrian plan focused on connections to transit. The plan implements findings from the PNA. Through a series of community, business partner and local agency forums, TriMet will develop strategies and priority pedestrian improvement projects to improve access to transit. The final plan is expected in mid-2020.

TriMet Bike Plan [www.trimet.org/bikeplan]

The TriMet Bike Plan was completed in 2016 and provides a roadmap that will help guide future investments in biking infrastructure and amenities. This includes improving bike access to transit stops, expanding bike parking options, and

accommodating bikes onboard buses and trains. The goal of the plan is to make bike + transit trips easier, safer and more convenient for more people. One of the efforts within the plan is to provide more bike parking at stops and stations and encourage more riders to leave their bikes in secure storage so more riders will not feel the need to bring their bikes on board, leaving more space for other users including seniors and persons with disabilities.

TriMet Funding

TriMet receives the majority of its funding from an employer payroll tax. Passenger fares are another significant revenue source, making up 24 percent of the total funding. To meet the demand for more service, the TriMet Board increased the employer payroll and self-employment tax by 1/10th of one percent, phased-in over 10 years. This phasing began in January 2016.

The payroll tax revenue is dedicated to new and expanded bus, rail and innovative community and job-connector services that are outlined in TriMet's comprehensive and strategic Future of Transit plans. With the 10-year increase in revenue, they will be able to implement about a third of the 20-year visions for the future of transit that were developed over four years of meetings with stakeholders, businesses, residents and riders.

Through the Keep Oregon Moving act TriMet also receives employee payroll tax that is dedicated to funding the expansion of public transportation services to serve low income communities. The payroll tax became effective on July 1, 2018 and is administered through the Statewide Transportation Improvement Fund, or STIF. Ninety percent (90%) of the STIF funds are disbursed by formula to Qualified Entities (QE) based on the amount of payroll tax generated in their area. TriMet is the QE for the tri-county area and is expected to receive about $49 million annually.

Tri-Met adopted the Tri-County Public Transportation Improvement Plan[4] that prescribes how Keep Oregon Moving investments to expand services in low-income communities through the following programs:

- TriMet Fixed Route Service Expansion improvements throughout TriMet's service district
- Low Income Fare
- School Transportation – a new student Transit Access Grant Program
- Community based demand response services for Senior and Disabled Transportation riders
- Electric Bus Program
- Non-TriMet Regional Coordination Program in support of existing and new shuttle bus service to low income communities within the district and between other service providers in the region.

The Future of Transit

The following describes several of TriMet and Metro's on-going transit planning projects.

Unified Service Enhancement Plan

Between 2011 and 2016, TriMet engaged Portland area communities in a process to envision a 20-year expansion of TriMet's bus service. The process divided the region into five sub-areas – Eastside, Westside, Southeast, Southwest, and North/Central – and developed Service Enhancement Plans for each area. The process relied on significant stakeholder outreach including current riders, neighborhood associations, business organizations and large companies, social service providers, institutions like schools, colleges, and hospitals, and jurisdictions. In addition, TriMet staff looked at demographic and trip pattern data for the region. Finally, individual jurisdictions provided short and long-term growth and redevelopment plans. The Service Enhancement Plans identified gaps in the system – both geographic and service related.

[4] Tri-County Public Transportation Improvement Plan, TriMet, October 2018.

In 2018 TriMet adopted the Unified Service Enhancement Plan (incorporating all five subarea Service Enhancement Plans) to meet new statewide planning requirements of HB 2017.

The long-term vision for each service enhancement subarea plan identifies opportunities to improve bus service, and provides guidance as TriMet considers each new Annual Service Plan. The following are brief summaries of the service needs in each sub-area of the region.

Westside, consisting of Beaverton, Hillsboro, Cornelius, Forest Grove, and unincorporated Washington County:

- More north/south service to serve the intra-county travel between residents in the south and employment opportunities in the north.
- Last mile connections to reach many jobs located just beyond a reasonable walking distance from transit.
- Improved frequency as development on the Westside continues and urban amenities are provided, the opportunity to serve more persons with more frequent bus service increases.

Southwest, consisting of SW Portland, Tigard, Tualatin, Sherwood, King City, Durham, Lake Oswego, and West Linn:

- Route reconfigurations that serve growing job centers areas other than Downtown Portland. This is especially true for east/west service.
- Increased service levels where existing bus service significantly lacks frequency and service only runs during commuter hours.
- Community Shuttles for some communities where traditional fixed route service is not cost-effective to offer, yet some demand for bus service still exists.

North/Central, consisting of the majority of the land area within the City of Portland (I-205 to the east, the Multnomah County/Washington County border to the west, Division Street to the south on the east side of the Willamette River, and I-405/US 26 to the south on the west side of the Willamette River):

- New routes and more coverage on existing routes for the neighborhoods not served as comprehensively as others.
- More frequency and hours of service on existing routes to help relieve overcrowding and to add more service at the beginning and ends of the day.

- Community Shuttles for some communities where traditional fixed route service is not cost-effective to offer, yet some demand for bus service still exists.

Eastside, consisting of East Portland (east of I-205), Gresham, Troutdale, Fairview, and Wood Village:

- More north/south service that improve regional connections to jobs, education, health care, affordable housing, and essential services.
- Improving service on existing routes to provide more frequency, longer hours of service, and better schedule adjustments.
- Community Shuttles for some communities where traditional fixed route service is not cost-effective to offer, yet some demand for bus service still exists.

Southeast, consisting of Southeast Portland (South of SE Division), Estacada, Gladstone, Happy Valley, Milwaukie, Oregon City, and Clackamas County:

- More east/west service to provide new access for growing communities and employment centers
- Community Shuttles for some communities where traditional fixed route service is not cost-effective to offer, yet some demand for bus service still exists.
- Improving service on existing routes to provide more frequency, longer hours of service, and better schedule adjustments.

Hop Fastpass

Since 2017, the Hop Fastpass electronic fare system makes it faster, easier and more convenient to ride the bus or train. Hop works with a fare card, smartphone or your credit/debit card. It also works with C-TRAN and Portland Streetcar.

The Hop Fastpass system is integrated with TriMet's LIFT software (Trapeze). Honored Citizens and LIFT riders are able to link payment with the LIFT reservation process. This provides additional convenience to seniors and persons with disabilities during the payment process. The two linked systems allow the customer to use their Hop Fastpass account to pay for their LIFT ride. The fare for their LIFT trip is deducted from their account at the time the ride is performed. Riders that qualify for LIFT paratransit service are eligible to pay the reduced Honored Citizen fare on fixed-route. The fixed-route system recognizes a LIFT paratransit card and automatically deducts the correct reduced fare amount. Additional information can be found at www.myhopcard.com.

Southwest Corridor Plan

Light rail will improve the transportation system in the corridor that includes Southwest Portland, Tigard, Tualatin, and neighboring cities. Additional information can be found at www.swcorridorplan.org.

The Division Transit Project

Arterial on-street Bus Rapid Transit (BRT) has been chosen as the transit solution in the Division Street corridor that stretches from Portland State University (PSU) and Oregon Health Sciences University (OHSU) on the west side to Mt. Hood Community College on the eastside. The project is under construction and new, frequent (every 12 minutes) service is expected in 2022. Additional information can be found at https://trimet.org/division/ .

Canby Area Transit (CAT)

CAT Service

Canby Area Transit (CAT) provides service within Canby and to Oregon City, Aurora, Hubbard, and Woodburn from the Canby Transit Center, the central transit terminal in Canby. Route 99X is the only commuter fixed route currently in operation and provides circulation within the city along the Highway 99E corridor between the Canby Market Center (Fred Meyer), Canby Transit Center, and Canby Square (Safeway) areas with headways between 30 and 90 minutes. Service is provided between 5:00 a.m. and 9:00 p.m. Monday through Friday and does not operate on major holidays. Route 99 makes 20 daily trips from Oregon City to the Canby Transit Center, and continues on to Aurora, Hubbard, and Woodburn eight times per day. The route provides connections to TriMet at the Oregon City Transit Center, Woodburn Transit and CARTS Routes 10 and 25 in Woodburn, SMART Route 3 at The Canby Transit Center. CAT service on Route 99 costs $1.00 for a one-way ride, and is free for children six years old and younger. A monthly pass may be purchased for $20.00.

The CAT Dial-A-Ride program provides a variety of services. These services require either advance registration or eligibility approval. The following provides a brief overview of these services.

- **Complementary Paratransit Service** (for eligible seniors and persons with disabilities) is provided within ¾ mile of the local Canby Fixed-Route and extends to all locations within the Canby Urban Growth Boundary.
- **Premium Dial-A-Ride Service** is available to customers who are eligible for complementary paratransit services. This service transports individuals to and from destinations within the Oregon City limits. It is limited by trip

purpose to medical, education, employment, legal services and social service appointments.

- **General Public Dial-A-Ride Service** provides morning and afternoon shopping shuttles and local demand responsive rides to the general public. This service is open to anyone traveling in Canby and is provided on a space available basis (first-come first-served).

CAT Advisory Committee

A seven member Transit Advisory Committee (TAC) advises Canby Area Transit Staff and the Canby City Council. The TAC meets monthly and is made up of seniors, persons with disabilities, Canby residents, CAT customers and members of the business community.

CAT Funding

Canby Area Transit receives operating revenue from local resources including payroll tax, the State's STF funds, federal §5311 Non-urbanized area formula program, the federal §5339 Buses and Bus Facilities Grants Program and capitalized preventive maintenance funding from the federal §5310 program.

Future of CAT

Canby adopted its Transit Master Plan (TMP) update in 2017. The TMP describes potential future service and capital investment plan priorities.

City of Portland

Portland Streetcar Loop Service

Since September 2015, the Portland Streetcar includes the A Loop, which operates clockwise around the Central City connecting the Pearl District, Lloyd District, OMSI and PSU; and the B Loop, which will operate in the opposite direction, or counter-clockwise.

The A & B Loops double up service on the historic North/South (NS) Line from NW Johnson south to SW Moody & Meade, providing 7.5 minute frequency Monday through Saturday, 10:00am to 7:00pm, and 10 minute frequency all day Sunday.

The City of Portland developed a City-wide Streetcar System Concept Plan which identifies corridors for consideration for future expansions of the Streetcar system. This planning effort was managed by the Portland Office of Transportation in

coordination with both the Metro/TriMet regional High Capacity Transit System Plan and the Portland Plan.

Portland Aerial Tram

The Portland Aerial Tram is part of Portland's public transportation system and operates in coordination with TriMet and Portland Streetcar. The tram operates load-n-go. The lower tram terminal is at the intersection of SW Moody & Gibbs. The upper terminal is located on Marquam Hill at Oregon Health and Sciences University. Including travel and boarding time, cabins typically depart every 6 minutes. A trip is 4 minutes each way.

Mount Hood Express

Mount Hood Express Service

The Mount Hood Express is a general public transit service operating on Mount Hood. This service in its former incarnation, the Mountain Express, provided only point-deviated fixed route services to residents between Sandy and the "Villages at Mt Hood" (Brightwood, Welches, Wemme, Zig Zag and Rhododendron) for access to work, school, medical and other needs. In 2014, after an extensive planning process, the service expanded to include commuter service going to destinations such as Government Camp and Timberline Lodge. Approximately 40 percent of the riders are commuters, of which the vast majority works entry-level positions. All vehicles are lift equipped and operators announce stops. The service offers flag stops and ADA eligible deviations on the Villages shuttle routes only.

Mount Hood Express Advisory Committee

The Mount Hood Express service has been managed by Clackamas County's Social Services Division for over eight years. The service is governed by the Board of County Commissioners for Clackamas County but also has an informal advisory board (Mt Hood Transportation Advisory Group) that includes public and private partners.

Mount Hood Express Funding

The service is currently funded with a public-private partnership model and includes grant funds through the Federal Lands Access Program (FLAP), §5311, and §5310 programs, as well as STF and Statewide Transportation Improvement Fund (STIF) funds, along with county funds and funding provided by large employers at Mt Hood.

Sandy Area Metro (SAM)

Sandy Service

Sandy Area Metro (SAM) provides service within the City of Sandy via a fixed route in the commercial corridor and a dial-a-ride service which is available to the general public up to and within a 3 mile radius of the city. SAM also operates 2 commuter routes and an Elderly and Disabled program that provides out of town non-emergency medical rides to Medicaid ineligible frail elderly and disabled persons.

The SAM Gresham route operates along Highway 26 to the Gresham Transit Center. This is a vital connector between the TriMet system in the greater Metro area and the Eastern region of Clackamas County. SAM Gresham makes 30 weekday trips to the Gresham Transit Center, 17 Saturday trips and 8 trips Sundays and most holidays.

The SAM Estacada route travels south along Highway 211 via Sandy, Eagle Creek and Estacada where SAM connects with the TriMet bus service. This is an important connector for the Eastern region of Clackamas County to Oregon City, the county seat. SAM Estacada provides 5 daily trips to Eagle Creek and Estacada Monday through Friday.

Sandy's Advisory Committee

A Transit Advisory Committee (TAC), comprised of individuals from the greater Sandy area, advises the City of Sandy. TAC members represent the business community, students and youth, seniors, persons with disabilities, minorities, and Sandy City Council members. Quarterly meetings are advertised and open to the public. The Committee forwards transit service recommendations to the Sandy City Council, where final decisions are made in a public forum.

Sandy Funding

Sandy Transit receives operating revenue from several resources. Locally, the City collects a payroll and self-employment tax and as of October of 2013 Sandy charges a fare on all system services. Other sources include the State's Special Transportation Funds (STF) and STIF funds, capitalized preventative maintenance funds from the Federal §5310 Enhanced Mobility of Seniors & Individuals with Disabilities, Federal §5311 non-urbanized formula funds, Federal §5339 Buses and Bus Facilities Grants Program, and Federal Highway Access Program Funds.

Future of SAM

SAM adopted its Transit Master Plan (TMP) update in 2020. The TMP describes potential future service and capital investment option depending on available funding.

South Clackamas Transportation District (SCTD)

SCTD Service

South Clackamas Transportation District (SCTD) operates 3 routes. The Molalla City bus is a fareless deviated route which makes 10 weekday trips throughout Molalla and connects with 2 SCTD commuter routes. Seven of the City bus trips connect with the Clackamas Community College (CCC) commuter route.

The CCC bus terminates at the Clackamas Community College campus. The CCC bus makes 22 weekday and 9 Saturday trips to the campus where it connects with the TriMet bus system. The CCC bus service also makes 8 weekday connections to the Canby bus service, a commuter route that is a vital connection to both the Canby (CAT) bus service and Wilsonville (SMART) bus service. Both the CCC and Canby commuter routes charge a $1.00 fare.

SCTD Advisory Committee

The SCTD Board of Directors consists of seven members elected from the District. The District is a free-standing Transportation District organized under Chapter 267 of the Oregon Revised Statutes (ORS). Seniors and persons with disabilities are serving on the board. SCTD also has an advisory committee that is called on as needed.

SCTD Funding

SCTD is funded with a payroll and self-employment tax, passenger revenue, federal 5311 Non-urbanized area federal assistance, state STF and STIF funds, interest and other sources.

South Metro Area Regional Transit (SMART)

SMART Service

SMART, operated by the City of Wilsonville, maintains a fleet of over 35 vehicles and has nine fixed routes, including one late night service, operating routes within Wilsonville and to the Barbur Transit Center, Salem and Canby (which overlaps with some of YCTA's transit service). SMART also operates Dial-a-Ride, which provides door-to-door service within Wilsonville and medical transport services to Portland and

other nearby cities for the elderly and people with disabilities. SMART transportation services are free within Wilsonville, but charge a fee for intercity services. The service costs $1.50 per trip for adults and $0.75 for seniors (60+), disabled, and youth outside of the CAT and SMART fareless zones. A transfer to TriMet WES Commuter Rail is possible at SMART Central at Wilsonville Station. SMART operates on weekdays from 5 am to 9 pm, Saturday from 7:30 am to 5:30 pm, and select holidays. Pre-scheduled service is provided to the Wilsonville Community Center. Transportation to Portland area medical appointments for seniors and persons with disabilities is provided with STF funds.

SMART Advisory Committee

SMART is advised on services through a citizen/stakeholder Task Force, as well as public input, City Council. SMART also actively solicits input from seniors and persons with disabilities through the Wilsonville Community Center. SMART also works directly with Clackamas Community Health (formerly Clackamas Mental Health) to coordinate transportation services.

SMART Funding

Business and self-employment tax provides 62 percent of SMART's operating revenues. Federal grants provide 12 percent, and STF, STIF and other operating grants represent 22 percent of SMART's budget. Fares make up three percent of SMART's current budget and miscellaneous revenue is one percent.

Future of SMART Transit

SMART updated their master plan in 2017. In 2018 SMART also developed and adopted its Programs Enhancement Strategy to guide programs to be funded with new revenue from HB 2017.

COMMUNITY-BASED TRANSIT PROVIDERS

The following describes the community-based transit operators in the study area and, as applicable, describes their services and programs, structure and advisory committees, background, future plans. The organizations include:

- Ride Connection;
- Clackamas County Social Services Division;
- Clackamas Community College;
- Washington County Disability, Aging and Veteran Services;
- Multnomah County Aging, Disability, and Veteran Services;

- Swan Island Transportation Management Association; and,
- Washington Park Transportation Management Association

Ride Connection

Background

Ride Connection is a private non-profit organization, located in Portland, Oregon, that coordinates transportation operations, mobility management activities provided by community-based organizations and groups and provides direct service when a partner cannot be found.

The partner network includes a variety of human service organizations serving seniors, persons with disabilities and other individuals who experience barriers to accessing the transportation system in the Portland metropolitan region and nearby rural areas. Each transportation service is individually designed to serve the unique needs of communities including geographically based services, as well as services based on specific levels of service or cultural affinities. The majority of Ride Connection customers are seniors or persons with disabilities. In recent years, Ride Connection services have also expanded to include more community-connector shuttle services and fare assistance for low-income individuals. A list of Ride Connection's partners is included in *Attachment F*.

In areas where there are no private non-profit partners with the capacity to provide door-to-door transportation services, Ride Connection directly operates services. Currently, this includes East Multnomah County, Northwest Portland and all of Washington County. In areas where additional door-to-door capacity is needed, beyond Ride Connection network capacity, Ride Connection contracts with established taxicab companies to provide additional service.

Ride Connection services continue to expand and grow to meet more community needs. In July of 2014, Ride Connection moved to its new Resource and Operations Center located at 9955 NE Glisan Street in the Gateway district of Portland. The Resource and Operations Center is home to the Ride Connection Customer Service Center, Fleet Management, Training Programs and Administrative Support services. In addition, direct service operations are coordinated from six satellite offices located in Beaverton, Forest Grove, Gresham, Hillsboro, King City and Tualatin.

Fleet management for the network includes a fleet of 100+ accessible mini-buses and minivans, along with six sedans to provide additional capacity for special programs and needs. Service is provided by approximately 800 drivers, of whom approximately two-

thirds are volunteers. In Fiscal Year 2014-15, nearly 500,000 trips were provided by Ride Connection door-to-door and community connector services and Ride Connection volunteers provided 42,965 hours of service.

Ride Connection provides the following support services for its partners:

- Service coordination between partners
- Service scheduling and centralized call center services
- Travel Options Counseling for individual customers
- Driver, partner and staff training and development
- Accessible fleet acquisition
- Preventative maintenance program and fleet management
- Technical assistance and support service to service partners and other community organizations
- Outreach and joint marketing of regional transportation services
- Advocacy for individuals with transportation needs and for community-based service partners who help meet those needs
- Volunteer recruitment assistance
- Data management and reporting support
- Web-based tools for daily operations and reporting
- Contract administration, compliance and performance monitoring
- Grant writing, fundraising and serving as a conduit for state and federal funding
- Service planning, including coordination of existing services for efficiency and creation and implementation of new services and innovative programs that meets transportation needs identified by local and regional communities.

Partnership Support

Ride Connection recognizes and supports the uniqueness of individual service partners and community organizations in the region. As the coordinating organization in the region, Ride Connection works diligently to provide collaborative opportunities for planning, funding, contract management, reporting tasks, fiscal monitoring, and volunteer management, so that service partners can focus on what they do best: providing transportation options to the communities they serve.

The Ride Connection coordination model is a hybrid of centralized and decentralized activities. Many of the direct service activities happen at the local neighborhood level, where knowledge of the community and its needs support a customer-focused, needs-based philosophy. Where centralization allows economies of scale to be achieved, functions are consolidated and managed by Ride Connection. Ride Connection is committed to enhancing support and strengthening network service partners while creating transportation solutions in accordance with the Coordinated Transportation Plan.

Transportation Services

Ride Connection has been instrumental in the development of regional information and referral service, driver training and travel training services, and a broad range of transportation services to address a variety of needs identified by the communities and individuals who receive service. It provides key connections to social service organizations and County aging and disability services, a role that urban transit agencies have not traditionally emphasized within their organizations. The following provides an overview of services:

Door-to-Door Services: Depending upon location, Ride Connection links the customer to a service partner or one of its direct service outlets. They are picked up at their door and taken to their destination.

- **Rides Upon Request** – Rides are provided at no cost for seniors (age 60+), persons with disabilities and veterans who need a lift to places like the grocery store, medical appointments and social activities.
- **Non-Medical OHP –**Ride Connection is the provider for non-medical transportation for Oregon Health Plan members (as authorized by Medicaid long-term case managers) in Washington County. To be eligible, the customer must be on the Oregon Health Plan (OHP). These services provide access to destinations beyond medical appointments, such as community services, activities and supportive services that are specified in the customer's OHP service plan.
- **Shared and Retired Vehicle Program** – Organizations that need a vehicle occasionally can borrow Ride Connection's accessible vehicles without having the expense of owning a vehicle. Ride Connection provides driver screening and training and they or one of its partners provides the vehicle. The borrowing organization provides the fuel and driver. Through the Retired Vehicle Program, Ride Connection places retired vehicles with community organizations throughout Clackamas, Multnomah and

Washington counties. Nonprofit organizations as well as government entities and jurisdictions serving persons with disabilities and/or individuals over the age of 60 are eligible to apply to receive a retired vehicle. All vehicles are wheelchair accessible and applications are accepted year-round.

- **Ride Together** –Riders recruit their own driver and once the driver is approved, Ride Connection provides mileage reimbursement for rides given. This program is intended to empower riders to ask for rides from a loved one or neighbor without feeling like they have nothing to offer in return.
- **RideAbout (Community Shuttles)** – A number of shuttles were designed for specific communities where many customers request similar trips (i.e. grocery stores). By implementing fixed route services (that can deviate with advance notice) that make stops at popular destinations, Ride Connection decreases the cost per ride.
- **Dahlia: Dialysis Transportation** – In 2013, Ride Connection received a grant from the Administration for Community Living to further investigate the needs of individuals who regularly receive dialysis treatments. Ride Connection is working with one dialysis clinic, with an expansion to two in 2016 and with a cadre of customers and volunteers to provide rides for individuals to and from treatment. A new process has been instituted in order to address wait times and overall customer comfort and have developed a one-of-a-kind training program specifically for drivers who provide rides to and from dialysis.
- **Veteran Transportation Services** – designed to meet the needs of Veterans through the use of volunteer drivers who are veterans as well.

Provide Access to Public Transit: Ride Connection collaborates and acts as a liaison between public transit agencies and service partners to develop community-based transportation services and programs that offer solutions for customer needs, leverage community resources, and expand the capacity of the regional transportation system.

- **Fare Relief** – Using TriMet funds, Ride Connection provides matching funds to nonprofit organizations to supplement funding used to purchase transit fare for seniors and persons with disabilities. As a new program, it was created to encourage human service agencies and community non-profit partners to include transportation for seniors and persons with disabilities in their program planning, funding applications and program operational budgets.

- **RideWise Travel Training –** Promotes independent travel of seniors and persons with disabilities by providing free access to information, one-on-one training and support. The RideWise program is designed to provide mobility support ranging from trip planning assistance to intensive one-on-one travel training and is based solely on an individual's need and ability level.
- **Information and referral (Travel Options Counseling) –** Ride Connection's Travel Coach provides a personalized mobility planning system that is easy to access and addresses the individual mobility needs of each customer. This personalized service provides customers with information and services that best meet their mobility needs.
- **Rider's Clubs –** Group trips are designed to encourage comfort in using the public transit system by creating fun adventures that include riding fixed route to and from. Volunteers called "Ride Ambassadors" lead these trips.

Last-Mile Services provide deviated, fixed-route transportation services in areas underserved by transit.

- **GroveLink** is a free "deviated, fixed route" public transit service and is designed to help the community access employment opportunities, local destinations, and regional transit services: specifically, TriMet bus line 57 and Ride Connection's westLink.
- **North Hillsboro Link** is a free "deviated, fixed route" service linking Orenco MAX Station to suburban employment centers in North Hillsboro. While specifically designed for transit-dependent employees, job-seekers, and low-income individuals, service is open to the public.
- **Tualatin Shuttle** is a free "deviated, fixed route" service linking Tualatin WES Station to employment destinations in the Tualatin area. While specifically designed for transit-dependent employees, job-seekers, and low-income individuals, service is open to the public.
- **westLink** connects the general public with the cities of Forest Grove, Banks, North Plains, and the Hillsboro Transit Center. This bus also connects to Tillamook's WAVE bus and GroveLink.

Board/Advisory Committee

Ride Connection's Board of Directors oversees and directs the organization's activities. Board membership is comprised of a diverse group of individuals who provide insight from different geographic areas of the region, different professional backgrounds, and individuals who use and benefit from the services that Ride Connection provides. This

provides a variety of skill sets needed to ensure proper oversight of Ride Connection's non-profit, mission-based operations. Advisory committees (e.g. Audit and Finance Committee, Program and Provider Services Committee) report to the board and monitor business practices, service delivery methods, fund development activities and core accountabilities to ensure the stability, adaptability and resilience of the organization and its network.

Ride Connection Funding

Ride Connection programs are funded with §5307, §5310, §5311 federal rural assistance, State STF and STIF funds, Aging and Disability Services, fare donations, fund raising, interest income, private, Business Energy Tax Credit, charitable contributions and other local funding resources. Ride Connection provides services within TriMet's service boundary that are beyond TriMet's minimum complimentary paratransit requirements as they are able to provide those services more cost effectively than TriMet's LIFT program.

Non-Emergency Medical Transportation

Non-Emergency Medical Transportation is provided through funding from Oregon Health Plan and operated by Ride To Care. Trips can be scheduled for medical visits with at least two days' notice.

Clackamas County Social Services Division

Clackamas County Social Services Division is the county's Area Agency on Aging, Community Action Agency, Development Disabilities Program and the Veteran's Service office. They offer two internal transportation services for seniors and persons with disabilities:

- Catch-a-Ride (CAR): This program is provided with paid drivers, and also has a small job access program for individuals with disabilities.
- Transportation Reaching People (TRP): This program is provided with a combination of paid drivers and volunteer drivers who receive mileage reimbursement.

The Social Services Division provides rides throughout Clackamas County, including with volunteers who are dispatched out of their local senior centers. Rides are provided for a variety of needs but medical and life-sustaining medical (including dialysis) rides are prioritized. The Division also works with volunteers for the Vets Driving Vets and Ride Together programs. Medicaid Waivered Non-medical Rides for the county are provided as well.

In addition to the two internal transportation programs, Clackamas Social Services is the lead organization in the Clackamas County Transportation Consortium, a partnership of senior and community centers that provide community-based services to seniors and persons with disabilities. The county's senior and community centers provide a variety of services to help individuals age in place, including home delivered meals and other essential supports. Centers currently providing transportation services include Pioneer (Oregon City), Milwaukie, Gladstone, Lake Oswego, Canby, Estacada, Molalla, Hoodland and Sandy. Most of the rides provided by center vehicles are for nutrition or local services. However, most centers dispatch TRP volunteers or their own volunteers to provide expanded medical ride services, including over significant distances such as to OHSU.

Clackamas Community College

Clackamas Community College (CCC) provides an express service, the CCC Xpress Shuttle, between CCC's Oregon City and Harmony campuses and the Green Line MAX at the Clackamas Town Center. The CCC Xpress Shuttle is free and open to the general public. Elderly riders and persons with disabilities using TriMet or the South Clackamas Transportation District rural service can transfer at the Oregon City campus to the CCC Xpress for direct service to the Harmony campus and Clackamas Town Center. Shuttles run fall, winter, and spring terms, but do not run during breaks, summer term, or during college closures resulting from inclement weather or other local emergencies.

Washington County Disability, Aging and Veteran Services

Washington County Disability, Aging and Veteran Services (WCDAVS) provide services through the Older Americans Act to individuals over 60 years of age. Services are designed to keep individuals independent and living in their home in the local community. Transportation needs for WCDAVS clients range from medical appointments, grocery shopping, socialization, and entertainment or service appointments with other social service agencies. In addition to the Tillamook WAVE service, WCDAVS has contracts with Ride Connection to cover the full range of transportation needs for its clients. This includes the North Hillsboro Link, GroveLink, westLink, King City RideAbout, Tualatin Shuttle, and the Beaverton RideAbout.

Multnomah County Aging, Disability, and Veteran Services

Multnomah County Aging, Disability, and Veteran Services provide services through the Older Americans Act to individuals over 60 years of age. Services are designed to keep individuals independent and involved in their local community. Transportation needs for MCADVS clients range from medical appointments, grocery shopping, socialization, and entertainment or service appointments with other social service

agencies. MCADVS has contracts with Ride Connection, Radio Cab, TriMet, and First Transit to cover the full range of transportation needs for its clients.

Transportation Management Associations

Westside Transportation Alliance (WTA)

The WTA is a nonprofit organization that works with its members to offer workplace services and programs that encourage their employees to commute to work by transit, carpool, vanpool, bicycling, and walking.

Washington Park Transportation Management Association (WPTMA)

The WPTMA operates the "Explore Washington Park" free shuttle transports people to all major attractions in the park from the main parking area and the MAX station. It operates daily April through October and on the weekends only November through March.

STATEWIDE TRANSIT PROVIDERS

The following is a list of other transit providers and services that connect to the Tri-county Area.

AMTRAK

Amtrak operates their Cascades train service between Vancouver, British Columbia and Eugene, Oregon, with a stop at Portland's Union Station. There are six trains operating in each direction on each day of the week. The Coast Starlight operates one daily train in each direction between Seattle, Washington and Los Angeles, California, with a stop at Portland's Union Station.

Cascades POINT

The Cascades POINT provides seven round trips daily from downtown Portland to and from the University of Oregon in Eugene, making a total of seven stops. Tickets are sold by Amtrak and are $28.00 for adults, $23.80 for seniors 62 years and older, and $14.00 for children between the ages of 2 and 15.

Clark County Public Transit Benefit Area Authority (C-TRAN)

C-TRAN offers convenient Limited service to downtown Vancouver, Delta Park/Vanport and Parkrose/Sumner MAX light rail stations. From these locations, riders can transfer to other C-TRAN routes, MAX, or TriMet bus routes for continued travel to destinations including Rose Quarter, Lloyd District, Swan Island, and downtown Portland. Service is provided weekdays only, except on the 65 Parkrose

Limited, which provides service on Saturdays. The adult All-Zone one-way fare is $2.50 or $100.00 for a monthly pass. The Honored/Youth fare for children 7-18 years of age, senior citizens 65 years or older, disabled individuals, and Medicare card holders is $1.25 ($28.00 for a monthly pass).

C-TRAN offers Clark County residents convenient Express service to Lloyd District, the downtown Portland Transit Mall, and the OHSU campus on Marquam Hill. Express service is available only during weekday peak commute times from all major park and ride and transit center locations in Clark County, except on the Route 105 I-5 Express which provides service throughout the day, Monday through Friday. The adult, Honored/Youth fare for children 7-18 years of age, senior citizens 65 years or older, disabled individuals, and Medicare card holders is one-way fare is $3.85 or $125.00 for a monthly pass.

NW CONNECTOR

The North by Northwest CONNECTOR system is an alliance of the transit providers across five counties in northwestern Oregon including Benton, Clatsop, Columbia, Lincoln, and Tillamook Counties.

While TCTD is the designated service operator, the service is subsidized by an ODOT §5311(f) Intercity Grant. The grant's local matching funds are provided by the Confederated Tribes of the Grand Ronde (CTRG) and the Confederated Tribes of the Siletz Indians (CTSI).

Columbia County Rider (CCR)

Columbia County Rider (CCR) provides public transit services in Columbia County and connections to TriMet. CCR has two lines that connect riders to TriMet routes. Line 1 operates Monday through Friday with 10 round trips between downtown Portland and the St. Helens Transit Center. Line 2 operates Monday through Friday with three round trips between Portland Community College's Rock Creek campus and the St. Helens Transit Center. Fares on Line 1 and Line 2 are as follows: one-way fares are $3.00 for the general public $2.00 for Honored Citizens and students. A monthly pass is $120.00 ($100.00 for Honored Citizens and students).

Columbia Gorge Express

ODOT operates daily transit service using accessible vehicles. Visitors to the Gorge can take the Columbia Gorge Express from the Gateway Transit Center in Portland to Multnomah Falls. In addition, regular weekend bus service will transport visitors for

free between an overflow parking lot at Rooster Rock State Park and Multnomah Falls. Visit the Columbia Gorge Express website for more information and to buy tickets.

NorthWest POINT

The NorthWest POINT provides twice daily bus service between downtown Portland and Astoria, making a total of nine stops, including Cannon Beach. The NorthWest POINT service connects with TCTD Bus Route 3 in Cannon Beach. Service from Portland to Astoria arrives in Cannon Beach at 11:20 a.m. and 8:08 p.m. and costs $4.50 for an adult (16-61 years of age), $3.85 for seniors, and $2.25 for a child. Service from Astoria to Portland arrives in Cannon Beach at 9:20 a.m. and 7:00 p.m. and costs $17.00 for an adult (16-61 years of age), $14.45 for seniors, and $8.50 for a child. More information on this service can be found online at: https://www.oregon-point.com/route-landing/?route=northwest.

Salem-Keizer Transit (Cherriots)

Salem-Keizer Transit (SKT) is the primary public transit and complementary paratransit provider to the Salem-Keizer area and Marion and Polk counties. Operating Monday through Friday, Cherriots buses provide service in the Salem-Keizer area, and connections to other metropolitan regions such as Portland.

Cherriots Route 1X provides service between the Wilsonville Transit Center and Salem. Riders from the Portland metropolitan area can reach Wilsonville via WES commuter rail or South Metro Area Regional Transit (SMART) buses. Route 1X operates 13 round-trips a day, with six trips in each direction during the morning and seven in the afternoon and early evening hours. The adult day pass is $3.25 or $45.00 per month. The Reduced fare day pass for senior citizens 60 years or older, disabled individuals and Medicare card holders is $1.50 ($22.50 per month). The Youth fare for children 6-18 years of age is $1.00 ($10.00 for a monthly pass). The monthly pass also provides free connections to Cherriots and CARTS.

Tillamook County Transportation District (TCTD)

As part of the NW Connector, Tillamook County Transportation District (TCTD) provides a twice-daily service from Tillamook to Portland's Union Station downtown where passengers may connect with Amtrak and Greyhound. Prior to downtown Portland, the service stops at Banks, North Plains, NW 185th Ave and the Sunset Transit Center to connect with TriMet's MAX light rail system, which provides connections to Portland International Airport as well as all destinations in TriMet's bus, light rail, and commuter rail system. Bus service runs from 8:00 a.m. to 6:00 p.m. All vehicles are accessible and can accommodate wheelchairs. The one-way fare is $15.00 between

Tillamook and Portland and the one-way reduced fare is $7.50. The round trip fare is $20.00. There is no charge for passengers from Banks to North Plains and from North Plains to TriMet stops in Hillsboro. However, TCTD records the number of pickups and reports them to Ride Connection. Ride Connection then compensates TCTD for the trips at a rate of $5.00 per one-way trip from Banks/North Plains to Hillsboro ($2.50 one-way reduced fare) and $2.50 for a one-way trip from Banks to North Plains ($1.25 one-way reduced fare).

Yamhill County Transit Area (YCTA)

Yamhill County Transit Area (YCTA) provides local public transit service in Yamhill County and connections to the TriMet system. Local service is provided in McMinnville and Newberg on weekdays only. In addition to local services, Yamhill County Transit provides several routes connecting communities in the area to TriMet services in the Portland metropolitan area.

Route 33 (McMinnville - Hillsboro): Connects McMinnville to Carlton, Yamhill, Gaston, Forest Grove and to the MAX light rail (Blue Line) in Hillsboro with two morning, a midday, and two afternoon round trips on weekdays.

Route 44 and 44X (McMinnville – 99W): Connects McMinnville to Lafayette, Dundee, Newberg, Sherwood, and Tigard. Route 44 operates ten weekday round trips, which includes an express route (Route 44x), and four Saturday round trips.

Fixed route one-way regular fare is $1.25, and a single day-pass is $2.50. Unlimited monthly passes are $35.00. Service runs from 5:00 a.m. to 9:00 p.m.

3. SERVICE GUIDELINES

HISTORY

The 2006 tri-county Elderly and Disabled Transportation Plan (EDTP) adopted a Land Use Concept as the strategy to guide the delivery of transportation services. This concept states that:

> "A higher level of transportation services for the seniors and/or- persons with disabilities community is available in areas where the concentration of the seniors and persons with disabilities population is the greatest. In this strategy, an urban area, city, town or small community would receive more services than those living outside those jurisdictional boundaries—for example, on a farm or in a rural area."

During the development of the EDTP update in 2009, the TriMet STFAC reaffirmed the Land Use Concept and most of the service standards that flow from it, and changed the language of a service "standard" to a service "guideline" to clarify that the guidelines are goals that providers should strive to meet given the variance among individual communities.

Originally, the 2006 EDTP divided the service delivery plan between communities within the Urban Growth Boundaries (UGB) and those outside it. This was later changed by the STFAC during the 2012 CTP update. The UGB designation was removed to create guidelines that apply inside and outside the TriMet Service District as the STFAC recognized that it was not cost-effective or necessary for some of the smaller communities within the UGB to provide a 20-24 hour service span. Within the TriMet Service District, the new guidelines defined Frequent Service corridors and standard service areas and reduce the span of service for fixed routes. These guidelines better corresponded to TriMet's current bus and rail service standards but still may be higher than current service to reflect the aspiration of more service in the future. In addition, the new guidelines reduced the span of service goal inside the district for paratransit provided to non-ADA eligible riders to better balance priorities.

In the small communities and rural areas, where the guidelines recommended that service be available five days a week, language in the 2012 CTP was added to clarify that the guideline does not require only weekday service, but that service could be offered on a Saturday or Sunday, as community needs dictate.

The 2016 CTP Update removed the large community, small community, and rural designations for classifying communities outside of the TriMet Service District but retained the associated population thresholds. The three categories are communities with 1) more than 2,500 people, 2) communities between 500 and 2,500 people, and 3) communities with less than 500 people.

SERVICE GUIDELINES

Service guidelines are used as a tool for assessing the level of service currently provided and identifying unmet needs or gaps. While each recommended guideline may not be achieved, it should remain a target for ongoing improvement. The public and policy-makers should not view these guidelines as guaranteed levels of service but rather as ways to measure progress toward an ideal continuum of transportation service.

This updated version of the plan has retained the categories of service available for people with varying degrees of ability to use fixed-route transit. The guidelines address the following categories:

Fixed Route—No to Some Difficulty

This category refers to days and hours of service available to seniors and persons with disabilities who have moderate or no difficulty using fixed route transit. Outside the TriMet Service District, this service may be provided by fixed route or paratransit service.

Paratransit

No Difficulties: This category refers to days and hours of paratransit service available to seniors and/or persons with disabilities in large, small and rural communities outside the TriMet Service District who have no difficulty using fixed route service, but where fixed route service may not be available.

Non-ADA with some difficulty: This category refers to days and hours of paratransit service available to seniors and persons with disabilities who are not ADA-eligible but who have some difficulty riding fixed route service.

ADA eligible: This category refers to the days and hours of complementary paratransit service available to ADA-eligible customers, which must coincide with the days and hours that fixed route transit is available in the area.

Needs Assistance: This category refers to days and hours of paratransit service for seniors and persons with disabilities who are unable to utilize fixed route service and cannot use demand response services without enhanced assistance, such as: an escort or travel assistant, door through door assistance or similar specialized services. This service exceeds that required by the ADA.

The following are the service guidelines recommended by the STFAC.

Within the TriMet Service Area

The following aspirational service guidelines apply within the TriMet service area and can be seen in Table 3-1.

Seniors and persons with disabilities who are able to use fixed route transit should have these fixed-route services available to them:

- **Frequent Service Corridors.** Bus and rail Frequent Service, serves main streets and connects regional and town centers identified in Metro's 2040 Plan. Frequent Service corridors have population and employment densities that can support 15 minute service most of the day, with a full span of service of at least 18 hours a day, seven days a week.
- **Standard Service**. Standard service helps meet the need for basic community mobility and provides connections to Frequent Service routes. Standard service operates on corridors or in communities with population and employment concentrations that can generate at least 15 boarding rides per vehicle hour with a span of at least 15 hours a day, seven days a week.

Seniors and persons with disabilities who are unable to use fixed route services, or who have moderate or major difficulty riding the fixed route system should have these services available to them:

- Additional local curb-to-curb or door-to-door services available 10-15 hours a day on weekdays and 8-10 hours a day on weekends. These services provide local transportation to shopping, nutrition sites, and medical clinics, for example, as well as to fixed route service. Services should generate at least four boarding rides per vehicle hour.

- ADA Paratransit service is available to people whose disability prevents them from using regular bus and rail service for some or all of their trips and who live within a three quarter mile radius of fixed route service. Service is limited to only those persons who have been determined as eligible according to criteria specified in the ADA law.
- Needs Assistance customers should have service available 10-15 hours a day on weekdays and 8-10 hours a day on weekends. These services may or may not be client-specific, but provide local transportation for a variety of different trip purposes.

Outside the TriMet Service Area

The following service guidelines apply outside the TriMet service area and can be seen in Table 3-1.

Communities with more than 2,500 people

Seniors and persons with disabilities with major, moderate, or no difficulty using the fixed route system should have access to fixed-route, curb-to-curb, or door-to-door services 10-15 hours a day, six days a week. Needs Assistance passengers should have access to service 8-10 hours a day, five days a week.

Communities with between 500 and 2,500 people

Seniors and persons with disabilities with major, moderate or no difficulty using the fixed-route system should have access to regularly scheduled, deviated fixed-route, curb-to-curb or door-to-door services 8-10 hours a day, five days a week, which may include a Saturday or Sunday. Needs Assistance passengers should have access to service 6-8 hours a day, five days a week for medical, work and nutrition trips, and 2-3 days a week for all other trips. This level of service exceeds that required for complementary paratransit under the ADA.

Communities with fewer than 500 people

Generally, these areas are small developments surrounded by large tracts of farmland or forests. Because of the sparse population, neither fixed routes nor complementary ADA-paratransit are anticipated under these guidelines. Seniors and persons with disabilities living in rural areas, including Needs Assistance passengers, should have access to demand response service a minimum of 6-8 hours a day, five days a week for medical, work and nutritional trips, and 2-3 days a week for all other trips. The service may include a Saturday or Sunday.

Table 3-1. Aspirational Service Guidelines Summary

	Fixed Route	Paratransit			
	No to Some Difficulty	E&D No Difficulty	Non ADA Eligible (some difficulty)	ADA Eligible	Needs Assistance
TriMet Service District High Frequency Corridors	≥ 18 hrs/7 days	N/A	Localized curb-to-curb 10-15 hrs weekdays; 8-10 hrs weekends	Same as fixed route	10-15 hrs weekdays; 8-10 hrs weekends
TriMet Service District Standard Service	≥ 15 hrs/7 days	N/A	Localized curb-to-curb 10-15 hrs weekdays; 8-10 hrs weekends	22 hrs/7 days	10-15 hrs weekdays; 8-10 hrs weekends
Community with more than 2,500 people	10-15 hrs/6 days	10-15 hrs/6 days	10-15 hrs/6 days	10-15 hrs/6 days	8-10 hrs/5 days
Community between 2,500 and 500 people	8-10 hrs/5 days	8-10 hrs/5 days	8-10 hrs/5 days	8-10 hrs/5 days	6-8 hrs/5 days for medical, work and nutrition; 2-3 days for other trips
Community with less than 500 people	N/A	6-8 hrs/5 days for medical, work and nutrition; 2-3 days for other trips	6-8 hrs/5 days for medical, work and nutrition; 2-3 days for other trips	6-8 hrs/5 days for medical, work and nutrition; 2-3 days for other trips	6-8 hrs/5 days for medical, work and nutrition; 2-3 days for other trips

Conformance to Service Guidelines

Tables 3-2 A-C (one table per county) and Tables 3-3 A-C provide an evaluation of how well the service guidelines are being met. Tables 3-2 A-C provide the results for areas located within the TriMet Service District and Tables 3-3 A-C provide the results for areas located outside the TriMet Service District. Gaps in service exist primarily in the Needs Assistance category, and in local on-demand services for ADA and non-ADA-eligible customers. This evaluation is based on conformance to service guidelines which are aspirational but that should be worked towards in the long-term.

CAPACITY GUIDELINES

Guidelines based on the hours that a service is *offered* does not address whether adequate service is available. For this reason, in 2009 the STFAC recommended that a new guideline to address *capacity* be developed.

To identify what capacity problems exist, TriMet previously sent a survey to the network of providers who deliver non-ADA service to seniors and/or persons with disabilities. The providers responded by listing the following issues:

- There are a limited number of vehicles and drivers to serve large areas over a long span of service.
- Providers cannot always supply the requested ride. They may need to refer a caller to a different service, deny the ride altogether, or renegotiate the time or day of the requested service.
- Providers have had to change scheduled service to meet more pressing ride requests.
- Providers are reluctant to promote their service, because they are at capacity and cannot serve new requests.
- Customers are requesting services for which there is no capacity, such as early morning and evening trips, a shorter scheduling window to request trips, fewer referrals to LIFT, and weekend trips.

In 2009, two Capacity Guidelines were discussed but not adopted:

- **Paratransit Guideline:** Set a limit on the number of unfilled requests per month to determine if additional capacity is needed.
- **Regularly-Scheduled Shuttle Guideline:** Count the number of customers compared to the maximum capacity of the vehicle to determine if additional capacity is needed.

Table 3-2a. Conformance to Service Guidelines inside the TriMet Service District Boundary-Washington County

Washington County										
	Incorporated Cites									
	King City	Hillsboro	Tigard	Tualatin	Beaverton	Forest Grove	Rivergrove	West Linn	Sherwood	Durham
	(# = limited hours of service per day)									
Regularly Scheduled Fixed Route										
Standard										
Weekdays	13						3			
Saturday								5		
Sunday				5				5		5
Frequent										
Weekdays	13									
Saturday										
Sunday										
Paratransit Service (1)										
ADA Eligible (Door to Door										
Weekdays	2.5	2.5	2.5	2.5	2.5	2.5		4.75	2.5	2.5
Saturday										
Sunday										
Non-ADA Eligible (Curb-to-Curb										
Weekdays										
Saturday										
Sunday										
Needs Assistance (Door-through-Door)										
Weekdays	2.5	2.5	2.5	2.5	2.5	2.5		4.75	2.5	4.75
Saturday										
Sunday	2.5	2.5	2.5	2.5	2.5	2.5				

Table 3-3b. Conformance to Service Guidelines inside the TriMet Service District Boundary-Multnomah County

Multnomah County						
	Incorporated Cites					
	Portland	Gresham	Troutdale	Fairview	Wood Village	Maywood Park
	(# = limited hours of service per day)					
Regularly Scheduled Fixed Route						
Standard						
Weekdays						
Saturday						
Sunday						
Frequent						
Weekdays						
Saturday						
Sunday						
Paratransit Service (1)						
ADA Eligible (Door to Door						
Weekdays	2	12	2	2	2	12
Saturday						
Sunday						
Non-ADA Eligible (Curb-to-Curb						
Weekdays						
Saturday						
Sunday						
Needs Assistance (Door-through-Door)						
Weekdays	2	2	2	2	2	2
Saturday						
Sunday	2	2	2	2	2	2

Table 3-4c. Conformance to Service Guidelines inside the TriMet Service District Boundary-Clackamas County

Clackamas County	*Incorporated Cites*							Unincorporated Urban Areas
	Lake Oswego	West Linn	Happy Valley/Damascus	Gladstone	Oregon City	Milwaukie	Johnson City	
	(# = limited hours of service per day)							
Regularly Scheduled Fixed Route								
Standard								
Weekdays			3				1.5	
Saturday	5	5	3					
Sunday	5	5						4
Frequent								
Weekdays								
Saturday								
Sunday								
Paratransit Service (1)								
ADA Eligible (Door to Door)								
Weekdays	0.5	4.75	2	4	3	3		2
Saturday								
Sunday								
Non-ADA Eligible (Curb-to-Curb								
Weekdays								
Saturday								
Sunday								
Needs Assistance (Door-through-Door)								
Weekdays		4.75	2	4	3	2		2
Saturday								
Sunday			2	4	3	2		2

Table 3-5a. Conformance to Service Guidelines Outside the TriMet Service District Boundary-Washington County

	Washington County				
	Incorp. Cities				*Unincorp. Rural Communitites*
	Banks	North Plans	Cornelius	Gaston	
Regularly Scheduled Fixed Route					
Fixed Route			NA	NA	NA
On Demand					
No Difficulty (Public DAR)					
Non ADA Eligible (Curb-to-Curb)					
ADA Eligible (Door-to-Door)			No Service		
Needs Assistance (Door-through-Door)					

Table 3-6b. Conformance to Service Guidelines Outside the TriMet Service District Boundary-Multnomah County

	Multnomah County	
	Incorp. Cities	*Unincorp. Rural Communitites*
Regularly Scheduled Fixed Route	NA	NA
On Demand		
No Difficulty (Public DAR)		
Non ADA Eligible (Curb-to-Curb)		
ADA Eligible (Door-to-Door)	No Service	
Needs Assistance (Door-through-Door)		

Table 3-7c. Conformance to Service Guidelines Outside the TriMet Service District Boundary-Clackamas County.

Clackamas County							
	Incorporated Cites					*Unincorp. Rural Communitites*	
	Wilsonville	Canby	Molalla	Sandy	Estacada	Mt. Hood Villages	Other
Regularly Scheduled Fixed Route	1	2	1, 3			2	NA
On Demand							
No Difficulty (Public DAR)	NA	2	1, 3		5	NA	6
Non ADA Eligible (Curb-to-Curb)	2	2	1, 3		5	2	6
ADA Eligible (Door-to-Door)		2	1, 3			2	
Needs Assistance (Door-through-Door)		2	1, 3	4	5	NA	6

Notes
1 No Sunday Service
2 No Weekend Service
3 Saturday service for Molalla CCC route only
4 Short, 3-hour service weekdays
5 Short, 3.5-6-hour service weekdays, only volunteer service 1 weekday
6 Based on volunteer driver and vehicle availability

At the time, the STFAC recommended that a capacity guideline should be set. However, they determined that not enough information and input from providers was currently available to set the guideline and this is still the case.

The following items need to be considered when setting such a guideline:

- Determine whether the guideline should focus only on denials or include referrals and renegotiations.
- The terms should be well-defined and used consistently across providers.
- Consider using the ADA definition for denials.
- Data collection for the guidelines should be easy to collect.
- Decide if data should be collected for requests when the provider is not in operation, such as evenings and weekends, in order to document unmet needs.
- Consider how lack of promotion could be factored into a capacity guideline.
- Allow for flexibility in applying the guideline to areas with different population levels.

PERFORMANCE MEASURES AND REPORTING

During the review of the Priorities for the 2016 update to the CTP, the STFAC identified the desire to incorporate performance measurement into the funding application process, to utilize these to assess the success or impact of funded projects, and to provide regular reports to the STFAC that provide more useful information than the monthly data currently provided. The list of Priorities in Chapter 1 has been expanded to include the following priority on performance measurement: Strive to implement performance measures to create baselines for tracking progress on improvements to service, customer convenience and safety, and to evaluate the effectiveness of funding decisions.

Many different types of performance measures are pertinent to various types of programs and projects. How the different types of performance measurements, including evaluations of previous funding decisions, would be incorporated into the updated funding application process were discussed and are described in Chapter 7. A strategic initiative identified in this plan update is to update the agency reports to more directly relate to the measures in the funding applications. *Attachment G includes a list of potential performance metrics that can be used to evaluate different service elements related to the CTP priorities.*

4. NEEDS ASSESSMENT

Developing a comprehensive and updated needs assessment is an important part of the planning process. The Coordinated Transportation Plan for Seniors and Persons with Disabilities focuses on the transportation needs, gaps and challenges specific to persons with disabilities and seniors; therefore, this chapter articulates those needs. Chapter 5 identifies actions intended to address these needs, and will also serve as the basis and rationale for potential future applications to the STFAC for federal and state funding.

The needs assessment was developed using demographic analysis, stakeholder outreach, and by evaluating available service to the Service Guidelines included in Chapter 3.

The demographic analysis of the tri-county area used 2010 data from the U.S. Census, 2014-2018 data from the most recent five-year American Community Survey (ACS), and population estimates from the most recent publication of the State of Oregon's Office of Economic Analysis in 2013. The analysis outlines recent and future trends for the total population and seniors in the tri-county area as well as ACS data for persons with disabilities.

The stakeholder outreach component of the needs assessment included outreach and coordination with the key stakeholders involved in planning for and delivering transportation services and social services to articulate and share their experiences, perceptions and opinions about which needs are most critical to meet. This outreach was conducted utilizing a survey, one-on-one meetings, and a regional stakeholder workshop.

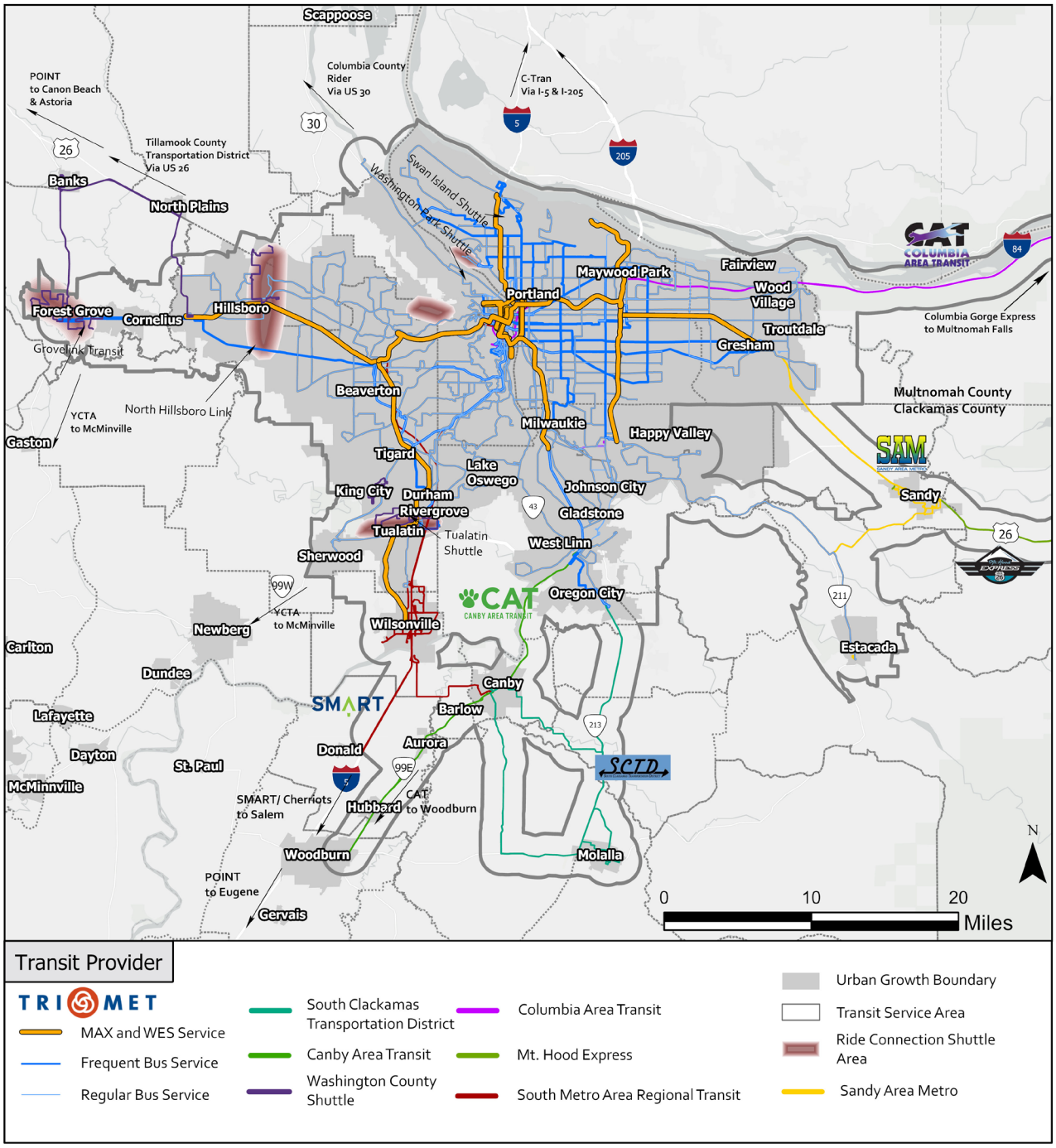
The evaluation of availability of service to the recommended Service Guidelines in Chapter 3 identified locations where there are significant gaps in service per the recommended service levels by type of service.

DEMOGRAPHIC ANALYSIS

The following provides an overview of the tri-county area based on data from the 2010 United States Census and the 2014-2018 American Community Survey 5-year estimate dataset. The tables and maps identify the areas of population most likely to face mobility challenges. There are 33 incorporated cities in addition to the three counties that make up the local governance within the tri-county area. Both Washington and Clackamas Counties include a significant amount of urbanized and densely populated land in their unincorporated areas, but within the Urban Growth Boundary. The transit

service area in the plan area is shown in Figure 4-1. It is based on a ¾ mile area from fixed route transit service which is the minimum required area for complimentary paratransit services.

Figure 4-1. Portland Metropolitan Area Transit Service Coverage Map



General Population Profile

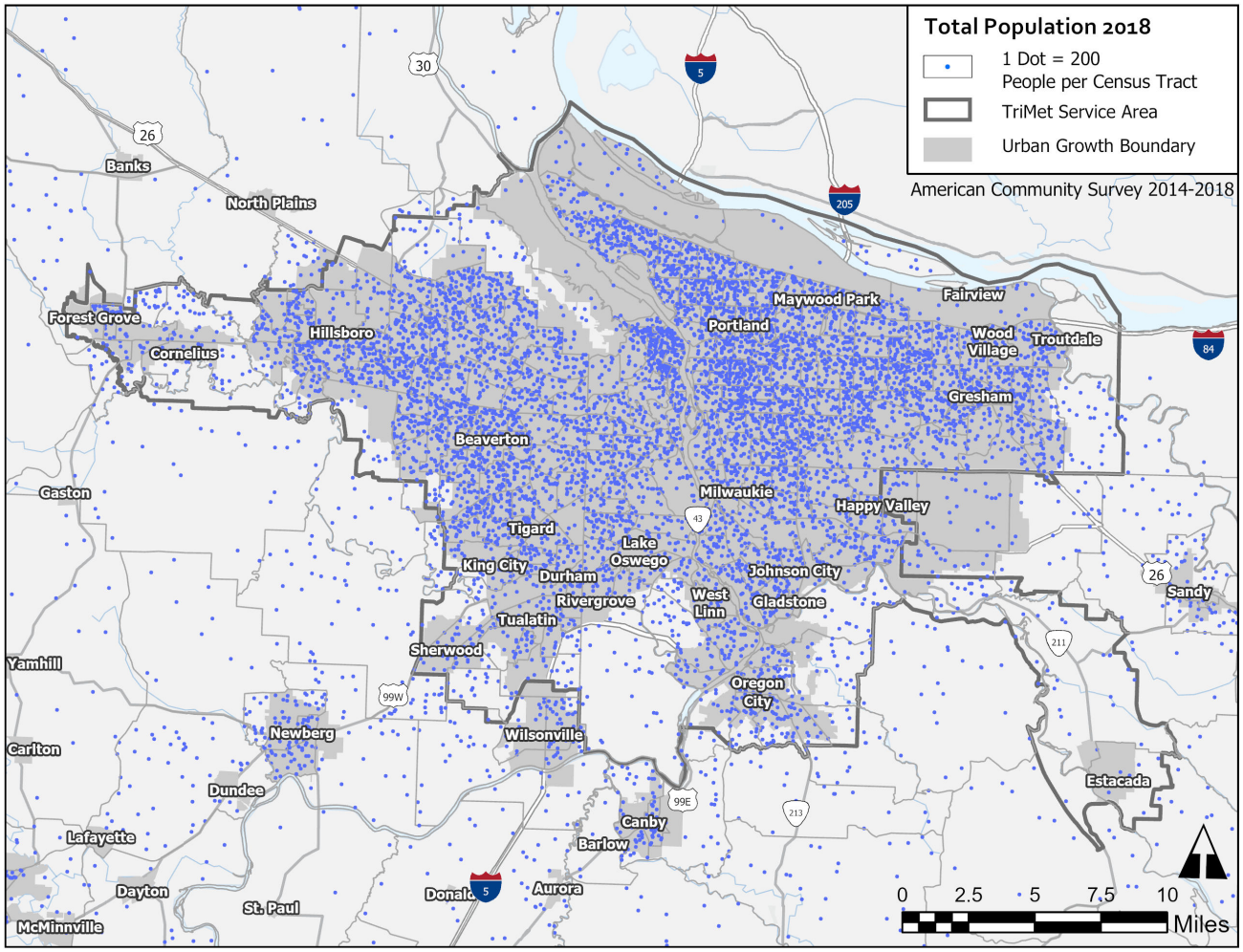
The 2010 U.S. Census included 1,641,036 people in the tri-county area. The American Community Survey estimates the 2018 population to be 1,786,256 which would indicate a regional annual growth rate of 1.07 percent from 2010 to 2018. This growth is not reflected equally throughout the region with some cities showing a decline in overall population during this period. The highest estimated growth rates were assigned to smaller communities. The cities Maywood Park, Happy Valley, Durham, King City and North Plains all had growth rates in excess of 2.5 percent per year. The cities of Barlow, Gaston and Johnson City all had an estimated population loss.

The greatest absolute increases in population were in the City of Portland (over 55,000 people), Unincorporated Washington County (over 21,000 people), the City of Hillsboro (over 13,000 people), the City of Beaverton (over 7,200 people), City of Happy Valley (over 5,500 people) and the City of Gresham (over 5,100 people).

Approximately 1,560,803 people lived within the current TriMet service area in 2010 representing over 95 percent of the tri-county population. Population information for each jurisdiction is shown in *Table H1 in Attachment H*, and a map of population density is provided in Figure 4-2.

By 2040, the tri-county population is forecast to be approximately 2,333,000, which represents a 42 percent increase over 30 years, or a 1.2 percent annual increase.

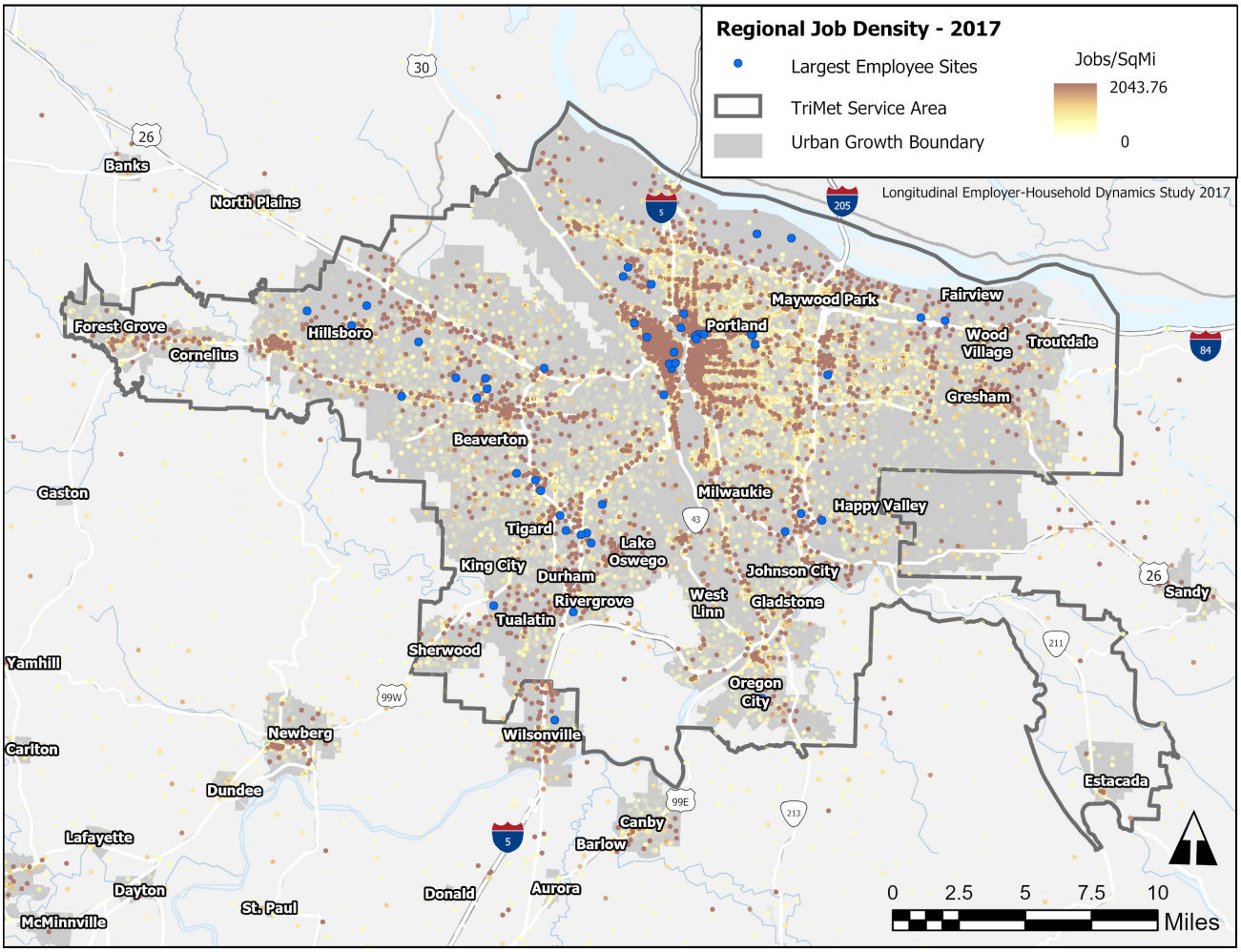
Figure 4-2. 2014 Population Density



Employment and Income

The tri-county area is the economic center of Oregon. According to the Longitudinal Employment and Housing Dynamic's (LEHD) 2017 reporting, there are approximately 967,443 jobs in the three counties. The largest concentration of employment is found in central Portland. Other large employment concentrations are found along the I-205 corridor through Multnomah and Clackamas Counties, and along US-26, OR 217, and I-5 in Washington County. *Table H2 in Attachment H* lists the largest localized employment hubs in the region and Figure 4-3 shows regional employment densities.

Figure 4-3. Regional Job Density



As of December, 2019, the Portland metropolitan area had an unemployment rate of 2.8 percent according the Bureau of Labor Statistics.

Household incomes are typically highest in northwest Clackamas County communities while the lowest median incomes are generally in Multnomah County communities east of the City of Portland and in the smaller outlying cities. At least 11% of the

populations of the cities of Cornelius, Beaverton, Hillsboro, Grehsam, and Barlow have limited English Proficiency (LEP). Communities with greater proportions of LEP populations typically have lower median household incomes, and generally have higher than average population densities, but have shorter commutes.

Employment and income information by jurisdiction is provided in *Table H3 in Attachment G* and a map showing concentrations of people earning below poverty level incomes and those who do not speak English very well is shown in Figure 4-4. A map showing concentrations of minority populations is shown in Figure 4-5.

Figure 4-4. Low Income and Non-English Speaking Population

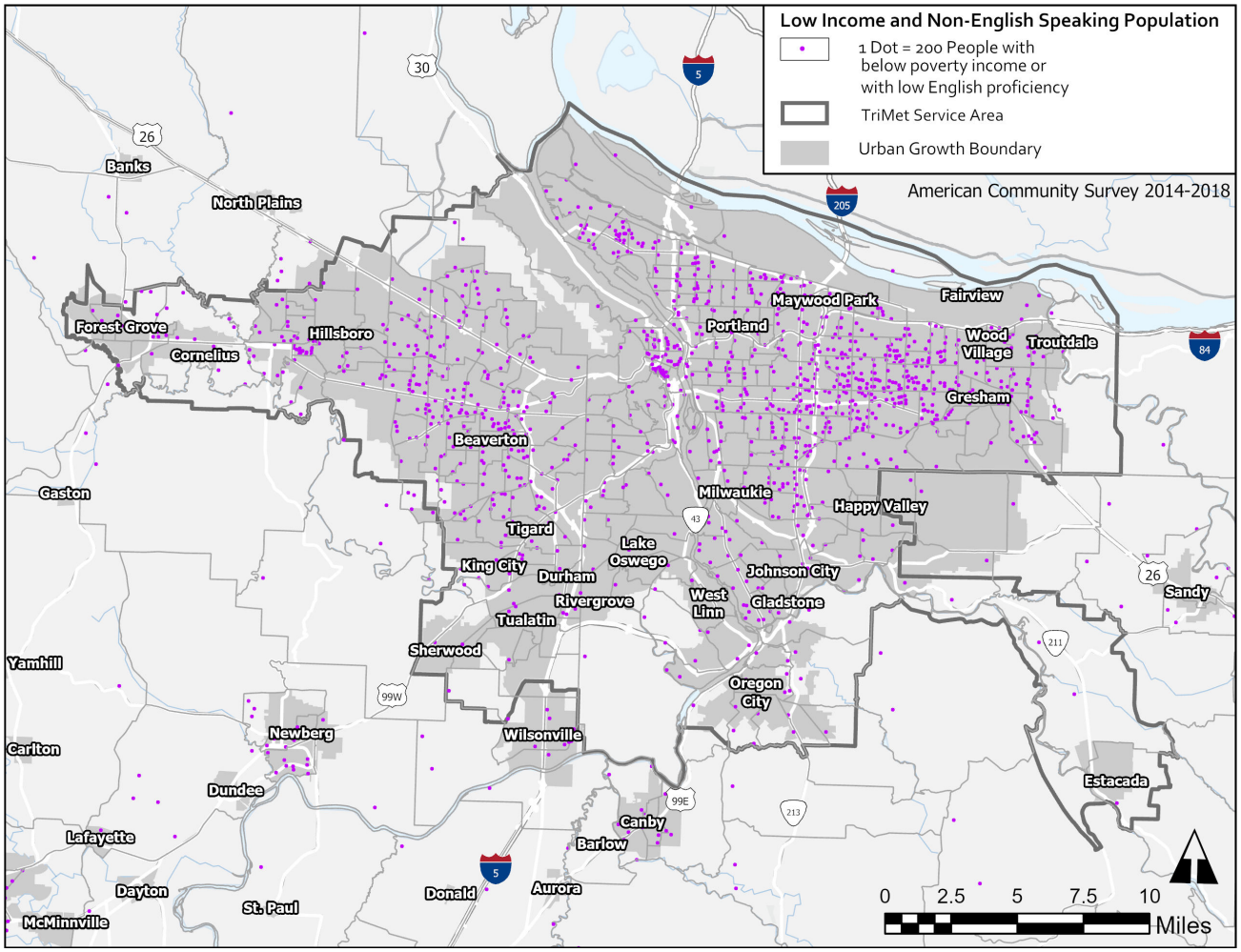
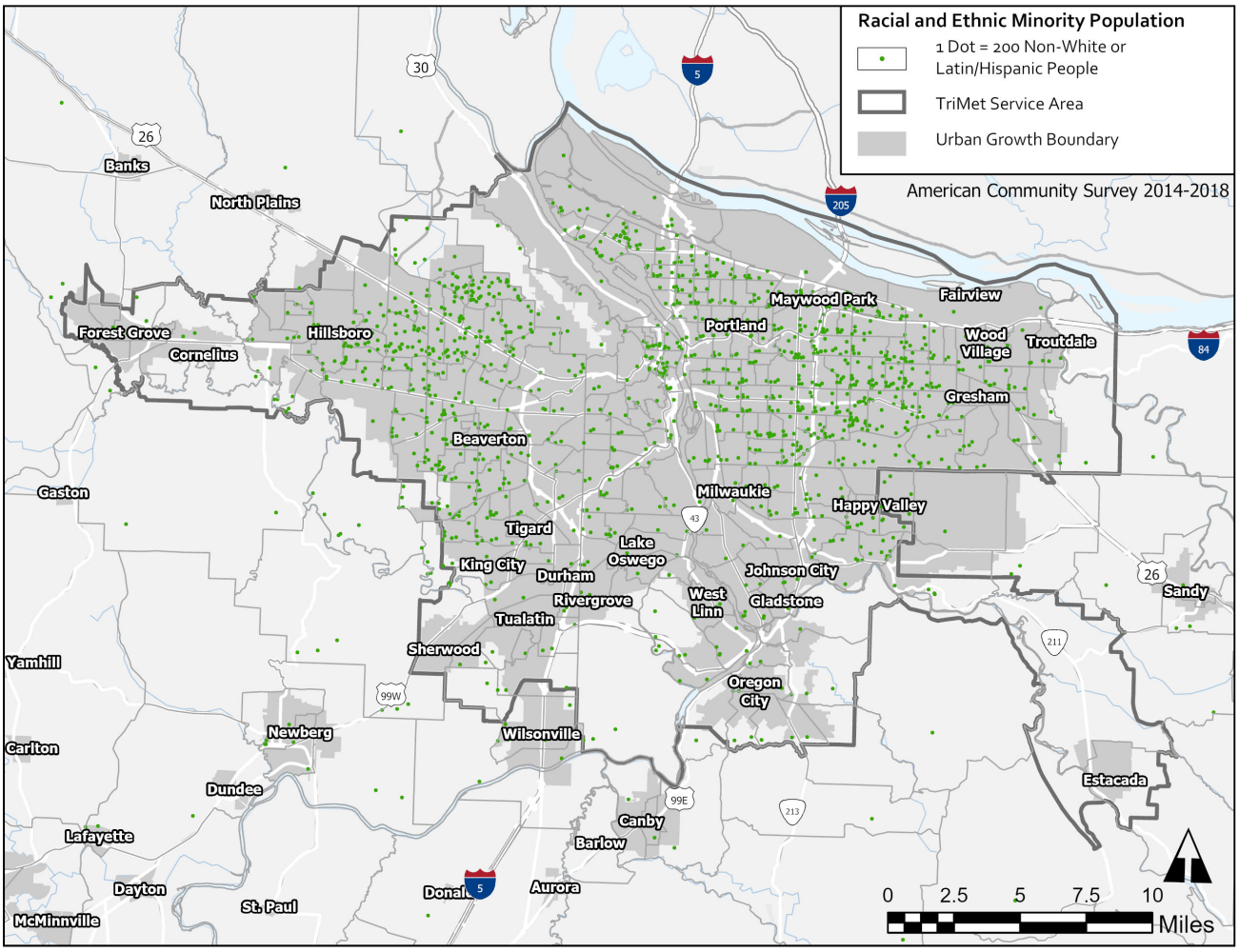


Figure 4-5. Minority Population

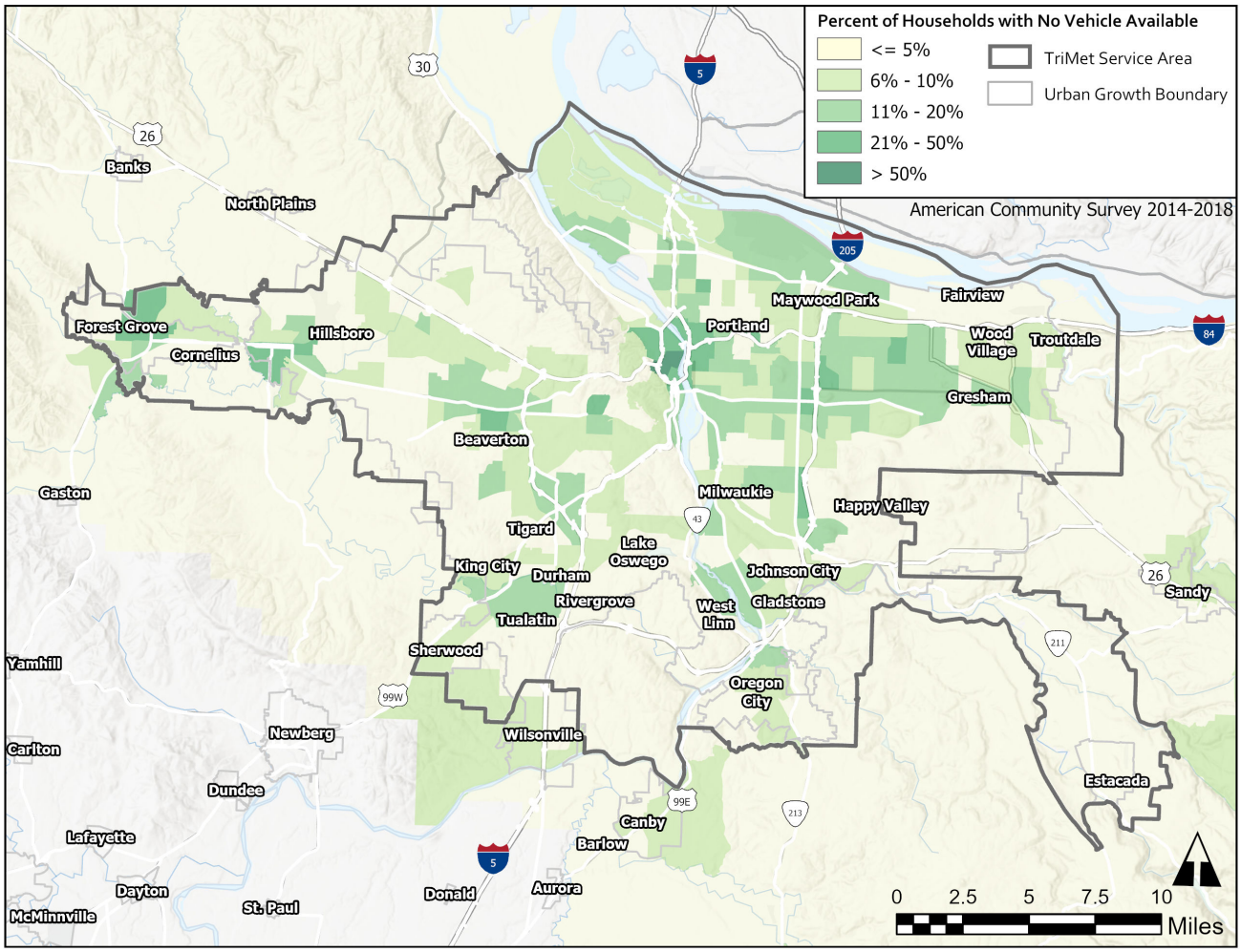


Vehicle Access

Riders are considered transit dependent when they can't drive or do not have the means to buy/maintain a car. Approximately 14.7% percent of households in the tri-county area have no or limited vehicle access according to the 2014-2018 American Community Survey. Low vehicle access means their household either has no vehicles or there are more workers than available vehicles.

A map showing concentrations of low vehicle access households is shown in Figure 4-6.

Figure 4-6. Households with Low Vehicle Access

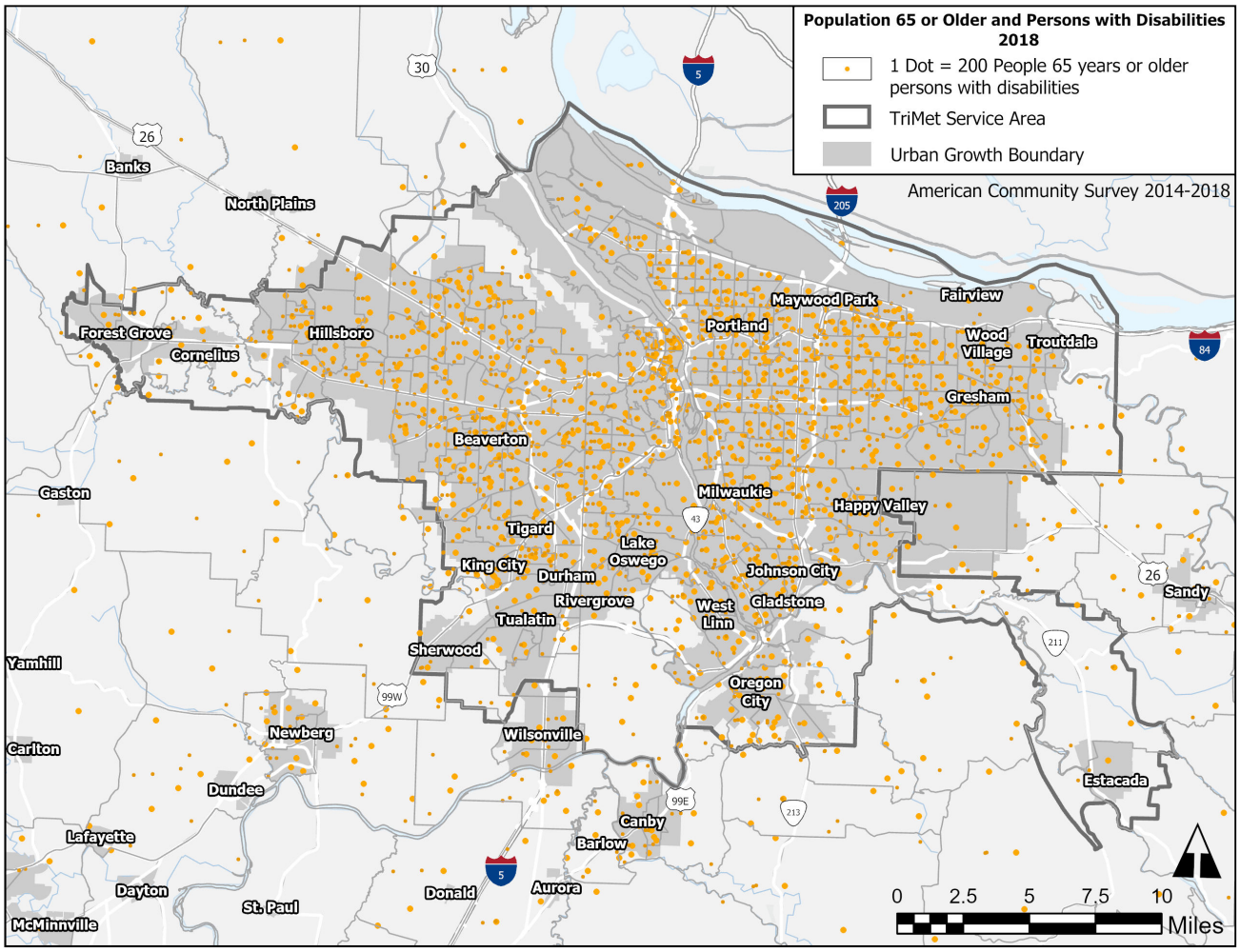


Seniors and/or Persons with Disabilities

Seniors and/or Persons with disabilities are very vulnerable populations and often times they are not able to drive due to disability or are on a fixed income and cannot afford to buy and maintain a vehicle.

There were 181,780 seniors in the tri-county area representing approximately 11.1 percent of the general population at the 2010 census. The American Community Survey estimates that there are 206,613 persons with disabilities as of 2018 representing 11.6 percent of the general population. The City of King City stands out with over 48 percent of its population aged 65 and over. The next highest concentration of seniors is Johnson City at 18.6 percent and the City of Rivergrove at 18.3 percent. Communities in Clackamas County have fewer seniors than those in Washington and Multnomah Counties. Population for seniors and persons with disabilities for each jurisdiction is shown in *Table H4 in Attachment H*, and a map of seniors and persons with disabilities population density is provided in Figure 4-7.

Figure 4-7. Location of Seniors and/or Persons with Disabilities



As of 2018 it was estimated that 76 percent of the 181,763 persons aged 65 years or more within the TriMet service district lived within ¼ mile of fixed-route bus or MAX service, and 91 percent lived within ½ mile.

Persons with disabilities are most concentrated in the cities of Gladstone (14.8 percent), Fairview (17 percent), Gresham (14.8 percent), Gaston (19.8 percent), and King City (20.8 percent). The lowest proportion of persons with disabilities can be found in the higher income communities south of the City of Portland such as Lake Oswego, Sherwood, Happy Valley, and Barlow.

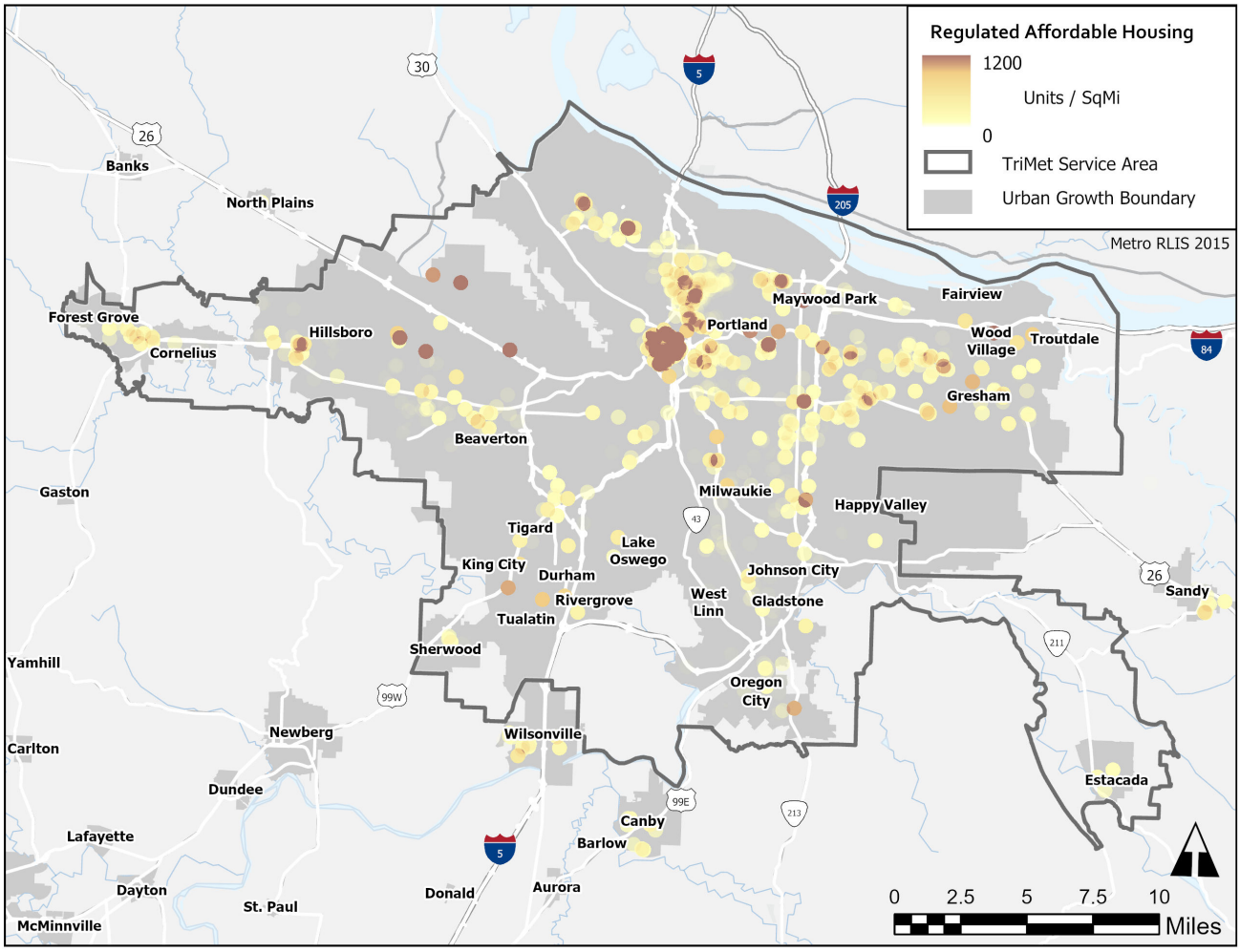
The highest densities of seniors and persons with disabilities living outside of the existing TriMet service area are along the US-26 corridor to the City of Sandy, the OR 99E corridor to the City of Canby, along the OR 8 corridor further into the City of Forest Grove, and the parts of Washington County adjacent to the Cities of Cornelius and Forest Grove.

As of 2010, approximately 95% of the tri-county population lived within the TriMet service area (approximately 1,561,000 people). Approximately 88% of the tri-county senior population is in the TriMet district, and approximately 92% of the tri-county population with disabilities is in the TriMet district.

Affordable Housing

Lower income households are sometimes eligible for regulated affordable housing. Affordable housing stock is distributed throughout the region with most communities having at least some. Figure 4-8 shows the locations where affordable housing is most concentrated.

Figure 4-8. Affordable Housing Stock



Access to Internet and Smart Phones

Every year, TriMet conducts an Attitudes and Awareness survey of the region's residents to gauge public approval and understanding of the agency's services, including new or future projects. According to TriMet's 2015 Attitudes & Awareness

Survey of 800 Portland Metro residents, including 116 seniors ages 65 and older shows that while internet access is very high for seniors, low-income individuals, and people of color, the majority of seniors do not have a smart phone. Seniors who either choose to not have a smart phone or have challenges in acquiring or using smart phones and apps may have limited access to mobile transit tools like app-based trip planning, real time vehicle location, and mobile ticketing that are offered through smart phones. As our population ages, a larger percentage of the senior population will be more adapted to smart phone technology; therefore, it is important that transit agencies acknowledge current challenges for seniors to access smart phone information but also plan for the future and make efforts accommodate these current senior population with access and training for tools offered through smart phones. Figures 4-9, 4-10, 4-11, and 4-12 provide an overview of smart phone access by income and by race according to TriMet's *2015 Attitudes & Awareness Survey.*

Figure 4-9. Internet Access by Age

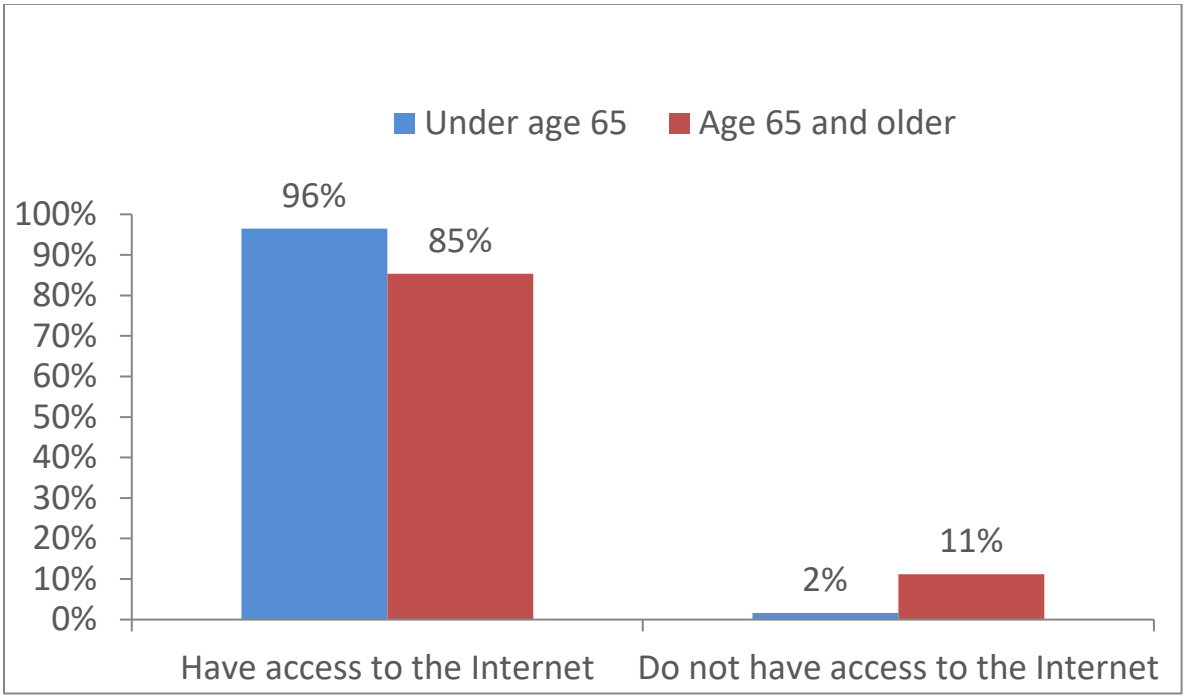


Figure 4-10. Smart Phone Access by Age

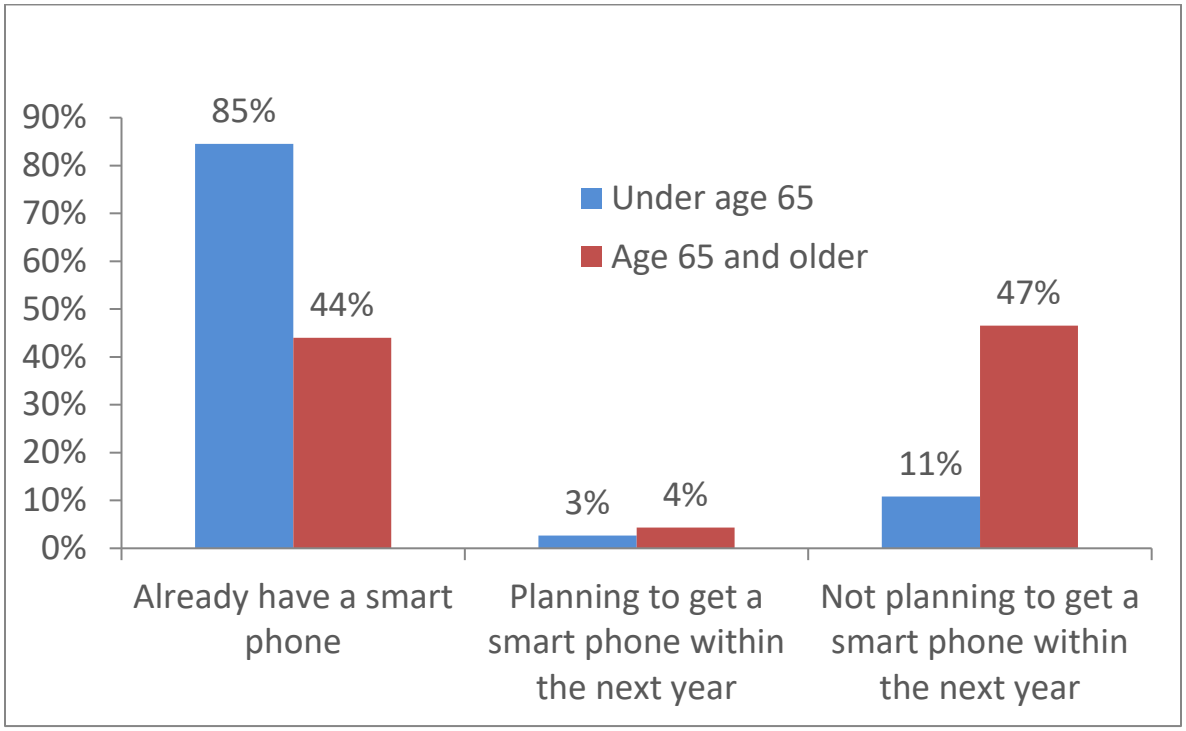


Figure 4-11. Smart Phone Access by Income

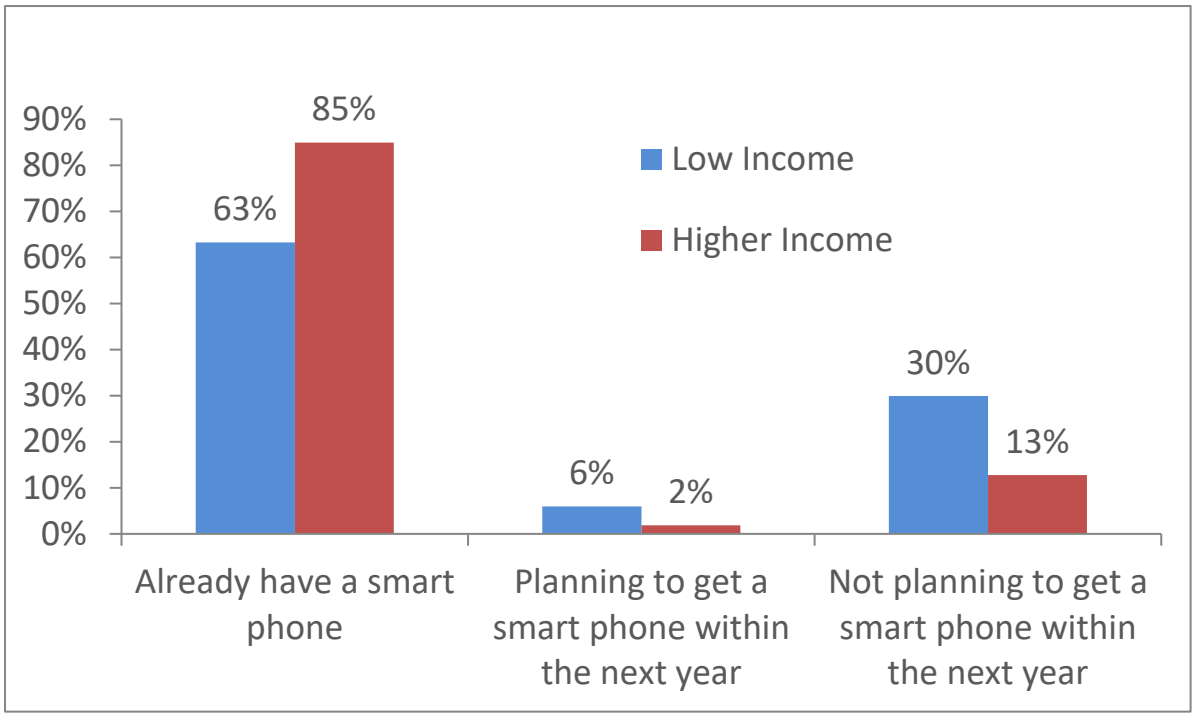
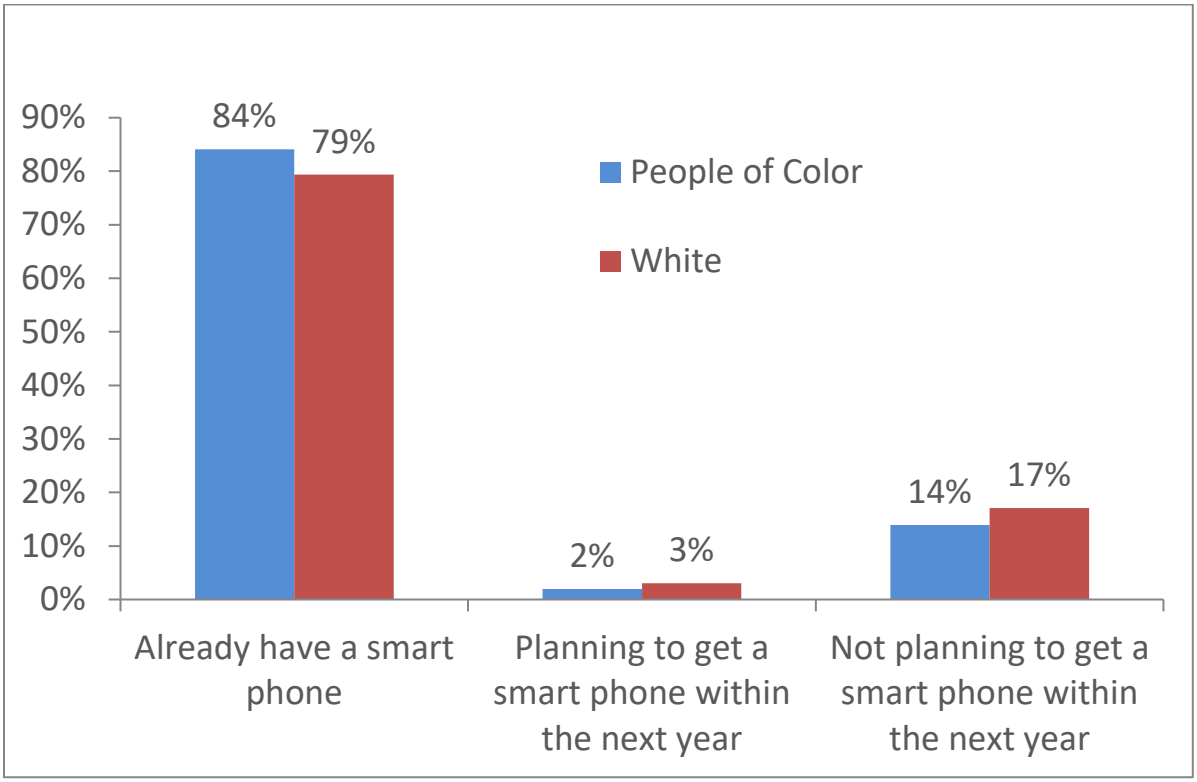


Figure 4-12. Smart Phone Access by Race



Summary of Demographic Based Needs

The need for specialized transit services is not limited to the urban centers or even to the TriMet service district. The surrounding rural communities have pockets of potential paratransit riders, including those that do not currently have fixed route transit service.

The vast majority of seniors and persons with disabilities living in the TriMet service district are in close proximity to existing fixed route services. This provides the opportunity to investigate options for making the fixed route system more accessible for people who might otherwise have difficulty accessing the system while allowing paratransit services to be focused on those with the greatest need or those that are truly not within a convenient distance to the fixed route system.

There are several clusters of employment and affordable housing that are not currently well connected to the fixed route transit system in the Tualatin, Hillsboro, and Happy Valley areas which could force some eligible people to rely on the paratransit system unnecessarily. Additional shortfalls in the provided transit service are identified in the Transportation Service Needs discussion.

The tri-county area's population has been growing and is forecast to continue to grow for the foreseeable future. Similarly, the population continues to age increasing the number of seniors who are eligible for paratransit services. It can also be expected that the population of persons with disabilities will increase proportionally with the overall population increase.

The overall demographic trend is that transit needs will continue to grow, and spread farther out geographically.

STAKEHOLDER OUTREACH

The stakeholder outreach component of the needs assessment included outreach and coordination with the key stakeholders involved in planning for and delivering transportation services and social services. They were asked to articulate and share their experiences, perceptions and opinions about which needs are most critical to meet. This outreach was conducted in the following ways:

- A survey was distributed to transit service providers and social service providers to learn more about the perceived needs and gaps, potential coordination opportunities and what types of services, programs or advances in technology could help address service gaps or offer new and innovative services.
- One-on-one meetings were conducted with transit and social service providers, including representatives of Oregon Project Independence (OPI) services, to review information, learn about existing services and/or identify any major changes since the 2012 CTP update, and supplement the information received in the survey.
- A regional stakeholder workshop was convened to (1) discuss the transportation needs, gaps and challenges specific to seniors and persons with physical and/or cognitive disabilities; (2) Identify geographic, regulatory and structural barriers to addressing these needs; and (3) share ideas for new and innovative services. Workshop invitees included transportation providers, community organizations, senior centers and human and health service agencies, representing a diverse group of services and geographies. *A summary of this workshop can be found in Attachment I.*

A summary of needs resulting from this outreach, as identified by the stakeholders, is provided below. It is summarized in four major themes including Transportation Service Needs, Infrastructure Needs, Coordination and Organizational Needs, and Technology.

TRANSPORTATION SERVICE NEEDS

The following describes areas that have current unmet transportation needs or needs for new or improved transportation service, specifically considering the needs and challenges of seniors and persons with physical and/or cognitive disabilities. This list is purposefully created without regard to current funding levels. Whether the improvements could be made soon or would need substantial more funding to be possible, the intention is to document all identified needs and then prioritize as needed with available funding and use the identified needs to support seeking additional funds.

- New transit services in areas without existing service such as:
  - Summertime hours for the CCC Xpress Shuttle
  - For-hire service (taxis, Lyft, Uber) availability, especially in rural areas
- Improved transit services in areas with existing service
  - Additional frequency and extended (longer, evening, weekend) service hours are needed in many locations, including rural and suburban areas.
  - Specific locations that have identified needs are:
    - Mt. Hood Villages (Rhododendron, Government Camp)
    - Clackamas County (Boring, Oregon City, Clackamas Community College, Clackamas Industrial Area)
    - Washington County (Bethany, Aloha, River Terrace in Tigard, Villebois)
    - Multnomah County (East Columbia Corridor)
  - More frequent intercity connections such as:
    - Between Canby and Woodburn, Wilsonville and Oregon City
    - The 99E corridor between Oregon City and Salem
    - Express bus service between Wilsonville WES and downtown Portland via TriMet Line 96 extension, connecting to Salem-Keizer Area Public Transit at SMART Central
    - New SMART Express Service between Wilsonville and the MAX Green Line
    - Canby to the MAX Green Line via Clackamas Community College

  - Meet dial-a-ride (DAR) service needs such as the STAR DAR service, rural DAR service, and reduce wait time for DAR services
- Improve "first" and "last" mile service
  - To/from urban and rural residential areas and to/from service businesses (health care, shopping, banks)
  - Minimize on-board vehicle time (especially for medical transport and those with significant care needs), more point to point transportation
  - Additional community/job connector shuttle services similar successful Grove Link and Tualatin Shuttle
  - Need to integrate last-mile services with demand-response service in suburban areas.
  - Meet transportation needs of riders living more than ¾ mile from a transit stop
- Eliminate or reduce service gaps and geographic gaps
  - Close the gaps in LIFT/paratransit services as fixed routes service has been removed in rural areas
  - Rural weekend service (including demand-response), better local service, and re-implementation of local deviated fixed routes
- More capacity in the following areas:
  - Staffing/drivers/training, such as:
    - Recruit additional volunteers for Ride Connection's Ride Together service, Clackamas County's Senior Companions, and other programs.
    - At least two additional paid drivers for CCSSD's TRP and CAR programs to help meet the needs for medical and dialysis appointments.
    - CCSSD organizational capacity for additional volunteer driver recruitment and training, including mileage reimbursement funds
    - More Ride Connection volunteers to increase capacity
  - Additional vehicles, including accessible vehicles
- Additional funding is required to meet the following needs:

  - To fund operations, accessible and general vehicle purchases, maintenance, service and geographic area expansion.
  - Specific agencies that have identified additional funding needs include: Ride Connection, Clackamas County Social Services Division, Multnomah County, TriMet LIFT service, and Mt. Hood Express
  - Specific needs for service include: group trips (shopping, exercise, recreation), an expanded TRP program for medical trips, federal funds (or other sources) to create Community/Job Connectors shuttle services, and for rural/suburban service and operations
  - Discounted fares; mileage reimbursement; paid drivers; and driver recruitment and training.
  - Rural and suburban infrastructure needs.
- Unmet medical needs including:
  - Coordination/collaboration with house-call service for routine medical and life sustaining treatments like dialysis
  - Additional flexibility for trips to/from medical and/or dialysis facilities
  - Veteran medical service transportation (such as Vets Driving Vets)
  - Mobility management
  - Increase the number of personally owned vehicles (POV) volunteer rider service
  - Explore the need for medical shuttles between key hubs (e.g. Sandy Senior Center) and medical facilities in greater Portland metro area and for persons who do not qualify for Medicaid medical rides

INFRASTRUCTURE NEEDS

The following describes current infrastructure needs associated with providing transportation service for seniors and persons with disabilities.

- Improve transit infrastructure
  - Accessible bus stops, bus stop facilities (seats, shelters, “level of comfort”), security (lighting and safe places to wait), signage
- Improve pedestrian infrastructure and network

  - Sidewalks, completing pedestrian network gaps, crosswalks, mid-block crossings, pedestrian connections to bus stops, ADA compliance, improve safety, pedestrian signals, wayfinding, curb cuts, reduce out of direction travel
- Improve street networks and connectivity
- A land-use/transportation planning program for elder-districts and siting of residential communities, care facilities, and public housing.

COORDINATION AND ORGANIZATIONAL NEEDS

The following describes the needs for improved coordination and organization between social service providers and transit providers.

- Continue to strengthen partnerships within and adjacent to service areas with such organizations as:
  - Transit providers: Ride Connection, Honored Citizen program, TriMet, TriMet LIFT, CAT, SCTD, SMART, SAM, SKT, Woodburn Transit (WTS), Mt. Hood Villages, CCC Xpress Shuttle
  - Counties, cities, and other public agencies
  - Community based organizations: senior centers, religious organizations, community centers
  - Social service partners
  - Medical partners such as hospitals and clinics
  - Other private partners
- Inter-agency coordination needs to be addressed include:
  - Service expansions, improvements, and modifications
  - Service and schedule coordination (transfers between services in/out of service areas, route sharing)
  - Coordination of fare policies, fare sharing and/or fare reciprocity between transit systems.
  - Coordination of vehicle maintenance and facilities
  - Coordination of and funding on projects that improve safety, service, and infrastructure.

  - Shuttle services, which take customers to fixed route (bus, rail) service on request.
  - Travel training (RideWise) and transportation options programs, including improved regional carpool matching program.
- Regular meetings between regional and local transportation providers and service agencies coordinators to discuss resources and services.
- Transportation co-operative programs with retirement communities to coordinate and share resources
- Acceptance of other paratransit providers ADA eligibility processes
- Possibly reduce number of transportation providers

TECHNOLOGY NEEDS

The following describes technology gaps in providing transportation services to meet the needs of seniors and persons with disabilities.

- Real-time information technology
- Electronic fare systems
  - Reloadable fare cards
  - Regional fare system
  - Common fare media
- Automatic stop announcement
- Automatic appointment reminders (calls, texts)
- "Texting" stops (rider notification system)
- Ride scheduling technology
  - Software to match customer needs and volunteer availability/ability in real-time
  - Dispatch technology
- Unified communication, web-based routing and scheduling systems across regional service providers for urban and rural trip planning and to communicate/share trips with other demand response providers or ADA services

- Finalization of rural transit providers GTFS data into Google Maps to help riders plan trips - SCTD is not currently in Google Maps.
- TriMet LIFT customer access to trip information through IVR or web
- Technology designed for use on the Internet, phones, and mobile devices
- Cabbie-cam in all cabs, searchable and viewable from a central website
- Volunteer ride connection software

DEFICIENCIES TO SERVICE GUIDELINES

Table 3-2 and Table 3-3 summarize locations which fall short of meeting the aspirational service guidelines. Highlights include:

- Cities within the TriMet service district, such as Clackamas, Durham, Happy Valley, Johnson City, Lake Oswego, Rivergrove, Tualatin, and West Linn are mostly well served with fixed-route service and complimentary ADA paratransit throughout the week, but are short by 3+ hours during the weekend.
- King City, which is classified as a high frequency location, fixed route- service is short 13 hours on weekdays and has no service on weekends.
- Communities within the TriMet service district are short of complying with service standards for the Non-ADA Eligible (Curb-to-Curb) and Needs Assistance (Door-through-Door) categories, with most short at least a few hours on weekdays and many lacking weekend service.
- Most cities and unincorporated areas outside of the TriMet service district do not have fixed route service. However, most of these locations do meet service standards for Dial-A-Ride (DAR) services including: No Difficulty (Public DAR), Non-ADA Eligible (Curb-to-Curb), and Needs Assistance (Door-through-Door). Most cities and unincorporated areas in Clackamas County are short of the service standards for those DAR services.

5. PRIORITIES, STRATEGIES AND ACTIONS

This chapter presents a set of strategies and actions based on the CTP priorities that the tri-county region can pursue to improve transportation services for seniors and persons with disabilities. Each of the strategies support one or more of the plan's Priorities.

PRIORITIES

The Principles from the 2012 CTP were updated through the CTP Update process by the STFAC and are referred to as Priorities in this plan. The Priorities will guide the decisions made by the STFAC to implement the Plan including how to evaluate funding applications. *Chapter 7 has information on how the Priorities were used to develop evaluation criteria for funding applications*. The Priorities, not listed in any particular order, include:

Provide transit service throughout the Tri-county area for older adults and persons with disabilities consistent with the CTP Service Area Standards and Guidelines (see Table 3-1). This can be achieved in the following ways:

   a. Maintain existing services and programs that meet the needs of older adults and/or persons with disabilities
   b. Increase capacity, improve service, improve accessibility of transit stops, and quality of existing services (such as providing additional or larger buses, right-sizing buses, reducing headways, increasing span of service)
   c. Expand service to areas that do not currently have service (either in new areas or areas where service was previously cut)

2. Provide for adequate capital replacements and maintenance of vehicles and other fundamental requirements to provide service.
3. Consider how projects are cost-effective and meeting specified goals when making funding decisions (such as $ per ride, % match) but balance that with the need to provide accessibility throughout the tri-county area.
4. Strive for strategic and equitable distribution of funding to address the needs of the region's older adults and persons with disabilities.
5. Advocate for increased funding.
6. Seek out new, innovative, and sustainable partnerships and funding opportunities.

7. Implement new and innovative initiatives related to technology and different service models.
8. Support new and collaborative partnerships that improve service to underserved communities and people.
9. Enhance rider experience and sense of dignity by being sensitive and attentive to the varied needs of individuals and by emphasizing a customer service model.

STRATEGIES AND ACTIONS

The strategies and actions presented and discussed below are intended to address or mitigate transportation needs for seniors and persons with disabilities as identified in Chapter 4 (Needs Assessment). This is an important element of the Coordinated Transportation Plan for Seniors and Persons with Disabilities in that it responds to federal planning requirements; in addition, it provides an opportunity to document regional service priorities as well as to identify lead entities responsible to implement them.

The methodology used to develop the actions included taking the following steps:

- Strategies and actions included in previous plan were reviewed with the responsible parties to assess whether they have been completed, or are more appropriately considered ongoing agency activities.
- A peer review was conducted of similar sized metropolitan areas throughout the country to identify new and innovative strategies being implemented throughout the country. *A summary of the peer review can be found in Attachment J.*
- Strategies and actions to address needs and move toward a future vision of enhanced transportation for seniors and persons with disabilities were discussed with the STFAC members and with stakeholders through surveys, interviews, and workshops. *A summary of the STFAC workshop on strategies can be found in Attachment K.*

This Plan update has streamlined the number of actions by removing those that are considered completed and, in some cases, those that are considered ongoing tasks and responsibilities of local service providers. Several new actions, especially related to implementing the plan and measuring performance, have been added.

The actions are assigned a "tier" ranking. Tier 1 projects are those considered of high priority to the region and the most feasible to implement. Tier 2 projects are considered short-medium term with potential funding sources to implement them. Tier 3 projects are those that will require long-term implementation efforts, and where funding is not secured.

Table 5-1 identifies the strategies and the CTP Priority that the strategy helps implement. Table 5-2 through Table 5-7 identify actions to implement each strategy, suggested lead agency or agencies to assume responsibility for implementation, the timeframe for completion, and the suggested tier. It should be noted that while some actions will require an initial investment to implement them, over the long term they may result in cost-savings to public transit programs.

Table 5-1. Strategies and CTP Priorities Addressed

		Strategies						
CTP Priority Addressed		**1 -Develop a committee to oversee implementation of the plan**	**2 - Enhance access**	**3 - Increase system efficiency**	**4 - Improve service to older adults and/or persons with disabilities**	**5 - Improve customer experience**	**6 - Measure program and project performance**	**7 - Promote coordination among service providers and innovative partnerships**
1a	Maintain Service				■			
1b	Expand Service							
1c	Increase Capacity and Quality of Service		■	■		■		
1d	Improve Stop Accessibility		■			■		
2	Capital Replacements and Maintenance				■			
3	Balance Cost-Effectiveness and Accessibility						■	
4	Equitable Distribution of Funds							
5	Increased Funding	■						
6	New/Innovative Partnerships and Funding	■						
7	New and Innovative Technology and Service Models	■	■	■		■		■
8	New Partnerships to Serve Underserved Communities	■						■
9	Enhance Rider Experience					■		

PLAN IMPLEMENTATION COMMITTEE

Through the CTP Update process, the STFAC identified many actions that could or should be implemented by the STFAC or that require participation, coordination, and collaboration from multiple transportation providers represented on the STFAC and in the plan. In years past, there had been a Regional Transportation Coordination Committee (RTCC) that had performed some of these functions, but it was discontinued. To assist in plan implementation, the STFAC supports the STFAC Sub-Committee to help oversee, advance, and implement strategies and actions identified

in the Plan. This includes actions related to evaluating system and project performance, estimating costs to implement actions in the plan, seeking new sources and advocating for additional funding, and facilitating and pushing for innovative partnerships. The sub-committee includes representation from transit providers as well as members from TriMet's Committee on Accessible Transportation (CAT).

Table 5-2. Actions to Develop a Committee to Oversee Plan Implementation

Action	Responsible party	Deadline
1. Develop an STFAC Subcommittee to assist with plan implementation	STFAC, TriMet	2021
2. Develop an advocacy strategy	STFAC Subcommittee	2024
3. Periodically review CTP to evaluate progress	STFAC Subcommittee	2024
4. Develop plan evaluation measures that promote social justice and geographic equity	STFAC Subcommittee	2024

MEASURE PERFORMANCE

Through the CTP Update process, the STFAC identified the need to modify the monthly reports they receive from transit providers to provide data more relevant to their decision making. The STFAC expressed a desire that the reports help them evaluate progress implementing the plan, understand if they are increasing the amount of people being served, and evaluate the effectiveness of the projects they have funded. Additionally, the STFAC recognizes the connection between health and transportation and has expressed interest in exploring standards and models for evaluating the performance of health benefits generated as a result of transit investments.

Table 5-3. Actions to Measure Program and Project Performance

Action	Responsible party	Deadline
1. Update and streamline reporting requirements	STFAC Subcommittee, TriMet	2020
2. Develop performance policies	STFAC Subcommittee	2021
3. Monitor program and project performance	STFAC	Ongoing, Annually
4. Review funding application process and application materials on a biennial basis	STFAC Subcommittee	Ongoing

ENHANCE ACCESS AND INCREASE SYSTEM EFFICIENCY

As shown in Chapter 4, the population in the tri-county areas is projected to continue to grow as is the portion of the population that are seniors and/or persons with disabilities. This will result in steadily increasing demand for transit service of all types. With limited funding for transit, key to serving the most people is encouraging and helping seniors and persons with disabilities to access fixed route service where available. This is the most cost-effective form of transit and also frees capacity in demand-responsive services for those that are unable to utilize fixed-route service due to lack of availability or physical or cognitive ability. Encouraging and helping people utilize fixed-route transit requires:

- Addressing the issues that prevent people from using fixed-route service when available;
- Managing demand for demand-responsive services through a conditional eligibility process; and,
- Addressing systemic issues related to transit supportive land uses and complete accessible pedestrian networks.

The financial benefits of this approach accrue over time, as each person that transitions to fixed route potentially takes many trips.

Encourage use of Fixed Route Transit

The 2012 CTP update process included a regional workshop and peer agency review to explore barriers that may prevent people from using fixed route services, as well as strategies which, if implemented, could encourage use of regularly scheduled transit services.

Many people who currently use paratransit services for all their travel needs may be able to use fixed-route, or other regularly scheduled transit service for some or all of their needs. The following services and initiatives will help encourage the use of more efficient modes of travel where appropriate.

Implement Trip Screening and Path of Travel Review

TriMet has an ADA paratransit eligibility process and opened a Certification Center in 2010 for in-person interview and functional assessment of abilities to ensure applicants for paratransit are accurately assessed for their eligibility to use ADA paratransit services, and conditions under which they are eligible. The implementation of the in-person eligibility determination process has provided an opportunity for TriMet staff to discuss the application of conditionally eligibility with the applicants and educate the community in general on the appropriate use of the LIFT service. The new eligibility process has also enabled staff to complete a more thorough evaluation of the applicant's functional abilities and identify more accurate conditions that may apply.

TriMet established a recertification period of three years and has completed the initial recertification of approximately 10,000 existing customers within that three years. TriMet's eligibility determination process has been recognized as a national model and there are no plans or apparent needs for implementing any process improvements at this time.

As a next step, TriMet, as well as other regional providers, could consider implementing trip screening for persons who are determined "conditionally" eligible, or able to use fixed route transit for at least some of their trips. This step should be taken in tandem with a path of travel review process, which would evaluate an individual's ability to get to or from a bus stop or rail station. STFAC member concerns with trip screening include consideration of weather conditions in the eligibility assessment as well as advance notification of a denied trip.

Bus Stop Improvements

TriMet has a strategic plan to improve many of its bus stops to ensure they are better accessible for seniors and persons with disabilities. The Pedestrian Network Analysis

(PNA at www.trimet.org/walk) identifies priority locations for sidewalk, curb ramp and crossing improvements. Since the PNA was released, cities and ODOT have made such improvements in many locations and TriMet has partnered with cities and ODOT to secure grant funding totaling over $15 million that is now going into such improvements in various parts of the region. Efforts should continue to identify locations with high ridership and the most potential for improvement. Making improvements such as adding benches or seats, providing real-time scheduling information, ensuring that the path of travel to the bus stop can be navigated by persons with disabilities, ensuring the bus stop platform can accommodate persons in wheelchairs, and making sure shelters are transparent to promote personal security are tangible steps that can be taken.

Paratransit Feeder Services

Customers who are able to use the fixed route but have trouble accessing bus stops can be picked up and taken to the nearest transit center to access the fixed route services to other local destinations. Feeder service can greatly reduce trip lengths on paratransit services and free up resources for other trip requests. Transfers to fixed-route services should only be done at improved transit centers to assure customers are not overly inconvenienced by the transfer. Also, only customers capable of making the transfer should be required to feed into the fixed-route service. This would require an assessment of the customer's capability to use fixed-route for the trip, and their ability to access their final destination from their destination stop/station. This assessment can be part of the trip screening and path of travel review steps described in the following ADA Demand Management section.

The lack of restroom facilities at transit centers has been identified as a barrier to customer's comfort at utilizing paratransit feeder services as well as making fixed-route transit trips that require transfers. On-time performance of these trips is critical for customers to make their connections and arrive at their destinations on time.

Most of Ride Connection's community connectors link to a transit center and anyone who qualifies for door-to-door services can request a trip to a transit center rather than their final destination. However, it is rare that customers request this due to the transfer penalty associated with their fare. Ride Connection does not currently require door-to-door trip requests to link to fixed route service even if an assessment of their ability would indicate they are able to do so.

Route Deviation

In a route deviation, a bus goes off its course to go to a specific location on a pre-scheduled request. By surveying riders using paratransit services to travel to

community centers and supported employment sites, transit operators can determine if a route deviation would allow many of the riders to instead use the less-expensive fixed route buses. Riders could be given incentives to make the switch to fixed-route buses.

Ride Connection provides deviated route service within ½ mile of the routes for the westLink, GroveLink, Tualatin Shuttle, King City RideAbout, and North Hillsboro Link. These services are free and open to the public. The South Clackamas Transportation District and Mount Hood Express also offer deviated fixed-route service.

Address Safety and Security Concerns at Transit Facilities and on Vehicles

Improving access to bus stops and rail stations can remove physical barriers preventing riders from using fixed-route services, but customer perceptions about their personal safety may limit the use of these services. See the section on Improving Customer Experience for actions that can improve safety and deter crime, and address the perceptions of transit as unsafe, which are often not the case.

Manage ADA Service Demand

Review Paratransit Service Standards

In 2012 TriMet LIFT ADA service boundaries and fares were modified to better align with TriMet fixed route. Previously service throughout the ADA service area was offered—this was adjusted to six service areas (Weekday, Weekday Evening, Saturday, Saturday Evening, Sunday and Sunday Evening. And as changes are made to Fixed Route service, ADA boundaries are now expanded or contracted on an individual route basis.

Prior to 2012, TriMet LIFT fares were less than fixed route. In 2012, a resolution was passed to gradually equalize LIFT fares with the adult TriMet fare. There was a proposal to eliminate the LIFT monthly pass, but ultimately the pass was retained. Currently LIFT fares and TriMet adult fares are equivalent.

Providers besides TriMet may need to review their service standards. As with the action to revise the paratransit certification process, it is important to carefully review options and to assess the potential impacts revisions of service standards would have on customers and potential customers of paratransit services. To the extent possible, these impacts should be quantified; that is, the eventual outcomes predicted and measured (i.e. number of trips that would not be provided). A range of scenarios

should be reviewed with advisory committees and other stakeholders with the goal of prioritizing those most feasible to implement.

Likewise, a "safety net" should be developed in parallel to implementation of this action to allow for customers to access transportation in limited cases when they have no other option. The voucher system, described below, may be one way to provide this safety net of limited services, or through volunteer or other programs administered through Ride Connection.

This action could apply to other operators as well.

Develop Comprehensive ADA Paratransit Eligibility Process

Since the development of the last Plan Update, TriMet has taken significant steps to refine its ADA paratransit eligibility process and has opened a Certification Center. Other service providers may be interested, as well, in making revisions to their certification processes.

There are two primary goals for this action:

- To ensure that persons are accurately and appropriately provided with the best mobility option based on their needs and conditions; and
- To ensure that ADA paratransit costs and resources are directed to those who meet eligibility standards as defined in the ADA.

Certification staff from other cities/programs that transitioned to an in-person assessment have emphasized the need for public outreach and education to current and potential users of the system, as well as to social service agencies.

Community-Based Accessible Vans

Making accessible vans available to community-based organizations often provides a lower cost, and more customer-focused alternative to traditional ADA complementary paratransit service. Transit providers can provide new or retired vehicles to the organizations for use with their staff or volunteer drivers. Some programs require a commitment from the community-based organization that they will take a quantifiable number of rides off of the ADA system.

Ride Connection offers these programs, which could be expanded because they currently run out of vehicles to share and place.

Enhance Services for People Who Stay at Home

Another way of looking at mobility is to think of ways to instead bring the services to the person. This type of service can be particularly important to people who

temporarily stay at home because of limited mobility, fragile health, etc.—for example, after surgery—or people whose mobility has become very restricted over the long-term, such as those with a debilitating illness. The goal is to help people who stay at home "age in place"—that is, help them to remain in their homes rather than institutionalize them. Currently, the following services are available:

- Grocery deliveries
- Meals on Wheels
- Library book deliveries

Ride Connection works with Travel Options Counselors and Travel Navigators to provide them tools to make referrals to non-transportation programs in the course of working with customers.

Enhance Pedestrian Access/Land Use Improvements

Pedestrian-Friendly Environment

It is human nature to want to be self-reliant. Self-reliant citizens make a stronger and more resilient community. Our society should take advantage of this desire to be independent by fostering ways for seniors and persons with disabilities to remain healthy and active. Transportation is one of many social determinants of health. Providing a pedestrian-friendly environment increases access to essential destinations and to fixed-route transit. By improving transportation access in this way not only will the result be happier individuals, but also the limited funds for transportation seniors and/or persons with disabilities will last longer and be available for those who truly need assistance.

This CTP encourages jurisdictions within the tri-county area to make their communities more pedestrian friendly for seniors and/or persons with disabilities populations. In keeping with the Land Use Concept, the plan advocates for more age-friendly communities, expanding wheelchair capacity on all transit vehicles, and locating housing for elders and persons with disabilities near services, such as grocery stores, pharmacies and support services, so that residents could walk instead of drive to obtain their basic needs. Specific resources to implement these innovations include:

Livable Communities Evaluation. This American Association of Retired Persons (AARP) evaluation guide includes a "walkability survey" to assess sidewalks, crosswalks, resting places and similar issues.

Pedestrian Master Plan. The City of Portland has adopted a 20-year *Pedestrian Master Plan* for pedestrian improvements, which can serve as a model for other communities. The plan includes a process for prioritizing improvements. The *Portland Pedestrian Design Guide* that was produced in conjunction with the pedestrian plan is used in the development review process.

Other cities, counties and ODOT have varying levels of pedestrian-oriented plans and design criteria.

Table 5-4. Actions to Enhance Access and Increase System Efficiency

Action to Enhance Access	Responsible party	Deadline
1. Encourage use of fixed route transit	STFAC, Ride Connection, transit providers	Ongoing
2. Promote enhanced pedestrian access or land use improvements	STFAC, Ride Connection, transit providers, ODOT, local jurisdictions	Ongoing
3. Support and expand travel training programs	STFAC, Ride Connection, transit providers	Ongoing
4. Provide fare assistance	Social service providers and transit agencies throughout the Tri-County area	Ongoing

Actions to Increase System Efficiency	Responsible party	Deadline
1. Manage ADA service demand	STFAC, Ride Connection, transit providers	Ongoing
2. Implement or expand upon feeder services to fixed route transit	Transit agencies and Ride Connection partners	Ongoing
3. Promote sustainable and zero/low-emission transportation options	STFAC, transit agencies, Ride Connection partners	Ongoing

MAINTAIN AND EXPAND SERVICE TO MEET SERVICE GUIDELINES

The Service Guidelines in Chapter 3 are a tool for assessing the level of service currently provided and identifying unmet needs or gaps. While each recommended guideline may not be achieved, it should remain a target for ongoing improvement. A Guiding Principle of the CTP is to provide service throughout the tri-county areas, in urban and rural areas, consistent with the recommended Service Guidelines which take into account the needs and feasibility of providing different service levels in different areas. Strategies to meeting the Service Guidelines include maintaining service, expanding service, enhancing service, and maintaining and providing appropriate vehicles and facilities to support the service. Implementing these strategies requires funding for operations as well as a supply of vehicles and drivers.

The following programs help increase the availability of vehicles and drivers.

- **Taxicab or TNC Vouchers.** Taxi or Transportation Network Company (TNCs, such as Uber of Lyft) discount programs for seniors and persons with disabilities allow residents to purchase vouchers at less than the face value and use them to pay for taxi rides.
- **Driver Pools.** Agencies could share drivers by establishing a pool among the three counties. Paid drivers who have free hours or days could enter the pool, as well as volunteer drivers willing to dedicate additional hours. The region has consistently supported this approach. *Ride Connection currently has an "on-call" driver pool that is shared across the region. Drivers are employed by Ride Connection and generally provide on-call service capacity, but can also be assigned to partner programs as needed to cover vacations/sick time etc.*
- **Volunteer Driver Programs.** Volunteers have long been relied upon in the delivery of public transit services in small communities and rural areas. Public agencies and non-profit organizations often oversee programs to recruit, train, schedule, and/or reimburse volunteer drivers. Volunteer drivers can sign up to drive organization vehicles or their personal cars. Similarly, they can volunteer to drive any customer needing a ride or just friends or family members based on the program parameters.
- **Peer and Cause Based Programs.** The recruiting and retaining of volunteer drivers is often difficult and expensive. Involving peers of the program participants (e.g. seniors and veterans) has proven beneficial in reaching out to new volunteers as they can relate to the needs of their peers and are more motivated in helping out. *Ride Connection has an established veteran's*

transportation program and is doing additional "cause based" volunteer recruitment for dialysis.

Additional strategies to maintain and expand service that were identified during the CTP Update process include:

- Seek additional dedicated state funding for transit providers (i.e. e-cigarette taxes ear mark funds for senior programs)
- Revisit design of fixed-route transit buses to accommodate growth of mobility devices and other needs
- Develop an advocacy white paper for legislators/statewide advocacy effort to increase funding sources.
- Utilize crowd source funding for special projects to expand service.
- Evaluate potential role of Transportation Network Companies (TNCs) such as Uber and Lyft to provide first- and last-mile services to seniors and persons with disabilities.

Table 5-5. Actions to Improve Service to Older Adults and/or Persons with Disabilities

Action	Responsible party	Deadline
1. Identify priorities for services, programs, and projects	STFAC Subcommittee	2021
2. Identify and address service gaps in public transit services	Transit agencies, Ride Connection	Ongoing
3. Enhance and expand volunteer programs	Ride Connection and county departments of social services	Ongoing
4. Provide low cost community service projects	Ride Connection, transit agencies, human services departments, county agencies	Ongoing
5. Assist low-income individuals to access employment and training opportunities	Transit agencies, Ride Connection, private sector	Ongoing
6. Use technology and software to improve service efficiencies	Ride Connection, transit agencies	Ongoing
7. Coordinate flexible service and funding guidelines to meet customer needs in states of emergency	Ride Connection, transit agencies	Ongoing

IMPROVE CUSTOMER EXPERIENCE

One of the priorities in the 2016 CTP is to enhance rider experience and sense of dignity by being sensitive and attentive to the varied needs of individuals and by emphasizing a customer service model. The following describes various strategies to work towards this principle.

Improve Information and Referral/Program Outreach

While all transit agencies and Ride Connection have improved the service information on their websites since 2012, a number of additional actions can be taken to increase

public awareness of transportation services for elders and persons with disabilities within the region.

Provider websites review

For those with Internet access, websites can provide important information about the transportation services available to meet individual travel needs. The tri-county region's community-based organizations could provide a link on their websites to TriMet and Ride Connection's sites.

TriMet currently provides links on their website to schedules for all transit services that interface with TriMet. It is located at: http://trimet.org/schedules/othertransit.htm.

SMART has a trip planner that links both services.

Ride Connection's website provides information about all of its services and the fixed-route and deviated route community shuttles it operates: https://rideconnection.org/about-us/partners.

Ride Connection and the other transit agencies that interface with TriMet or other services should provide links to those services websites.

Address Safety and Security Concerns at Transit Facilities and on Vehicles

Customer experience is impacted by their sense of safety and security during the trip. The following actions can improve safety and deter crime, and can address the perceptions of transit as unsafe, which often is not the case.

- **Improve lighting.** Adequate lighting at, and around, bus stops and rail stations can both deter crime and provide riders with a better sense of personal security.
- **Improve visibility.** Eliminating hidden areas at stops, on platforms and along access paths will provide similar benefits. Avoiding opaque shelter walls and managing landscaping are two primary tools for providing clear lines of sight to transit users while accessing or waiting for a bus or train.
- **Improve communications with transit security personnel.** Clearly identified and easy to use voice communications with security personnel can reduce response time in case of an emergency and provide riders with a better sense of security. Visual communications for people who are hard-of-hearing/deaf also need to be considered. Similarly, video cameras can deter crime if would

be offenders think the public space if being monitored, and riders appreciate knowing they are not isolated.

- **Provide public information on transit safety and security.** The perception of transit as unsafe is frequently not supported by the facts. Providing the public, especially potential users, with current data on crimes and accidents on transit vehicles and at transit facilities can often mitigate unfounded concerns.

TriMet continues work with its jurisdictional partners to make capital investments to the pedestrian, bicycle, and transit network. Contributions include sidewalk infill, pedestrian crossing improvements, in street bus pads and pullouts to improve operational safety. Most bus stops are located in public right-of-way. While effort is made to place bus stops near existing streetlight infrastructure, TriMet is a fiscally responsible entity and does not actively pursue the proliferation of streetlights at bus stops and the ongoing operating expense of energizing them. Most TriMet provided energized lighting can be found at TriMet transit centers, rail platforms and the highest ridership bus stops. TriMet does provide solar powered (low operating expense) lights on many bus shelters, and will continue to do so. TriMet's 2015-2016 Bus Stop Capital Improvements for Access to Transit included improvements to fifteen bus stops to make them ADA accessible with concrete pads and add shelters and sidewalks in some locations. Many of the highest ridership stops (including those that serve transit dependent patrons, social service providers, seniors and persons with disabilities, already have amenities and functional accessibility. Continuing to implement the bus stops strategic plan to ensure they are better accessible for seniors and persons with disabilities is ongoing.

SMART has also upgraded a number of curbs/bus stops to meet ADA requirements in the past several years.

Additional strategies to enhance improve customer experience were identified during the CTP Update process, including:

- Provide customers better information about available services across all providers.
- Increase the availability of real-time information for scheduled rides.
- Improve the technology and communications that clients are using to deliver information and schedule trips.
- Schedule TriMet LIFT online or through mobile device applications and connect to the TriMet fixed-route application. *TriMet LIFT has upgraded*

scheduling software versions and their base map. The new base map has capability for more accurate scheduling methods, which are expected to be implemented over time. LIFT is continuing to seek funding for automated customer information.

- Develop on-demand ride-matching technology that is user-friendly and accessible
- Advocate and look for opportunities to improve accessible service by Transportation Network Companies (TNCs) like Lyft and Uber.
- Implement electronic fares (E-fare) across all systems.
- Utilize Neighborhood Associations as transportation ambassadors to educate on services. *Ride Connection currently provides concierge volunteers on some neighborhood shopping shuttles.*
- Provide monitors or additional staff onboard to assist customers.
- Enhance and provide additional Driver Training
    - Include a panel of persons with disabilities as part of operator training, and/or produce a training video that can be presented to vehicle operators at multiple programs. Ride Connection has developed a dialysis training module informed by dialysis patients through their participatory planning process and they participate in trainings sometimes.
    - Provide greater mental health training for drivers and support staff. For example, transit operators in Eugene, OR know to call CAHOOTS, a mobile crisis intervention team, in case additional support is needed for individuals with cognitive and/or mental health challenges.

Information about these services should be incorporated into transportation providers' programs. The services are a piece of a multimodal strategy for mobility, reflecting the mobility needs of the "whole person" as people transition through various stages of age and disability.

Table 5-6. Actions to Improve Customer Experience

Action	Responsible party	Deadline
1. Improve information sharing and referrals	Transit Agencies, Ride Connection, ADRC, 211	Ongoing
2. Work towards providing real-time information for scheduled rides and same-day or on-demand scheduling	TriMet, Ride Connection, and other interested agencies	Ongoing
3. Address safety and security concerns at transit facilities and on vehicles	Transit agencies, Counties, Cities, and State	Ongoing
4. Use technology and software to improve customer services	Ride Connection, transit agencies	Ongoing

TRANSIT PROVIDER COORDINATION AND INNOVATIVE PARTNERSHIPS

TriMet, Ride Connection, and the other transportation providers and social service providers identified in this Plan are already a model nationally for coordinating transportation service for seniors and persons with disabilities. These efforts need to continue but in order to keep up with growing demand, additional effort is needed to go beyond coordinating to collaborating to provide a seamless service experience throughout the region and to identify innovative partnerships and ways to work with existing and new partners.

Coordinated Planning & Operations

Within TriMet and other public transit systems, analysis of TriMet's LIFT and the other transit agencies' ADA eligible ridership should continue to be undertaken to identify where clusters of elders and persons with disabilities are located, their travel patterns, common origins and destinations, and to identify paratransit users who also are served by the transit agencies and the Ride Connection network. The service planning objectives of such assessments include the following:

- Identify opportunities to reconfigure existing fixed routes and amenities to better serve the needs of the transit dependent.
- Identify opportunities for developing deviated fixed route options, service routes or other flexible service designs to enhance local community and fixed route access by the seniors and/or persons with disabilities population.
- Identify opportunities to reduce individually dispatched trips by grouping riders and introducing neighborhood circulators, shopping shuttles or other hybrid transit services.

Within the Ride Connection Network

Ride Connection could implement many of the recommendations included in this updated CTP by expanding the existing planning process with its network partners to target identified underserved and unserved communities and populations. Some specific strategies include the following:

- **Expand Partner Capacity:** Ride Connection can serve as an incubator, a role that involves identifying potential partner agencies in the community, training the managers and professional staff, and nurturing the operation initially to ensure success.
- **Expand Accessible Vehicle-Sharing and Volunteer Drivers:** Partners have indicated that underutilized vehicles should be made more available to fill service gaps. Incentives, such as eligibility for a small pool of discretionary funding or credits toward grant funding, could be designed to reward vehicle-sharing among partners. In addition, partners have identified a need for more drivers. Making presentations to service clubs and also developing a driver incentive program might recruit more volunteer drivers.
- **Group Medical Trips:** Establish a program to assist medical clinics and hospitals to group rides and schedule treatments around transportation for patients, particularly those who are receiving life-sustaining medical procedures (e.g., dialysis, chemotherapy and radiation).

Intra-Regional Strategies

A number of actions can be taken that would promote connectivity between Ride Connection and TriMet, and between Ride Connection, TriMet, other transit agencies, and TMAs in the region.

- **Joint Service Planning:** Several community shuttles have been developed as a result of neighborhood needs assessments and cooperative planning

efforts between TriMet, Ride Connection and TMAs. Those joint planning efforts should be expanded, particularly in areas identified as underserved, in communities where there are overlapping trips by LIFT and Ride Connection partners, and in more isolated areas within the region that have only limited fixed route service.

- **Regional ADA Eligibility & Reciprocity:** A concerted effort should be undertaken by the five transit agencies in the region to further explore the feasibility of regional ADA eligibility, an approach that was originally suggested in the EDTP in 2009. Many customers need to travel across the region for a variety of trips. Sometimes transfers are required, resulting in need for certification by multiple jurisdictions, eligibility reciprocity between agencies and/or expanded visitation rules. Some agencies provide complete cross-region travel eliminating the need for eligibility (and fare) reciprocity. Both SMART in Wilsonville and Sandy Transit bring people into the TriMet district medical centers and use STF funds to cover these costs.
- **Coordination with Private Sector**: Opportunities should be explored to develop new partnerships with private businesses. Cooperative agreements could be created to provide group trips or subscription services to area groceries, pharmacies, technical training schools, medical centers, and shopping centers. Increased communication and planning with retirement homes, foster care homes, assisted living centers, and nursing homes could result in more coordination between public transit and these private transportation services. For example, joint scheduling or sharing of vehicles could potentially result in cost savings for both the public and private sector. Ride Connection has developed funding partnerships with WalMart and Providence to enhance their ability to provide trips to healthcare services. They have worked with Reser's Foods to coordinate the North Hillsboro Link and working with Hollywood Dialysis Center staff to coordinate dialysis trips through a pilot project at that location.
- **Coordinate Scheduling of Rides:** Each of the transit agencies in the region and many of the 30 plus community-based transportation agencies that make up Ride Connection's partner network currently handle their own ride requests and operate separate call centers. In addition, each of the three counties schedules rides independently for elders, veterans and other client groups. The STFAC encourages the consolidation or centralizing of several of these call-taking functions, where it would increase efficiency without compromising service quality. Ride Connection currently handles

the coordination of trips and call center activities for the open request Community Based transportation services that receive funding through the STF/§5310 process and/or are subcontracted to Ride Connection in Washington and Multnomah Counties. Clackamas County still manages its own trip requests/calls for programs based in Clackamas County. Where Ride Connection receives a first call from a customer living in Clackamas County – they are given information and referred to Transportation Reaching People.

Centralize Network Information: Efforts should continue, in addition to coordinating scheduling of rides, to developing a centralized information system that can be accessed by people needing information on applicable mobility resources for them. The primary focus for seniors and persons with disabilities should be to connect them to Ride Connection's Travel Options Counselors.

- **Coordination with Medical Facilities:** Efficiencies could be realized by better coordinating medically-related trips with medical facilities, with the goal of developing a more flexible scheduling approach. For example, anecdotal evidence suggests that there is currently duplication of service to major medical facilities or clinics, such as dialysis centers. There may be opportunities to work with staff from the clinics to facilitate grouping of trips where appropriate, in order to avoid service redundancy. Another example relates to coordinating the transportation of patients being discharged from hospitals. Currently, when such trip requests are not coordinated, the patient may be required to stay longer than necessary in the medical facility, which is inefficient use of medical facilities and an inconvenience to the patient. *Ride Connection currently has a successful dialysis project in coordination with Hollywood Dialysis Center and is working on establishing a program with Raines Dialysis Center in Forest Grove.*
- **Coordinated Care Organizations (CCOs):** In 2011 the Oregon State Legislature authorized the establishment of Coordinated Care Organizations (CCOs). The CCOs provide medical services to those enrolled in the Oregon Health Plan (including Medicaid recipients) under a different model than previously existed. It is important for local public transit service operators to track efforts to facilitate transportation for Medicaid recipients under this new model.

- **Non-Emergency Medical Transportation (NEMT):** Recipients of Oregon Health Plan (OHP) are eligible for non-emergency medical transportation. That service is currently provided by Ride To Care on contract with the State of Oregon. Though provided separately and with a separate funding source, the STFAC should remain aware of the service levels and funding for this service to look for potential coordination opportunities.

Regional Strategies

Improved customer connectivity between systems is important for improving special transportation needs services. Many travel patterns are considered regional in nature, or are corridor-based, meaning trips may begin in one area (county, city) and end in another. Trips requiring a transfer from one system to another can be time-consuming and inconvenient, and difficult for persons with disabilities. Connectivity improvements should address travel for passengers both on fixed route and paratransit programs.

Additional strategies to enhance coordination that were identified during the CTP Update process include:

- Provide transit hubs for connectivity of dispersed services
- Work with local agencies to include requirements for bus shelters in the development review process. City of Wilsonville has such requirements. Other cities, such as City of Portland, do as well.
- Enhance partnerships between cities and services to share and coordinate transportation services.

Innovative Partnerships and Collaboration

Throughout the CTP Update process the STFAC expressed strong desire to advocate for and support new and innovative collaborative partnerships and service models. Ideas for innovative partnerships and collaboration with new partners that were identified during the CTP Update process include:

- Utilize and update existing ridesharing platforms. Drive Less Connect, an online ridesharing platform operated by ODOT and promoted by Metro, could be upgraded and expanded to help connect rides among individuals who have accessibility challenges.
- Develop on-demand ride-matching technology that is user-friendly and accessible

- Explore partnerships with TNCs operating in the region, like Uber and Lyft. Public-private partnerships can expand the number of transportation providers, encourage software integration and improve customer experience through first-mile/last-mile transportation. This is currently being done in Kansas City, Kansas and Dallas, Texas.
- Approach medical facilities, grocery stores, etc. to participate financially in community shuttles serving their sites.
    - Ride Connection worked with Mary's Woods assisted living campus to establish a connector service to Highway 43. Mary's Woods provides the vehicle and transportation program coordination and Ride Connection provides funding for driver time and technical assistance.
- Partner with places of worship to coordinate ridesharing.
- Explore opportunities for companies and organizations such Walmart, Boy and Girl Scouts, etc. to enhance bus stops or volunteer as drivers for service projects.
- Explore partnerships with schools to utilize their buses and drivers for community shuttles and other types of trips. *Ride Connection currently works with 20 programs across 13 different school districts.*

Table 5-7. Actions to Promote Coordination among Service Providers and Innovative Partnerships

Action	Responsible party	Deadline
1. Consider expanding electronic fare participation	ODOT, TriMet, Rural transit agencies	Ongoing
2. Improve regional connections	ODOT, transit agencies	Ongoing
3. Coordinate with public and private sector, medical facilities, older adults and/or Persons with Disabilities	Ride Connection, transit agencies, Coordinated Care Organizations, medical providers	Ongoing
4. Coordinate outreach and advocacy activities	Ride Connection, TriMet and other transit providers	Ongoing
5. Explore developing a centralized information system	ADRC, 211, transit agencies, local jurisdictions	Ongoing
6. Explore partnerships with TNCs	Transit agencies, Ride Connection, TriMet	Ongoing
7. Explore opportunities to expand ridematching, scheduling, dispatching, and ridematching	TriMet, Ride Connection	Ongoing

6. FINANCIAL PLAN

The tri-county area continues to experience a dramatic demographic shift that has substantial implications for transportation costs and services for seniors and persons with disabilities.

Between the years 2020 and 2040, the growth of people age 65 and older will increase 45 percent, while the growth of the general population will be 21 percent[5].

As a result of this demographic shift, the tax base will be smaller relative to the number of people needing services. The demand for specialized transportation services is expected to grow with the increase in the senior population, and more costly services, such as door-to-door transportation are likely to be needed.

The most expensive of these services is ADA complementary paratransit; a paratransit ride costs approximately ten times that of fixed route service. In addition, fixed route service allows for a very low marginal cost of additional trips until the capacity of the vehicle is reached. In comparison, ridership growth on complementary paratransit service results in a more one-to-one rate of increase in service and vehicle purchases.

The following sections describe how the State of Oregon STF and federal §5310 funding programs have been utilized, and the updated process the TriMet STFAC will use to allocate STF and §5310 funds.

STATE SPECIAL TRANSPORTATION FUND (STF) PROGRAM

The three-county STF area receives approximately $12-17 million in STF formula, supplemental, and discretionary funds each biennium (every two years). STF funds have played an important role in the expansion of community-based services for seniors and persons with disabilities the last 10-12 years as well as in the preservation of fixed route and complementary paratransit services. STF funds have permitted:

- Areas outside transit district boundaries to provide transportation to people who don't have service;
- Non-profit transportation providers to hire paid drivers, improving the reliability of the service over that which can be provided with volunteers; and

[5] State of Oregon, Oregon Population Forecast, Office of Economic Analysis, 2013.

- Transit agencies outside the TriMet district to add routes to better serve seniors and persons with disabilities.

These programs, funded with STF funds, may have helped stem the growth of TriMet's LIFT ridership and SMART dial-a-ride, thus preserving the Portland area fixed route bus and rail system. Ride Connection ridership of seniors and persons with disabilities grew from 500,000 rides in FY2015 to 547,100 rides in FY2019 with a commensurate increase in service. LIFT ridership has declined somewhat in the past 10-12 years

LIFT boardings in FY2005 were 1,026,156, and in FY2019 were 962,220, with a high during that period of 1,122,036 in FY2008. The small decline in demand for LIFT is largely due to changes in LIFT eligibility requirements and promoting less costly transportation alternatives through RideWise and Ride Connection.

STF formula funds cover approximately 6% of transit agencies' costs of door-to-door services for seniors and people with disabilities. The STF formula program supports approximately 50% of the City of Sandy's paratransit costs; 25% of Wilsonville's; 31% of Canby's; and 5% of TriMet's paratransit costs.

§5310 FUNDS

The tri-county area received approximately $7.5 million in §5310 funds for the 2020-21 biennium. These funds are improving transportation for seniors and persons with disabilities transportation by providing for:

- Vehicle maintenance and new vehicles for transit agencies as well as Ride Connection and its partners;
- Operations that both maintain and expand service;
- Mobility management; and
- Technology capital and IT infrastructure.

OTHER FUNDS

Grant funds that are not available through the STFAC process are offered from a variety of other sources and may be available to transit providers for planning transit projects and improving coordination. These grants include:

Transit Planning 4 All

The mission of this project, sponsored by the Department of Health and Human Services' Administration for Community Living, is to demonstrate the value that inclusive processes can bring to transportation efforts. Grant funds for inclusive planning projects and technical projects are made available on an ad-hoc basis.

The Community Transportation Association of America, in partnership with Easter Seals, National Association of Area Agencies on Aging, and Westat, is developing, testing and demonstrating ways to empower people with disabilities and older adults to be actively involved in designing and implementing coordinated transportation systems. Their goal is to support communities nationwide in adopting sustainable, scalable, and replicable models that include participation of people with disabilities and older adults in the design and implementation of responsive, coordinated transportation systems.

Rides to Wellness Demonstration and Innovative Coordinated Access and Mobility Grants program

Rides to Wellness Demonstration Grants are part of a series of activities to support FTA's Rides to Wellness Program that seeks to address challenges for the transportation disadvantaged in accessing health and wellness services. The goal of the competitive Rides to Wellness Demonstration Grants is to find and test promising, replicable public transportation healthcare access solutions that support the following Rides to Wellness goals: increased access to care, improved health outcomes and reduced healthcare costs.

PROJECTED FUNDING NEEDS

The STF program funding has not kept up with increasing paratransit costs. Serving the growing population of seniors and persons with disabilities and addressing gaps in service will require more money.

- The tax base supporting STF formula funds is a declining source of revenue as it is not keeping pace with the growth of the senior population and it is funded by cigarette tax revenue, excess revenue earned from sales of photo ID Cards, and other funds from Oregon Department of Transportation.

Additional funding will be needed just to maintain services at current levels and provide inflation increases to providers.

- The state discretionary STF program also remains a flat source of revenue. This program does not provide enough funding to continue existing services and provide for on-going vehicle maintenance and replacements.

CURRENT FEDERAL AUTHORIZATION

The latest federal transportation funding authorization is the five-year Fixing America's Surface Transportation (FAST) Act, which was signed in December 2015. Highlights of FAST that are relevant to the CTP are summarized in Table 6-1.

Table 6-1. FAST Act Highlights

Program	Purpose	Status in FAST Act	Overview of Changes in FAST Act
§5307 - Urbanized Area Formula Program	Provides funding for transit capital, operations, planning, and engineering in urbanized areas (which have a population of 50,000 or more). This includes some ADA complementary paratransit service costs.	Modified	'"100 bus rule" is modified to include non-ADA general population demand response transit service Allows 20% of allocation to be used for operations of ADA paratransit under certain conditions Directs recipients to maintain equipment and facilities in accordance with their transit asset management plan Eliminates requirement to spend 1% of 5307 funds on Associated Transit Improvements Allows use of up to 0.5% of 5307 funds for Workforce Development Increases the Small Transit Intensive Cities (STIC) tie starting in FY 2019 Funding: $4.53 Billion (FY 2016) authorized Small but not substantial changes in funding levels from previous years
§5310 - Enhanced Mobility of Seniors & Individuals with Disabilities	Provides funding to support transportation for the elderly and persons with disabilities. Provides funding for vehicles, wheelchair lifts, scheduling systems, mobility management programs, contracted services, services beyond those required by the ADA, travel training, and more.	Modified	Allows states or localities that provide transit service to be direct recipients under this section Requires FTA to develop a best practices guide for §5310 service providers Introduces a new Pilot Program for Innovative Coordinated Access & Mobility (to improve coordination of transportation and non-emergency medical transportation services) Requires Coordinating Council on Access and Mobility (CCAM) to produce a strategic plan to address coordination across the federal government

Program	Purpose	Status in FAST Act	Overview of Changes in FAST Act
			Funding: $263 million (FY 2016) authorized from the Trust Fund Small but not substantial changes in funding levels from previous years
§5311 - Formula Grants for Rural Areas	Provides funding for transit capital, planning, and operations in rural areas (population less than 50,000), including job access and reverse commute projects.	Modified	Increases the tribal formula authorization to $30M/year, maintains the $5M discretionary tribal program Allows advertisement & concessions revenue as local match Clarifies what costs are to be counted as local match with respect to intercity bus feeder service Recipients may now use up to 20% of their 5311 allocation (previously 10%) for the operation of paratransit service, if certain conditions are met In determining the amount of the unsubsidized portion of privately provided intercity bus service that connects feeder service that is eligible as in-kind local match, all operating and capital costs can now be included without revenue offset Funding: $620M (FY 2016) authorized from the Trust Fund Small but not substantial changes in funding levels from previous years
§5314 - Technical Assistance & Workforce Development	Supports technical assistance activities that enable more effective and efficient delivery of transportation services, foster compliance with federal laws (including the ADA), meet the transportation needs of the elderly, and more. Supports activities that address public transportation workforce needs through research, outreach, and training.	Consolidated	Consolidates former §5314 and §5322 into a single section for both eligibilities, and maintains the National Transit Institute (NTI) Workforce Development remains a competitive program, with outreach to additional populations, a focus on national training standards, increased **outcome requirements, and a Report to Congress** **Allows use of up to 0.5% of 5307 funds for Workforce Development** **Funding: $9M**/year from the Trust Fund, of which $5M is set-aside for NTI, and an additional $5M/year authorized from the General Fund (subject to appropriations) Small but not substantial changes in funding levels from previous years
§5339 – Buses and Bus Facilities	Provides funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify	Modified	Recipients of 5307 and 5311 may now be direct recipients of Section 5339 funds. Discretionary components added: A bus and bus facilities competitive program based on asset age and condition, and a low or no emissions bus deployment program. A new pilot provision for urbanized areas between 200,000 and 999,999 in population to participate in

Program	Purpose	Status in FAST Act	Overview of Changes in FAST Act
	low or no emission vehicles or facilities.		voluntary state pools to allow transfers of formula funds between designated recipients. Allows states to submit statewide applications for bus needs. Grantees may use up to 0.5% of their 5339 allocation on Workforce Development activities.

Sources: "The Federal Transit Administration's Programs under the FAST Act." Presentation. FTA, Washington, D.C., January 2016. And "FTA Program Fact Sheets under the FAST Act." Web page. FTA, Washington, D.C., Updated March 24, 2016.

National Aging and Disability Transportation Center Resources

The National Aging and Disability Transportation Center (NADTC), the Federal Transit Administration's technical assistance center, hosts their website to provide easy access to a wealth of useful resources and information. The NADTC focuses on leveraging FTA's §5310 formula grants and other transit investments.

The clearinghouse offers resources created through FTA's investments in technical assistance supporting accessibility and mobility.

FUNDING PROCESS

One of the key roles of the STFAC is to review applications for STF and §5310 funds and make recommendations for funding between project applications. The application review and evaluation process was discussed as part of the CTP update process. Through a series of meetings and a workshop, the STFAC was asked to articulate and share their experiences, perceptions and opinions about the funding process, funding application categories, evaluation criteria, and application format. A summary of the topics discussed at the workshop focused on the application process is provided below. *A summary of the STFAC workshop on the funding process and application review criteria can be found in Attachment L.*

- **Funding Process.** The proposed application review process for reviewing funding applications identifies a seven-step process that includes three STFAC meetings, and identifies actions that will occur by TriMet staff and STFAC members between meetings and between funding cycles.
- **Funding Application Categories.** The proposed funding application categories were updated based on input received at previous meetings to more clearly separate capital from operations. The categories now include

capital projects and operations projects under "Maintaining Existing Service" and "Service Expansion" projects. There is also a category for "New Initiatives".

- **Evaluation Criteria.** The proposed evaluation criteria are related to the CTP Priorities. The criteria each include a series of questions to help describe how different types of applications may address the criteria. Applicants will be asked specifically to address these criteria and the STFAC members will evaluate each application how well they address the criteria.
- **Funding Applications.** The proposed updated funding applications have two forms. The first form provides information about the applicant's organization and they will complete this only once, regardless of how many different project applications they submit. The second form will get filled out for each project application submitted by an applicant.

The proposed funding process, application categories, and application review criteria can be found in Attachment M.

7. CONCLUSIONS

The region is growing rapidly and the population of seniors and/or persons with disabilities is growing even faster as a share of the total population. In order to support and maintain strong communities, there is a growing emphasis on "aging in place" which means that demand for transportation is expected to remain strong and grow over time. Strong coordination, collaboration, and innovation will be critical to meeting the transportation needs of seniors and/or persons with disabilities in the future.

The CTP defines priorities and action steps to support a cost-effective, efficient and high-quality transportation network for seniors and/or persons with disabilities. It also looks forward to future needs, identifying those needs, calling for actions to help address them. Among the many actions called for, some highlights include:

- Creating an implementation sub-committee of the STFAC to help ensure that actions are carried through and that the region continues to collaboratively seek additional funds for identified service needs
- Strengthening the focus on performance measurement and monitoring including updating current data reporting to make it more focused and user-friendly
- Encouraging use of fixed-route transit, which has a much lower cost per ride and therefore offers the opportunity to provide mobility for many more people with whatever the resources available
- Managing ADA service demand to ensure that those who need it have it available and manage future costs
- Enhancing pedestrian access and participating in land use decision-making to make it easier for seniors and/or persons with disabilities to not have to rely on paratransit or individual rides, but be able to get around more on their own or on fixed-route transit
- Maintain current cost-effective services that meet the needs of Seniors and/or Persons with Disabilities
- Expand or establish new services and programs to provide greater coverage, more span throughout the day and weekends, as well as expanding the most cost-effective services and new technologies
- Improve the customer experience with better information

- Create a safer environment and improve the perception of safety with infrastructure like lighting and with information and outreach
- Promote coordination and innovation with a range of activities from electronic fares that are seamless between systems, sharing of vehicles and trips and other potential partnerships

The CTP service guidelines and actions are consciously unconstrained by current available dollars. This helps better define the real need for additional funds and sets a high bar to encourage seeking additional resources to provide these services.

Transportation and mobility are fundamental to a person's well-being. To support fulfilling and productive lives for the residents of the tri-county area, this plan aims to maintain and improve current services and expand services to meet current and future needs.

Attachment A Common Acronyms

COMMON ACRONYMS

AARP	American Association of Retired Persons
ACS	American Community Survey
ADA	Americans with Disabilities Act
AVL	Automatic Vehicle Location
BRT	Bus Rapid Transit
CAT	TriMet Committee on Accessible Transportation
CAR	Catch-a-Ride
CCAM	Coordinating Council on Access and Mobility
CCO	Coordinated Care Organization
CCSSD	Clackamas County Social Services Division
CL	Central Loop
CTP	Community Transportation Program
DAR	Dial-a-Ride
EDTP	Tri-County Elderly and Disabled Transportation Plan
FAST	Fixing America's Surface Transportation
FLAP	Federal Lands Access Program
FY	Fiscal Year
FTA	Federal Transit Administration
JPACT	Joint Policy Advisory Committee on Transportation
MTP	Medical Transportation Providers
NADTC	National Aging and Disability Transportation Center
NTI	National Transit Institute
ODOT	Oregon Department of Transportation

OHP	Oregon Health Plan
OSHU	Oregon Health Sciences University
PNA	Pedestrian Network Analysis
POV	Privately Owned Vehicle
PSU	Portland State University
RTP	Regional Transportation Plan
RTCC	Regional Transportation Coordinating Council
SAM	Sandy Area Metro
SCTD	South Clackamas Transit District
SMART	South Metro Area Rapid Transit
SPD	Seniors and People with Disabilities (formerly SDSD)
STF	Special Transportation Fund (Discretionary and Formula)
STFAC	Special Transportation Fund Advisory Committee
STIF	Statewide Transportation Improvement Fund (Formula and Discretionary)
TAC	Transit Advisory Committee
TCRP	Transit Cooperative Research Program
TMA	Transportation Management Association
TNC	Transportation Network Company
TRP	Transportation Reaching People
WCDAVS	Washington County Disabilities, Aging, and Veterans Services
WTS	Woodburn Transit
WVDO	Willamette Valley Development Officers

Attachment B Glossary of Terms

GLOSSARY OF TERMS

Accessibility	The extent to which facilities, including transit vehicles, are barrier-free and can be used by people who have disabilities, including wheelchair users.
ADA	Americans with Disabilities Act: Passed by the Congress in 1990, this act mandates equal opportunities for persons with disabilities in the areas of employment, transportation, communications and public accommodations. Under this Act, most transportation providers are obliged to purchase lift-equipped vehicles for their fixed-route services and must assure system-wide accessibility of their demand-responsive services to persons with disabilities. Public transit providers also must supplement their fixed-route services with paratransit services for those persons unable to use fixed-route service because of their disability.
ADA Eligible	ADA Eligible refers to eligibility for complementary fixed route paratransit. Individuals who qualify must be unable to used fixed route due to a disability.
Boarding Rides	Boarding rides are counted each time a person enters a vehicle. Boardings and rides all refer to boarding rides.
Boarding Rides per Vehicle Hour	The number of boardings divided by the vehicle hours of service. Describes a route's productivity.
Brokerage	A method of providing transportation where riders are matched with appropriate transportation providers through a central trip-request and administrative facility. The transportation broker may centralize vehicle dispatch, record keeping, vehicle maintenance and other functions under contractual arrangements with agencies, municipalities and other organizations. Actual trips are provided by a number of different vendors.

Complementary Paratransit	Paratransit service that is required as part of the Americans with Disabilities Act (ADA) which complements, or is in addition to, already available fixed-route transit service. ADA complementary paratransit services must meet a series of criteria designed to ensure they are indeed complementary.
Coordination	A cooperative arrangement between transportation providers and organizations needing transportation services. Coordination models can range in scope from shared use of facilities, training or maintenance to integrated brokerages or consolidated transportation service providers.
Corridors	The Corridor concept is from the 1997 Regional Framework Plan. Corridors are not as dense as centers, but also are located along good quality transit lines. They provide a place for densities that are somewhat higher than today and feature a high quality pedestrian environment and convenient access to transit. Typical new developments would include row houses, duplexes and on to three story office and retail buildings, and average about 25 persons per acre.
Curb-to-Curb Service	A common designation for paratransit services. The transit vehicle picks up and discharges passengers at the curb or driveway in front of their home or destination. In curb-to-curb service the driver does not assist the passenger along walks or steps to the door of the home or other destination.

Demand-Response Service	The type of transit service where individual passengers can request transportation from a specific location to another specific location at a certain time. Transit vehicles providing demand-response service do not follow a fixed route, but travel throughout the community transporting passengers according to their specific requests. Can also be called dial-a-ride. These services usually, but not always, require advance reservations.
Deviated Fixed Route	This type of transit is a hybrid of fixed-route and demand-response services. While a bus or van passes along fixed stops and keeps to a timetable, the bus or van can deviate its course between two stops to go to a specific location for a pre-scheduled request. Often used to provide accessibility to persons with disabilities.
Disability	The limitation of normal physical, mental, social activity of an individual. There are varying types (functional, occupational, learning), degrees (partial, total) and durations (temporary, permanent) of disability.
Door-to-Door Service	A form of paratransit service which includes passenger assistance between the vehicle and the door of his or her home or other destination. A higher level of service than curb-to-curb, yet not as specialized as door-through-door service (where the driver actually provides assistance within the origin or destination).
Fare Box Revenue	A public transportation term for the monies or tickets collected as payments for rides. Can be cash, tickets, tokens, transfers and pass receipts. Fare box revenues rarely cover even half of a transit system's operating expenses.

Fixed-route	Transit services where vehicles run on regular, pre-designated, pre-scheduled routes, with no deviation. Typically, fixed-route service is characterized by printed schedules or timetables, designated bus stops where passengers board and alight and the use of larger transit vehicles.
Frequent Service	TriMet service that operates every fifteen minutes or better, every day. 16 bus routes and all MAX lines meet this level of service.
FY (Fiscal Year)	In Oregon, public agency Fiscal Years start on July 1 of the preceding calendar year. FY 2005 is from July 1, 2004 to June 30, 2005.
JARC (Jobs Access Reverse Commute)	Federal formula funds available to provide transportation to assist low income individuals get to work.
Match	State or local funds required by various federal or state programs to complement funds for a project. A match may also be required by states in funding projects, which are joint state/local efforts. Some funding sources allow services, such as the work of volunteers, to be counted as an in-kind funding match. Federal programs normally require that match funds come from other than federal sources.
Medicaid	Also known as Medical Assistance, this is a health care program for low-income and other medically needy persons. It is jointly funded by state and federal governments. The Medicaid program pays for transportation to non-emergency medical appointments if the recipient has no other means to travel to the appointment.
New Freedom	Federal formula funds for transit agencies to provide services to people with disabilities that are above and beyond what the ADA requires.

Paratransit	Types of passenger transportation that are more flexible than conventional fixed-route transit but more structured than the use of private automobiles. Paratransit includes demand-response transportation services, subscription bus services, shared-ride taxis, carpooling and vanpooling, jitney services, and so on. Most often refers to wheelchair-accessible, demand-response van service.
Service Route	Another hybrid between fixed-route and demand-response service. Service routes are established between targeted neighborhoods and service areas riders want to reach. Similar to deviated fixed routes, service routes are characterized by flexibility and deviation from fixed-route intervals. However, while deviated fixed routes require advanced reservations, service routes do not. A service route can include both regular, predetermined bus stops and/or allow riders to hail the vehicle and request a drop-off anywhere along the route.
Special Transportation Fund (STF)	State funds for transportation for elderly and people with disabilities.
Statewide Transportation Improvement Fund (STIF)	State funds from an employee payroll tax to improve public transportation services in low-income communities.
Total Transit System	TriMet's term for all of the attributes that make transit an attractive choice for riders, including customer information, easy access to transit, comfortable places to wait, high quality transportation (frequent, reliable, comfortable), safety and security.

Trip	A one-way movement of a person or vehicle between two points. Many transit statistics are based on unlinked passenger trips, which refer to individual one-way trips made by individual riders in individual vehicles. A person who leaves home on one vehicle, transfers to a second vehicle to arrive at a destination, leaves the destination on a third vehicle and has to transfer to yet another vehicle to complete the journey home has made four unlinked passenger trips.
Urban Growth Boundary (UGB)	The UGB controls urban expansion onto farm, forest and resource lands. Metro, the regional government, manages the UGB as required by state law.
Vanpool	A prearranged ridesharing service in which a number of people travel together on a regular basis in a van. Vanpools may be publicly operated, employer operated, individually owned or leased.
Vehicle Hours	Vehicle hours include revenue hours plus the time it takes a vehicle to travel from the garage to the end of the line.

Attachment C STFAC Membership Roster

STFAC MEMBERSHIP ROSTER (APRIL 2020)

Membership Category Description	Number of Persons	Committee Members	
		Name	Through Year
Those interested persons who are members of the TriMet Committee on Accessible Transportation (CAT), excepting the CAT member who is a Board member	Up to 14	Jan Campbell, Chair	2019
		Claudia Robertson, Vice Chair	2019
		Annadiana Johnson	2020
		Leon Chavarria	2019
		Ryan Skelton	2020
		Patricia Kepler	2019
		Zoe Presson	2020
Seniors or persons with disabilities who reside in Multnomah County	2	Carin Topliff	2021
		vacant	
Seniors or persons with disabilities who reside in Multnomah County	2	Andrea Belcher	2020
		vacant	
Seniors or persons with disabilities who reside in Washington County	2	Elaine Wells	2021
Seniors or persons with disabilities who reside outside the TriMet District	2	Glenn Koehrsen	2021
		Eric Olsen	2021
Staff representatives of the respective County Agencies on Aging and Disability; one per county	3	Teresa Christopherson, Clack. Co.	2021
		Mjere Simantel, Wash. Co.	2021
		Monika Johnson, Mult. Co.	2021
Staff representative of TriMet	1	Margo Moore	2021
Staff representative of Ride Connection	1	Julie Wilcke	2021
Staff representatives of public transit agencies other than TriMet, including rural transit entity representative	2	Andi Howell, City of Sandy	2020
		Elli Work, City of Wilsonville	2021
Seniors or Persons with Disabilities Living in the Service Area	3	David Keyes	2021
		Mike Foley	2020
		Mary Lou Ritter	2020

Attachment D STFAC Meeting Summaries

STFAC Meeting #1
Friday, January 18th, 2019
Meeting Summary

No attendance recorded.

Discussion Items

- Confirm w/ Julie about upcoming funding will receive 40% reduction and not current funding
- Assume full funding
- Reconvene when know what funding will come in
- Motion – proceed w/ the full funding levels with the recognition that if receive cutbacks then would reconvene
- Advocate at senior day at May 9th
- Subcommittee to discuss advocacy

Interested Subcommittee members:

- Zoe
- Mary
- Glenn
- Rebecca
- Julie
- Margo
- Jan
- Elaine
- Claudia

Julie will lead the subcommittee

Follow-up Tasks

- Find out if can speak on behalf of the STFAC when advocate and let subcommittee know
- Everyone needs copies
- Get list of FY16 discretionary funded operating
- Hardcopy of CTP to Eric
- Link to everyone
- List awards of FY16 discretionary funding

STFAC Meeting #2
Thursday, July 25th, 2019
Meeting Summary

Attendees:

- Attendees:

• Teresa Christopherson	• Tom Strader
• John Whitman	• Monika Johnson
• Mike Foley	• Jan Campbell
• Annadiana Johnson	• Jeff Hill
• Tangerine Behere	• Andi Howell
• Elli Work	• Elaine Wells

Priorities:

- No change on priorities
- How to meet #4 if STF and STIF merge – Elli
  - Glenn – may not get there but it's still a priority
  - Elaine – Agrees with Glenn
- Elli - #9 change to #1

Strategies:

- Glenn – in general they are good but we haven't done any of them.
- Margo – how would we do this.
- Permanent subcommittee meeting
- Elaine –Wants us to be thinking about new ways to provide expanded service, especially in rural areas. Supports Andi – this plan should be used in the application and providers have been doing
- Elli – change
- Vanessa clarified that one subcommittee will address multiple items. Jan & Vanessa – we can wordsmith items.

Actions:

- No changes except for the date.
- Annadiana – have time limit and milestones.
- Need to establish a charter and drill down on actions with the subcommittee.
- Subcommittee – be clear on what's expected of providers and work with them before they submit their applications.
- Glenn – need a specific group of people identified with a firm chair.
- Jan – will ask if people want to continue on the subcommittee after the CTP update is complete.

- Change dates to 2020 and work with subcommittee on benchmarks.

Chapter 2:

- Margo – want to confirm that all these providers are still in place.
- Update with assistance from providers.
- Elaine – would like more time to review CTP with a rural provider lens
- Andi – doesn't feel like she needs more time
- Tom – either way for him. Could use more time but doesn't have to.
- Send additional changes to Vanessa and she will send them out
- Glenn – 5.13, need to add first mile and last mile accommodations
- Vanessa – follow up with ODOT about if need to incorporate anything

Next Meeting

- Tuesday, August 27th
- 9:30am-11:30am at Mobility Center
- Teresa – can't attend but meet without her
- Andi – will try and miss her standing meeting
- Tom - will work
- Comments by August 15th and I will incorporate and send them to you and review
- More than 2 subcommittee meetings a year / once a month and two full meetings – after the STFAC meeting
- Reports – ask for feedback from providers on form before finalizing it.
- Glenn – CCO announcement. We need to get involved.
- Vanessa will send out CCO announcement to group. Include STF and STIF merge email. Discuss advocacy operations and approach as subcommittee at future sub meetings.

STFAC Meeting #3
Tuesday, August 27th, 2019
Meeting Summary

Attendees:

- Attendees:

• Teresa Christopherson	• Monika Johnson
• John Whitman	• Jan Campbell
• Mike Foley	• Jeff Hill
• Annadiana Johnson	• Andi Howell
• Tangerine Behere	• Elaine Wells
• Elli Work	• Julie Wilcke
• Claudia Robertson	• Vanessa Vissar
• Tom Strader	• Tom Mills
•	• Margo (TriMet)

Review Comments – Revising the Coordinated Transportation Plan for Seniors and Persons with Disabilities

- Vanessa discussing what has been done and what transit law requires of plan Coordinated Transpo Plan FTA requirement for section 5310 funding must be developed with seniors, PWD, and reps of public and nonprofit transportation providers.
- Vanessa: "The approach this time is to perform minor update." Included in CTP to date is:
    - Introduction
    - Chapter 2
    - Chapter 3
    - Chapter 4
    - Chapter 5
    - Chapter 6
    - Conclusion
- During the last meeting, the group focused on Chapter 5, asking for revisions By 08/15, they received some from Julie and (who else?) Vanessa is also updating maps and data to reflect current info.
- "Is it our intent to use this basic document, make changes with the same format? Is it acceptable to everyone?"
- Vanessa is working with FTA and Metro to ensure compliance, but so far, so good. She'll know by the end of the week if there are any major issues with FTA.
- 5310 Circular definition on back of agenda, being read by Jan Campbell Questions?
- "I'm assuming since we're meeting the federal requirement, the fact we're including STIF is (important)?"

- "This was a preliminary attempt to test out my thinking as to what we need to do."
- Claudia: Another question: "Have we ever included low-income strategy?" "Low income was mentioned several times,"
- "TriMet's definitions may have changed since I started."
- Jan: Many persons with disabilities and seniors disproportionately poor.
- Glen raised the concern, and expressed surprise that ethnic diversity is not being included in this context.
- Monica: "Being that this is the federal language, will you include Title VI, because if so, we cover all of those protected classes."
- Glen and Julie went over their revisions before going on to Chapter 5.
- Glen: in intro, they made updates, know that coordinated care orgs need to address socially determined health He updated it to the current situation, and is waiting to see whether he went too far or not far enough based on feedback. He noted that he received critical feedback in the past.
- "I have to say Glen, from day 1 how thoroughly you review documents."

Table 2-1 Transportation Services in Washing, Multnomah and Clackamas Counties

- Julie: They went through all Ride Connection programs to ensure accuracy, reflecting new services such as Hillsboro Connector and new partners. On table 2.1, they attempted to clarify from the previous table. "Everything was in the shuttle service area. Actually, this, I'm not positive if this is our change doc in here."
- Vanessa took revisions.
- They essentially rearranged the categories in table 2.1 to better differentiate between the various types of shuttle services being provided.
- Vanessa: "Do you remember why this was included?"
- Glen: refers to the consultant’s involvement in this matter.
- Jan: "just thought it would be easier to read an overview."
- Glen: "Ride Connection is the only organization so far to make these updates."
- Vanessa: "there is no deadline for the providers yet."
- Glen: "Andy, are you working on this?"
- Andy: "Yes, we're providing the same services as bf."
- Jan: "We’ll see a final draft before the next STFAC meeting."
- Claudia wants this table included.
- Glen: "Is this plan every 3 or every 4 years?"
- Vanessa says it is 3.
- Tom: "My comment is that the chart gives a nice summary of services offered, and helps someone who's new to the organization."
- Glen has the same inclination.
- There was consensus to keep the table in.
- Julie: There is another map which needs updating. They sent questions beyond the updates via email regarding demographics and other community indicators.
- They are also working to include CCOS in this data in addition to transportation network information.
- Glen participated in a meeting in Salem regarding rulemaking on version 2.0.

- "I tried addressing some of that in my notes, maybe not accurately."
- Jan: "Are you going to address those questions?
- Vanessa is looking in her email.
- Glen has time in the next few weeks to address issue if others are not available to do so.
- Claudia: "Did First do waiver nonmedical?"
- Vanessa: "Who wants to draft something?"
- Glen indicates interest.
- Jan: "Anyone else that wants to include or delete?"
- Vanessa: "So far, CCO and Title VI were added."
- Glen: I'm assuming that many attachments won't be included since they're talking about needing notes from 2015-16."
- Vanessa: "We're updating all of that."
- Jan: They're looking for a timeline of draft completion; everyone will get a final draft.

Chapter 5 Priorities, <u>Actions</u> and Strategies

- The other thing the committee focused on was Chapter 5, revisiting the action again, "because in the small committee, the only changes we saw were the date."
- Now they are going through each one, now on page 5.5, plan to oversee implementation
- Glen: "We should identify why we didn't act on the actions several years ago."
- Vanessa wants to go through each one to ensure everyone is on the same page.

<u>Action #1 Develop STAFAC subcommittee</u>

There is contention regarding the interpretation of item 1 around creating a subcommittee. Glen thinks the bylaws weren't followed. Vanessa thinks they were.

- Glen also says that no nominating committee was established, and reiterates that the bylaws weren't followed.
- "We have Dick Jones who isn't coming back again, and we haven't identified a replacement."
- Jan: "We can't go back, we need to go forward."
- Glen still insists that there are problems.
- Monica makes a motion to table the bylaws discussion, as there are only 1.5 hours left.
- No motion is needed; everyone agreed by consensus to move on, including Glen.
- *The* timeframe has been moved back to 2024. The next step is to create a subcommittee charter, nominate members, create a workplan, etc.
- Glen is still frustrated, saying "It states we'll form a subcommittee by 2024," He says it needs to happen ASAP" recommends changing to 2021
- A motion was made and seconded by Monica to do just that, and passed, with Glen abstaining. He is still concerned that they're pushing it off.
- Andy: "To clarify, what does timeframe actually mean? Will it be complete by '21, begin in '21?"
- It is agreed that the committee will be established and a plan documented by 2021.
- Claudia: "committee is very amorphous; some will stay for a while, others will move on."
- "2021 gives us enough time to establish a committee and workplan."

- Vanessa: Clarify next steps?
- Glen says he is on a different wavelength from everyone, and doesn't really care now.
- Julie: "We can be working on this stuff simultaneously," and "any timeline sooner than that is aggressive, and we'd set up ourselves for failure if we accelerated the timeline."
- Vanessa: "We'll have to revisit STFAC's duties once the STFAC/STIF merge is complete."

Action #2 Estimate Cost for Actions

- Vanessa: Is this needed?
- Andy: It's a very heavy lift, with many actions in the plan throughout each county. She sees the value, but the cost and time commitment needed for a consultant is a very heavy lift.
- Elaine agrees with Andy, and thinks it needs to be the full committee's responsibility.
- Andy: "We thought at the time it could be very helpful, but when you actually look at STFAC action, there is just such a range of what could be implemented, and x's hard to put a price on many of these actions."
- Tom: "It would take a lot of time, effort, resources."
- Elli made a motion to remove 2 which passes, Margo seconds

Action #3 Develop Advocacy Strategy from STFAC

- Identify subcommittee workplan
- Glen: "We all talk to our legislators, and should have a common white sheet of our issues, since they don't know these?"
- Other: "It depends on what's coming up. We all wrote draft letters. "It depends on what's in the Governor's budget."
- Claudia: "We may have a strategy in hand when we think we're losing them."
- The item is being kept.

Action #4 Periodically Review CTP

- Review STFAC to determine progress
- One agrees that there should be milestones to keep everyone on task.
- Also, define periodically.
- Andy: "Just leave it in the plan, and that would be the committee that would put a timeframe on it; we don't want to put a timeframe on the whole plan."
- Julie: "We should also revisit the process since there's a difference in interpretation on that."
- This is a Tier 1 issue.

Action #5 Application Processes

- Claudia: The formatting of the plan needs to be changed to be easier to navigate and read overall.
- Elaine: clarify?
- Glen teases Elaine about losing WashCo money.
- Vanessa: "Julia mentioned changing it to," (didn't catch what exactly).
- Jan: Are we keeping this all at Tier 1?

- Andy: "I got hung up on 1." "started doing research and typing a draft, just read in the bylaws that the chair will select subcommittee members and designate a chair."
- "Should we change that so it matches our bylaws?"
- Claudia says that these are two different things.
- Jan: "I'm wondering if we need to review the bylaws and put that in here."
- Andy: "The subcommittee could review them."
- Updating and reviewing the bylaws is being made an action.
- Margot: "How often? It needs to be looked at consistently."
- Monica: "annually"
- Claudia: "Put a time limit on it, and redo the timeframe when the plan is updated in 2021."
- Vanessa: "normally yes, except for the merge, so we must wait until that's done before revisiting this."
- Andy: "I don't think ODOT's recommendation is due for a couple of months."
- Vanessa: "It should be out by October, and will probably go through short session in 02/20."
- Julie also believes that it will go to short session. Claudia thinks that admin rules will be drafted after that session.
- Vanessa: review annually?
- Others believe it should be as needed.
- Elaine: "What about adding something like "to be concurrent with the merge?""
- Monica: "We're adding 7?"
- Jan: "Yes."
- What are next steps?
- Claudia: Subcommittee, then workplan, as well as periodic work review
- She emphasizes that it is ongoing.

Measure Program and Project Performance

- Julie: "Is it up to STFAC as to what reports are reduced?"
- Vanessa: "They have their preference."
- What we've done is combine ODOT and STFAC into one quarterly document.
- Glen: "Can someone from TriMet accounting come to the meeting and explain the need for the report?"
- "What good is the report? It takes a lot of time and effort."
- "We're updating the reporting requirements."
- Glen: "The subcommittee will do all these tasks, but may have different priorities."
- Claudia: "If we don't get these numbers from the reports, we won't know if whether or not TriMet's withholding of the funding for these services is arbitrary or not.
- Now moving on to Page 5.15.
- Vanessa will restructure this so it looks nicer.
- Glen: "If "ongoing" is acceptable here, why isn't it accepted on the other tables?"
- "We did, we have it as ongoing."
- Jan: "How do people feel on the timeframe?"
- Monica: "Are we reverting to "ongoing" for the items to be completed in 2021?"

- Glen: "We'll have a date to set up the subcommittee, who will determine the timeframe."
- Going to page 5.15; supporting expanded travel training programs
- Vanessa: "Isn't that what we do?"
- Julie: "It is ongoing, expanding, shifting. RIDE Connection just hired a fantastic new mobility specialist/travel trainer. Wilsonville's needs have shifted."
- Claudia and Glen are discussing how TriMet is not listening to them about the plan.
-
- Jan: "Is 7 good?"
- Everyone agrees.
-
- Moving on to 8.
- Vanessa: "Action 8 is done."
- Andy disagrees.
- "Every time we go for our new STIF plan, we'll look to this for feeder services."
- Everyone agrees to keep Action 8.
- Elaine: "WashCo still working on their plans, so we should expand the community connectors piece to include a broader area."
- 9
- public restrooms in transit centers, identify which transit centers to prioritize
- Jan: "What do people thinking about removing it?"
- Andy: "X's a Tier 3. Unless there's a really good reason to remove it, we shouldn't." She suggests expanding it to include other amenities.
- "Anything we can get to improve our shelters is good."
- Julie thinks that may be beyond the scope.
- Elaine believes that this was put in here to address long travel times for some riders. It should stay in.
- Tom also agrees that it should be beefed up to include more amenities.
- Elaine and Julie agree. Julie serves on the Ptax ADA work group which is looking at best ADA practices among transit systems. "We should look at amenities which exceed ADA standards."
- Vanessa reads draft Language: improved amenities as opposed to just public restrooms.
- There was discussion on whether to broaden the responsible entities from transit agencies to other entities.
- Monica suggests adding language which says "exceeding ADA requirements"
- Managing ADA service demand, "still ongoing, right?"
- "Yes."
-
- Items 10 and 11 kept
- now on Item 12
- TriMet is responsible for this item.
- Margot: "Some of it is done," HOP launched
- She is discussing the Sandbox TriMet has been working on which can be used by multiple transportation providers, including parking information.

- Vanessa suggests updating 12 13.
- Vanessa: "Still a lot to cover,"
- Glen thinks TriMet should update these.
- Julie: "Next steps?"
- Vanessa: "Since Trimet's the responsible party on many of them, we should take another stab at it."
- Julie points to 1D. "Which action does that tie to?"
- "Where do we have an action that supports addressing accessible bus stops?"
- Vanessa: "It should be covered under item 9."
- The committee is comfortable having TriMet update the remaining actions.
- Vanessa is wrapping up with next steps which are:
- The goal of this meeting was to do minor updates to have STFAC review. The goal is to present the items to the Board in December.
- The next date that the revisions can be reviewed is during the 9/20 subcommittee meeting.
- If more time is needed, they can meet

STFAC Meeting #4
Friday, September 20th, 2019
Meeting Summary

Attendees:

- Attendees:

• Mike Foley	• Andi Howell
• Annadiana Johnson	• Rebecca Miller
• Tangerine Behere	• Glenn Koehrsen
• Eric Olsen	• David Keyes
• Claudia Robertson	• Vanessa Vissar
• Tom Strader	• Tom Mills
• Monika Johnson	• Margo (TriMet)
• Jan Campbell	

Merge:

- Want to keep STFAC
- Don't want to rely on QE for funding and others
- Will send update at
- Offer public comment at other times other than the beginning
- Forward info to STFAC
- ODOT CAC for Recs by November
- Legislatures will consider it Jan-March.
- Goal to rec. how to merge the program. Seem to be getting off topic and suggesting changes to STIF
- Expect CAC to get input from constituents
- Will be getingt input from STFAC when have something. Via email.

Proposal:

- Update CTP due by June 2020
- 5310 projects need to be in plan regardless
- Continue finalizing Actions
- Don't bring the plan to the board until March
- Reach Consensus on CTP Actions 10-44
- Discuss timeframe and priority for actions 1-9 later
- Simplify and combine for adequate rather than existing services, maintain services? Maintain access?
- Identify Subcommittee Next Steps

Next Steps:

- Share CAC information
- Offer public comment at other times other than the beginning
- STFAC Meeting on October 25th
    - Update from ODOT

    - STF overview
- Condense actions
- Move others to Sub Workplan
- Full meeting

STFAC Meeting #5
Friday, April 30th, 20209
Meeting Summary

Attendees:

- Attendees:

• Mike Floyd	• Andi Howell
• Annadiana Johnson	• Rebecca Miller
• Kristina Babcock (alt for Teresa Christian)	• Theresa Conley (for Jason Kelly, ODOT)
• Eric Olsen	• Elaine Wells
• Julie Wilcke	• Glenn Koehrsen
• Claudia Robertson	•
• Tom Strader	• Tom Mills
• Ryan Skelton	• David Bouchard (TriMet)
• Leon Chavarria, CAT Committee	• Cora Potter (TriMet)
• Monika Johnson	• Aaron Dees (TriMet)
• Jan Campbell, CAT Chair	• Margo Moore (TriMet)
• Elli Work	• Eileen Collins (TriMet)
• Mary Lou	• Andrew Mortensen

The meeting begins at 9:05

Welcome

- Jan Campbell welcomes everyone to the meeting. She has been thinking about everyone, and knows that it has been a very difficult time. She thanks everyone for everything they have done. She thanks staff for helping to get the meeting going, and keeping transit operating.
- Claudia echoes Jan's sentiments, and again thanks TriMet. She's glad we're getting together to resolve issues that have been pending for a while.
- Tom Mills gives everyone a brief overview of WebEx.
- Jan Campbell Reviews Agenda
  - Introductions
  - 1. Delivery of Food and Medicine
  - 2. PPE
  - 3. Unspent STF money; info and discussion
  - 4. CTP update and action
  - 5. Consolidation of STF/STIF
  - Adjourn

Introductions

- Andi Howell; no updates
- Annadiana; no updates
- Claudia; no updates
- Elaine; Just a reminder that the CTAA Expo has been moved to November in Louisville, KY.
- Glenn; no updates
- Julie; no updates
- Kristina; no updates
- Leon; no updates
- Margo; no updates; LIFT continues to run in these crazy times.
- Jan Campbell asks Margo for info about the food delivery. LIFT is currently partnering with Meals on Wheels, and is also offering grocery pickup and delivery for LIFT customers. There are some other things in the works that will be shared when ready.
- Mary Lou; no updates
- Rebecca; She's been working in Washington County's EOC. Agencies will be receiving both Families First and CARE dollars, which offer flexibility in assisting vulnerable populations. She hopes that others have some great ideas to share either here or offline.
- Ryan; Things are still busy at Independent Living Resources, ILR.
- Elli Work; Elli praises Margo. SMART continues to show up every single day, and are doing some new and interesting things to support the operators.
- Jan asks Eileen to explain what was done to make online reservations easier. LIFT just began online trip booking, which can be done through a web portal either on a desktop or smartphone.

1. Delivery of Food and Medicine

- Tom: ODOT released guidance outlining flexibility in STF funding due to COVID. These funds can be used for meal deliveries, cleaning of vehicles, pharmaceuticals, and medical and emergency transport. STFAC is required to vote to allow this to occur. The members must determine that local citizens are unable to access essential services, particularly seniors and people with disabilities. We asked everyone by email to indicate their vote. They can backdate this vote to make it retroactive.
- Annadiana is pleased that medication deliveries are included. Leon has been unable to use LIFT to get them delivered.

- Ryan has a question in regards to this. If passed, roughly what percentage of the funds would be used for these services?
- Julie does not have an exact percentage, but all network partners are providing some form of goods delivery. STF already allows that. They are focusing on opportunities to get PPE. They have requested PPE through the emergency management systems. They have volunteers to make PPE, and have received assistance from distilleries.
- Andi says that SAM has been doing the same. They've partnered with Meals on Wheels and Fred Meyer's clip list grocery pickup program. They will only be using STF funds for grocery delivery, since they already have PPE sources.
- Rebecca has a couple questions. Can we add the purchase and delivery of durable medical equipment? They do this for OPI, delivering things such as undergarments.
- Theresa Conley; At this point, it's an eligible use of funding.
- Rebecca; One of the gaps is the actual shopping and grocery handling. Could providers potentially hire a staff person or volunteer coordinator to work with people who can physically pick up and deliver groceries and other items? Also, would this be FEMA reimbursable?
- Theresa encourages them to work with other agencies who are already doing this. It's a gray area when you hire people to do this.
- Eileen; When they launched their grocery delivery program, an agency offered to provide assistance, but this particular one is not a good option for them. The organization in question is unable to expand its services. She answered her own question regarding FEMA reimbursement.
- Ryan says that in relation to durable medical equipment, many of the shops themselves are able to handle pickup orders. Delivery is still more complex, depending on the nature of the disability.
- Elaine and Kristina have nothing to add.
- Leon; Is there a number I can call to find out about my deliveries for pharmaceuticals?
- Tom will refer him to that information at the end of the meeting, and Jan will also send him some information.
- Mike has no questions.
- Monika; What is the timeline for using these funds for COVID activities? They're also getting Families First and CARES funds. Will it stretch through the entire biennium?

- Theresa appreciates that Monika's thinking strategically about the sources, and encourages everyone to do so. CARES funds cover many of the things that these STF funds may be used for. If you don't need the funds for meal delivery, you might consider holding on to these funds.
- The motion is put on the floor.
- Claudia; Would this be restricted to only paratransit riders?
- Claudia motions that these services be available to fixed route riders. Mary Lou seconds.
- Claudia says that Jan had an issue with the word "citizen." Has this been resolved?
- Tom says that this has been changed. It was just an error in the presentation. The word "residents" will be used in place of "citizens."
- Ryan asks if it is possible to add "durable medical equipment" to the motion? Tom says that that will automatically be considered as eligible.
- The motion passes unanimously.

2. PPP

3. Unspent STF Funds

- Delivery of Food and Medicine Jan agrees.
- Elaine suggests calling this an emergency fund rather than a funding reserve.
- She also suggests that we put the remaining funds into an emergency fund.
- Jan would be most comfortable with a formal vote.
- Ryan seconds the motion.
- Rebecca also suggests that we get clarification from ODOT, and be prepared to take additional action as necessary.
- Claudia asks if this is an amendment. Rebecca says that it is not.
- The motion passes unanimously.

4. CTP Update

- A number of committee members were on a subcommittee developing recommendations for the CTP.
- Cora was tasked with updating CTP for the 2020 update. It is required to be updated every 4 years. Federal transit law requires that 5310 programs be included in this CTP, and guidance from various members of the public, such as seniors, people with disabilities, and the general public.

The update this year will be minor, and includes an updated inventory of services, service providers, and funding sources, updated maps and statistics, and a list of reviewed priorities. The plan must be approved by TriMet's board by 6/30/2020.

The subcommittee met in the summer and fall of 2019, and developed a final draft for STFAC in November.

The draft priorities and strategies were also available for public input during TriMet open houses in late February.

- Cora reads the list of priorities and strategies.
- Currently, TriMet is working with Andrew Mortensen to review these revisions. Today, we're seeking approval of the priorities and strategies.
- Claudia wishes to reconcile the copy of the plan that she has with what Cora presented. What Cora presented was abbreviated, according to Claudia.
- Cora believes that Claudia is referring to the action tables.
- Claudia is interested in the wording of Priority 5.
- Ryan believes that it may be a question of bylaws versus what the CTP says. As long as the by-laws include advocacy as a function, then this is moot. The by-laws do not include advocacy, but the CTP does, says Cora. As a body, the STFAC can't advocate for things, but individuals can.
- Mary Lou has a question regarding Strategy 4. She wonders how we define equity. She has been looking at equity maps in her role on STIF. Is there an opportunity to recognize something in the strategy section around tying equity maps into what the STFAC does in setting up priorities and actions?
- Cora says that the CTP shows data on the service hours of a provider. The maps are also being updated to show where the populations are.
- Eileen also does not recall that defining equity has been discussed before.
- Cora; Every time the STFAC makes funding recommendations, they can view them through the lenses of each priority.
- Ryan; If we're looking for language to describe the idea of equity, I suggest putting something such as socioeconomic, racial, and geographical considerations. Essentially, categories of equity should be listed.
- Mary Lou believes TriMet's equity policy has a list of 10 criteria defining equity, determining what factors are used to determine if equity is being met in an area. Should the committee have a tutorial on TriMet's equity policies and principles?

- Tom confirms this. It is called the equity index. Individual census blocks can be scored on this index. However, some of those factors are irrelevant to this committee.
- Jan wants to mention that Annadiana is on TriMet's Equity Group.
- Annadiana says that currently there are no discussion around disability issues. She participates on TEAC.
- Claudia asks if the priorities and strategies were also available online.
- Tom doesn't believe that they were available online.
- Annadiana attended the open house, but there was very little information about what is being discussed at this meeting. She only saw information regarding the proposed service improvements in the area.
- Julie asks Cora to revisit the FTA statement. Does anything in the plan address the delivery of goods? With the STF/STIF consolidation, does the plan need to be updated to reflect this?
- Cora; The strategies only apply to FTA 5310 funds, but ODOT relies on these plans. She believes that there might be something in the actions regarding deliveries.
- Theresa says that ODOT anticipates that the CTP will include STF and 5310 funding.
- Elli believes that it is to our benefit to keep equity definitions vague, I believe.
- Claudia would like to see general language about emergencies. She suggests that the language suggest allocation funds as needs arise. It does not need to be specific.
- Jan wants to address Ryan's concern about defining equity. Ryan thinks it's good that equity is a broad category rather than a narrow one.
- Margo is in favor of specific language regarding equity in the CTP.
- Mike says that we need to be sure that we are all in agreement in how the term is being used. Elaine and Monika both agree.
- Monika would like to see some language from the Civil Rights Act, specifically Title VI language. That language should be in the draft documents, according to Monika.
- Andi; During the subcommittee meetings, we discussed this. The discussion was very long, and led to no ultimate decision. Andi is comfortable with Cora's language.
- Rebecca says that the equity definition concept is difficult. Washington County has adopted a race-led policy, as well as Multnomah County. She is

OK with the language as is for today, but emphasizes that the disparity remains.

- Eileen; We need to address two different forks of equity; populations that we serve, and the agencies who provide transportation, and how funding decisions are made there, particularly for agencies that serve multiple counties.
- A motion to update the language is made by Jan, and seconded by Mary Lou and Rebecca.
- Ryan wants to make sure that Mike-who is blind-is able to access the information.
- The motion passes unanimously.

5. STF/STIF Merge

- Aaron Deas is presenting on this topic.

  We now expect to have 1-3 special emergency sessions before the upcoming long session. Discussion on what will be tackled have been all over the place. Perhaps STIF funding will be used to maintain services. In a longer session, we can expect to see a merge of the two programs, depending on the nature and depth of the Recession.
- Claudia says that this doesn't address next biennium's funding cycle, and what happens to the legacy funding.
- Ryan; How viable are those funding sources in the future?
- Tom; The legacy funding sources continue with a backfill from STIF to keep STF solid. There are threats to cigarette funding. The cigarette tax measure could be an issue, but it sounds like there are plans to hold STF harmless. The lawnmower tax may also be an issue.
- Elaine wonders if local entities are covered under the payroll protection act.
- Leon wonders if there is a website explaining the difference between STF and STFAC.
- Tom says that ODOT has a webpage. Google ODOT STF/STIF Merge. Aaron says that they have a couple of very good fact sheets.

The meeting adjourns at 11:59 AM.

Attachment E Transit Provider Fleet Data

TRANSIT PROVIDER FLEET DATA

TriMet Vehicle Fleet

The 267 LIFT vehicles listed in **Table E1** are all owned and operated by the TriMet. All the vehicles in the fleet are currently in active use. Nearly 75 percent of the vehicles are Chevrolets, with the rest of the vehicles' make either Ford or Dodge. The majority of the vehicle fleet is comprised of medium-size light-duty buses that have more than ten general use seats and three ADA seats. 15 vehicles are E-3 modified minivans that have three seats and one ADA seat. Nearly half of the vehicles in the fleet are five years old or older. Currently, approximately one-third of the vehicles in the fleet have passed their usable life end date, and all vehicles will be past their usable end of life date by 2021. Less than 20 percent of the fleet is considered to be in excellent condition, approximately 25 percent of the vehicles' conditions are identified as marginal, and the rest of the fleet is classified as being in adequate or good condition.

Sandy Area Metro (SAM) Vehicle Fleet

The SAM vehicle fleet in **Table E2** is owned and operated by the City of Sandy. All nine vehicles in the fleet are active and comprise several different makes and models. Six of the vehicles are five years old or older and five vehicles have over 100,000 miles. There is one vehicle in poor condition and this vehicle has an end of usable life date in January 2015. The newest vehicle is from 2014, has just over 17,000 miles, and has an end of usable life date in November 2019. Two vehicles, including the newest vehicle, are classified as being in excellent condition.

South Metro Area Regional Transit (SMART) Vehicle Fleet

Table E3 shows detailed information on the SMART vehicle fleet. All 12 SMART vehicles are owned and operated by the City of Wilsonville and are currently in active use. Most of the vehicles are Ford or Eldorado models and are medium-size, light-duty buses with two ADA seats apiece. Three vehicles are considered to be in poor condition, and more than half of the vehicles are five years old or older. The oldest vehicle is from 2002 has passed its usable life end date in January 2007. The four newest vehicles are from 2013 and have an end of usable life end date in September 2018. Half of the fleet vehicles have more than 100,000 miles.

Canby Area Transit (CAT) Vehicle Fleet

The City of Canby owns and operates the CAT fleet detailed in **Table E4**. The seven vehicles are all active and have less than 30,000 miles each. Most of the vehicles are either Chevrolets or Gilligs, and range from small, light-duty buses to large, heavy-duty buses. Most of the vehicles either have two or four ADA seats, and one has 16 ADA seats. The smallest buses have five seats and largest buses have 35 seats. All the buses are considered to be in good condition. The oldest bus was placed into service in 2010 passed its end of usable life date in June 2015. The newest bus is from 2014 and is still in excellent condition has an end of usable life date in January 2018. The two large, heavy-duty buses have an end of usable life date in January 2026.

South Clackamas Transit District (SCTD) Vehicle Fleet

The South Clackamas Transportation District owns and operates all four vehicles from the SCTD vehicle fleet shown in **Table E5**. Each vehicle is a medium, light-duty bus with two ADA seats and 14 non-ADA seats. Half of the fleet is in good or marginal condition and the other half is in poor condition. Currently, only three vehicles are active. The backup or spare vehicle is the oldest vehicle and passed its end of usable life date in February 2013. The newest vehicle is from 2014 and has an end of usable life date in June 2021.

Ride Connection Vehicle Fleet

All 116 vehicles in **Table E6** are owned and operated by Ride Connection, Inc. Most of the vehicles are medium, light-duty buses with more than 10 seats and either two or four ADA seats. There are 39 vehicles that have fewer than two ADA seats or no ADA seats available. These vehicles are considered small buses or vans and have less than eight seats. More than half of the fleet is five years old or older. Approximately 44percent of the vehicles are in good or excellent condition. 67 percent of the vehicles are lift equipped and 28 percent of the vehicles have an accessible ramp.

Clackamas County Vehicle Fleet

Table E7 shows the five active vehicles in Clackamas County's fleet. Three of the vehicles are medium-sized, light-duty buses with more than two ADA seats in a 14 seat configuration. The newest vehicles are large, heavy-duty vehicles delivered in 2015 and have 37 seats and two ADA seats. Most of the vehicles are in good

condition and have fewer than 90,000 miles. The oldest vehicle is from 2009 has passed its usable life end date in August 2014. The newest vehicle was delivered in 2015 has an end of useable life data in August 2026.

Table E1: TriMet Vehicle Fleet

Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
9800	1GB6G5BL3 C1143800	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,782	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/9/12	6/9/17
9801	1GB6G5BL5 C1159545	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	224,489	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/23/12	5/23/17
9802	1GB6G5BL7 C1159451	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	213,498	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/23/12	5/23/17
9803	1GB6G5BL9 C1159306	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,836	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/23/12	5/23/17
9804	1GB6G5BL0 C1159873	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	210,256	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	8/2/12	8/2/17
9805	1GB6G5BL0 C1160067	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	195,249	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/27/12	5/27/17
9806	1GB6G5BL2 C1159776	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	205,715	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/9/12	6/9/17
9807	1GB6G5BL1 C1160174	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	222,897	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/27/12	5/27/17
9808	1GB6G5BL9 C1160424	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	243,260	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	5/27/12	5/27/17
9809	1GB6G5BL2 C1160541	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,794	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/3/12	6/3/17
9810	1GB6G5BL5 C1159626	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	238,307	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9811	1GB6G5BL4 C1161464	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	244,392	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9812	1GB6G5BL3 C1160757	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,491	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/3/12	6/3/17
9813	1GB6G5BL2 C1160653	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	226,735	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9814	1GB6G5BL6 C1161160	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	234,579	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9815	1GB6G5BL3 C1161102	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	229,167	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9816	1GB6G5BL2 C1161656	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	205,898	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9817	1GB6G5BL0 C1160988	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	234,582	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/9/12	6/9/17
9818	1GB6G5BL2 C1161396	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	224,537	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/9/12	6/9/17
9819	1GB6G5BL3 C1161536	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	203,768	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9820	1GB6G5BL8 C1167218	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	221,318	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9821	1GB6G5BL3 C1166557	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,314	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9822	1GB6G5BL3 C1166932	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,078	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9823	1GB6G5BL1 C1166685	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	224,931	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/16/12	6/16/17
9824	1GB6G5BL3 C1166865	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	213,154	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/23/12	6/23/17
9825	1GB6G5BL6 C1168092	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	200,947	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9826	1GB6G5BL4 C1169192	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	226,529	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9827	1GB6G5BL9 C1168474	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	220,448	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9828	1GB6G5BL9 C1169009	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	243,884	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9829	1GB6G5BL5 C1168259	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	229,174	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9830	1GB6G5BL7 C1169350	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	206,985	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	6/30/12	6/30/17
9831	1GB6G5BL6 C1168903	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	213,523	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	7/5/12	7/5/17

Table E1: TriMet Vehicle Fleet

Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
9832	1GB6G58L6 C1168707	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	203,139	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	7/5/12	7/5/17
9833	1GB6G58L2 C1172432	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	237,484	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9834	1GB6G58L8 C1167624	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	235,014	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9835	1GB6G58L9 C1167891	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,917	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9836	1GB6G58L9 C1169608	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	214,376	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9837	1GB6G58L8 C1167736	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	233,680	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9838	1GB6G58L1 C1161227	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	206,065	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9839	1GB6G58L7 C1169123	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	220,592	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9840	1GB6G58L3 C1172262	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,678	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9841	1GB6G58L2 C1172317	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	216,607	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9842	1GB6G58L1 C1172552	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	219,556	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9843	1GB6G58L6 C1172711	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	243,914	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9844	1GB6G58L2 C1172494	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	221,717	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9845	1GB6G58L7 C1172605	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	231,646	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/2/12	10/2/17
9846	1GB6G58L6 C1172188	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	234,113	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/1/12	11/1/17
9847	1GB6G58L9 C1172962	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	223,094	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9848	1GB6G58L8 C1172807	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	235,710	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9849	1GB6G58L0 C1172753	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,068	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/25/12	10/25/17
9850	1GB6G58L0 C1174003	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	224,580	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9851	1GB6G58L3 C1173234	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	223,895	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9852	1GB6G58L6 C1173860	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	210,262	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9853	1GB6G58L0 C1173742	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	222,510	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/30/12	10/30/17
9854	1GB6G58L9 C1173352	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	237,915	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9855	1GB6G58L4 C1174036	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,600	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/2/12	11/2/17
9856	1GB6G58L4 C1173498	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	235,028	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9857	1GB6G58LX C1173683	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	216,595	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9858	1GB6G58L3 C1174433	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	207,309	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/26/12	9/26/17
9859	1GB6G58L6 C1173390	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	231,704	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/2/12	11/2/17
9860	1GB6G58L1 C1174513	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	232,161	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/2/12	11/2/17
9861	1GB6G58L7 C1174483	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,707	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/26/12	10/26/17
9862	1GB6G58L5 C1173803	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,803	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/8/12	11/8/17
9863	1GB6G58L4 C1174165	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	213,614	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/9/12	11/9/17

Table E1: TriMet Vehicle Fleet

Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
9864	1GB6G58L9 C1173531	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,130	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/9/12	11/9/17
9865	1GB6G58L5 C1174403	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	227,001	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/30/12	10/30/17
9866	1GB6G58L1 C1173295	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	200,405	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/9/12	11/9/17
9867	1GB6G58L6 C1173020	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	225,045	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/30/12	10/30/17
9868	1GB6G58L9 C1173058	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	214,808	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/26/12	10/26/17
9869	1GB6G58L3 C1173332	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	227,094	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/8/12	11/8/17
9870	1GB6G58L9 C1173187	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	221,240	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/12/12	11/12/17
9871	1GB6G58L7 C1175262	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,504	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/14/12	11/14/17
9872	1GB6G58L8 C1175223	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	232,799	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/25/12	10/25/17
9873	1GB6G58L5 C1174952	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	221,104	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/25/12	10/25/17
9874	1GB6G58L4 C1174909	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	228,880	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/30/12	10/30/17
9875	1GB6G58L7 C1169445	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	205,187	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/12/12	11/12/17
9876	1GB6G58L3 C1173606	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	223,376	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/25/12	10/25/17
9877	1GB6G58L8 C1174637	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	224,275	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/13/12	11/13/17
9878	1GB6G58L2 C1174701	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	218,978	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/13/12	11/13/17
9879	1GB6G58L6 C1174989	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	223,474	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/14/12	11/14/17
9880	1GB6G58L7 C1174998	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	222,279	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/15/12	11/15/17
9881	1GB6G58L4 C1174926	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	207,914	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/15/12	11/15/17
9882	1GB6G58L8 C1179045	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	223,258	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/16/12	11/16/17
9883	1GB6G58L4 C1175106	38	Chevrolet	El Dorado Aerotech 220	2012	10	3	Marginal	204,875	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/16/12	11/16/17
9901	1GB6G68L9 E1163428	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	174,197	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9902	1GB6G68LX E1187544	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	152,043	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/1/14	10/1/19
9903	1GB6G68L8 E1187591	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	152,103	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9904	1GB6G68L3 E1187661	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	157,819	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9905	1GB6G68L2 E1187750	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	163,368	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9906	1GB6G68L8 E1187803	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	161,232	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/1/14	10/1/19
9907	1GB6G68LX E1187897	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	169,223	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9908	1GB6G68LX E1188032	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	178,068	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9909	1GB6G68L5 E1188052	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	188,614	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/11/14	9/11/19
9910	1GB6G68L9 E1188135	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	184,892	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9911	1GB6G68L5 E1188245	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	175,075	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9912	1GB6G68L9 E1188278	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	185,271	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19

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Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
9913	1GB6G6BL4 E1188365	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	179,427	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9914	1GB6G6BL3 E1188373	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	149,957	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9915	1GB6G6BL0 E1188525	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	182,276	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9916	1GB6G6BL4 E1188642	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	187,567	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/5/14	9/5/19
9917	1GB6G6BL9 E1188569	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	171,944	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9918	1GB6G6BL2 E1188610	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	180,513	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9919	1GB6G6BL9 E1188720	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	173,235	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/1/14	10/1/19
9920	1GB6G6BL7 E1188750	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	174,427	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/5/14	9/5/19
9921	1GB6G6BL7 E1188893	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	163,011	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/16/14	9/16/19
9922	1GB6G6BL8 E1188918	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	168,367	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/29/14	9/29/19
9923	1GB6G6BL8 E1188949	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	191,447	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/16/14	9/16/19
9924	1GB6G6BL2 E1188977	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	169,066	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/9/14	9/9/19
9925	1GB6G6BL0 E1189058	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	167,562	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9926	1GB6G6BL5 E1189105	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	187,478	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/4/14	9/4/19
9927	1GB6G6BL5 E1189136	39	Chevrolet	El Dorado Aerotech 240	2014	12	3	Good	149,196	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/5/14	9/5/19
9930	1GB6G6BL8 F1220865	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	138,992	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/21/15	12/20/20
9931	1GB6G6BL8 F1222874	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	154,363	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/7/15	10/6/20
9932	1GB6G6BL8 F1223992	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	148,681	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	9/30.15	#VALUE!
9933	1GB6G6BL4 F1235766	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	146,657	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/19/15	10/18/20
9934	1GB6G6BL7 F1236622	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	144,927	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/16/15	10/15/20
9935	1GB6G6BL2 F1236074	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	143,114	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/19/15	10/18/20
9936	1GB6G6BL0 F1238082	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	136,329	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/19/15	10/18/20
9937	1GB6G6BL7 F1237740	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	159,369	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/22/15	10/21/20
9938	1GB6G6BL1 F1236597	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	151,454	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/19/15	10/18/20
9939	1GB6G6BL4 F1238649	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	143,270	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/13/15	10/12/20
9940	1GB6G6BL9 F1237593	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	133,986	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/6/15	11/5/20
9941	1GB6G6BLX F1236873	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	151,092	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/23/15	10/22/20
9942	1GB6G6BL0 F1239247	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	128,437	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/5/15	11/4/20
9943	1GB6G6BL2 F1235412	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	164,801	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/27/15	10/26/20
9944	1GB6G6BL0 F1238678	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	150,896	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/27/15	10/26/20
9945	1GB6G6BL8 F1234989	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	156,271	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/30/15	10/29/20
9946	1GB6G6BL3 F1237802	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	134,634	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/22/15	10/21/20

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Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
9947	1GB6G6BL2 F1219422	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	149,235	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/27/15	10/26/20
9948	1GB6G6BL4 F1284403	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	132,251	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/13/15	11/12/20
9949	1GB6G6BL0 F1284138	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	128,882	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/23/15	11/22/20
9950	1GB6G6BL8 F1284386	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	127,937	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/13/15	11/12/20
9951	1GB6G6BL9 F1283988	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	110,102	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/17/15	11/16/20
9952	1GB6G6BL2 F1284531	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	124,324	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/19/15	11/18/20
9953	1GB6G6BL4 F1284689	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	106,908	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/6/15	11/5/20
9954	1GB6G6BL8 F1285148	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	135,015	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/17/15	11/16/20
9955	1GB6G6BL0 F1285094	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	135,364	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/5/15	11/4/20
9956	1GB6G6BL7 F1284444	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	131,897	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/19/15	11/18/20
9957	1GB6G6BLX F1284647	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	114,132	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/13/15	11/12/20
9958	1GB6G6BL9 F1286177	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	124,423	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/2/15	12/1/20
9959	1GB6G6BL7 F1285528	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	119,564	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/22/15	12/21/20
9960	1GB6G6BL5 F1285348	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	125,786	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/23/15	11/22/20
9961	1GB6G6BL3 F1286076	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	136,106	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/23/15	11/22/20
9962	1GB6G6BL7 F1284735	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	137,709	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/20/15	11/19/20
9963	1GB6G6BL1 F1286173	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	137,612	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/11/15	12/10/20
9964	1GB6G6BL9 F1285045	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	135,960	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/19/15	11/18/20
9965	1GB6G6BL9 F1285286	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	135,816	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/2/15	12/1/20
9966	1GB6G6BL1 F1285380	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	140,408	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/2/15	12/1/20
9967	1GB6G6BL3 F1284778	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	129,264	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/9/15	12/8/20
9968	1GB6G6BL8 F1285750	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	126,693	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/11/15	12/10/20
9969	1GB6G6BL4 F1286054	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	136,636	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/9/15	12/8/20
9970	1GB6G6BL4 F1284949	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	134,467	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/22/15	12/21/20
9971	1GB6G6BL7 F1285626	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	130,789	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/11/15	12/10/20
9972	1GB6G6BL3 F1285803	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	132,249	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/22/15	12/21/20
9973	1GB6G6BL0 F1285208	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	124,458	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/11/15	12/10/20
9974	1GB6G6BL7 F1285240	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	143,780	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/17/15	12/16/20
9975	1GB6G6BL9 F1284509	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	123,775	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/17/15	12/16/20
9976	1GB6G6BL8 F1285862	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	118,866	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	2/1/16	1/31/21
9977	1GB6G6BL6 F1285441	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	131,035	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/30/15	12/29/20
9978	1GB6G6BLX F1285359	40	Chevrolet	El Dorado Aerotech 240	2015	12	3	Good	116,219	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/31/15	12/30/20

Table E1: TriMet Vehicle Fleet

Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
8701	1GB6GVBL 0G1335410	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	95,244	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/5/16	12/5/21
8702	1GB6GVBL 5G1336004	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	84,038	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/11/16	11/11/21
8703	1GB6GVBL 0G1335665	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	92,620	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/1/16	11/1/21
8704	1GB6GVBL XG1336810	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	91,117	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/1/16	11/1/21
8705	1GB6GVBL 3G1336454	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	99,945	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/15/16	10/15/21
8706	1GB6GVBL 4G1339380	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	98,356	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	10/15/16	10/15/21
8707	1GB6GVBL 0G1336217	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	102,960	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/4/16	11/4/21
8708	1GB6GVBL 9G1337382	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	90,033	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/11/16	11/11/21
8709	1GB6GVBL 5G1337332	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	100,695	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/18/16	11/18/21
8710	1GB6GVBL 8G1338572	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	99,597	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/16/16	11/16/21
8711	1GB6GVBL 9G1336023	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	98,408	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/16/16	11/16/21
8712	1GB6GVBL 2G1336221	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	98,313	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/14/16	11/14/21
8713	1GB6GVBL 8G1339026	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	83,075	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/17/16	11/17/21
8714	1GB6GVBL 0G1337755	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	97,674	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/14/16	11/14/21
8715	1GB6GVBL 7G1335209	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	103,955	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	11/4/16	11/4/21
8716	1GB6GVBL 2G1337143	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	95,987	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/5/16	12/5/21
8717	1GB6GVBL 3G1336552	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,554	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/5/16	12/5/21
8718	1GB6GVBL 7G1339826	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,057	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/7/16	12/7/21
8719	1GB6GVBL 5G1338853	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	109,707	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/5/16	12/5/21
8720	1GB6GVBL XG1338282	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	112,182	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/5/16	12/5/21
8721	1GB6GVBL 2G1339538	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	124,823	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/13/16	12/13/21
8722	1GB6GVBL 9G1338080	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	113,227	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/13/16	12/13/21
8723	1GB6GVBL XG1337231	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,997	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/13/16	12/13/21
8724	1GB6GVBL 3G1337233	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,527	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/20/16	12/20/21
8725	1GB6GVBL 1G1339059	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,344	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/20/16	12/20/21
8726	1GB6GVBL 1G1336307	41	Chevrolet	El Dorado Aerotech 220	2016	12	3	Good	110,202	Active	Category D Medium Size Light Duty Bus/ 5yrs/150,000 miles	12/10/16	12/10/21
8801	1FDAX2CV8 HKB43907	42	Ford	Transit 350	2017	3	1	Excellent	69,691	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/4/18	2/4/23
8802	1FDAX2CVX HKB43908	42	Ford	Transit 350	2017	3	1	Excellent	66,399	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/4/18	2/4/23
8803	1FDAX2CV1 HKB43909	42	Ford	Transit 350	2017	3	1	Excellent	66,398	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/4/18	2/4/23
8804	1FDAX2CV8 HKB43910	42	Ford	Transit 350	2017	3	1	Excellent	63,808	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/2/18	3/2/23
8805	1FDAX2CVX HKB43911	42	Ford	Transit 350	2017	3	1	Excellent	63,686	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/2/18	3/2/23
8806	1FDAX2CV1 HKB43912	42	Ford	Transit 350	2017	3	1	Excellent	63,877	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/8/18	3/8/23

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Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
8807	1FDAX2CV3HKB43913	42	Ford	Transit 350	2017	3	1	Excellent	65,250	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/23/18	3/23/23
8808	1FDAX2CV5HKB43914	42	Ford	Transit 350	2017	3	1	Excellent	69,018	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/27/18	3/27/23
8809	1FDAX2CV7HKB43915	42	Ford	Transit 350	2017	3	1	Excellent	66,900	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/27/18	3/27/23
8810	1FDAX2CV9HKB43916	42	Ford	Transit 350	2017	3	1	Excellent	68,546	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/28/18	3/28/23
8811	1FDAX2CV0HKB43917	42	Ford	Transit 350	2017	3	1	Excellent	62,290	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/6/18	4/6/23
8812	1FDAX2CV2HKB43918	42	Ford	Transit 350	2017	3	1	Excellent	66,457	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/8/18	3/8/23
8813	1FDAX2CV4HKB43919	42	Ford	Transit 350	2017	3	1	Excellent	66,680	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/10/18	3/10/23
8814	1FDAX2CV0HKB43920	42	Ford	Transit 350	2017	3	1	Excellent	62,915	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/20/18	3/20/23
8815	1FDAX2CV2HKB43921	42	Ford	Transit 350	2017	3	1	Excellent	66,244	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/16/18	3/16/23
8930	1FDVU4XV0JKB11863	43	Ford	Transit 350XL	2018	5	1	Excellent	24,734	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/19/19	3/18/24
8931	1FDVU4XV2JKB11864	43	Ford	Transit 350XL	2018	5	1	Excellent	24,391	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/27/19	2/27/24
8932	1FDVU4XV5JKB26052	43	Ford	Transit 350XL	2018	5	1	Excellent	27,531	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/31/19	1/31/24
8933	1FDVU4XV7JKB26053	43	Ford	Transit 350XL	2018	5	1	Excellent	31,595	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/21/19	2/21/24
8934	1FDVU4XV9JKB26054	43	Ford	Transit 350XL	2018	5	1	Excellent	25,060	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/27/19	2/27/24
8935	1FDVU4XV0JKB26055	43	Ford	Transit 350XL	2018	5	1	Excellent	26,045	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/31/19	1/31/24
8936	1FDVU4XV2JKB26056	43	Ford	Transit 350XL	2018	5	1	Excellent	23,867	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	7/16/19	7/15/24
8937	1FDVU4XV4JKB26057	43	Ford	Transit 350XL	2018	5	1	Excellent	34,212	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/22/19	3/21/24
8938	1FDVU4XV6JKB26058	43	Ford	Transit 350XL	2018	5	1	Excellent	31,703	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/22/19	3/21/24
8939	1FDVU4XV8JKB26059	43	Ford	Transit 350XL	2018	5	1	Excellent	25,328	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/19/19	3/18/24
8940	1FDVU4XV4JKB26060	43	Ford	Transit 350XL	2018	5	1	Excellent	27,213	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24
8941	1FDVU4XV6JKB26061	43	Ford	Transit 350XL	2018	5	1	Excellent	26,448	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/27/19	3/26/24
8942	1FDVU4XV8JKB26062	43	Ford	Transit 350XL	2018	5	1	Excellent	28,126	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/7/19	3/6/24
8943	1FDVU4XVXJKB26063	43	Ford	Transit 350XL	2018	5	1	Excellent	28,078	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/27/19	2/27/24
8944	1FDVU4XV1JKB26064	43	Ford	Transit 350XL	2018	5	1	Excellent	25,565	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/19/19	3/18/24
8945	1FDVU4XV3JKB26065	43	Ford	Transit 350XL	2018	5	1	Excellent	25,038	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/9/19	4/8/24
8946	1FDVU4XV5JKB26066	43	Ford	Transit 350XL	2018	5	1	Excellent	26,107	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24
8947	1FDVU4XV7JKB26067	43	Ford	Transit 350XL	2018	5	1	Excellent	22,968	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/9/19	4/8/24
8948	1FDVU4XV9JKB26068	43	Ford	Transit 350XL	2018	5	1	Excellent	24,261	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/22/19	3/21/24
8949	1FDVU4XV0JKB26069	43	Ford	Transit 350XL	2018	5	1	Excellent	24,621	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24
8950	1FDVU4XV7JKB26070	43	Ford	Transit 350XL	2018	5	1	Excellent	22,462	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/6/19	5/5/24
8951	1FDVU4XV9JKB26071	43	Ford	Transit 350XL	2018	5	1	Excellent	19,514	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	6/3/19	6/2/24
8952	1FDVU4XV0JKB26072	43	Ford	Transit 350XL	2018	5	1	Excellent	25,639	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24

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Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
8953	1FDVU4XV 2JKB26073	43	Ford	Transit 350XL	2018	5	1	Excellent	24,791	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/9/19	5/8/24
8954	1FDVU4XV 4JKB26074	43	Ford	Transit 350XL	2018	5	1	Excellent	22,890	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24
8955	1FDVU4XV 6JKB26075	43	Ford	Transit 350XL	2018	5	1	Excellent	22,756	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/9/19	5/8/24
8956	1FDVU4XV 8JKB26076	43	Ford	Transit 350XL	2018	5	1	Excellent	19,110	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	6/3/19	6/2/24
8957	1FDVU4XV XJKB26077	43	Ford	Transit 350XL	2018	5	1	Excellent	18,613	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	7/16/19	7/15/24
8958	1FDVU4XV 1JKB26078	43	Ford	Transit 350XL	2018	5	1	Excellent	18,553	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	7/16/19	7/15/24
8959	1FDVU4XV 3JKB26079	43	Ford	Transit 350XL	2018	5	1	Excellent	21,233	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/1/19	4/30/24
8001	1FDVU4XV 0KKB36408	44	Ford	Transit 350XL	2019	5	1	Excellent	6,282	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/16/20	1/15/25
8002	1FDVU4XV 2KKB36409	44	Ford	Transit 350XL	2019	5	1	Excellent	6,246	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/16/20	1/15/25
8003	1FDVU4XV 9KKB36410	44	Ford	Transit 350XL	2019	5	1	Excellent	6,070	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/16/20	1/15/25
8004	1FDVU4XV 0KKB36411	44	Ford	Transit 350XL	2019	5	1	Excellent	8,629	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/21/20	1/20/25
8005	1FDVU4XV 2KKB36412	44	Ford	Transit 350XL	2019	5	1	Excellent	6,236	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/30/20	1/29/25
8006	1FDVU4XV 4KKB36413	44	Ford	Transit 350XL	2019	5	1	Excellent	6,074	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	1/30/20	1/29/25
8007	1FDVU4XV 6KKB36414	44	Ford	Transit 350XL	2019	5	1	Excellent	6,273	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/7/20	2/6/25
8008	1FDVU4XV 8KKB36415	44	Ford	Transit 350XL	2019	5	1	Excellent	5,286	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/12/20	2/11/25
8009	1FDVU4XV XKKB36416	44	Ford	Transit 350XL	2019	5	1	Excellent	8,301	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/12/20	2/11/25
8010	1FDVU4XV 1KKB36417	44	Ford	Transit 350XL	2019	5	1	Excellent	437	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/13/20	2/12/25
8011	1FDVU4XV 3KKB36418	44	Ford	Transit 350XL	2019	5	1	Excellent	2,684	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/25/20	2/24/25
8012	1FDVU4XV 5KKB36419	44	Ford	Transit 350XL	2019	5	1	Excellent	2,384	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/2/20	3/2/25
8013	1FDVU4XV 1KKB36420	44	Ford	Transit 350XL	2019	5	1	Excellent	3,982	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/26/20	2/25/25
8014	1FDVU4XV 3KKB36421	44	Ford	Transit 350XL	2019	5	1	Excellent	1,533	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/6/20	3/6/25
8015	1FDVU4XV 5KKB36422	44	Ford	Transit 350XL	2019	5	1	Excellent	502	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/11/20	3/11/25
8016	1FDVU4XV 9KKB48587	44	Ford	Transit 350XL	2019	5	1	Excellent	992	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/30/20	3/30/25
8017	1FDVU4XV 0KKB48588	44	Ford	Transit 350XL	2019	5	1	Excellent	1,645	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/20/20	3/20/25
8018	1FDVU4XV 2KKB48589	44	Ford	Transit 350XL	2019	5	1	Excellent	1,581	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/20/20	3/20/25
8019	1FDVU4XV 9KKB48590	44	Ford	Transit 350XL	2019	5	1	Excellent	1,732	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/11/20	3/11/25
8020	1FDVU4XV 0KKB48591	44	Ford	Transit 350XL	2019	5	1	Excellent	1,465	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/13/20	3/13/25
8021	1FDVU4XV 2KKB48592	44	Ford	Transit 350XL	2019	5	1	Excellent	1,561	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/7/20	4/7/25
8022	1FDVU4XV 4KKB48593	44	Ford	Transit 350XL	2019	5	1	Excellent	898	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/7/20	4/7/25
8023	1FDVU4XV 6KKB48594	44	Ford	Transit 350XL	2019	5	1	Excellent	3,992	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	2/10/20	2/9/25
8024	1FDVU4XV 8KKB48595	44	Ford	Transit 350XL	2019	5	1	Excellent	978	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/25/20	3/25/25
8025	1FDVU4XV XKKB48596	44	Ford	Transit 350XL	2019	5	1	Excellent	753	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	3/26/20	3/26/25

Table E1: TriMet Vehicle Fleet

Asset Number	VIN	Fleet #	Asset Make	Asset Model	Year	Seats	Seats ADA	Last Condition	Asset Last Odometer Reading 6/16/20	Status	End of Usable Category	End of Usable Start Date	End of Usable Life End Date
8026	1FDVU4XV 1KKB48597	44	Ford	Transit 350XL	2019	5	1	Excellent	1,047	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/7/20	5/7/25
8027	1FDVU4XV 3KKB48598	44	Ford	Transit 350XL	2019	5	1	Excellent	1,447	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/1/20	4/1/25
8028	1FDVU4XV 5KKB48599	44	Ford	Transit 350XL	2019	5	1	Excellent	4,900	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/6/20	4/6/25
8029	1FDVU4XV 8KKB48600	44	Ford	Transit 350XL	2019	5	1	Excellent	0	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles		
8030	1FDVU4XV XKKB48601	44	Ford	Transit 350XL	2019	5	1	Excellent	5,160	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	4/14/20	4/14/25
8031	1FDVU4XV 1KKB48602	44	Ford	Transit 350XL	2019	5	1	Excellent	3,486	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/7/20	5/7/25
8032	1FDVU4XV XKKB49084	44	Ford	Transit 350XL	2019	5	1	Excellent	3,198	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/7/20	5/7/25
8033	1FDVU4XV 1KKB49085	44	Ford	Transit 350XL	2019	5	1	Excellent	2,512	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/12/20	5/12/25
8034	1FDVU4XV 3KKB49086	44	Ford	Transit 350XL	2019	5	1	Excellent	758	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	6/4/20	6/4/25
8035	1FDVU4XV 5KKB49087	44	Ford	Transit 350XL	2019	5	1	Excellent	2,424	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/12/20	5/12/25
8036	1FDVU4XV 7KKB49088	44	Ford	Transit 350XL	2019	5	1	Excellent	352	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/29/20	5/29/25
8037	1FDVU4XV 9KKB49089	44	Ford	Transit 350XL	2019	5	1	Excellent	607	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/29/20	5/29/25
8038	1FDVU4XV 5KKB49090	44	Ford	Transit 350XL	2019	5	1	Excellent	2,322	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/12/20	5/12/25
8039	1FDVU4XV 7KKB49091	44	Ford	Transit 350XL	2019	5	1	Excellent	615	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	6/4/20	6/4/25
8040	1FDVU4XV 9KKB49092	44	Ford	Transit 350XL	2019	5	1	Excellent	280	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	6/4/20	6/4/25
8041	1FDVU4XV 0KKB49093	44	Ford	Transit 350XL	2019	5	1	Excellent	0	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles		
8042	1FDVU4XV 2KKB49094	44	Ford	Transit 350XL	2019	5	1	Excellent	530	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/29/20	5/29/25
8043	1FDVU4XV 4KKB49095	44	Ford	Transit 350XL	2019	5	1	Excellent	480	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/29/20	5/29/25
8044	1FDVU4XV 6KKB49096	44	Ford	Transit 350XL	2019	5	1	Excellent	0	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles		
8045	1FDVU4XV 8KKB49097	44	Ford	Transit 350XL	2019	5	1	Excellent	0	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles		
8046	1FDVU4XV XKKB49098	44	Ford	Transit 350XL	2019	5	1	Excellent	0	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles	5/29/20	5/29/25
8047	1FDVU4XV 1KKB49099	44	Ford	Transit 350XL	2019	5	1	Excellent	42	Active	Category E Small, Light Duty Bus 4 yrs/100,000 miles		

TABLE E2 SANDY AREA METRO VEHICLE INVENTORY

FLEE	YEAR	MAKE	VIN	PLATE #	BODY	ADA	CAPACIT	FUEL	SERVICE
1	2017	HOMETOWN TROLLEY	1FC4E4KS4GDC48358	E274121	TROLLEY	2	18	DSL	DEVIATED
2	2020	TROLLEY			TROLLEY	2	18	DSL	DEVIATED
15	2006	FORD ESCAPE	1FMCU96H86KB49381	E234848	HYBRID	0	4	UNL	N/A
20	2011	LF GILLIG	15GGB271XB1178555	E254534	TRANSIT 35	2	28	DSL	FIXED
21	2013	FRTL - DEFENDER II	1FVACWDU2DHFD786	E259054	TRANSIT 35	2	26	DSL	DEVIATED
23	2020	MV1	57WMD2A67EM101486	E264803	MINI VAN	1	4	UNL	NEMT
25	2016	MV1	57WMD2C64GM100392	E264839	MINI VAN	1	4	UNL	NEMT
26	2017	LF GILIIG	15GGB2710H1186916	E274102	TRANSIT 35	2	28	DSL	FIXED
27	2019	FORD 450 CHAMPION	1FDFE4FS1KDC39641	E283536	CUTAWAY	2	16	UNL	DAR
28	2019	FORD E450 CHAMPION	1FDFE4FS1KDC39642	E283537	CUTAWAY	2	16	UNL	DAR
30	2020	LF GILLIG	15GGB2718L31	E284452	TRANSIT 35	2	31	DSL	FIXED
31	2020	LF GILLIG	15GGB271XL3	E284451	TRANSIT 35	2	31	DSL	FIXED

Table E3 South Metro Area Regional Transit (SMART) Fleet Invetory

Unit#	Year	Make	Model	Fuel	VIN	Current mileage	Status	Eligible to replace
2010	2010	Ford/Braun	E350	G	1FTSS3EL4ADA95339	157,335	Relief vehicle	10/22/2015
2405	2005	Eldorado	EZ Rider 30	D	1N9FLACL65CO84246	375,856	Active	N/A
2500	2000	Gillig	Phantom 35	D	15GCA1812Y1089833	485,858	Training	N/A
2600	2000	Gillig	Phantom 35	D	15GCA1816Y1089866	577,255	Active/Spare	N/A
3005	2005	Ford/Champion	Challenger 25	D	1FDXE45P85HA59900	331,015	Active/Spare	2/22/2012
3119	2019	Proterra	Catalyst E2	E	7JZTG11J4KL000026	18,207	Active	6/27/2031
3219	2019	Proterra	Catalyst E2	E	7JZTG11J6KL000027	11,739	Active	6/27/2031
3516	2016	Gillig	LF 35	D	15GGB2714G1185590	86,838	Active	11/18/2028
3616	2016	Gillig	LF 35	D	15GGB2714G1185591	79,162	Active	11/18/2028
3707	2007	Blue Bird	CSRE 40	D	1BDJNBKA67F255277	93,537	Active/Spare	12/31/2017
4113	2013	Gillig	LF 40	D	15GGD2714D1182078	192,347	Active	11/6/2025
4212	2012	Gillig	LF 40	D	15GGD2715C1180354	227,534	Active	10/16/2024
4314	2014	Gillig	LF 40	H	15GGD3016E1184514	207,779	Active	2/1/2027
4414	2014	Gillig	LF 40	H	15GGD3018E1184515	204,759	Active	2/1/2027
5104	2004	Ford/Eldorado	Aerotech 240	D	1FDXE45F13HB85164	326,290	Retired	1/21/2011
5210	2010	Ford/Eldorado	Aerotech 240	D	1FDFE4FP4ADA20975	273,351	Active/Spare	3/12/2017
5310	2010	Ford/Eldorado	Aerotech 240	D	1FDFE4FP6ADA20976	285,491	Retired	3/12/2017
5411	2011	Ford/Eldorado	Aerotech 240	C	1FDFE4FS6BDB00462	177,802	Active	12/5/2018
5511	2011	Ford/Eldorado	Aerotech 240	C	1FDFE4FS8BDB00463	217,559	Active	12/5/2018
5612	2012	Ford/Eldorado	Aerotech 240	G	1FDFE4FSXCDA82453	273,330	Active	7/9/2019
5713	2013	Ford/Eldorado	Aerotech 240	G	1FDFE4FS3DDB16086	232,015	Active	9/20/2020
5813	2013	Ford/Eldorado	Aerotech 240	G	1FDFE4FS5DDB16087	241,994	Active	9/20/2020
5913	2013	Ford/Eldorado	Aerotech 240	G	1FDFE4FS1DDB16085	281,625	Active	9/20/2020
6013	2013	Ford/Eldorado	Aerotech 240	G	1FDFE4FS1DDB19312	265,988	Active	9/20/2020
6116	2016	Ford/Eldorado	Aerotech 240	G	1FDFE4FS1GDC21875	178,352	Active	1/25/2023
6217	2017	Ford/Starcraft	Allstar 22	G	1FDFE4FS0HDC06785	77,666	Active	3/8/2022
6318	2018	Ford/Starcraft	Allstar 24	G	1FDFE4FSXJDC07688	22,074	Active	8/9/2023
6515	2015	Ford/Eldorado	Aerolite 200	C	1FDFE4FS3FDA15827	139,616	Active	6/20/2022
6615	2015	Ford/Eldorado	Aerolite 200	C	1FDFE4FS5FDA15828	104,998	Active	6/20/2022
6719	2019	Ford/Eldorado	Aerotech 240	C	1FDFE4F56KDC25994	5,855	Active	2/10/2026
6819	2019	Ford/Eldorado	Aerotech 240	C	1FDFE4FSXKDC25996	4,690	Active	2/10/2026
6919	2019	Ford/Eldorado	Aerotech 240	C	1FDFE4FS8KDC25996	6,285	Active	2/10/2026
8110	2010	Dodge/Braun	Caravan	G	2D4RN4DE4AR120626	113,750	Relief vehicle	1/15/2014
8210	2010	Dodge/Braun	Caravan	G	2D4RN4DE4AR120625	77,983	Supervisor	1/15/2014
15048	2001	Classic	Trolley	D	4UZAAUBV21CJ15048	51,042	Special events	3/20/2011

TABLE E-4		Canby Area Transit (CAT) Vehicle Inventory						
VEHICLE	**YEAR**	**MAKE**	**VIN #**	**LENGTH**	**FUE**	**BODY**	**CAPACITY**	**Mode Use**
Bus 17	2009	CHEV SENATOR	1GBE4V1999F4 07205	26 (312")	DIESE L	CUT-AWAY	21 Ambulatory w/o w/c 16 Ambulatory/1 in w/c 14 Ambulatory/2 in w/c	Fixed Route
Bus 18	2010	CHEV	1GB9G5A68A11 21989	22 (264")	DIESE L	CUT-AWAY	17 Ambulatory w/o w/c 4 w/c stations	DAR
Bus 19	2010	CHEV	1GB9G5A65A11 22100	22 (264")	DIESE L	CUT-AWAY	17 Ambulatory w/o w/c 4 w/c stations	DAR
Bus 26	2011	ARBOC	1GB6G5BG6B11 86044	26 (312")	GAS	CUT-AWAY low-floor	20 Ambulatory w/o w/c 18 Ambulatory/1 in w/c 16 Ambulatory/2 in w/c	Fixed Route DAR Backup
BUS 27	2011	ARBOC	1GB6G5BG7B11 90622	26 (312")	GAS	CUT-AWAY low-floor	20 Ambulatory w/o w/c 18 Ambulatory/1 in w/c 16 Ambulatory/2 in w/c	Fixed Route DAR Backup
BUS 28	2013	GILLIG	15GGB2719D11 82065	35 (420")	DIESE L	COACH low-floor	33 Ambulatory w/o w/c 30 Ambulatory w/1 in 27 Ambulatory w/2 in	Fixed Route
BUS 29	2013	GILLIG	15GGB2710D11 82066	35 (420")	DIESE L	COACH low-floor	33 Ambulatory w/o w/c 30 Ambulatory w/1 in 27 Ambulatory w/2 in	Fixed Route
MV-30	2013	DODGE CARAVAN	2C4RDGCG8ER 187479	19' (228")	GAS	MINI-VAN	3 Ambulatory 1 Ambulatory/1 in w/c	DAR
Bus 31	2016	ARBOC	1GB6G5BG8F12 45245	23' (276")	GAS	CUT-AWAY low-floor	16 Ambulatory 12 ambulatory w/ 1 w/c 10 ambulatory w/ 2 w/c 6 ambulatory w/ 3 w/c 2 ambullatory w/ 4 w/c	DAR Fixed Backup
Bus 32	2016	ARBOC	1GB6G5BGXF12 45781	26' (312")	GAS	CUT-AWAY low-floor	20 Ambulatory w/o w/c 18 ambulatory w/1 w/c 12 ambulatory w/2 w/c	DAR Fixed Backup
Bus 33	2016	ARBOC	1GB6G5BG0F12 48530	26' (312")	GAS	CUT-AWAY low-floor	20 Ambulatory w/o w/c 18 ambulatory w/1 w/c 12 ambulatory w/2 w/c	DAR Fixed Backup
Bus 35	2018	ARBOC	1HA6GUBB1JN0 08040	28' (336")	GAS	CUT-AWAY low-floor	20 ambulatory w/o w/c 16 ambulatory w/ 1w/c 12 ambulatory w/2 w/c 8 ambulatory w/3 w/c	Fixed Route DAR Backup
Bus 36	2018	ARBOC	1HA6GUBB0JN0 08000	23' (276")	GAS	CUT-AWAY low-floor	16 ambulatory 12 ambulatory w/1 w/c 10 ambulatory w/2 w/c 6 ambulatory w/3 w/c 2 ambulatory w/4 w/c	DAR Fixed Backup
Bus 37	2018	ARBOC	1HA6GUBB6JN OO8082	23' (276")	GAS	CUT-AWAY low-floor	16 ambulatory 12 ambulatory w/1 w/c 10 ambulatory w/2 w/c 6 ambulatory w/3 w/c 2 ambulatory w/4 w/c	DAR Fixed Backup

TABLE E5 South Clackamas Transit District (SCTD) Fleet Inventory

OPTIS Asset #	VIN#	Asset Make	Asset Model	Year	# of Seat	Seat ADA	Last Condition	Asset Last Odometer	Status	EUL Category	Useul Life start	EUL Date
V00147 4	1GB6FG5BL3E1167212	Chevrolet	Van	2014	16	2	Poor	294,413	Active	7 yrs/ 200,000 miles (medium, med- duty)	2014	6/9/2021
V00164 9	1FDGF5GTXGEA86002	Ford	Starcraft Allstar XL	2016	20	2	Adequate	181,585	Active	7 yrs/ 200,000 miles (medium, med- duty)	2016	3/7/2023
V00178 6	5WEASC8M7JH231694	International	Starcraft Allstar XL	2018	20	2	Adequate	187,740	Active	7 yrs/ 200,000 miles (medium, med- duty)	2018	
V00188 7	5WEASC8M9JH231695	International	Starcraft Allstar XL	2018	20	2	Good	175,612	Active	7 yrs/ 200,000 miles (medium, med- duty)	2018	1/3/2025
V00188 8	5WEASC8M0JH231696	International	Starcraft Allstar XL	2018	20	2	Good	180,673	Active	7 yrs/ 200,000 miles (medium, med- duty)	2018	1/15/2025
	5WEEZC8P3LH102832	International	Starcraft Allstar XL	2020	20	2	Good	25,622	Active	7 yrs/ 200,000 miles (medium, med- duty)	2020	3/7/2023

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
2D4RN4DEXAR164517	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	57,738	4/1/2010	Seats 05 - ADA 1	Adequate	4/1/2010
2D4RN4DE0AR165417	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	104,090	4/1/2010	Seats 05 - ADA 1	Adequate	4/1/2010
2D4RN4DE4AR282501	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	104,176	7/19/2010	Seats 05 - ADA 1	Marginal	7/19/2010
1FDFE45SX9DA92863	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2010	84,292	8/1/2010	Seats 12 - ADA 2	Adequate	8/1/2010
1FDFE45S19DA92864	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2010	81,326	7/19/2010	Seats 14 - ADA 2	Adequate	7/19/2010
2D4RN4DE7AR282492	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	104,624	7/1/2010	Seats 05 - ADA 1	Adequate	7/1/2010
2D4RN4DE9AR282557	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	103,883	7/1/2010	Seats 05 - ADA 1	Adequate	7/1/2010
2D4RN4DE4AR282515	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	122,294	8/1/2010	Seats 05 - ADA 1	Marginal	8/1/2010
2D4RN4DE3AR288595	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2010	59,105	9/24/2010	Seats 05 - ADA 1	Adequate	9/24/2010
1FDFE4FS6ADA58678	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2010	96,948	9/24/2010	Seats 14 - ADA 2	Adequate	9/24/2010
1FDFE4FS6ADA79207	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2010	103,866	10/1/2010	Seats 14 - ADA 2	Adequate	10/1/2010
1FDFE4FS0BDA29954	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2011	83,799	7/1/2011	Seats 14 - ADA 2	Adequate	7/1/2011
1FDFE4FS3BDA39412	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford StarTrans	Senator	2011	108,864	7/1/2011	Seats 14 - ADA 2	Marginal	7/1/2011
1FDFE4FS2BDA39224	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2011	67,841	2/21/2011	Seats 13 - ADA 2	Adequate	2/21/2011
2C4RDGBG0CR225818	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2012	174,301	5/8/2012	Seats 05 - ADA 1	Marginal	5/8/2012
2C4RDGCG7CR399268	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2012	70,554	9/28/2012	Seats 05 - ADA 1	Adequate	9/27/2012
1FDFE4FS6CDB38243	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2013	66,341	1/18/2013	Seats 14 - ADA 2	Adequate	1/18/2013
2C4RDGBG6CR398467	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2012	99,100	1/18/2013	Seats 06 - ADA 2	Marginal	1/18/2013
2C4RDGCGXDR543669	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2013	126,928	1/18/2013	Seats 07 - ADA 2	Adequate	1/18/2013
2C4RDGBG0CR398481	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2012	96,540	1/18/2013	Seats 06 - ADA 2	Marginal	1/18/2013
1FDFE4FS8DDA50893	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2013	53,962	6/30/2013	Seats 14 - ADA 2	Adequate	6/30/2013
1FDFE4FS2DDA64191	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2013	80,556	6/30/2013	Seats 14 - ADA 2	Adequate	6/30/2013
1FDFE4FS6DDA89174	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2013	135,177	6/30/2013	Seats 14 - ADA 2	Adequate	6/30/2013
1FDFE4FS0DDA93107	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2013	85,900	6/30/2013	Seats 14 - ADA 2	Adequate	6/30/2013

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
1FDEE4FL4EDA05701	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2014	53,257	1/30/2014	Seats 14 - ADA 2	Adequate	1/30/2014
1FDEE3FL1EDA23762	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Goshen	GC-II	2014	31,406	1/23/2014	Seats 10 - ADA 2	Good	1/23/2014
2C7WDGBG6ER380141	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	60,508	8/21/2014	Seats 07 - ADA 2	Adequate	8/21/2014
2C7WDGBG8ER380139	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	63,944	8/21/2014	Seats 07 - ADA 2	Adequate	8/21/2014
2C7WDGBG4ER380137	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	50,359	8/21/2014	Seats 07 - ADA 2	Adequate	8/21/2014
2C7WDGBG6ER380091	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	86,625	8/14/2014	Seats 05 - ADA 1	Adequate	8/14/2014
2C7WDGBG6ER380107	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	52,515	8/21/2014	Seats 07 - ADA 2	Adequate	8/21/2014
2C7WDGBG1ER380080	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2014	57,786	8/14/2014	Seats 05 - ADA 1	Adequate	8/14/2014
1FDFE4FS7EDA04523	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	113,849	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FS4EDA04530	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2015	43,904	10/23/2014	Seats 14 - ADA 2	Adequate	10/23/2014
1FDFE4FS9EDA04538	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	56,812	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FS0EDA04511	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	60,050	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FS2EDA04526	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	97,568	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FSXEDA04533	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	63,661	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FS8EDA04496	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	101,456	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FS0EDA04525	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	30,825	12/31/2014	Seats 14 - ADA 2	Good	12/31/2014
1FDFE4FS3EDA04535	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2015	63,843	10/23/2014	Seats 14 - ADA 2	Adequate	10/23/2014
1FDFE4FS0EDA04492	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	59,829	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
1FDFE4FSXEDA04502	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2014	76,857	12/31/2014	Seats 14 - ADA 2	Adequate	12/31/2014
JT2BF22K6X0167189	Cat E 7: Sedan	Toyota	Camry	1999	172,308	11/7/2014	Seats 05 - ADA 0	Marginal	11/7/2014
KMHEC4A47DA084304	Cat E 7: Sedan	Hyundai	Sonata Hybrid	2013	67,406	1/30/2015	Seats 05 - ADA 0	Adequate	1/30/2015
KMHEC4A46DA089820	Cat E 7: Sedan	Hyundai	Sonata Hybrid	2013	96,460	1/30/2015	Seats 05 - ADA 0	Adequate	1/30/2015
KMHEC4A48DA089821	Cat E 7: Sedan	Hyundai	Sonata Hybrid	2013	74,143	1/30/2015	Seats 04 - ADA 0	Adequate	1/30/2015
1FDFE4FS0FDA15851	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2015	44,735	3/4/2015	Seats 20 - ADA 2	Good	3/4/2015

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
1FDFE4FS2FDA25488	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2015	68,736	5/11/2015	Seats 12 - ADA 4	Good	5/11/2015
1FDFE4FS4FDA25489	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2015	57,495	5/11/2015	Seats 12 - ADA 4	Good	5/11/2015
1FDFE4FS0FDA25490	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2015	68,730	5/11/2015	Seats 12 - ADA 4	Adequate	5/11/2015
1FDFE4FS2FDA25491	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Elkhart	EC II	2015	68,972	5/11/2015	Seats 12 - ADA 4	Good	5/11/2015
1GB6G5BGXF1130596	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Chevrolet Glaval	Titan II	2015	103,655	6/19/2015	Seats 14 - ADA 2	Good	6/19/2015
2C7WDGBG8FR703509	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	45,920	6/26/2015	Seats 07 - ADA 2	Adequate	6/26/2015
1FDXE45S0YHC01195	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2001	217,493	10/19/2001	Seats 08 - ADA 3	Marginal	10/19/2001
1FDXE45S31HA74142	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2001	213,133	10/19/2001	Seats 12 - ADA 4	Marginal	10/19/2001
1FDXE45S1YHB99098	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2000	60,474	10/19/2001	Seats 14 - ADA 2	Adequate	10/19/2001
1FDXE45S3YHB99099	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2000	56,771	9/28/2001	Seats 14 - ADA 2	Marginal	9/28/2001
1FDXE45S4YHB99158	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2000	74,255	9/28/2001	Seats 14 - ADA 2	Marginal	9/28/2001
1FDXE45S73HB28321	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2003	191,738	7/24/2003	Seats 14 - ADA 4	Marginal	7/24/2003
1FDXE45S34HB52357	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2004	219,620	12/15/2004	Seats 14 - ADA 4	Marginal	12/15/2004
1FDXE45S46HA53534	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2006	154,897	10/14/2005	Seats 14 - ADA 2	Adequate	10/14/2005
1FDXE45S47DB21176	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2007	160,739	9/14/2007	Seats 14 - ADA 2	Marginal	9/14/2007
1FDXE45S67DB21177	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2007	115,914	9/14/2007	Seats 14 - ADA 2	Adequate	9/14/2007
1FDXE45S27DB21175	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2007	81,216	9/14/2007	Seats 14 - ADA 2	Adequate	9/14/2007
1FD4E45S28DA59569	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2008	130,670	3/1/2008	Seats 10 - ADA 4	Marginal	3/1/2008
1FDFE4FS4ADA78976	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2010	123,557	9/23/2010	Seats 14 - ADA 2	Adequate	9/23/2010
1FDFE4FSXADA78934	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2010	124,097	8/1/2010	Seats 10 - ADA 4	Adequate	8/1/2010
1FDFE4FS1ADA78935	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2010	130,924	8/1/2010	Seats 10 - ADA 4	Adequate	8/1/2010

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
1FDFE4FS3BDA63189	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2011	76,152	6/1/2011	Seats 14 - ADA 2	Marginal	6/1/2011
1FDFE4FS9BDA80322	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2011	132,075	9/1/2011	Seats 14 - ADA 2	Marginal	9/1/2011
1FDFE4FS0BDA63151	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2011	134,047	6/1/2011	Seats 10 - ADA 4	Adequate	6/1/2011
1FDFE4FS9BDA63150	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2011	117,265	6/1/2011	Seats 10 - ADA 4	Adequate	6/1/2011
1FDFE4FS0BDA80323	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2011	56,363	9/1/2011	Seats 14 - ADA 2	Adequate	9/1/2011
1FDFE4FS0DDA07360	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2013	79,161	6/30/2013	Seats 10 - ADA 4	Adequate	6/30/2013
1FDFE4FS4DDA07362	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2013	83,872	6/30/2013	Seats 10 - ADA 4	Adequate	6/30/2013
1FDFE4FS2DDA07361	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Champion	Challenger	2013	87,910	6/30/2013	Seats 10 - ADA 4	Adequate	6/30/2013
5NPE24AFXGH318280	Cat E 7: Sedan	Hyundai	Sonata SE	2016	19,644	4/11/2016	Seats 04 - ADA 0	Good	3/11/2016
2C7WDGBGXFR705617	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	58,460	7/26/2016	Seats 06 - ADA 2	Good	6/15/2016
2C7WDGBG1FR705618	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	37,339	9/23/2016	Seats 06 - ADA 2	Good	6/15/2016
2C7WDGBG3FR705619	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	51,374	9/12/2016	Seats 06 - ADA 2	Good	6/15/2016
2C7WDGBGXFR705620	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	45,209	7/26/2016	Seats 06 - ADA 2	Good	6/15/2016
2C7WDGBG1FR705621	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	47,352	9/12/2016	Seats 06 - ADA 2	Good	6/15/2016
2C7WDGBG2HR831117	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	23,665	10/4/2017	Seats 05 - ADA 2	Good	9/22/2017
57WMD2C60GM100101	Cat E 3: Modified Minivan	Mobility Ventures LLC	MV - MV1	2016	17,787	11/1/2016	Seats 03 - ADA 2	Good	10/25/2016
2C7WDGBG8FR705616	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2015	12,964	6/15/2016	Seats 06 - ADA 2	Good	6/15/2016
1FDEE3FS6HDC29364	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	24,702	3/9/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDEE3FS3HDC29354	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	31,736	4/21/2017	Seats 14 - ADA 2	Good	4/18/2017
1FDEE3FSXHDC30100	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	14,795	4/13/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDEE3FS5HDC29338	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	59,216	3/28/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDEE3FS9HDC29343	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	29,463	4/19/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDEE3FS2HDC23528	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	28,719	2/10/2017	Seats 14 - ADA 2	Good	1/10/2017

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
1FDEE3FS7HDC29342	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	20,197	3/23/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDEE3FS3HDC29337	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	32,774	4/19/2017	Seats 14 - ADA 2	Good	3/7/2017
1FDFE4FS0HDC07466	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	33,063	3/8/2017	Seats 16 - ADA 2	Good	3/7/2017
1FDEE3FS5HDC29372	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	36,947	4/6/2017	Seats 14 - ADA 2	Good	3/24/2017
1FDEE3FS6HDC30062	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	53,212	4/19/2017	Seats 14 - ADA 2	Good	3/24/2017
1FDEE3FS4HDC29346	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	95,530	4/19/2017	Seats 14 - ADA 2	Good	3/24/2017
1FDEE3FS9HDC30170	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	40,800	4/3/2017	Seats 14 - ADA 2	Good	3/24/2017
1FDEE3FS3HDC29340	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	96,810	4/19/2017	Seats 14 - ADA 2	Good	3/24/2017
1FDEE3FSXHDC29335	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	78,691	4/19/2017	Seats 14 - ADA 2	Good	4/18/2017
1FDEE3FS2HDC29359	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	39,403	4/20/2017	Seats 14 - ADA 2	Good	4/18/2017
1FDEE3FS8HDC29365	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford Starcraft	Allstar	2017	28,900	4/19/2017	Seats 14 - ADA 2	Good	4/18/2017
1FDFE4FS8JDC42830	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2018	28,709	11/27/2018	Seats 10 - ADA 4	Excellent	11/6/2018
1FDFE4FSXJDC42831	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2018	17,409	11/21/2018	Seats 10 - ADA 4	Excellent	11/6/2018
1FDFE4FS1JDC42832	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2018	21,182	11/21/2018	Seats 10 - ADA 4	Excellent	11/6/2018
2C7WDGBG4HR831118	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	25,475	9/26/2017	Seats 05 - ADA 2	Good	9/22/2017
2C7WDGBGXHR838817	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	33,881	11/8/2017	Seats 05 - ADA 2	Good	11/7/2017
2C7WDGBG1HR838818	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	27,869	12/1/2017	Seats 05 - ADA 2	Good	11/7/2017
2C7WDGBG9HR831115	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	31,612	10/2/2017	Seats 05 - ADA 2	Good	9/22/2017
2C7WDGBG0HR831116	Cat E 3: Modified Minivan	Dodge	Braun Entervan	2017	28,857	10/15/2017	Seats 05 - ADA 2	Good	9/22/2017
1FDFE4FS3JDC42833	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 240	2018	34,644	11/15/2018	Seats 10 - ADA 4	Excellent	11/6/2018
2C7WDGBG1KR521399	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	10,603	4/30/2019	Seats 05 - ADA 2	Excellent	4/4/2019
2C7WDGBG4KR521400	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	12,309	4/16/2019	Seats 05 - ADA 2	Excellent	4/4/2019
2C7WDGBG6KR521401	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	12,953	4/16/2019	Seats 05 - ADA 2	Excellent	4/4/2019

TABLE E6 Ride Connection Fleet Inventory

Serial Number	Vehicle Category	Make	Model	Model Year	Odometer 05/31/2020	In Service Date	Seating Capacity	Condition Assessment	Date Purchased
2C7WDGBG8KR521402	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	8,370	4/29/2019	Seats 05 - ADA - 2	Excellent	4/4/2019
2C7WDGBGXKR521403	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	6,557	4/24/2019	Seats 05 - ADA - 2	Excellent	4/4/2019
2C7WDGBG1KR521404	Cat E 3: Modified Minivan	Dodge ElDorado	Amerivan	2019	18,764	4/30/2019	Seats 05 - ADA - 2	Excellent	4/4/2019
1FDFE4FS4KDC43717	Cat D: Medium-Size, Light-Duty Bus & Van Chassis	Ford ElDorado	Aerotech 220	2019	17,184	10/15/2019	Seats 14 - ADA - 2	Excellent	8/28/2019

TABLE E7 Clackamas County Fleet Inventory

MHX VEHICLES

County Unit #	License	VIN	Sandy Unit #	Make	Model	Type	Year	Mileage	Condition	EUL Category	EUL Start Date	EUL End Date
	E265795	1FDFE4FS5GDC11446	929	FORD	STARCRAFT	Category D	2016	193,511	Poor	5 yrs / 150,000	2016	2021
	E248081	1FDFE45S59DA42243	902	FORD	SENATOR	Category D	2009	303,506	Marginal	5 yrs / 150,000	2009	2014
168919	E258888	1FVACWDT4GHHL5392	919	FREIGHTLINER	DEFENDER	Category B	2016	250,092	Marginal	10 yrs / 350,000	2016	2026
158925	E262290	1FVACWDT2FHGG3294	925	FREIGHTLINER	DEFENDER	Category B	2015	354,586	Poor	10 yrs / 350,000	2015	2025
158926	E262292	1FVACWDTOFHGG3293	926	FREIGHTLINER	DEFENDER	Category B	2015	344,037	Marginal	10 yrs / 350,000	2015	2025
208962	E281532	4UZADRFC0LCLX1608	964	FREIGHTLINER	DEFENDER	Category B	2020	16,450	Good	10 yrs / 350,000	2020	2030
208963	E281531	4UZADRFC2LCLX1609	962	FREIGHTLINER	DEFENDER	Category B	2020	20,413	Good	10 yrs / 350,000	2020	2030
208964	E281533	4UZADRFC9LCLX1610	963	FREIGHTLINER	DEFENDER	Category B	2020	19,720	Good	10 yrs / 350,000	2020	2030

TRP VEHICLES

County Unit #	License	VIN	TRP Vehicle #	Make	Model	Type	Year	Mileage	Condition	EUL Category	EUL Start Date	EUL End Date
148916	E262267	1FDFE4FS3EDA26731	2	FORD	AEROTECH	Category D	2014	137,853	Poor	5 yrs / 150,000	2014	2019
108910	E251205	1FDFE45S99DA90652	1	FORD	AEROTECH	Category D	2010	178,093	Poor	5 yrs / 150,000	2010	2015

Attachment F Ride Connection Partner Network

RIDE CONNECTION PARTNER NETWORK

Clackamas County

The **Clackamas County Transportation Consortium**: Clackamas County Social Services Division serves as the lead organization in partnership with community-based Senior/Community centers around the County. One service offered through this partnership is door to door transportation for seniors and persons with disabilities. The centers contract with Clackamas County to provide a host of services funded by the Older Americans Act, STF and other State and local resources. Some of the supportive services provided by the Centers are nutrition (congregate and home delivered meals), health and wellness activities (fitness/fall prevention classes and health screenings), case management, information & assistance, and reassurance.

Rides for the purpose of coming to the community center for exercise, nutrition, supportive services, or to partake in the center's monthly/bimonthly grocery shopping trip are scheduled as group rides on the mini bus. Rides to medical appointments, and/or personal business or shopping that is not part of a monthly/bimonthly group trips, are scheduled with volunteer drivers operating their own vehicles. TRP dispatch staff schedule rides primarily for medical and life-sustaining medical purposes as well as limited use shopping, personal business and nutrition (trips to local food banks).

This network includes:

- Canby Adult Center
- Friends of Estacada Community Center
- Gladstone Senior Center
- Hoodland Senior Center
- Lake Oswego Adult Community Center
- Milwaukie Center
- Molalla Adult Community Center
- Pioneer Community Center (Oregon City)
- Sandy Senior and Community Center
- Transportation Reaching People (TRP)

The City of West Linn though their community center provides limited recreational rides outside of the Consortium services.

Multnomah County

Asian Health and Services Center offers culturally-specific transportation to Asian and Asian-American seniors in Multnomah County. This includes rides to their clinic and center in SE Portland for medical appointments, meals, and other activities.

David's Harp offers transportation to adults with severe and persistent mental illness. The program provides a shuttle to and from Gateway MAX for the day. Vans are also used to support member integration in the community. This component allows members to discover and access social, educational and health related resources that assist in their psychiatric stabilization.

Ride Connection East County U-Ride-This service provides local area door to door transportation services to seniors and people with disabilities, a daily shuttle to meal sites, and group trips to shopping destinations. East County U-ride also serves the rural areas of East County including Corbett.

Ride Connection Mid-County U-Ride- Door to door service for seniors and people with disabilities in areas west of 82nd Ave and east of 162nd Ave. Mid-County provides daily shuttles to meal sites, community centers and shopping destinations.

Ride Connection Northwest Portland- Door to door services for seniors and people with disabilities residing in areas of Downtown and Northwest Portland. Ride Connection also operates the Downtown Rideabout, a weekly shopping shuttle that transports people from downtown Portland to shopping destinations.

Ride Connection Veterans Transportation- A service in which veteran volunteers transport veterans in Multnomah and Washington Counties.

Project Linkage is a program of **Metropolitan Family Service** that has several parts to it. Transportation is the largest part of the program. They also provide have a Community Visitor Program and a Minor Home Repair Program. The transportation program is a door through door service that serves older adults and people with disabilities. Project Linkage operates 21 shopping shuttles during the week from different parts of North, Northeast Portland and Mid-county to take people to grocery stores and food banks. They also collaborate with the service center at Ride Connection to take people to medical appointments, dialysis, cancer treatments and any other requests that clients might have.

Neighborhood House provides door-to-door transportation to adults 60 and over and adults with disabilities residing in SW Portland. Trips are provided by paid and volunteer drivers in fleet vehicles and volunteers' personal vehicles. Services

include pre-scheduled shopping shuttles in SW and downtown Portland, and recreational group trips for the Neighborhood House Senior Center.

Impact NW provides escorted door-through-door transportation services to seniors over the age of 60 and adults of any age with disabilities residing in SE Portland or accessing services at the Multi-cultural Senior Center on SE Belmont. Impact NW has vehicles that are lift equipped for individuals who have wheelchairs or scooters.

Providence Elderplace is a Program of All Inclusive Care for the Elderly. Along with coordinated care solutions, we provide transportation for program participants from home, to and from medical appointments, the social center and ElderPlace coordinated events and outings. We also collaborate with area programs to provide trips for shopping, nutrition, and recreational opportunities.The

Urban League provides door to door services to seniors living in the North/Northeast communities. The service includes but is not limited to, Medical appointments, Medication pickups/Personal Business/Supportive services/Shopping/Recreation/Daily visits to meal sites for nutritional needs.

Washington County

Edwards Center (client-based services only)

LifeWorks Northwest\Michael's Place (client-based services only)

Ride Connection Community Connectors- Ride Connection operates four deviated fixed-route shuttles that are open to the general public. These include (1) Grovelink, providing transportation within the City of Forest Grove; (2) North Hillsboro Link, an employment shuttle serving employment areas in Hillsboro north and south of US 26; (3) Tualatin Shuttle, an employment shuttle serving Tualatin east and west of I-5; and (4) Westlink, which connects Forest Grove and Hillsboro to the rural communities of North Plains and Banks.

Ride Connection Veterans Transportation- A service in which veteran volunteers transport veterans in Multnomah and Washington Counties.

Ride Connection Washington County General Public- Door to door service for all Washington county residents residing in areas outside the TriMet service district and within the city limits of Banks, North Plains, and Gaston. Riders are transported to destinations in Forest Grove, Cornelius or Hillsboro where they can access public transportation.

Ride Connection Washington County U-Ride- Door to door service for seniors and people with disabilities serving the urban areas of Washington County.

Providence Elderplace is a Program of All Inclusive Care for the Elderly. Along with coordinated care solutions, we provide transportation for program participants from home, to and from medical appointments, the social center and ElderPlace coordinated events and outings. Providence Elderplace also collaborates with area programs to provide trips for shopping, nutrition, and recreational opportunities.

Attachment G Performance Measures and Reporting

Attachment G: Performance Measures and reporting

Performance measures have a variety of different uses. The funding applications that the STFAC evaluates include a variety of performance measures related to the projects and programs seeking funding. The STFAC also receives monthly reports that include data and performance measures from each of the transit providers within the tri-County area. The STFAC desires to update the monthly reports to provide data that is:

- more directly related to the performance measures reported in the funding applications;
- provides information that helps the STFAC understand how well they are serving seniors and persons with disabilities, how many people they are serving, and what progress is being made on implementing the CTP; and,
- aides the STFAC in their decision making; and,
- is succinct and not overly burdensome on the providers to prepare.

The types of performance measures that may be useful to the STFAC include measures that do the following:

- Assess compliance with federal regulations such as the Americans with Disabilities Act (ADA)
- Evaluating the merits of funding applications with the TDP Guiding Principles
- Evaluate the performance of providers
- Evaluate the performance of a specific program or project funded by the STFAC
- Identify unmet needs per the TDP Service Guidelines
- Identify program or project benefits to customers and the community
- Identify how many additional people are being served or helped by a program funded by the STFAC
- Document customer satisfaction

Characteristics of effective performance measurement that should be considered when selecting performance measures include:

- Stakeholder acceptance
- Linkage to goals

- Clarity
- Reliability and credibility
- Variety of measures
- Number of measures
- Level of detail
- Flexibility
- Realism of goals and targets
- Timeliness
- Integration into agency decision-making

The following provides a list of performance measures relevant to paratransit, dial-a-ride, and small fixed route systems which may be applicable to the types of programs and projects that the STFAC evaluates. The CTP Guiding Principles that the measure could help evaluate are identified.

It is recommended that the smallest number of measures that address priority policy issues be used. Too many measures tend to obscure the most important needs and can hinder effective management.

Additional information on each of these measures can be found in the Transit Cooperative Research Program (TCRP) Report 88: A Guidebook for Developing a Transit Performance-Measurement System.

http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_report_88/Guidebook.pdf

Table 1 Potential Performance Measures

	Relationship to CTP Priorities							
	How many people are being served?	What or how much area is being served?	Is capacity adequate?	Is the service accessible?	Are the vehicles adequate or in good repair?	How cost-effective is the service?	Is the distribution of service equitable?	How is the rider experience?
Revenue hours	x		x					
Stop accessibility	x			x				x
Passengers per mile	x					x		
Passengers per hour	x					x		
Passenger trips per employee	x					x		
Percentage of no-shows	x						x	x
Service Hours	x							x
Total annual ridership	x							
Passenger miles traveled	x							
Trips per vehicle	x							
No shows and late cancelations	x							
Service coverage area		x						
Hours of service		x						
Capital resource utilization Peak-to-Base Ratio			x			x		
Demand to Capacity Ratio			x			x		
Percentage of missed phone calls			x					x
Percentage of calls held excessively long			x					x
Response time			x					x
Passenger capacity			x					
Service denials			x					
Percentage of stops with shelters and benches				x				x
Equipment reliability				x				x
Maintenance work orders per bus model vs. total fleet				x				
Fleet composition					x	x		x
Miles between safety incidents					x			x
Average age of fleet					x			x

	Relationship to CTP Priorities							
	How many people are being served?	What or how much area is being served?	Is capacity adequate?	Is the service accessible?	Are the vehicles adequate or in good repair?	How cost-effective is the service?	Is the distribution of service equitable?	How is the rider experience?
Van miles per trouble call					x			x
Injuries per 100,000 passenger boardings					x			x
Equipment reliability					x			x
Road calls					x			x
Preventative maintenance inspections completed					x			
Percentage of vehicles placed into service					x			
Mean vehicle age					x			
Subsidy per passenger						x	x	
Cost per vehicle hour						x		
Cost per vehicle mile						x		
Cost per trip						x		
Operating expense						x		
Service Equity							x	
Local Index of Transit Availability							x	
Passenger Complaints								x
Passenger commendations								x
Vehicle accidents								x
Late trips								x
On-time Performance (demand-responsive)								x
Customer satisfaction								x

Attachment H Demographic Dates

Table H1. Tri-County Population Profile

	2010 Population	2018 Population	2040 Population Forecast	Annual Population Growth	Land Area (sq mi)	Population Density (pers / sq mi)
Clackamas County	**375,992**	**405,788**	**541,943**	**0.96%**	**1864.01**	**218**
Barlow	135	119		-1.56%	0.05	2,380
Canby	15,829	17,527		1.28%	4.37	4,011
Damascus	10,539	12,024		1.66%	15.23	789
Estacada	2,695	3,270		2.45%	2.22	1,473
Gladstone	11,497	12,045		0.58%	2.37	5,082
Happy Valley	13,903	19,471		4.30%	9.42	2,067
Johnson City	566	500		-1.54%	0.06	8,333
Lake Oswego	36,619	38,705		0.69%	10.76	3,597
Milwaukie	20,291	20,955		0.40%	4.93	4,251
Molalla	8,108	9,082		1.43%	2.31	3,932
Oregon City	31,859	36,040		1.55%	9.64	3,739
Rivergrove	289	509		7.33%	0.18	2,828
Sandy	9,570	10,834		1.56%	3.35	3,234
Tualatin	26,054	27,338		0.60%	8.11	3,371
West Linn	25,109	26,511		0.68%	7.53	3,521
Wilsonville	19,509	23,418		2.31%	7.29	3,212
Unincorporated	*143,555*	*147,440*		*0.33%*	*1776.23*	83
Multnomah County	**735,334**	**798,647**	**980,567**	**1.04%**	**433.58**	**1,842**
Fairview	8,920	9,303		0.53%	3.15	2,953
Gresham	105,594	110,770		0.60%	23.41	4,732
Maywood Park	752	998		3.60%	0.17	5,871
Portland	583,776	639,387		1.14%	134.36	4,759
Troutdale	15,962	16,559		0.46%	5.92	2,797
Wood Village	3,878	4,036		0.50%	0.95	4,248
Unincorporated	*16,452*	*17,594*		*0.84%*	*265.6*	66
Washington County	**529,710**	**581,821**	**810,303**	**1.18%**	**723.24**	**804**
Banks	1,777	1,811		0.24%	0.67	2,703
Beaverton	89,803	97,012		0.97%	19.6	4,950
Cornelius	11,869	12,575		0.72%	2.02	6,225
Durham	1,351	1,724		3.09%	0.41	4,205
Forest Grove	21,083	23,923		1.59%	5.86	4,082
Gaston	637	546		-1.91%	0.34	1,606
Hillsboro	91,611	104,730		1.69%	24.64	4,250
King City	3,111	3,807		2.56%	0.7	5,439
North Plains	1,947	2,427		2.79%	0.91	2,667
Sherwood	18,194	19,337		0.76%	4.33	4,466
Tigard	48,035	52,368		1.09%	12.68	4,130
Unincorporated	*240,292*	*261,561*		*1.07%*	*651.07*	402

Source: 2010 Population, US Census Table P1; 2018 Population, American Community Survey Table B01003; 2040 Population Forecast, Portland State University (2019).

Table H2. Largest Employment Nodes

Primary Employer / Site	County	City	Jobs
Oregon Health & Science University	Multnomah	Portland	19,439
Nike, Inc. – Main Campus	Washington	Unincorporated	8,462
Providence Health and Services – Headquarters	Multnomah	Portland	7,993
Intel Corporation – Main Campus	Washington	Hillsboro	7,691
Portland State University	Multnomah	Portland	6,331
Intel Corporation – Jones Farm Campus	Washington	Hillsboro	5,608
Kaiser Permanente – Sunnyside Medical Center	Clackamas	Unincorporated	5,205
Portland International Airport	Multnomah	Portland	5,007
Washington Square	Washington	Tigard	4,921
Lloyd Center	Multnomah	Portland	4,610
Providence St. Vincent Medical Center	Washington	Unincorporated	4,572
Commercial Zone – I-5 / OR 217 Jct. Northwest	Washington	Tigard	4,522
Providence Portland Medical Center	Multnomah	Portland	3,938
Shipyard Commerce Center – Swan Island	Multnomah	Portland	3,273
Boeing Company	Multnomah	Gresham	3,151
Legacy Emmanuel Medical Center	Multnomah	Portland	3,022
US Bankcorp Tower	Multnomah	Portland	2,987
Portland Community College – Sylvania	Multnomah	Portland	2,828
Murray Business Center / Providence Health	Washington	Beaverton	2,775
Clackamas Town Center	Clackamas	Unincorporated	2,691
Kaiser Permanente – 500 Multnomah Street	Multnomah	Portland	2,312
Commercial Zone – OR 217 / OR 99W Jct. South	Washington	Tigard	2,232
Commercial Zone – Sandy Boulevard / NE 181st Avenue Southwest	Multnomah	Gresham	2,231
Industrial Zone – OR 99W / SW 124th Avenue Southwest	Washington	Tualatin	2,223
Commercial Zone – OR 217 / SW Hall Boulevard Southwest	Washington	Beaverton	2,149
World Trade Center – Portland	Multnomah	Portland	2,134
Commercial Zone - Centerpointe Drive	Clackamas	Lake Oswego	2,133
Clackamas County Administration	Clackamas	Oregon City	2,054
Adventist Medical Center	Multnomah	Portland	2,045
Commercial Zone - Merlo Road	Washington	Beaverton	2,025
Moda Tower	Multnomah	Portland	2,000

Source: Longitudinal Employment & Housing Dynamic - 2014.

Table H3. Income, Employment, and English Proficiency

	Median Income	Mean Travel Time to Work (minutes)	Unemployment Rate	Non-English Speaking Population
Clackamas County	**$80,691**	26.2	**4.7%**	**4.1%**
Barlow	$50,000	36.9	5.0%	11.8%
Canby	$70,638	24.9	2.6%	8.8%
Damascus	$87,808	30.5	4.4%	4.0%
Estacada	$65,320	32.2	1.0%	0.3%
Gladstone	$64,983	23.9	4.5%	3.6%
Happy Valley	$119,135	27.6	1.9%	7.7%
Johnson City	$56,964	22.6	2.2%	1.5%
Lake Oswego	$111,141	21.2	2.0%	3.0%
Milwaukie	$72,887	24.4	3.0%	1.7%
Molalla	$56,875	33.4	3.1%	6.4%
Oregon City	$72,210	27.8	3.3%	2.9%
Rivergrove	$93,958	23.2	3.1%	4.7%
Sandy	$62,321	29.3	2.0%	2.9%
Tualatin	$95,405	20.7	3.3%	5.9%
West Linn	$99,738	24.9	2.8%	3.1%
Wilsonville	$77,260	24.0	2.6%	3.8%
Unincorporated		27.6		
Multnomah County	**$73,426**	24.8	**5.6%**	**8.4%**
Fairview	$78,235	25.8	2.2%	5.5%
Gresham	$56,326	28.2	4.4%	11.2%
Maywood Park	$90,417	25.6	3.3%	1.2%
Portland	$77,111	23.7	3.8%	8.1%
Troutdale	$65,938	27.0	4.7%	6.2%
Wood Village	$57,031	23.4	1.5%	29.9%
Unincorporated		44.3		
Washington County	**$82,110**	24.6	**5.0%**	**9.1%**
Banks	$80,000	23.4	2.6%	0.4%
Beaverton	$76,674	23.0	3.8%	11.2%
Cornelius	$47,450	24.1	3.4%	21.0%
Durham	$96,328	22.0	3.1%	6.4%
Forest Grove	$48,365	24.6	4.7%	8.0%
Gaston	$78,250	33.4	2.1%	1.3%
Hillsboro	$79,725	22.4	3.6%	11.1%
King City	$61,513	21.3	1.3%	2.8%
North Plains	$79,643	23.6	1.8%	2.3%
Sherwood	$98,646	25.9	2.1%	3.0%
Tigard	$85,223	22.8	3.5%	7.2%
Unincorporated		25.8		

Source: Median Income, American Community Survey Table S1903 (2014-2018 5 Year Estimate); Mean Travel Time to Work, American Community Survey Table B08135 (2014-2018 5 Year Estimate); Unemployment Rate, American Community Survey Table DP03 (2014-2018 5 Year Estimate); Non-English Speaking Population, American Community Survey Table DP02 (2014-2018 5 Year Estimate).

Table H4. Population of Seniors and Persons with Disabilities

	2010 Population	65 and Over Population	% Over 65	Population with Disabilities	% with Disabilities
Clackamas County	**375,992**	**51,231**	**13.6%**	**47,447**	**11.7%**
Barlow	135	17	12.6%	9	7.6%
Canby	15,829	2,247	14.2%	2,318	13.3%
Damascus	10,539	1,406	13.3%	1,451	12.1%
Estacada	2,695	347	12.9%	383	11.7%
Gladstone	11,497	1,581	13.8%	1,772	14.8%
Happy Valley	13,903	1,138	8.2%	1,380	7.1%
Johnson City	566	105	18.6%	99	20.0%
Lake Oswego	36,619	5,918	16.2%	3,036	7.9%
Milwaukie	20,291	2,767	13.6%	2,741	13.1%
Molalla	8,108	797	9.8%	972	10.8%
Oregon City	31,859	3,555	11.2%	4,467	12.6%
Rivergrove	289	53	18.3%	58	11.4%
Sandy	9,570	977	10.2%	1,452	13.4%
Tualatin	26,054	1,819	7.0%	2,466	9.0%
West Linn	25,109	2,785	11.1%	2,381	9.0%
Wilsonville	19,509	2,597	13.3%	1,937	8.8%
Unincorporated	*143,555*	*23,139*	*16.1%*	*20,525*	
Multnomah County	735,334	**77,423**	**10.5%**	**101,426**	**12.8%**
Fairview	8,920	890	10.0%	1,582	17.0%
Gresham	105,594	11,321	10.7%	16,273	14.8%
Maywood Park	752	118	15.7%	125	12.5%
Portland	583,776	60,789	10.4%	78,880	12.4%
Troutdale	15,962	1,215	7.6%	1,906	11.5%
Wood Village	3,878	291	7.5%	452	11.2%
Unincorporated	*16,452*	*2,799*	*17.0%*	*2,208*	
Washington County	**529,710**	**53,109**	**10.0%**	**57,740**	**10.0%**
Banks	1,777	70	3.9%	148	8.2%
Beaverton	89,803	9,374	10.4%	10381	10.8%
Cornelius	11,869	744	6.3%	1289	10.3%
Durham	1,351	139	10.3%	143	8.3%
Forest Grove	21,083	2,599	12.3%	3179	13.4%
Gaston	637	38	6.0%	108	19.8%
Hillsboro	91,611	7,155	7.8%	9930	9.6%
King City	3,111	1,494	48.0%	776	20.8%
North Plains	1,947	180	9.2%	258	10.8%
Sherwood	18,194	1,240	6.8%	1189	6.1%
Tigard	48,035	5,413	11.3%	5759	11.0%
Unincorporated	*240,292*	*24,663*	*10.3%*	*24,580*	

Source: Population Over 65, US Census Table DP-1(2010); Population with Disabilities, American Community Survey Table DP03 (2014-2018 5 Year Estimate).

Attachment I Summary of Stakeholder Workshop

TriMet Coordinated Transportation Plan for Elderly and People with Disabilities

March 4th 2016 Stakeholder Worksession Summary

Thank you for your engagement in the Needs Assessment worksession for TriMet's Coordinated Transportation Plan for Elderly and People with Disabilities (CTP). Your participation in the small group discussions and in sharing your comments helped make the Special Transportation Fund Advisory Committee (STFAC) worksession a great success. Together, we discussed the transportation needs, challenges and gaps for seniors and people with physical and/or cognitive disabilities. We identified the geographic, regulatory and structural barriers to addressing these needs, and shared ideas and strategies. The following provides some highlights from the worksession conversations and comments. A complete inventory of comments will be included in an appendix to the updated Plan.

Over 50 people provided feedback, either through the worksession or online. Among you were seniors, persons with physical and/or cognitive disabilities and users of the transportation system, representing sixteen social service agencies and eight transit service providers across the tri-county area that include:

- Albertina Kerr
- Canby Area Transit (CAT)
- Cascadia Behavioral Health
- Centerstone
- City of Forest Grove
- Clackamas Community College
- Clackamas County Disability Services Advisory Council (DSAC)
- Clackamas County Social Services
- Clackamas County Transportation
- Consortium
- Committee on Accessible Transportation
- Community Partners for Affordable Housing
- Community Vision
- Edwards Senior Center, Inc.
- Hollywood Senior Center
- Lifeworks NW
- Metro
- Multnomah Aging, Disability and Veterans Services Division (ADVS)
- National Alliance on Mental Illness, Clackamas County
- Ride Connection
- Sandy Area Metro (SAM)
- South Metro Area Regional Transit (SMART)
- Special Transportation Funds Advisory Committee (STFAC)
- TriMet
- Vocational Rehabilitation
- Washington County Disability, Aging and Veteran
- Services (DAVS)
- Western Psychological

Key Themes

General Trends

> *"As good as our system is, it is far from perfect. Many seniors and people with disabilities live in areas where land and housing is available. This puts them in areas where fixed route may be available, but not necessarily accessible. Last mile service, evening and weekend service, local service are all lacking in these outlying areas."*

- **Shifting demographics and displacement.** Rapid growth and rising housing costs have shifted the region's aging and transit-dependent populations to outlying areas that are not well served by fixed-route service, and consequently not well served by paratransit.
- **Infrastructure improvements near key destinations.** Paved roads, complete sidewalks and curb cuts greatly affects an individual's ability to access public transportation when they have a disability. While basic infrastructure still lacks in more rural areas, improvements should focus around destinations that accommodate a higher traffic of individuals with physical and/or cognitive disabilities, such as senior centers and medical offices. For example, corridors such as the Tualatin Valley Highway and facilities such as the Edwards Senior Center lack sidewalks to connect its users to the transportation system.
- **Funding gaps**. Overall, participants agreed that there is a desire to see more funding from predictable sources for transportation services that meet the needs of seniors and people with physical and/or cognitive disabilities.

Customer Service and Environment

- **Driver training for people with cognitive and/or mental health challenges.** Participants expressed a need for more comprehensive driver training in order to better serve individuals with cognitive or mental health challenges. In addition, providing support personnel or audio/visual distraction for riders may help improve driver safety.
- **First-mile and last-mile trips.** Transportation access is often limited by an inability to reach a fixed or deviated-route transit stop due to distance or terrain. Participants noted that strategies should focus on public-private partnerships to help an individual complete the first or last mile of their trip. Otherwise, the effectiveness of system improvements may be compromised.

- **Circulator transit service.** Transit users and providers alike emphasized that local transit routes can help individuals better access services within their own community. Whereas most major transportation corridors link outlying areas to downtown Portland, more circulator service can alleviate the demand for community-based transit providers such as Ride Connection to access local destinations. Participants mentioned GroveLink as an example of a successful, small-scale circulator service for the Forest Grove community.
- **Transit stop amenities and design.** Improving transit stops with shelters, benches, lighting, curbs/curb-cuts and designated pedestrian crossings improve safety and accessibility. Participants suggested that poorly designed or nonexistent facilities may be what prevents an individual from using fixed-route services instead of LIFT services.

> *"Infrastructure provides safety, comfort and dignity."*

Coordination and Organization

- **Coordination of transportation service with medical facilities.** Participants expressed the need for better coordination between transportation services, hospitals and medical clinics in order to ensure patients arrive to their appointments on time and are well supported when discharged.
- **Information dissemination.** While several discussion groups agreed that there is a wealth of transportation services provided through various agencies, organizations and communities, the information lacks centralization. Suggestions for improving access to information included clearinghouse of all available services by type of need (similar to 211 Info), "transportation ambassadors" for social service organizations and a standardized menu of services and contact information on all transit fleets.
- **Plan implementation through a governing body.** Participants called for reinstating a governing body, like the former Regional Transportation Coordinating Council, to better support the implementation of the CTP's strategies and initiatives.

Technology

- **Real time information and location services**. Several discussion groups supported the use of mobile apps and web platforms to request and track rides, plan trips and pay for fares. Of note, some rural areas lack adequate cellular service.
- **Human service in the age of technology.** While there was strong support for greater technological capabilities for transit service providers, several participants expressed concern that the digital divide could further isolate individuals who are unable or uncomfortable using technology. They emphasized that human personnel services, whether manual payment of bus fare or a person-to-person phone call, is crucial.

- **Integration of public-private transportation services.** Participants expressed interest in transportation network companies (TNC) such as Uber and Lyft to help address first-mile/last-mile issues, as well as the use of TNC software for seamless integration between different services and trip legs.

Ideas and Strategies

- **Provide greater mental health training for drivers and support staff.** For example, transit drivers in Eugene, OR know to call CAHOOTS, a mobile crisis intervention team, in case additional support is needed for individuals with cognitive and/or mental health challenges.
- **Utilize and update existing ridesharing platforms.** Drive Less Connect, an online ridesharing platform operated by ODOT and promoted by Metro, could be upgraded and expanded to help connect rides among individuals who have accessibility challenges.
- **Explore partnerships with Uber and Lyft.** Public-private partnerships can expand the number of transportation providers, encourage software integration and improve customer experience through first-mile/last-mile transportation. This is currently being done in Kansas City, Kansas and Dallas, Texas

"I have faith in the providers in our region. I have never questioned their commitment, dedication, or ability to dig deep and find ways to do what they can to find ways to provide more and/or better options for our seniors and people with disabilities."

FOR MORE INFORMATION:

If you have questions or ideas about TriMet's next steps to support accessible transportation through the 2016 CTP Update, please don't hesitate to contact TriMet CTP project manager, Hannah R. Quinsey at RitchieH@TriMet.org or 503-962-4912.

Attachment J Peer Review on Strategies

Peer Review On Strategies

The draft text below reflects strategies identified through a review of peer agency Coordinated Plans, literature from the Transit Cooperative Research Program (TCRP), and stakeholder input from the STFAC worksession on March 4, 2016. The next step is to gather further input from the STFAC at the March 18, 2016 meeting.

The information on strategies is organized along three main tracks developed through stakeholder input on unmet needs and cover provider and social service agency coordination, strategies to improve customer service, opportunities to increase the use of technology to meet the transportation needs of seniors and people with disabilities, and a set of categorized strategies for funding.

Coordination Strategies

- Institutional strategies
  - Agency-wide governance strategy.
  - Regional coordination council, which could include committees that focus on specific aspects of coordination (service delivery, maintenance, technology issues).
  - Hire a regional mobility manager.
  - Continue to hold coordination meetings with seniors, people with disabilities, and people in poverty and associated representatives.
  - Consideration of a “no one size fits all” philosophy that aims to provide tailored approaches to coordination of transportation service for different groups of people.
  - Region- or system-wide shared paratransit eligibility
  - Review legal and insurance barriers to shared transportation.
  - Manage risk.
- Operational strategies
  - Creation of a “concept of operations” document describing the options and needs of seniors and people with disabilities.
  - Vehicle/cost-sharing agreement between providers.
  - Centralized demand-response dispatching with on-line options (text, web, mobile).

  - Centralized transportation brokerage to integrate various transportation resources
  - Development of seamless transportation technology to allow for easier cross-system use.
- Performance/mobility strategies
  - Performance measurement
  - Cost/benefit analyses
  - Track success, promote and market, and duplicate successful projects from within and from outside of the region.
  - Explore public-private partnerships
  - Continued to promote and market public transit usage
  - Continued to promote regional accessibility and livability

Customer Service and Environment Strategies

- Increase driver sensitivity training for all types of drivers (volunteer, fixed route, paratransit)
- Reduce transfer times.
- Reduce total trip times.
- Increase the availability of real-time information across multiple platforms (this is also a technology strategy).
- Increase availability of travel training programs.
- Determine which infrastructure improvements (e.g. bus stops improvement, completing sidewalk gaps, ADA upgrades) would have the ability to increase customer experience the most.
- Provide same day paratransit service.
- Adapted and assign vehicles to meet the needs of target rider groups.
- Create and/or enhance a centralized customer care center (Salt Lake City has a particularly good example) or something similar to the Veterans Transportation Community Living Initiative.
- Provide additional service to “lifestyle” activities such as recreational sites (e.g. movie theaters, hiking, cultural activities).

Technology Strategies

- Develop software for a regional one-click/one-call center to connect seniors, people with disabilities, and those in poverty to mobility options. Software would allow for connections to related systems throughout the service area (or regionally). An integrated software package could include the following specific applications:
    - Rideshare matching software
    - On-line scheduling/dispatching systems (Salt Lake City has a cgood example)
    - Develop database of users in multiple agency directories – opportunity to build on and expand functionality of the current regional 211 database.
- Electronic fare systems incorporating technologies such as e-fare cards, multiple fare products, multiple point-of-sale locations/systems, and centralized data collection for system-wide analyses.
- Incorporate end-user training on technology products into travel training efforts.
- Use of open-source software and database tools
- Mobile application development including:
    - Bridj, which provide data that can be used to increase efficiency in demand-response transportation. See: http://www.metro-magazine.com/bus/news/710635/bridj-kcata-ford-partner-for-urban-mobility-pilot-project
    - Tiramisu: Bus location app (Pittsburgh)
    - Let's Go: transit information via phone (Pittsburgh)
    - Dynamic scheduling app (Pittsburgh)
- Systems integration with Uber/Lyft services for first- and last-mile service enhancements that improve mobility: See:
    - http://www.thetransitwire.com/2016/02/24/psta-teams-with-uber-and-taxi-company-to-improve-mobility/
    - www.thetransitwire.com/2016/01/13/lyft-tests-senior-transportation-service/

Funding

- Review of existing programs and identify all recipients of monies from 5310, STF, and other programs.
- Create a schematic map of funding sources and identify funding sources by jurisdictions at the federal, state, and local levels. (Denver)
- For each strategy included in the final CTP, identify what unmet need(s) it would address, what potential projects would be completed, and what would be the potential funding source.
- Include map or link to a list of fiscally-constrained transit improvement projects.
- Funding application processes
    - Review Pittsburgh application selection process (plan begins on page 56 of the document).
    - Project selection criteria could include: ability to meet coordination needs, project benefits, level of innovation, opportunities to increase organizational capabilities, and budget.
    - Allow scoring methodology to assign different weights to each category.
- Focus on financial sustainability and program efficiency such as: reduce costs, selecting cost-effective strategies, technology solutions that would reduce costs, and opportunities to coordinate the maintenance of vehicles, equipment, and other resources
- Pooled funding for specific programs
- Provide free/reduced cost transit passes, taxi vouchers, and create affordable fare programs.
- Advocacy white paper for legislators/statewide advocacy effort to increase funding sources.

Relevant Research

TCRP 101 – Toolkit for Rural Community Coordinated Transportation Services

Westat, Nelson Development, Ltd., and Nelson\Nygaard Consulting Associates, Inc. Transportation Research Board, Washington, D.C., 2004.

This report summarizes strategies and lessons learned about the successful provision of coordinated transportation services in rural areas. It also provides information about basic concepts, it identifies the entities that may be involved in the provision of coordinated transportation services, and it describes the benefits of coordinated transportation services. Identified challenges to coordination include actual or perceived regulatory barriers, actual or perceived agency mission incompatibilities, challenges of accountability and reporting, inability to provide the local match for federal funding, and lack of knowledge about how coordination works.

Chapter 3 of the report discusses establishing a new coordinated transportation service program. Chapter 4 contains answers to "frequently asked questions" about coordination. Chapter 5 describes strategies for improving existing coordinated services. These strategies include the following:

- Finding and using new funding sources and sources not currently utilized
- Decreasing direct costs
- Improving productivity and utilization
- Taking advantage of economies of scale
- Providing service were service currently does not exist
- Taking advantage of opportunities created by multiple provides and modes
- Providing trips on fixed routes where possible
- Providing ADA services via private nonprofits instead of public transit agencies, to take advantage of the lower cost structures of the former
- Using volunteer drivers and/or volunteer staff
- Providing incentives to paratransit users to use fixed-route transit
- Consolidating the services provided by individual human service agencies
- Implementing a coordinated dispatching system

The report identifies strategies to avoid as well. These include duplicating dispatch and administrative functions, duplicating services, and serving only one type of client or trip.

Identified factors for success include the following:

- Effective stakeholder leadership and participation (in depth and from the outset)
- Clear identification of stakeholder needs and concerns
- Sound planning (with goals, objectives, a strategic plan, an operational plan, an implementation plan, and commitments)
- Sound technical support (including reporting, sharing of technical resources, and use of information technologies)
- Demonstrated benefits
- Modified services and financial participation arrangements

Chapter 6 suggests approaches to addressing specific coordinated transportation issues. Chapter 7 contains examples of and model processes for state-level involvement in coordinated transportation. Chapter 8 describes lessons learned from case studies of successful coordinated transportation services.

TCRP 105 – Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged

TranSystems Corporation, Center for Urban Transportation Research, Institute for Transportation Research and Education, and Planners Collaborative. Transportation Research Board, Washington, D.C., 2004.

This report summarizes the development of strategies for improving coordinated transportation services that support travel by the transportation-disadvantaged. The report includes an inventory of funding sources, service types/models, and planning and decision-making processes; case studies; technology discussion; and analysis. The case studies were intended to support the identification of successful and innovated coordinated transportation strategies.

Indicators of success identified in the report include the following:

- Building a coalition that comprises transportation providers and other stakeholders (e.g., businesses and institutions)
- Developing strong leadership at the state and local levels (including champions among elected officials)
- Leveraging federal programs and requirements to build infrastructure
- Taking advantage of state programs that support coordination
- Getting all stakeholders involved in the transportation planning process

- Evaluating the program
- Exploring non-traditional funding sources
- Coordinating at the regional level
- Using technology to provide information, coordinate operations, and improve customer service
- Being flexible with respect to changes in funding and changes in regulations
- Building trust among stakeholders (e.g., by involving all of them from the beginning and by tailoring service to meet each stakeholder's needs)
- Partnering with agencies that are amenable to changing the status quo
- Using a phased approach to program implementation
- Investing time upfront to develop resources, support, a framework, and clear goals and objectives
- Developing commitment to coordinated transportation at all levels of the stakeholder organizations
- Focusing on improvements that will benefit many people rather than few people
- Testing concepts before broader implementation
- Developing and using high-quality cost information
- Recognizing that benefits might not appear immediately

Peer agency review

The review of peer agencies similar to TriMet included the following transit agencies. A link to each agency's most recent version of their Coordinated Transportation follows the name of the city.

Atlanta, Georgia: http://documents.atlantaregional.com/tcc/HST/2012-2013_HST_Plan_Limited_Update_FINAL.pdf

Baltimore, Maryland: http://www.baltometro.org/reports/2010-Human-Services-Transportation-Plan-final.pdf

Charlotte, North Caroline: http://charmeck.org/city/charlotte/cats/bus/ridingcats/documents/coordinated%20hs%20transportation%20plan%20rev%201.pdf

Salt Lake City, Utah: http://wasatchmobilityplan.weebly.com/

Las Vegas, Nevada: http://www.rtcsnv.com/wp-content/uploads/2012/06/Coordinated-Transportation-Plan-FINAL-031215.pdf

Minneapolis-St. Paul, Minnesota: http://metrocouncil.org/Transportation/Publications-And-Resources/Public-Transit-and-Human-Services-Transportation-C.aspx

Seattle, Washington: http://www.psrc.org/assets/11596/CoordinatedPlan2015-2018.pdf

Pittsburgh, Pennsylvania: http://www.spcregion.org/pdf/atwichs/FullFinalHSReport.pdf

Denver, Colorado: https://drcog.org/sites/drcog/files/resources/C1-DRAFT%20Transit%20Coord%20Plan-TAC%20Jan%202016.pdf

Tampa Bay, Florida: http://www.planhillsborough.org/wp-content/uploads/2014/06/Regional-Mobility-Needs-Chapter_2.27.14.pdf

Long Island, New York: http://nymtc.org/files/RTP_PLAN_2040_docs/Public%20Review%20Drafts/Appendix6.pdf

Attachment K Summary of STFAC Workshop on Priorities and Strategies

STFAC Meeting 5: WORKSHOP SUMMARY (RAW NOTES)

Table Facilitator Notes, Comment Form Responses, Flipchart Notes

March 18, 2016

Draft Guiding Principles and Priorities

1. **New categories:**
    a. **Funding**
        i. Include language regarding cost, funding, money spent outside STF Funds, etc…
        ii. Equitable funding (funding per capita?)
        iii. Include "Consider cost-effectiveness with needed level of service in mind, in making funding decisions" in all guiding principles
        iv. Budget tracking and expenses
        v. Reallocate poorly utilized service to new service
        vi. Overview of providers prior to actual funding process
        vii. Make new initiatives clearer
        viii. Add needing additional funding
    b. **Partnerships, collaboration**
        i. Add evaluation of collaboration.
        ii. Collaborate with schools and school buses.
    c. **Customer focus**
        i. Identify the population that is being served (seniors, people with disabilities, low income, etc.)
            (a) Improvements should be based on increasing accessibility for NOT ridership
            (b) Should relate to user
        ii. Focus on under-served communities
        iii. Introduce all applicants to an overview of providers
    d. **Sustainability**
    e. **Accessibility**

i. Expand service
ii. Level of service
iii. Ride quality

f. Land use and siting (geography and design)
g. New innovations – Localized solutions
h. Equity and reliability
i. Evaluation of performance/efficiency measurement

2. To include in each category:
a. Cost effectiveness
i. Consider cost-effectiveness for each principle not on its own.
b. Capital

3. Prioritization:
a. Do not prioritize 2016 CTP Guiding Principles. They should be simply listed.
b. If prioritized, they should be ranked on:
i. Cost Effectiveness
(a) Include multi-year cost
(b) Consider future cost
ii. Service: preserve and expand services
iii. Review each funding cycle (multi-year cost estimates)
(a) Discussion of priorities needs to happen at each funding cycle (to address lower tier applications). Funding of cycle should be prioritized in order for each funding cycle to be equitable. Need to reserve some money for lowest priority.
iv. Need – what needs to be funded and why

<u>Funding Application Categories</u>

1. Missing categories:
a. Collaboration and partnerships
b. Capital expenditures
i. Vehicle replacement and maintenance
ii. Facilities and stop improvements

2. **Improvements needed:**
   - **a.** Clarify new initiatives
     - i. I.e. does improving service quality refers to infrastructure or vehicles?
   - **b.** The first question in application should be whether the baseline service is mentioned. Maintain existing service/baseline services.
   - **c.** Match application categories with guiding principles and priorities more clearly
   - **d.** Multiple application types
   - **e.** Ask about number of customer, cost per mile cost effectiveness
3. **Information that would be useful for project evaluation:**
   - **a. Breakdown of full project costs** - Need cost breakdown for requests and provider budgets.
     - i. STF money
     - ii. Budget
     - iii. Operational funding
     - iv. Number of FTE
     - v. Shortfall funding (?)
     - vi. Data operating worksheets are helpful.
     - vii. Breakout how much of service serves E&D.
   - **b. Discuss priorities at each funding cycle** – shift money accordingly
     - i. Project solicitation – meet before to establish priority.
   - **c. Improvements to service** (partnerships, extended service area, etc.)
     - i. Breakout service level for seniors vs. young people with disabilities
     - ii. Use data operating worksheets to evaluate performance
     - iii. Include demand data in applications.
   - **d. Timeline for applications is too short**
     - i. Begin process in November
     - ii. Advocate for more time to write, review and rank applications
   - **e. Have applicants present their applications**
   - **f. Ideas for consolidating information in application forms.**
     - i. Application process should coordinate with ODOT

ii. Keep them brief
iii. Reduce narrative or move to appendix

g. Technology pilot programs

h. Other things to consider

i. Administrative cost to administer grants
ii. Additional funding sources
iii. B/C analysis
iv. Consolidate application narrative
v. Application process can be overwhelming for participants
vi. Coordinate ODOT app with STFAC needs
vii. Repetition among applications
viii. Time consuming

<u>Issues Specific to Draft 2016 CTP Guiding Principles</u>

#1 – *Preserve existing services and avoid service reductions.*

- Language related too closely to the recession? (might be able to eliminate)
- Is there a need to account for increasing budgets?
- Consider that funding comes from two sources for ops and capital.

Expand to include

- Maintain baseline service (combine with #3)
- Maintain vehicles

#2 – *Provide for adequate capital replacements and maintenance of vehicles and other fundamental requirements to provide service.*

#3 – *Strive for strategic and equitable distribution of funding to address the needs of the region's seniors and people with disabilities.*

#4 – *Help mitigate shortfalls in funding from other sources of grant funds.*

- **Concern:**
  - Old plan = new funding
  - New plan = short falls

#5 – *Increase capacity and improve service quality of existing services (such as providing additional or larger buses or other capital equipment, increasing frequency, span of service, or staff time).*

Expand to include

- Access to infrastructure

#6 – *Consider cost-effectiveness in making funding decisions (such as $ per ride, % match)*

- Hard to compare with different types

Keep and expand to include

- Evaluation and performance (budget tracking and expenses)
- Cost effectiveness measures
- Show cost and money spent outside of STF funds
- Add statement about new sources, new language

#7 – *Expand service in new areas, restore service where previously cut, or implement new initiatives related to technology and coordination.*

Keep and expand to include

- New collaborative partnerships
- Research, peer review, new technologies
- Add statement about new sources, new language
- Include more focus on underserved communities, individuals.

<u>Strategies</u>

- Collaboration and Coordination – for implementation (social service transit providers).
- Infrastructure improvements, physical barriers at stops.
- Partners (school buses, shuttles, circulator service). *See first bullet point.*
- Eliminate jurisdictional and political "issues". *See first bullet point.*
- Peer review of other plans.
- No one size fits all! Population served.
- Advocacy white paper.
- Customer-centric projects.

- "Safe route to schools" – similar program?
- Collect RC donations through application?
- Crowd sourcing data and funding for new and innovative programs.

Attachment L Summary of STFAC Workshop on Funding Process and Application Criteria

STFAC Meeting 6: WORKSHOP SUMMARY (RAW NOTES)

April 15th, 2016

Funding Process. The proposed application review process for reviewing funding applications identifies a seven step process that includes 3 STFAC meetings instead of 2, and identifies actions that will occur by TriMet staff and STFAC members between meetings and between funding cycles.

1. What questions or comments do you have on the proposed funding process? Would you amend the proposed process in any way?

- Pre-evaluations – yes or no? Mixed.
  - Pre-evaluation helps prepare questions.
  - Don't want to submit right away
    - Need 1 – 2 days
    - Some may need a week
    - Friday to Tuesday maybe okay
- Seems strange that applicants vote.
- Concerned about past processes where providers discuss alone and make a decision that has more weight than STFAC.

****

- When would notification/when would providers get information?
  - As early as possible.
- Clarification.
- The process is too short.
- Start early on as possible.
- Check the legalities of the process.
  - Have to wait for notice from ODOT to start the public process, accepting application.
- Not submit the application but fill it out.
- TM Board approves in March/OR in April/contracts in May.
- Multi-layer.
- Like have meeting #1 before the notice, have discussions ahead of time.

****

- Empowering bureaucrats, not the community.
- Minimize/cut-out bureaucracy.
- Stay on top of ODOT.
  - Get ODOT's information ahead of time. Need to know.

  - Do everything possible for streamlining.
- Timeline.
- Identify ODOT staff to get information out.
- Develop strategy.

****

- More time for ranking/feedback
- First meeting could have been scheduled 2 months earlier.
- Any TriMet staff function that evaluates programs the STFAC should be in charge of. Maybe a subcommittee?

2. Do you have any suggestions on how to discuss priorities at STFAC Meeting #1?

- Review unmet needs → review 3-2
- Discuss any new demographic changes/issues → discuss specific gaps.

****

- What projects are eligible and the priorities?
- Behind the scenes knowledge – What ODOT is thinking.
- Have ODOT give a presentation-perspective.
  - Can guide us early.
- Ability to revisit priorities.
- Clarity on when funds will be available.

****

- Identify during pre-meeting – current priorities as we know the targeted funding.
- Restore art books (?) if that – perennial priority.
- Identify list of cuts.
- Look for available technology if available for solutions.
- Develop consistency across apps by comparing to benchmarks. Easier to…
  - Score apps.
  - See excluded criteria.
  - More objectivity.
- Elaine Wells wants to follow up.

****

- Depends on the type of funding
- Go back to Guiding Principles. Identify priorities there.
- Providers need to be at the first meeting
- Review needs/geographic statistics by county.

Funding Application Categories. The proposed funding application categories were updated based on input received at the last meeting to more clearly separate capital from operations. The categories now include capital projects and operations projects under "Maintaining Existing Service" and "Service Expansion" projects. There is also a category for "New Initiatives".

3. Do you have any additional comments on the updated Funding Application Categories? Is there any type of funding request that you believe may still be missing?

- Put categories right at top of applications – front and center.

****

Operations – 5310 is considered a capital expense – more match, STF is more flexible, less match.

- Bring in 5310 categories and make compatible.
- Operations (includes 5310 purchase service)
- Why differ between capital and operations?
- Is the capital a one-time expense?
- Like the 3 major categories – simple.
- Technology (upgrades)/ITS in service (new) expansion, new initiative and maintain service (replace).
- Accessibility and mobility
  - Lighting at stop (service expansion)
- Public safety.
- Service expansion or enhancement
- One or two sentences to describe the categories.
- Things in Maintain
  - Is thing critical to keep those services running?

****

- Zero-emission vehicles.
  - Increase cost.
  - Timeline concerns.
- Right-sizing vehicles – where does it fit?
- Earlier comments chart – misleading.
  - (d) new initiates.
- Better, cheaper examples.
- More to advocacy category.

****

Evaluation Criteria. The proposed evaluation criteria identify criteria that relate to the Guiding Principles. The criteria each include a series of questions to help describe how different types of applications may address the criteria. Applicants will be asked specifically to address these criteria and the STFAC members will evaluate each application how well they address the criteria.

4. Do you want to evaluate each project on a 1 through 5 scale for how well they address each criteria (as you have done in the past), or would you prefer to rank all projects in order of preference based on how well you believe the project meets all the Guiding Principles?

- Ranking → 4 votes
- Unsure/Not rank → 1 vote →Like it but seems challenging
- Score – 0 or 1 vote
- Is there something in the middle?

****

- Priorities and rankings.
  - Systematic approach – same level of standard.
- Formal ranking based on priorities, transparent, procurement process, in good faith.
- Presentations can help with those who aren't good at grant writing.
- Point system.
- We should consider whether our application is ODOT's application (that's how they are going to prioritize applications).
- Maybe a few questions that address STFAC priorities?
- What about 5310 funds? Urban area.
- Consensus around the table:
  - Form 1: Keep
  - Form 2 (Main): ODOT
  - Form 3: Question specific to addressing CTP-project specific

****

- Consistent and objective process.
- Considering a different scoring method.
- Provide some evaluation points for rural areas – need to meet needs of rural areas.

****

- Ranking works well if the guiding principles are in front of you. Scoring can still be done individually, but you turn in a ranking by category.

If ranking is preferable, would you rather rank projects within each category or provide an overall ranking?

- Interest → Yes

- Consider ranking applications for capital vs. operations.
- When applicants have multiple applications, asking them to rank their own applications is not fair and the STFAC seeing something is an applicant's 2nd priority out of 6 applications is not comparable to another applicants 2nd priority out of 2. Don't want to create incentive for submitting multiple applications.

****

- Limited by funding, so categories don't matter.
- What accessibility and equity? Geographical equity. Something in the ranking.
- Keep description clear and concise.
  - Those end up ranking higher.

****

- Not answered on third form.

****

- By category; if that's possible with the money we have.

5. Do you feel that the proposed criteria adequately reflect the Guiding Principles and do they reflect the STFAC's desired outcomes? What comments do you have on the proposed criteria?

- Customer surveys would be helpful.
- Question #1 – Concerned about cost/ride.
- Vehicle age and mileage – should be provided in the application if required vehicle.
- Can we tailor further to address people?
  - How many different people are we serving?
  - New people that will be served?
  - Add to Question #2.

****

- Don't know if this meets the ODOT criteria.
- Ranking should follow ODOT rankings.
  - ODOT criteria I-4
  - 5th should be how well does the project meet the STFAC goals/guiding principles.
  - Distill the local criteria into one or two.
  - This is too much.
  - Asking the question too many times – double the work.
  - Questions are the same but tweaked differently.
- Use the ODOT criteria as it pertains to our guiding principles.
- Transparent – What you submit to STFAC is same as what is submitted to ODOT.
- ODOT criteria is the core – additional clarifying or questions to address the local goals (one-pager)(STFAC guiding principles).

****

- Add cultural/language barriers.
- Is the project "fair" to remote or rural area?
  - Consider a separate question.
- Consider ODOT's criteria in order to reduce duplication.

****

- Sub bullets should be reviewed to make sure they align with the criteria questions
- Add **Project** to describe the type of application in Question 1 and 4
- Add question about number of people served, number of new people served, number of 60+/PWD to Question 1
- Add "cost per house" to "cost per ride" under Bullet 2, Question 1.
- Add bullet question under Question 1: Any new ways of strategizing for making things more cost-effective?
- Add to Question4: Does the project include new partnerships or collaborations between more than one agency or service provider and how does it reduce duplication of service or increase number of people served or enhance service quality?
- Add to Question 6: How does this project increase access or opportunity to people of color, those with language or cultural barriers and low income populations?
- Add to Question 7: Does it build on previous efforts and work towards a whole? (Generally unclear)

Funding Applications. The proposed updated funding applications have two forms. The first form provides information about the applicant's organization and they will complete this only once, regardless of how many different project applications they submit. The second form will get filled out for each project application submitted by an applicant.

6. Do you have any questions or comments on the two-form approach?

- Like it!
- Seems more organized.

****

- Like the two form approach.
- Do any of these need 900 words? Can it be captured in 500 words (or less)?
  - As concise as possible.
- Evaluation of performance of funded projects – Like that.

****

- Need to match up with ODOT.
- Good idea for 2 forms.
- Add days/hours of operation to both forms.

****

- It's good!
- Add Email and Website for organization contact info

7. The proposed applications include project goals and measurable (page 27). Is there anything the STFAC would specifically like to request in these sections or is the proposed table sufficient?

- Needs to be only for operating projects
  - Doesn't fit some applications like a computer server.
  - Different table for capital vs. operations applications?
- This info cold still be good for capital to know how many people the program serves.
- Additional metrics for capital:
  - # of vehicles.
  - # of miles.
- Should this table be provided for each component of the application (maintain, expand, innovate)?
- How do we handle existing measurables vs. projected measureables for expansion?

****

- How are riders and number of riders served?
- Equitable?
  - Geographic and demographic.
- % of E&D population covered/served?

****

- Travel training/mobility management.
  - Need to provide this information.
  - Include on application form #1, organizational.
- Include economic development
  - Always keeping them as active consumers.
  - Consider opportunities.
- Number of individuals in remote rural area.
  - Time of day.
- Add "Type of Vehicle" – lifecycle.

****

- On Pg 27, add question after Table 1.3: How would you measure your success?
- Describe fleet and type of vehicle (fleet info will help discern/measure these project goals by type of fleet).

8. Do the proposed application forms include all of the information the STFAC would like to see the applicants provide?

- Website.
- Organization contact info.
- Project contact vs. organization contact.

****

- Not answered on second form.

****

- Sensitivity training.
- Passenger safety.
  - Improvements.
  - Opportunity.
- Driver training.
- Mental Health.
- Coordination with other organizations that provide these types of drivers.
- Costs:
  - Education/training for different populations.

****

- **Form 1**:
  - **Pg 19**: change Table 3,4,5 to transportation-specific, i.e. Table 3: Transportation Service Days and Hours of Operation, Table 4 to: Annual Transportation Budget and Table 5 to: Transportation Operating Data
  - Move Table 2.1-2.3 (section 2 of Form 2) to Form 1

- **Form 2**:
    - Add at the top under Section 1: Project Overview:
        Indicate the type of funding request:
        - Maintain Existing Service
            - Operating funds for services
            - Equipment, vehicles or infrastructure investments
        - New Service or Service Expansion
            - Operating funds for services
            - Equipment, vehicles or infrastructure investments
        - New initiatives (not currently funded)
            - Operating funds for new services
            - Technology or infrastructure investments
    - Add "transportation" program to describe program and project
    - Pg 12 change #4 to say "Project Design" or "Project Description". Under this ask:
        - Who will you serve?
        - What level of service will be provided to customers?
        - Describe if volunteers are utilized to provide service and how will this occur (is the volunteer program supported with STF or other funds? Will you provide mileage reimbursement to volunteers using their owner vehicles?)
        - How will the service be marketed?
    - Pg 13, under describe need for this project, add: Attach your data or study.
    - Pg 13 under question "How do you measure cost-effectiveness and what are your measurable goals?" Add "*how many people will be served?*
    - Pg 14: Under meeting project needs for PWD, add question: How will the project improve customer satisfaction, increase ride matching and reduce wait times?
    - Pg 14: Under increasing accessibility, add:
        - Are you expanding service hours? *By what specific amount?*
        - Are you increasing the capacity of an existing service? *How?*
        - Are you addressing a service gap per the Service Guidelines and Standards listed in the Coordinated Transportation Plan? *Which ones?*
    - Pg 15: Add under equity: How does this project increase access or opportunity to people of color, *those with language or cultural barriers and low income populations?*
    - Pg 25, under customer service: Add question about how they measure customer satisfaction and eliminate last bullet (i.e. how many people would be affected)
    - Pg 27: Add number of turn downs to Table 1.3
    - Move Table 2.1-2.3 (section 2 of Form 2) to Form 1

9. What other comments do you have?

- Not answered on first form.

****

- Not answered on second form.

****

- Art funding for lights at bus stops.

****

Summarizing key points:

Was there a central issue and opportunity from your group about:

- **Funding Process**
  - Pre-evaluations before meeting #2 are good
    - Need few days (Friday-Tuesday) to submit.
  - Questions on applicants reviewing their own applications
    - Is this conflict? ½ of committee so seems necessary but is there a conflict?
  - When discussing priorities
    - Want to revisit/review needs/services gaps.

****

  - Start as early as possible.
  - At first meeting:
    - Preliminary thinking – What is ODOT thinking?
    - Have ODOT give a presentation.

****

  - Build advocacy into funding process.
  - Private funding.
  - Coordination, advance notice, transparency, reduce bureaucratic barriers, increase creative solutions.

****

- **Funding application categories**
  - Good.
  - Want them front and center at top of application with description.

****

  - Like the 3 major categories.
  - Would like to see "Enhancement" added to service expansion.
    - This could include technology/ITS, which could also be added to new initiatives.

****

  - Zero-emission vehicles.
  - Rural services.
  - Right-sized vehicles.

****

- **Evaluation Criteria**

- Majority agreed ranking would be better, encourage individual scoring to develop individual ranking.
- Ranking in categories seemed interesting
  - Interested in seeing straw proposal using categories and pre-agreed priorities.
- Make sure we are focusing on people served.
- Make sure adequately address capital.

****

- The criteria should follow ODOT's criteria.
- Additional criteria to address how project meets the STFAC guiding principles/goals.

****

- Have objective guidelines to evaluate.
  - To be consistently applied.
  - Cultural/language.
  - Include ODOT's criteria.
- Specifics.

****

- **Funding Applications**
  - Like 2 worksheet format.
  - Measures on p.22 may need to be more tailored for capital, consider separate.
  - How do we answer for program with expansion component?

****

- Like Form 1.
- Criteria – ODOT.
- One-pager for STFAC.
- Keep scores.

****

- Include mobility management/training – can turn into projects.
- Advocacy.

****

Other Comments?

- Include website and project contact rather than organization contact on applications.

Attachment M Proposed Funding Process

INTERIM STATE GUIDANCE COMBINING STF AND STIF FUNDING PROGRAMS

In 2019, the Oregon State Legislature directed the transfer of $10.1 million from the STIF to STF. The transfer is designed to distribute funds to transit entities to support public transportation services benefiting seniors and persons with disabilities.

The Oregon Department of Transportation (ODOT) 2019-2021 Legislatively Adopted Budget (House Bill 5039) directed ODOT to merge STF and STIF into one public transit program.

In November, the Oregon Transportation Commission endorsed the ODOT Rail and Public Transit Division's STF/STIF Consolidation Report and Plan. ODOT updated the Formula Allocation Comparison in December of 2019 to include the most recent STIF revenue forecast.

It is expected that ODOT and its partners will bring forward the recommendation for statutory change to the 2020 legislative session. The Oregon Legislature may consider implementing the recommended concepts in late 2020. As the Qualified Entity (QE) of both the STF and STIF funds within the three county area, TriMet will likely amend the 2020 CTP and other plans to administer funding programs consistent with new statutory guidelines emanating from the 2020 legislative session.

PROPOSED FUNDING PROCESS

1. **STFAC Meeting #1** - STFAC meets to discuss upcoming funding opportunities and priorities and discuss the following:
    a. Which funding sources will be available and approximately how much will be available?
    b. What projects are eligible under each funding opportunity?
    c. What are the STFAC's priorities for each of the funding opportunities?
    d. How well are existing programs meeting the STFAC's goals? *(This will inform applicants on how to improve their applications or project scope before drafting an application.)*

2. **TriMet Staff Actions**
    a. Inform applicants of upcoming funding opportunities and the STFAC's priorities for each fund this funding cycle.
    b. Solicit applications (Impress on ODOT the need for increased time for the project solicitation process and STFAC review evaluation and deliberation).
    c. Review applications for completeness of information and ask applicants for any necessary application updates.
    d. Distribute complete applications to STFAC for review and preliminary evaluation.
3. **STFAC Action** – STFAC members review and complete preliminary evaluation of applications.
4. **STFAC Meeting #2** - STFAC meeting for applicants to present their applications and for the STFAC to ask questions. STFAC members complete their application evaluations and submit them to TriMet staff at the end of the meeting.
5. **TriMet Staff Action -** TriMet summarizes STFAC evaluations and creates a funding straw proposal for discussion (includes ranking by application type and combined).
6. **STFAC Meeting #3** - STFAC meets to discuss the funding straw proposal and make a recommendation to the TriMet Board.
7. **TriMet Staff Action** – Upon TriMet Board approval, TriMet staff submits applications for funding to the State and Federal agencies. In agreement with ODOT and the FTA, TriMet administers pass-through and sub-recipient agreements for grant funds to service providers in the region.
8. **Between funding cycles**:

a. **TriMet Staff Action**
    i. TriMet staff provides regular updates on the status of future funding, including grants beyond STF/STIF and §5310 – what's happening at the federal and state level?
    ii. TriMet staff provides a history of the previous funding cycle and review of previous recipients of funding.
b. **Transit Providers** provide a status report on how previously funded programs are meeting specified goals and if not meeting these goals, describe why.
c. **STFAC** or a subcommittee meets to discuss opportunities to enhance effectiveness of the funded programs in the next funding cycle.

PROPOSED FUNDING APPLICATION CATEGORIES

Applications for STF/STIF and §5310 funding can generally be placed into the following general categories:

- **Maintain Existing Service**
    a. Capital
        i. Dispatch or computer system
        ii. Replacement vehicles
        iii. Vehicle Preventative Maintenance
        iv. Capital Equipment Replacement
    b. Operations
        i. Operational funding to maintain existing transit service levels
        ii. Operational funding to maintain existing coordination service
        iii. Operational funding to maintain existing mobility management service

- **Service Expansion**
    a. Capital
        i. Dispatch or computer system
        ii. Purchase additional vehicles or right-sizing vehicles
        iii. New equipment or Stop/Transit Center amenities
    b. Operations

i. Increase amount of service - this provides more transportation service than currently provided, such as adding weekend service or having more frequent service.
ii. Restore service area – this restores transit service to an area that has received service in the past.
iii. New service area – this expands transit service to an area that has never received service before

- **New initiatives** – this category would include other new efforts which could include projects such as introducing new technologies and new ways to coordinate or collaborate on services.
    a. New technology project
    b. New ways to coordinate or collaborate on services
    c. New type of Mobility Management
    d. Accessibility Improvement (e.g. sidewalks, curb ramps, crossings, etc.)

PROPOSED APPLICATION REVIEW CRITERIA

STFAC members may provide project rankings or evaluation scores for each project. An evaluation scoring process is described below to assist STFAC members with developing their rankings if that is their preferred approach. Either ranking or scores will useful to TriMet in compiling the evaluations.

The evaluation criteria and questions provided are intended to help articulate how a project addresses the priorities identified during the CTP Update process. These evaluation criteria will be addressed in the application forms completed by the applications and will be useful to the STFAC members responding during their evaluations.

Review each project and evaluate each project on the degree to which they implement the Priorities of the CTP. Rate each project on a scale of 1 to 5 point value for each criterion to reflect how well the proposed project satisfies each of the four ODOT public transportation goals.

Greatest 5 4 3 2 1 Least

1. How cost-effective is the application?
    a. Is it leveraging other funds? What %?
    b. What is the cost per ride or potential maintenance savings?

   c. Will it improve the cost-effectiveness of all service (such as through improved dispatch, ride matching, technology, etc.)?

2. Does the project provide accessibility that is otherwise not available for seniors and persons with disabilities?
   a. What percentage of the rides will be for seniors and persons with disabilities?
   b. Is this the only available service for seniors and persons with disabilities?
   c. Does it address the needs of an underserved population?
   d. Does it address a service gap per the Service Guidelines and Standards?

3. Does the project increase accessibility of existing services?
   a. Does it expand the service hours?
   b. Does it increase the capacity of an existing service?
   c. Does it improve physical access to transit (more accessible vehicles, sidewalks, transit stop/station amenities)?
   d. Does it address a service gap per the Service Guidelines and Standards?

4. Does the application include a new or innovative approach to coordinate and collaborate?
   a. Does the project implement new technology to enhance service or improve cost-effectiveness?
   b. Does the project include new partnerships or collaboration between more than one agency or service provider?

5. Would the project improve customer service?
   a. Does the project improve ease of scheduling, or on-time performance, or communication between rider and driver?
   b. Does the project improve the customer on-board experience?
   c. Does the project improve their wait time at a stop or station?
   d. How many people would be affected?

6. Does the project improve equity?
    a. How is the project geographical/demographically/financial equitable?
    b. How does this project increase access or opportunity to people of color and low income populations?
    c. Does it address the needs of an underserved population?

7. Is the project sustainable?
    a. Does it complete a one-time gap or need funds every year?
    b. Does it build on previous efforts and work towards a whole?
    c. Would “seed money” create a long-term funding source?
    d. Does the project leverage other infrastructure

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX H

2023 Regional Transportation Plan

Financial strategy documentation

July 10, 2023

oregonmetro.gov/rtp

Metro respects civil rights

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

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

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

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

Project website: **oregonmetro.gov/rtp**

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

June 30, 2023

Prepared for Metro

by DKS Associates

DKS

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Exhibit D: ODOT Metro Area Revenue Estimates and Forecasted Non-Capital Expenditures, 2024-2045

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PURPOSE AND BACKGROUND

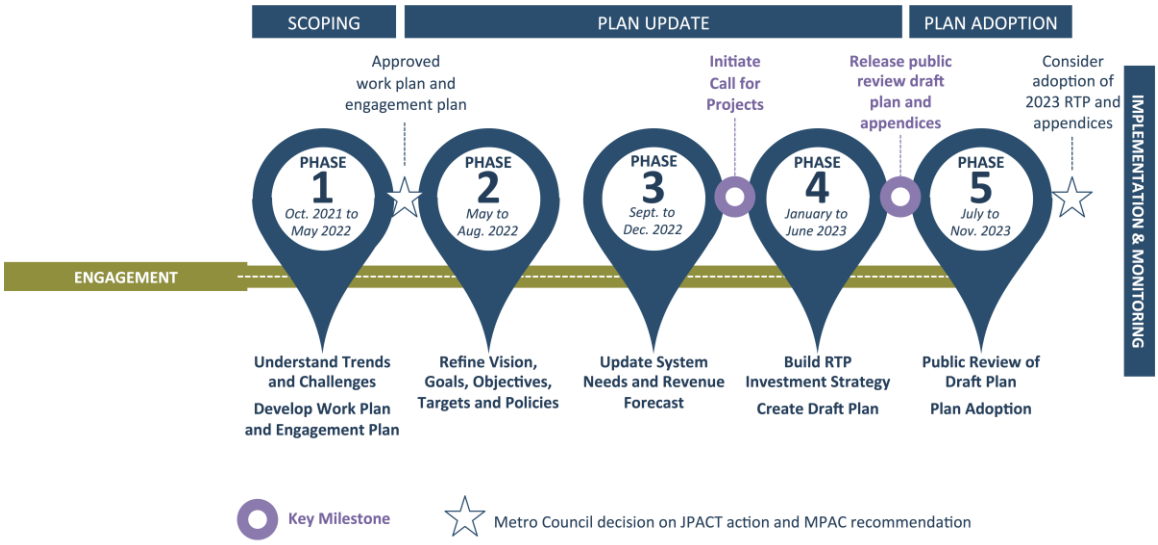
Regional Transportation Plan (RTP)

An RTP is a federally- and state-required long-range plan that must address the region's multi-modal transportation system for the next 20 years and beyond. As the federally recognized metropolitan planning organization (MPO), Metro is responsible for leading and coordinating the effort to update the RTP every five years. This update to the plan is for the fiscal years 2023 to 2045.

Find out more about the 2023 Regional Transportation Plan Update: https://www.oregonmetro.gov/public-projects/2023-regional-transportation-plan

The RTP must meet federal and state fiscal constraint requirements. This appendix is part of the larger effort to document forecasted revenues and proposed transportation projects and programs identified in the RTP. The timeline for the RTP update is shown in Figure 1.

Figure 1: 2023 RTP Update Timeline



This appendix summarizes cooperative process used to develop the RTP financial forecast and the initial revenue estimates provided by local jurisdictions, the Confederated Tribes of Grand Ronde, and transportation agencies serving the greater Portland area during Phases 3 and 4 of the RTP update. The revenue estimates in this document are preliminary and will be finalized as part of the RTP adoption. All revenues that are applied to regionally significant transportation infrastructure by cities, counties, ODOT, the Port of Portland, tribes, transit agencies, and parks districts are included.

The complete list of jurisdictions is presented in Table 1.

Table 1. Agencies and Tribal Government within the Metro Region

Clackamas County	
Gladstone	Happy Valley
Johnson City	Lake Oswego [a]
Milwaukie [a]	Oregon City
Rivergrove [a]	West Linn
Wilsonville [a]	North Clackamas Parks and Recreation District
Multnomah County	
Fairview	Gresham
Maywood Park	Portland [a]
Troutdale	Wood Village
Washington County	
Beaverton	Cornelius
Durham	Forest Grove
Hillsboro	King City
Sherwood	Tigard
Tualatin	Tualatin Hills Park and Recreation District
Transit Agencies	
TriMet	SMART
Regional Agencies	
Port of Portland	Metro
State Agency and Tribal Government	
ODOT	The Confederated Tribes of Grand Ronde

[a] This city may have portions in other counties. However, for the purposes of this RTP, it is included as part of the county in which the city predominantly lies.

This appendix discusses the process for collecting and estimating the revenue that is reasonably expected to be available for operations and maintenance activities and capital projects and programs on the regional transportation system in the greater Portland region.

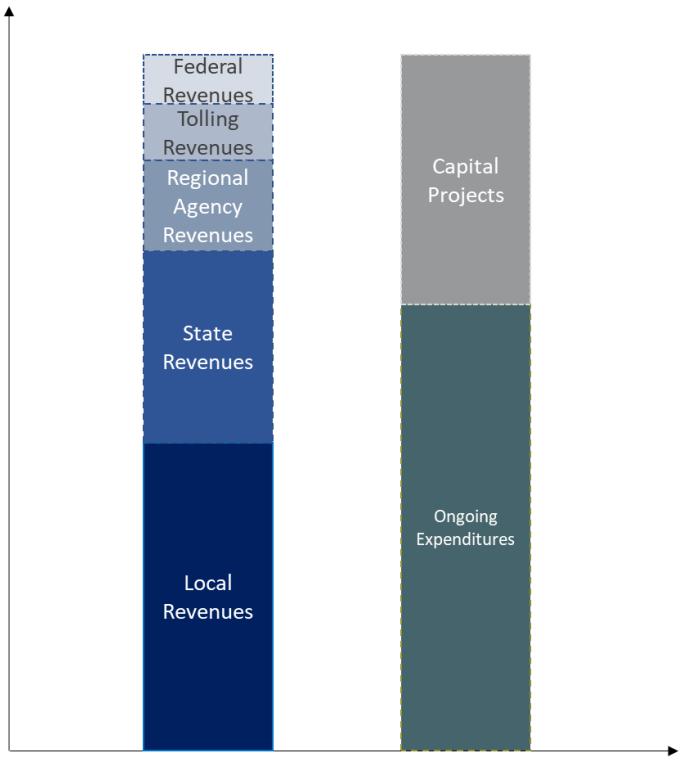
These estimates include revenues collected or received by cities, counties, local parks districts, ODOT, the Confederated Tribes of Grand Ronde, Metro, TriMet, the South Metro Area Regional Transit (SMART) district, and the Port of Portland. This document is designed to supplement Chapter 5 of the RTP. Additional details on revenue and spending may be found there.

These estimates are preliminary and will be finalized as part of the RTP adoption.

COOPERATIVE PROCESS AND METHODOLOGY OVERVIEW

Development of the 2023 RTP revenue forecast occurred in cooperation and consultation with the Oregon Department of Transportation (ODOT) senior economist, ODOT Region 1 and Urban Mobility Office staff, ODOT's Long Range Funding Assumptions Working Group and two Metro-convened finance workshops of city, county, ODOT, TriMet, SMART and the Port of Portland staff. Metro also worked directly with the Confederated Tribes of Grand Ronde, individual cities, three counties, ODOT, TriMet, SMART and the Port of Portland. County leads also helped to coordinate identification of local revenue sources that meet the federal "reasonably likely to be available" guidance and growth methodologies.

Figure 2: Illustration of the RTP Financial Estimation Process



Note that the bars in Figure 2 are not to scale and are for illustrative purposes only.

The process detailed in this document describes the estimation of reasonably available funds and potential new funding mechanisms to assume in the 2023 RTP. The revenues collected by local, state, regional agencies, tolling projects, and federal transportation agencies, as represented by the left bar in **Figure 2**, can be used to fund capital infrastructure projects and other ongoing expenditures, such as system operations and maintenance (O&M) activities. For example, in cities and counties, roadway pavement maintenance is a significant portion of their ongoing system expenditures. During the RTP update process, the share of funds applied to ongoing operations and maintenance (O&M)

expenditures is deducted from the total revenue to reveal the amount that is assumed to be available to be spent on future capital infrastructure projects and programs in the region. The transportation agencies then compiled a list of priority capital projects that can be funded with that remaining amount.

The next sections describe the methodology used to estimate revenues and expenditures to identify funds available for capital projects.

Revenue Estimation Methodology

The Federal Highway Administration (FHWA) requires that the RTP use "reasonably available" funds to forecast that regional transportation improvements are prudent and reasonably financed. Reasonably available funds are forecast to the best knowledge of staff and may not be indicative of actual funding levels in a future year. Values reflect current trends and are used to forecast "likely" project timelines for the region, not, for example, commitment that a project will be built in 20 years' time. Reasonably available fund estimates are therefore not like budget estimates and are likely to reflect a higher value than local budget documents.

Federal law requires that the amounts be reported in annualized totals, reflecting "Year of Expenditure" dollars. All revenue estimates and project costs in the RTP are in year of expenditure dollars. Federal regulations also direct the revenue forecast be developed cooperatively by the MPO with agencies involved in the regional transportation planning process.

ODOT State Transportation Revenue Forecast (2023)

This cooperative process began at the state level, led by the Oregon Department of Transportation (ODOT). ODOT conducts a statewide long-range revenue forecast, the ODOT State Transportation Revenue Forecast (provided as **Exhibit A**), for expected revenues through the fiscal year 2029. This forecast provided a basis for forecasting all federal and state funding for transportation purposes, including revenues collected at the state level but distributed by formula to cities and counties, such as state gas tax revenues.

The process then tailored consideration of these revenues for how they would be forecast to funding programs and projects at the metropolitan planning area level through fiscal year 2050. This forecast documented agreed upon methodologies and the federal and state transportation revenues to be expected for the state to inform the long-range planning efforts led by the MPOs. The forecast was the starting point for defining federal and state revenues expected withing the Metro MPO region over the planning period of 2024 through 2045. The statewide forecast report is provided as **Exhibit B**.

City, County and Park District Worksheets

All cities, counties, and local parks districts that generate and expend transportation revenues were asked to update their 2018 RTP local revenue worksheets. An example of a worksheet from a hypothetical jurisdiction – City of Pleasantville, is shown as Table 2. A summary of local agency revenues by County is provided as **Exhibit C**.

Table 2. Example City Revenue Worksheet

City of Pleasantville Local Revenues							
FYE	**Transportation Utility Fee**	**Growth Rate**	**Service Development Charge**	**Growth Rate**	**Local Fund Transfer**	**Growth Rate**	**Total**
2023	$2,580,000.00	2.20%	$1,368,000.00	3%	$150,000.00	0%	$4,098,000.00
2024	$2,636,760.00	2.20%	$1,409,040.00	3%	$150,000.00	0%	$4,195,800.00
2025	$2,694,768.72	2.20%	$1,451,311.20	3%	$150,000.00	0%	$4,296,079.92
2026	$2,754,053.63	2.20%	$1,494,850.54	3%	$150,000.00	0%	$4,398,904.17
2027	$2,814,642.81	2.20%	$1,539,696.05	3%	$150,000.00	0%	$4,504,338.86
2028	$2,876,564.95	2.20%	$1,585,886.93	3%	$150,000.00	0%	$4,612,451.89
2029	$2,939,849.38	2.20%	$1,633,463.54	3%	$150,000.00	0%	$4,723,312.92
2030	$3,004,526.07	2.20%	$1,682,467.45	3%	$150,000.00	0%	$4,836,993.52
2031	$3,070,625.64	2.20%	$1,732,941.47	2.50%		-100%	$4,803,567.11
2032	$3,138,179.41	2.20%	$1,776,265.01	2.50%			$4,914,444.41
2033	$3,207,219.35	2.20%	$1,820,671.63	2.50%			$5,027,890.99
2034	$3,277,778.18	2.20%	$1,866,188.42	2.50%			$5,143,966.60
2035	$3,349,889.30	2.20%	$1,912,843.13	2.50%			$5,262,732.43
2036	$3,423,586.86	2.20%	$1,960,664.21	2.50%			$5,384,251.08
2037	$3,498,905.77	2.20%	$2,009,680.82	2.50%			$5,508,586.59
2038	$3,575,881.70	2.20%	$2,059,922.84	2.50%			$5,635,804.54
2039	$3,654,551.10	2.20%	$2,111,420.91	2.50%			$5,765,972.01
2040	$3,734,951.22	2.20%	$2,164,206.43	2.50%			$5,899,157.66
2041	$3,817,120.15	2.20%	$2,218,311.59	2%			$6,035,431.74
2042	$3,901,096.79	2.20%	$2,262,677.83	2%			$6,163,774.62
2043	$3,986,920.92	2.20%	$2,307,931.38	2%			$6,294,852.31
2044	$4,074,633.18	2.20%	$2,354,090.01	2%			$6,428,723.19
2045	$4,164,275.11	2.20%	$2,401,171.81	2%			$6,565,446.92
Total: 2024-2030			$35,665,881.28	**Total: 2031-2045**			$84,834,602.21
				Total: 2024-2045			**$120,500,483.49**

Growth rates were generally left to the local agency to determine; cities usually opted to extrapolate from historic rates of growth. Cities and counties were allowed to change the growth rate if future conditions were expected to change, input negative growth rates, or to terminate a revenue source if for some reason it was to sunset.

These tables were used to compile countywide summaries of revenues expected to be available from each jurisdiction. Some preliminary data is included at the end of the Revenues section.

Every effort has been made to separate fund sources out by type. However, some jurisdictions have more complex fund sources and agreements, and complete breakdowns by source were not compiled in time for this document.

Federal Revenue Sources

The current federal authorization is the Infrastructure Investment and Jobs Act (IIJA), also commonly called the Bipartisan Infrastructure Law (BIL). In general, federal revenue sources come from the Department of Transportation (USDOT), including Federal Highways Administration (FHWA) programs and Federal Transit Administration (FTA) funds. However, any federal funds or grants, including congressionally directed spending or emergency funds (e.g. Federal Emergency Management Agency (FEMA)) that go towards improving the regional transportation network may be included in the spending totals. Metro participated in a statewide revenue forecasting effort led by the Oregon DOT that included MPOs and transit agencies from across the state described above and as documented in **Exhibit B**.

The expected beneficiaries of these funds are all agency types. A non-exhaustive table showing roles of agencies and examples of funding from the federal government are included in the tables that follow.

How do agencies use Federal funds?

Table 3. Federal funds and how they are used

Agency Type	Role and/or Fund Examples
ODOT	ODOT coordinates all federal funding statewide in Oregon, including disbursements to local agencies and projects on federal lands. ODOT receives funding from FHWA for road construction, congestion mitigation and air quality improvement, active transportation projects, and trails. ODOT prepares the Statewide Transportation Improvement Plan (STIP), which includes statements on how federal funds are used throughout Oregon.
Regional Agencies	Metro is required to record how federal funds are used in the region through the Metropolitan Transportation Improvement Program (MTIP), coordinates disbursement of regional flexible funds through RFFA, and receives federal grants for regional planning and trails efforts. The Port of Portland receives Department of Transportation funding for port and airport projects
Transit Agencies	Transit agencies receive grant funding from the FTA.
Counties, Parks Districts, and Cities	Counties, parks districts, and cities receive funds from FHWA grants and emergency planning programs that can be used on the regionally significant transportation system.

What federal funds does the Metro region receive to improve roads and bridges?

Unless otherwise stated, these funds are administered by ODOT, and all local agencies (counties, cities, special districts), regional agencies, ODOT programs, and projects on Federal lands in the Metro region are eligible. This table does not include funds specific to the Port of Portland, SMART or TriMet. Specific revenue estimates can be found in **Exhibit C.**

Table 4. Federal funds the region receives to invest in transportation

Fund Name	Description
Congestion Mitigation Air Quality (CMAQ) Improvement Funds	Allocated to ODOT, which portions out an annual apportionment to Metro. These funds are used for the Metropolitan Transportation Improvement Program (MTIP). CMAQ funds must be used on programs that reduce congestion and improve air quality to meet national standards for ozone, carbon monoxide, or particulate matter. Forecasts for these funds are included as part of the Statewide forecast (Exhibit A).
Surface Transportation Block Grant (STBG) Program (includes Transportation Alternatives (TA) set-aside)	STBG funds may be used to maintain or improve the performance of any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. The STBGP supplants programs from prior authorizations, including FAST Act Transportation Alternatives and the Surface Transportation Program of MAP-21. ODOT administers this funding to Metro, and to the rural portions of Clackamas, Multnomah, and Washington Counties.
Highway Safety Improvement Program (HSIP)	The HSIP program is intended to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.
National Highway Freight Program	The National Highway Freight Program promotes projects that improve the efficiency of freight on the national highway freight network. These funds can also be used to fund supporting infrastructure.
National Highway Performance Program (NHPP)	The NHPP supports the construction of new facilities and improvement of existing facilities on the National Highway system to support projects that meet the goals of Oregon's highway performance plan. NHPP funds, as of the IIJA, can also be used to provide resiliency against sea-level rise, extreme climate events, and natural disasters.
Metropolitan Planning Program	These funds support regional planning efforts in metropolitan areas. As the area MPO, Metro is the primary user of these funds, and uses it mostly for the regional Unified Planning Work Program (UPWP).
Carbon Reduction Program	These funds are used for projects that reduce transportation CO_2 emissions.
State Planning and Research	Every State DOT must develop a State Transportation Research program. Research may identify actions to improve the transportation system,

Fund Name	Description
	benefitting travelers in the greater Portland region.
Bridge Program	Regionally, several bridges qualify for the bridge investment program. The Interstate Bridge Replacement Program has been awarded funds for the project, and Multnomah County hopes to win funds for the Burnside Bridge replacement.
National Electric Vehicle Infrastructure (NEVI)	NEVI funds allow states to strategically deploy electric vehicle charging stations, per the IIJA. In the Metro region, I-5 is already compliant with national alternative fuel network provisions. I-205 is in the immediate statewide infrastructure plan.
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)	The IIJA sees the creation of a new program to increase the resilience of the Nation's infrastructure. PROTECT funds can be used to fund planning activities, resilience improvements, community resilience, evacuation route improvements, and at-risk coastal infrastructure.
Miscellaneous Grants	Based on historical rates of winning grants from prior authorizations and assuming that programming continues under the current Infrastructure, Investment, and Jobs Act (IIJA), this RTP assumes some level of money under miscellaneous grant programs. Examples include competitive funds under the Congestion Relief, Resilient Operations (PROTECT program), electric infrastructure, or Reconnecting Communities grant and discretionary funds.

What federal funds does the region receive for transit and port infrastructure?

Unless otherwise stated, SMART and TriMet are the primary recipients of Federal Transit Administration (FTA) funds in the region.

Table 5. Federal funds the region receives for transit and port infrastructure

Fund Name	Description
Reduction of Truck Emissions at Port Facilities	In the Metro region, the public operator of seaport and airport infrastructure, as well as the public manager of port-supporting rail infrastructure, is the Port of Portland. While funds for the National Highway Freight Program can be used on any Federal-aid highway, this funding is specific to Port facilities.
Railway-Highway Crossings Program	This program funds improvements to safety at public railway-highway grade crossings, including protective devices and grade separation. These are usually coordinated between Class I railroads, the Port of Portland, Metro, and the affected local agency.
Maritime Administration (MARAD) Port Infrastructure Development Program (PIDP)	The PIDP is discretionary funding that can be used to improve port and related infrastructure to ensure that the nation's ports can meet the nation's freight transportation needs and can meet anticipated growth in freight volumes.
FTA Section 5303 Metropolitan and non-Metropolitan Statewide Planning Formula Funds	Similar to the FHWA's Metropolitan and non-Metropolitan planning grants, these funds are allocated to ODOT, which portions out the funds statewide. Metro uses these funds for transit and regional planning purposes.

Fund Name	Description
FTA Section 5307 Urbanized Area Formula Grant	Provides funding to public transit systems in Urbanized Areas (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. As the transit agencies in the Metro region, SMART and TriMet are the users of these funds.
FTA Section 5337 State of Good Repair Grants	The State of Good Repair Grants Program (49 U.S.C. 5337) provides capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a state of good repair. Additionally, SGR grants are eligible for developing and implementing Transit Asset Management plans.
FTA Section 5339 Grants for Buses and Bus Facilities Formula Program	Provides funding to states and transit agencies through a statutory formula to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. In addition to the formula allocation, this program includes two discretionary components: The Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program.
FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities	This program (49 U.S.C. 5310) provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs
Other funding	Certain projects are funded through discretionary funds, such as the FTA 5309 New Starts/Small Starts grants, or STBG Flex funds allowed under Section 5310. These funds are forecast based on historical levels.

State Revenue Sources to Transit Agencies, Regional Agencies, Cities, Counties and Park Districts

Any pass-through funds mandated by state statute, most commonly gas tax and vehicle registration fees, that apply statewide are included as state funds and included in a local agency revenue forecast sheet. Note, however, that local jurisdictions are free to charge their own local gas tax and vehicle registration fee.

The State Safe Routes to Schools program and Multimodal Active Transportation discretionary ODOT funding programs are expected to generate additional revenue for local agencies in the region. These funds are not listed in the individual local agency forecast but are included as a part of the "Federal and State Discretionary" revenue forecast that are sub-allocated to the sub-regions of the Metro area and are added to the overall cost target for each sub-region.

Revenues from the Regional Mobility Pricing Project or other tolling projects are not included for distribution to local projects at this time. As noted in the section below, however, active conversations on tolling/congestion pricing policy and operations are continuing at the state, regional and local levels. Therefore, final adjustments to the

revenue forecast from these sources may be made through the plan's public comment and adoption phase to reflect the most current policy direction and financial knowledge.

Table 6. State funds agencies and jurisdictions in the region receive

Agency Type	Role and/or Fund Examples
Regional Agencies	Metro supports local governments with policy and communications assistance in pursuing and implementing grants, receives grants to develop plans, and receives and provides grants for improvements to the regional trail system. The Port of Portland receives ODOT support and funding for access to and at Port facilities.
Transit Agencies	Transit agencies receive statewide funding to operate service and defray capital costs
Cities, Counties and Parks Districts	Counties and cities receive formula pass-through funds from the State fuel tax and vehicle registration fees and may also receive discretionary grants for specific transportation planning or projects.

ODOT Distributed State and Federal Funds and Tolling Revenues

This section goes into additional detail on the funds distributed by ODOT to ODOT Region 1 projects and programs. This section includes funds generated by the state and does not include the core highways program funding and FTA funds, which have been detailed as part of the Federal funding. Many federal funds are administered at the state level by ODOT.

Table 7. State funds distributed in the region

Fund	Description
HB 2017	Passed by the Oregon legislature during the previous RTP update cycle, HB 2017 includes bonds for the Rose Quarter improvements, highway safety, projects along I-205, Safe Routes to School, highway maintenance, and other projects. HB 2017 also established new transportation funding mechanisms, including a transit payroll tax, bicycle excise tax, and vehicle privilege tax. HB 2017 also included an increase to the gas tax. These are passed, by formula, to local agencies in the Metro region, and are largely reported as "State Pass-through" funds.
State Gas Tax and Vehicle Registration Fees	The State of Oregon collects fuel duties on gasoline and diesel, and a vehicle registration fee on every vehicle registered in the State. ODOT retains a little more than half of these funds for ODOT needs. The other portion of these funds are returned to the jurisdictions where the fuel is purchased, or the vehicle was registered using a formula-based allocation. These are generally reported as "State Pass-through" funds.
2009 Jobs and Transportation Act (JTA) Funds	The issuance of JTA bonds was completed in 2017. However, some projects remain outstanding. The closeout of the JTA is anticipated before the adoption of the next RTP.

Fund	Description
Connect Oregon	Connect Oregon, established in 2005, was the States' comprehensive multimodal funding program for non-roadway projects. However, HB 2017 and HB 2592 have changed the program to focus on aviation, marine, and rail transportation projects. Transit is now funded by the Statewide Transit Tax and bicycle/pedestrian infrastructure has been shifted to the multimodal statewide investments management fund through STIP programming.

ODOT allocates the funds it retains for ODOT purposes using five funding allocation categories.[1] These are:

- **Fix-it** - provides funding for projects that maintain or fix the state highway system. As part of the development process, ODOT will seek direction from the Oregon Transportation Commission to continue with the current categories or modify program categories.
- **Enhance** – funds projects that expand or enhance the state owned and operated transportation system.
- **Safety** – funds projects that are focused on reducing fatal and serious injury crashes on Oregon's roads.
- **Public and Active Transportation** (formerly Non-Highway) - funds bicycle, pedestrian, public transportation and transportation options projects and programs.
- **Other Functions** - provides funding for workforce development, planning and data collection and administrative programs using federal resources.

ODOT is also administering three interlinked tolling projects:

- I-5 Interstate Bridge Replacement (IBR) Program
- Regional Mobility Pricing Project
- I-205/Abernethy Bridge Replacement Project

The tolling revenues have remained difficult to fully forecast. Metro staff developed a preliminary forecast in consultation with ODOT staff that assumes tolling/congestion pricing is anticipated to begin during the early years of the 2023 RTP plan period. The

[1] ODOT programming materials also include a "Local Programs" category, listing the federal and state funds distributed by formulas to local agencies, as ODOT is the fund administering agency on behalf of USDOT for federal funds in Oregon. These funds are described in the federal and state funds to cities, counties, regional agencies and transit sections of this report.

initial forecast of revenues from these project sources is included in the public review draft RTP.

In May 2023, Governor Kotek directed that tolling not be implemented before January 2026. Active conversations on tolling/congestion pricing policy and operations are continuing at the state, regional and local levels. Therefore, final adjustments to the revenue forecast from these sources may be made through the plan's public comment and adoption phase to reflect the most current policy direction and financial knowledge.

All federal and state revenue sources forecast to be allocated to ODOT led projects are summarized in **Exhibit D**.

Funding Sources for the Confederated Tribes of Grand Ronde

The Confederated Tribes of Grand Ronde Community of Oregon is a federally recognized Tribe. The Tribe, representing over 30 Tribes and bands from western Oregon, northern California, and southwest Washington.[2]

The Tribe has made concerted efforts to reestablish its deep connection with tumwata village area in the Oregon City. The Tribe is working with local jurisdictions, primarily Oregon City, to contribute to regional transportation projects with Tribal Transportation Program Funds, Tribal Federal Discretionary Grants, Indian Health Services funds, and Confederated Tribes of Grand Ronde revenues.

Funding Sources for Regional Agencies

The Port of Portland operates marine port and airport facilities across Clackamas, Multnomah, and Washington Counties. While the Port of Portland enters memoranda of understanding (MOUs) and tax agreements with the Counties, it is largely a self-contained enterprise. However, roads leading to and from Port of Portland facilities, as well as certain passenger and freight terminal upgrades are considered regionally significant projects and are included in the RTP.

Beyond self-generated funds from its enterprise activities, the Port also benefits from FHWA emissions and MARAD port improvement projects and statewide Connect Oregon funding. Note that while regional airports do receive Federal Aviation Administration (FAA) funding for site improvements such as greener heating in passenger terminals or improved runway lights, these are not listed in the RTP as part of the regionally significant road and freight system.

Metro's regionally significant transportation projects are generally limited to supporting regional planning efforts (such as this RTP), and regional active transportation

[2] https://www.grandronde.org/history-culture/history/

infrastructure. Metro is supporting some regional trail projects, which are included in this RTP. Metro's parks and nature bonds also generate a local share component which may be used on regionally significant trails.

Funding flows from these regional agencies to the regionally significant transportation system occurs on a project-by-project basis.

Funding Sources for Cities, Counties, and Parks Districts

The following funding sources are common sources of transportation system revenues generated by local agencies in the greater Portland region. These funds all contribute either to capital improvements or maintaining and operating the regional transportation system. Other funds, including general fund transfers, property taxes, or investment funds, may be committed in part to transportation, but are not generally used primarily for transportation purposes.

Franchise Fees

Franchise fees, utility fees, or right-of-way fees are charged to entities, such as companies or the city themselves, to use the city's streets, roads, or infrastructure. While not all franchise fees are spent on transportation infrastructure, cities generally do fund road projects using these fees.

Local Gas Tax

Oregon allows local governments to assess a gas tax for gasoline sold within their boundaries. These revenues are required to be spent on roadway infrastructure.

Miscellaneous Fee Revenues

Cities occasionally have some smaller funds dedicated to specific parts of their roadway network or take on specific, revenue producing tasks. These can produce a small but steady revenue stream that can be used on roadway projects.

System Development Charges (SDC)

SDCs are one-time fees paid as part of the development process. These fees help jurisdictions pay for improvements to the roadway network that offset traffic growth from new development. These charges may apply to an entire city, or a sub-area of a city.

Transportation Development Tax (TDT)

Washington County jurisdictions elected to adopt a transportation development tax in addition to local system development charges. This tax, assessed on development and redevelopment within Washington County, pays for multimodal transportation improvements in the jurisdiction where the project is located.

Vehicle Registration Fees (VRF)

Counties in the Metro region assess vehicle registration fees in addition to what the State charges. These by law must be paying for certain regional transportation improvements.

Cost and Expenditure

Several jurisdictions provided internal estimates on the operations and maintenance (O&M) (sometimes referred to operations, maintenance, and paving, or OM&P) costs. However, for many jurisdictions, these were estimated using the local road surveys compiled by ODOT. The reports can be found at this link, titled Local Road and Street Finance Report from each year.

	2. Operations and Maintenance		
		A.2.a:	General maintenance of condition
		A.2.b:	Safety and traffic maintenance
		A.2.c:	Snow and ice removal
		A.2.d:	Extraordinary maintenance (not including Declared Emergency Events)
		A.2.e:	Federally declared emergency events
	3.	A.3:	Administration and General Engineering
		Costs shown here should include, but not be limited to:	
		General supervision & administration, all clerical & accounting costs, administrative fees paid to agency general funds, long range planning costs, permit issuing costs(permit acquisition should be included in construction), operations and maintenance engineering, highway planning, traffic studies, and research activities	
	4.	A.4:	Match Payments for Local Agency Projects
B.	DEBT SERVICE ON LOCAL OBLIGATIONS		
	1. Bonds		
		B.1.a:	Interest (including paying fees)
		B.1.b:	Redemption (Must equal item III, C.1)
	2. Notes		
		B.2.a:	Interest (including paying fees)
		B.2.b:	Redemption (Must equal item III, C.2)
C.	1. PAYMENTS TO OTHER JURISDICTIONS FOR WORK ON THEIR ROADS/STREETS		
		C.1.a:	To counties
		C.1.b:	To cities
		C.1.c:	To other local agencies
		C.1.d:	To state for state highway projects

The figure above is an extract from the local road survey. A default growth factor was applied to the average of recent years' O&M costs to project the annual cost of O&M to 2045. The default growth factor, 3.3 percent, was the long-term economic trend in the growth of transportation costs in the State.

In development of the financially constrained revenue forecast, it is assumed that funding not used for O&M is available for capital projects.

Funding Sources for Transit Agencies

Transit agencies provided similar workbooks as the local and county agencies. However, transit agencies receive their federal dollars primarily from the FTA instead of the FHWA.

Connect Oregon funds can no longer be used for transit projects with the creation of the dedicated HB 2017 transit payroll tax. Transit funding in the region comes from three dedicated sources.

Payroll Taxes and STIF Revenues

Payroll taxes assessed for employers and freelancers in the region where each transit system operates. This includes the additional tax from the Statewide Transportation Improvement Fund (STIF) under HB 2017.

Passenger Fares

SMART and TriMet collect fares that are used to fund service.

Other Revenues

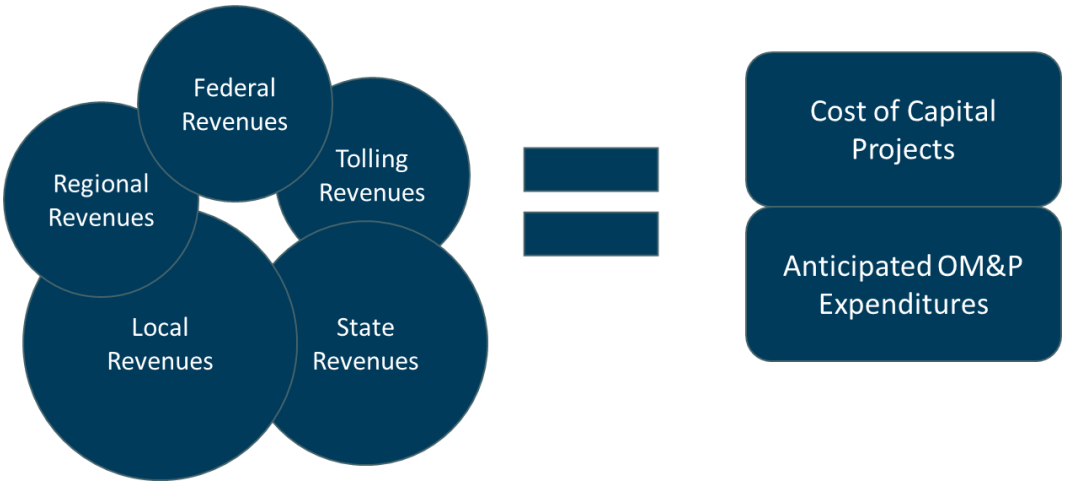
TriMet also has some smaller local revenue programs that raise some funds for the system. Other revenues may also include interest gains from investments.

Special Transportation Fund (STF)

The Special Transportation Fund (STF), funded through cigarette taxes and ODOT revenues, provides a flexible, coordinated, reliable and continuing source of revenue in support of transportation services for people who are senior and people with disabilities of any age. Transit agencies and tribal governments are eligible for STF funds.

REGIONAL REVENUE PICTURE

The funds and fund types listed above, as well as ongoing expenditures, create the cost targets for each jurisdiction. For most jurisdictions, revenues are a mix of federal, state, regional, and local revenues. The sum of all revenues at all levels creates the revenue target, the anticipated sum of OM&P and funds available for capital projects.



For example, if a hypothetical jurisdiction forecast that its federal, state, and local transportation revenues to 2045 totaled $250 million, but had $200 million of anticipated OM&P expenditure, then it would have $50 million to build capital projects.

The figures below will show the counties (Clackamas, Multnomah, and Washington), including the cities and park districts within their jurisdiction as defined in Table 1, then Confederated Tribes of Grand Ronde, the transit agencies (SMART and TriMet), then regional planning and port agencies (Metro and the Port of Portland), and then ODOT. The funds represented in each image will represent the authority spending the money, i.e. local funds will be shown under Clackamas County and the ODOT graphic will reflect only funds spent by ODOT. The subtotals by county include the county and individual cities within the county totals.

The estimates that follow are preliminary and will be finalized as part of the RTP adoption.

Clackamas County and Cities in Urban Clackamas County

Figure 3. Clackamas County and cities in Urban Clackamas County Revenue Estimates, 2024-2045

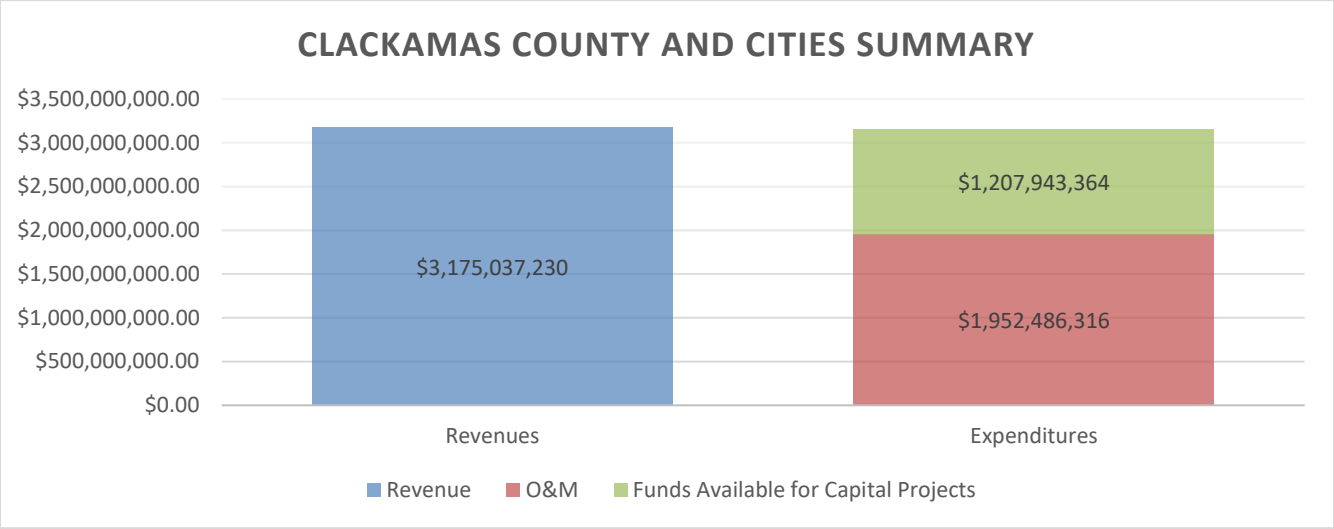
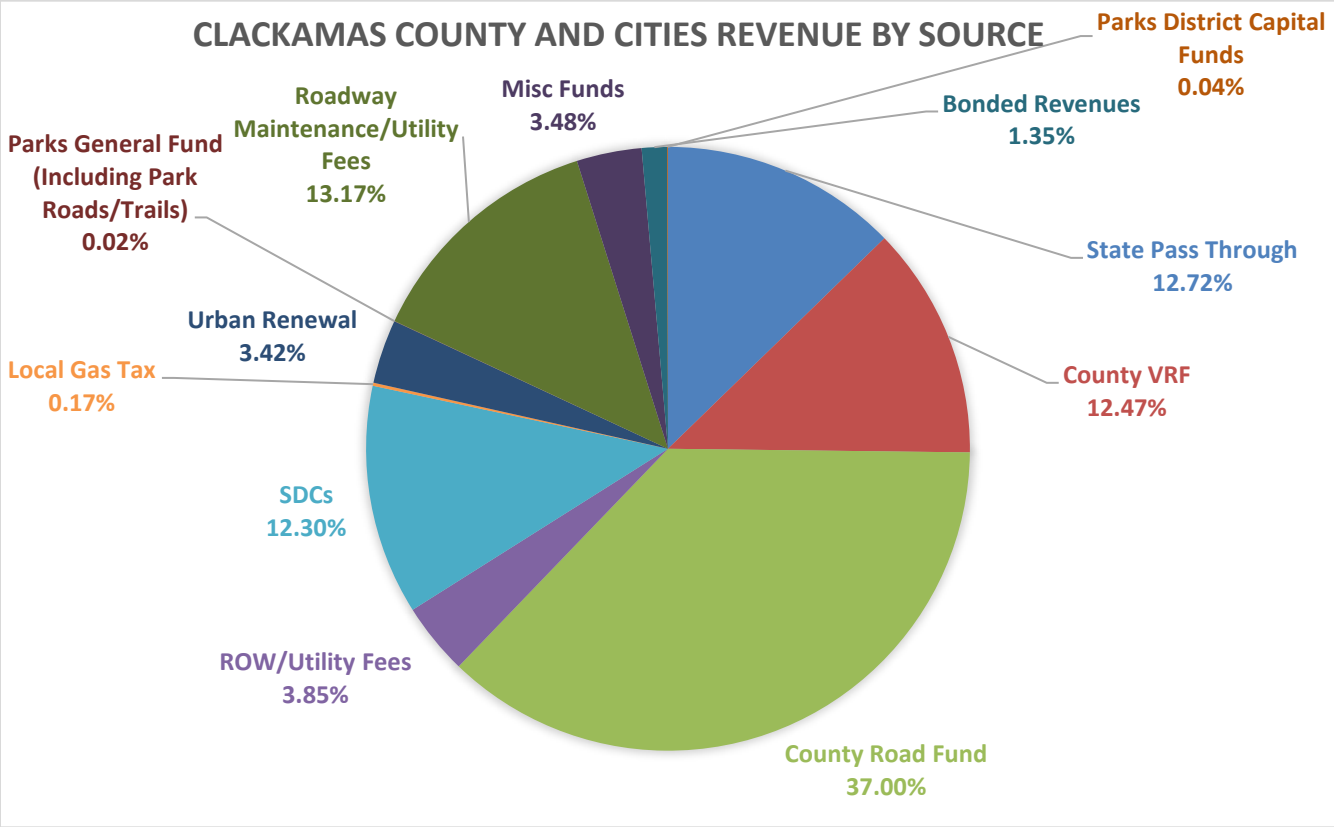


Figure 4. Clackamas County and cities in Urban Clackamas County revenue by source, 2024-2045



Multnomah County and Cities in Multnomah County

Figure 5. Multnomah County and cities in Multnomah County Revenue Estimates, 2024-2045

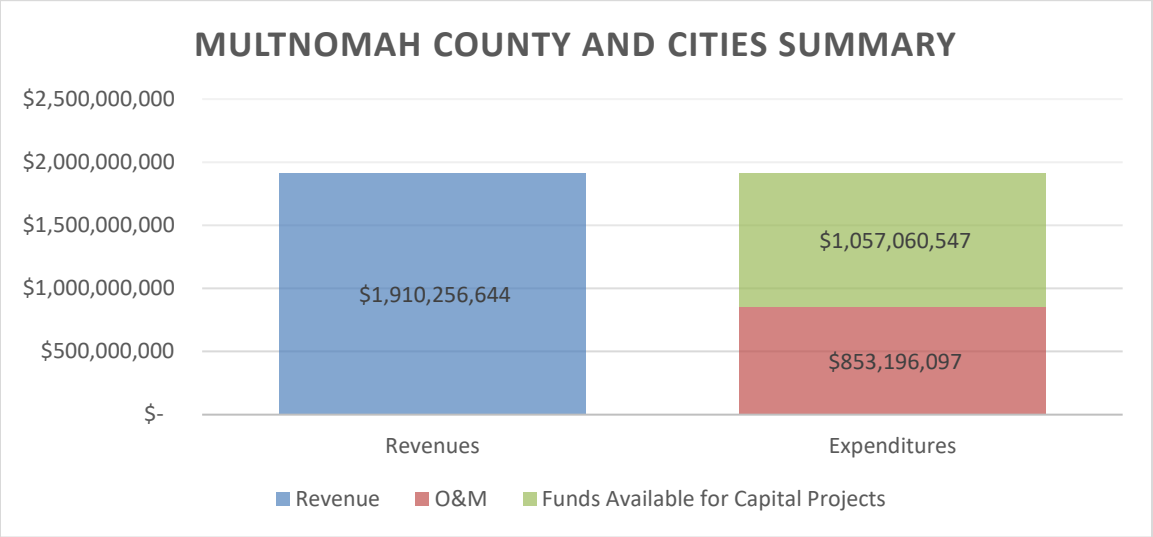
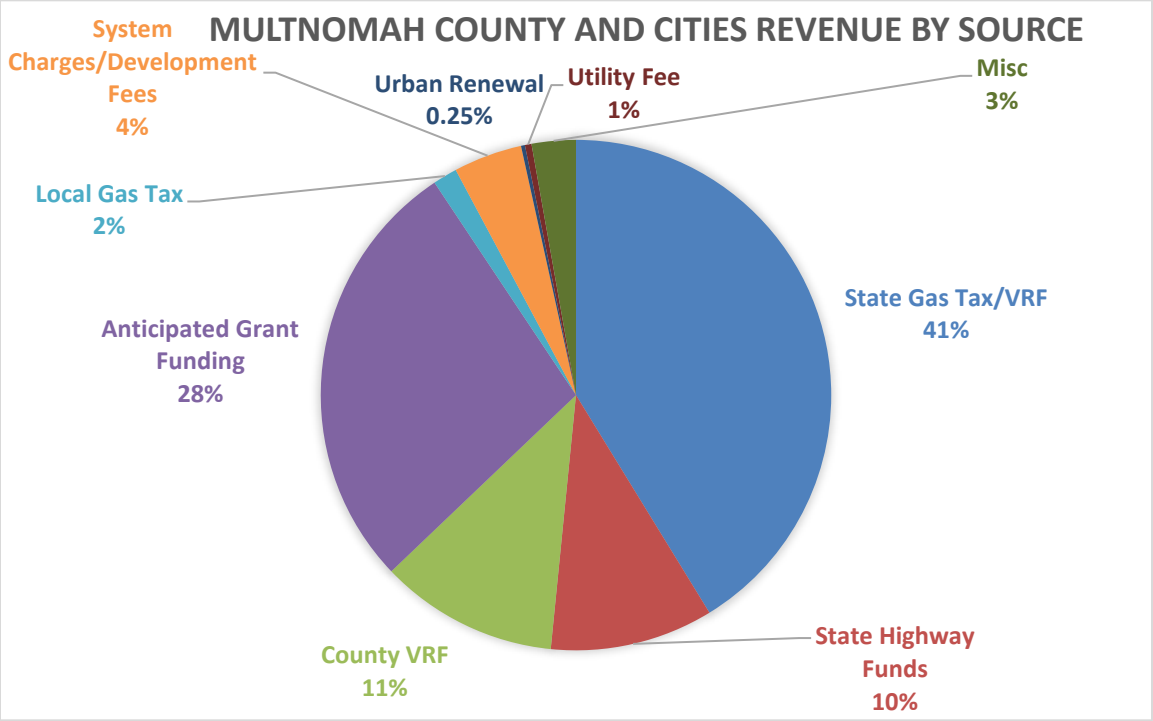


Figure 6. Multnomah County and cities in Multnomah County revenue by source, 2024-2045



Washington County and Cities in Urban Washington County

Figure 7. Washington County and cities in Urban Washington County revenue estimates, 2024-2045

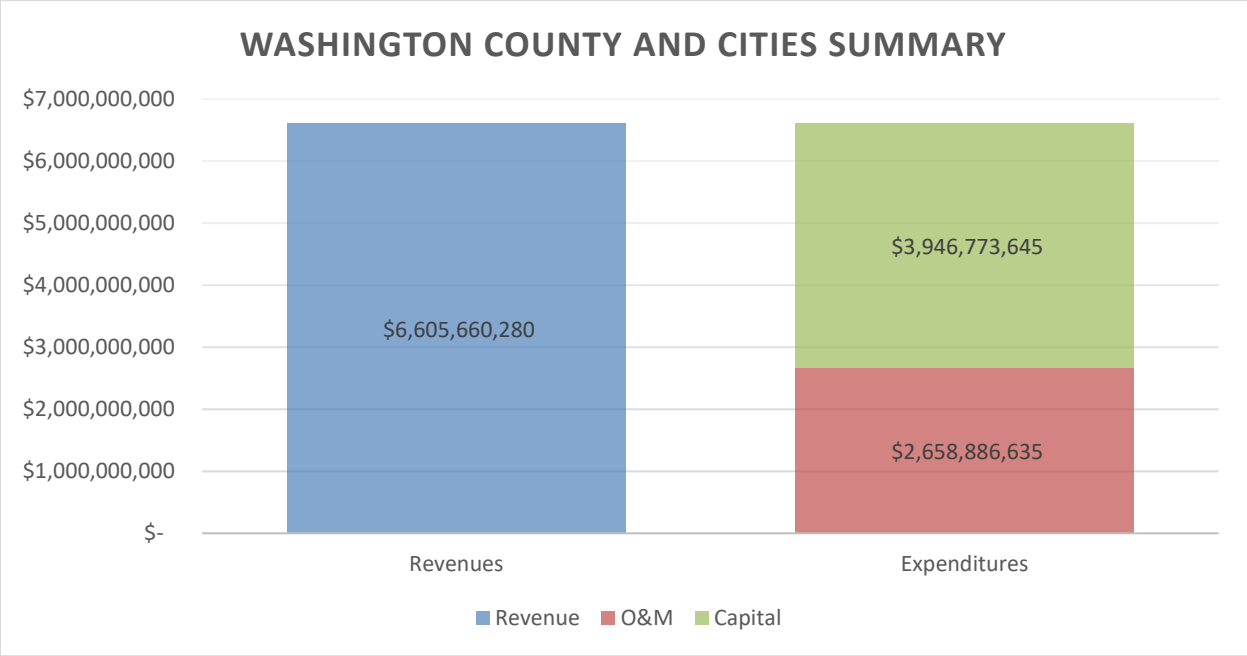
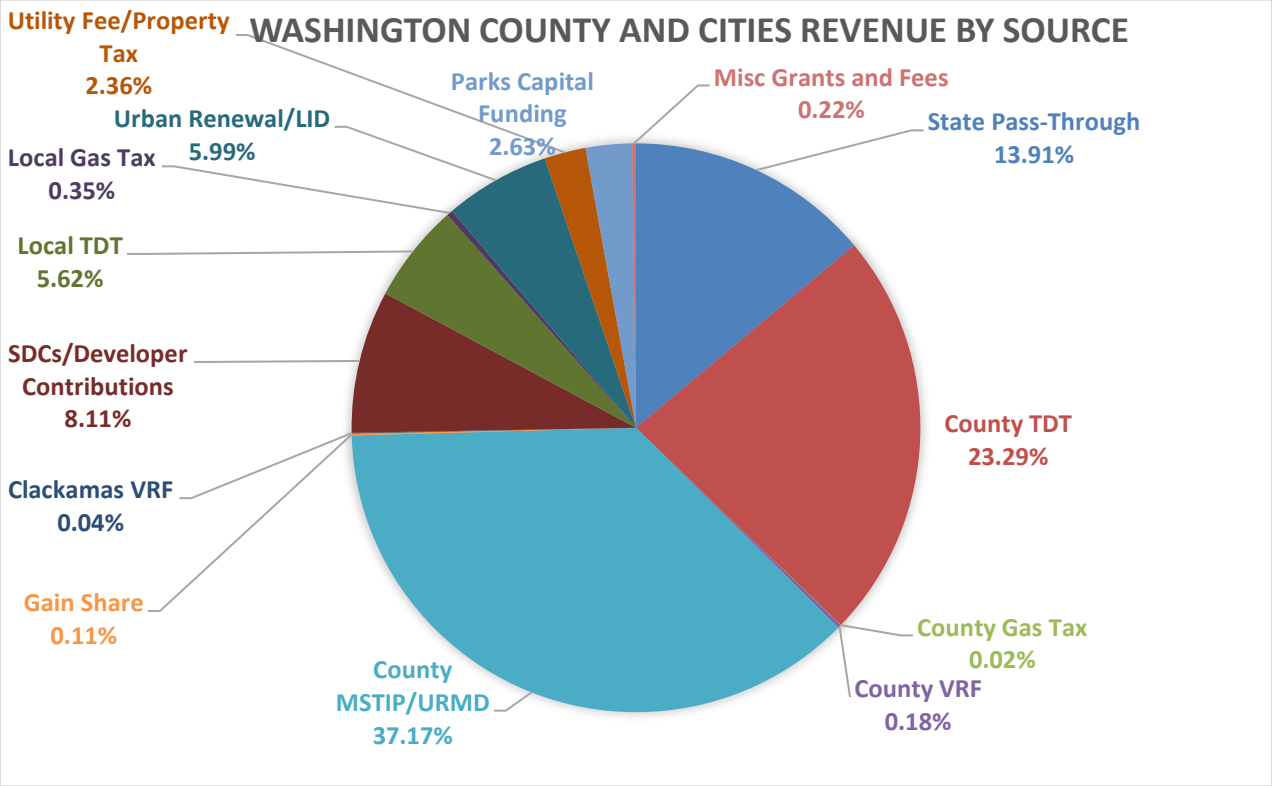
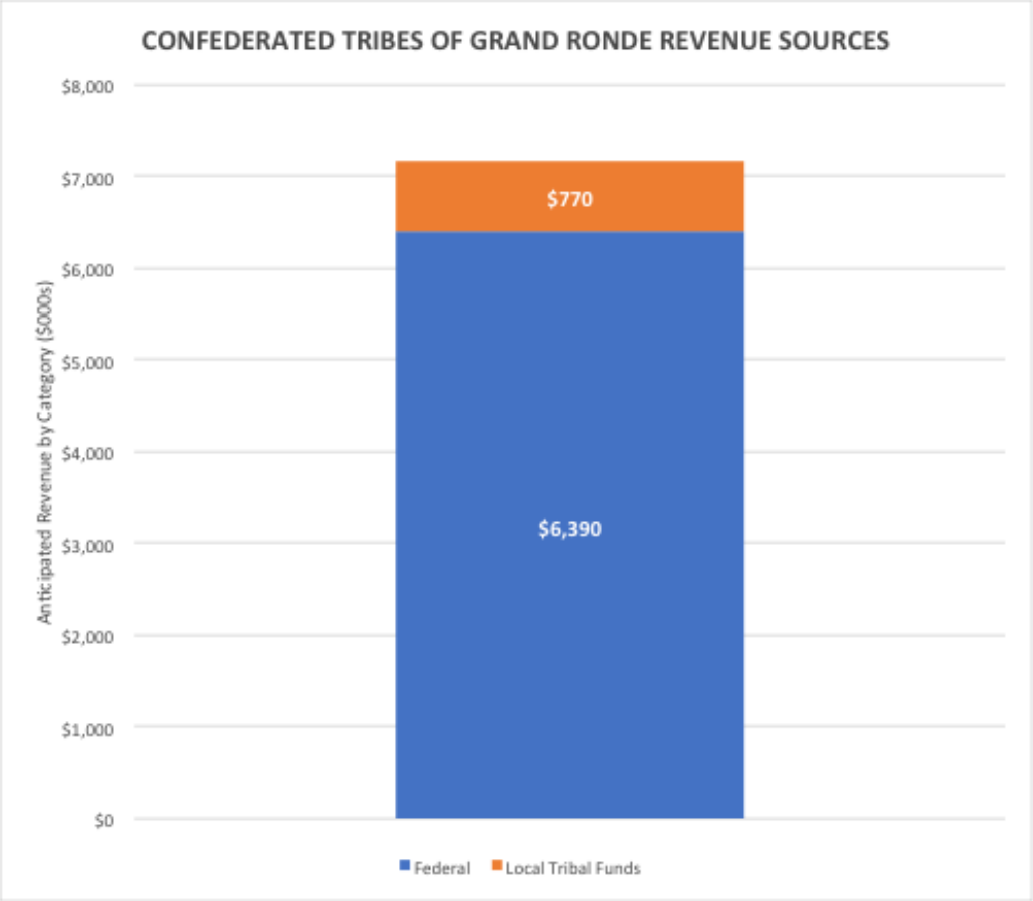


Figure 8. Washington County and cities in Urban Washington County revenue source, 2024-2045



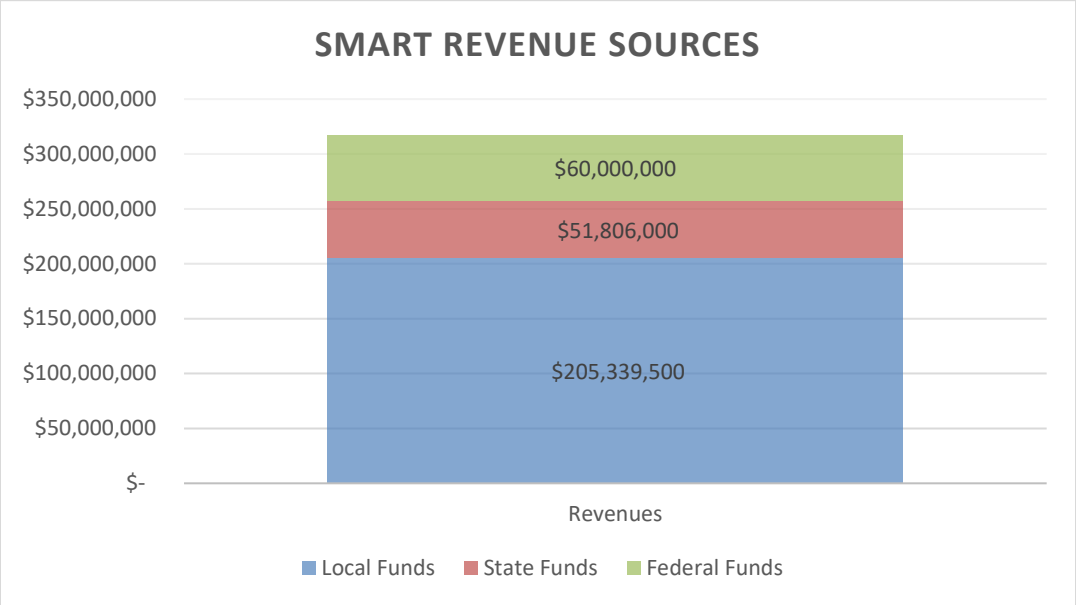
Confederated Tribes of Grand Ronde

Figure 9. Confederated Tribes of Grand Ronde Revenue Sources, 2024-2045



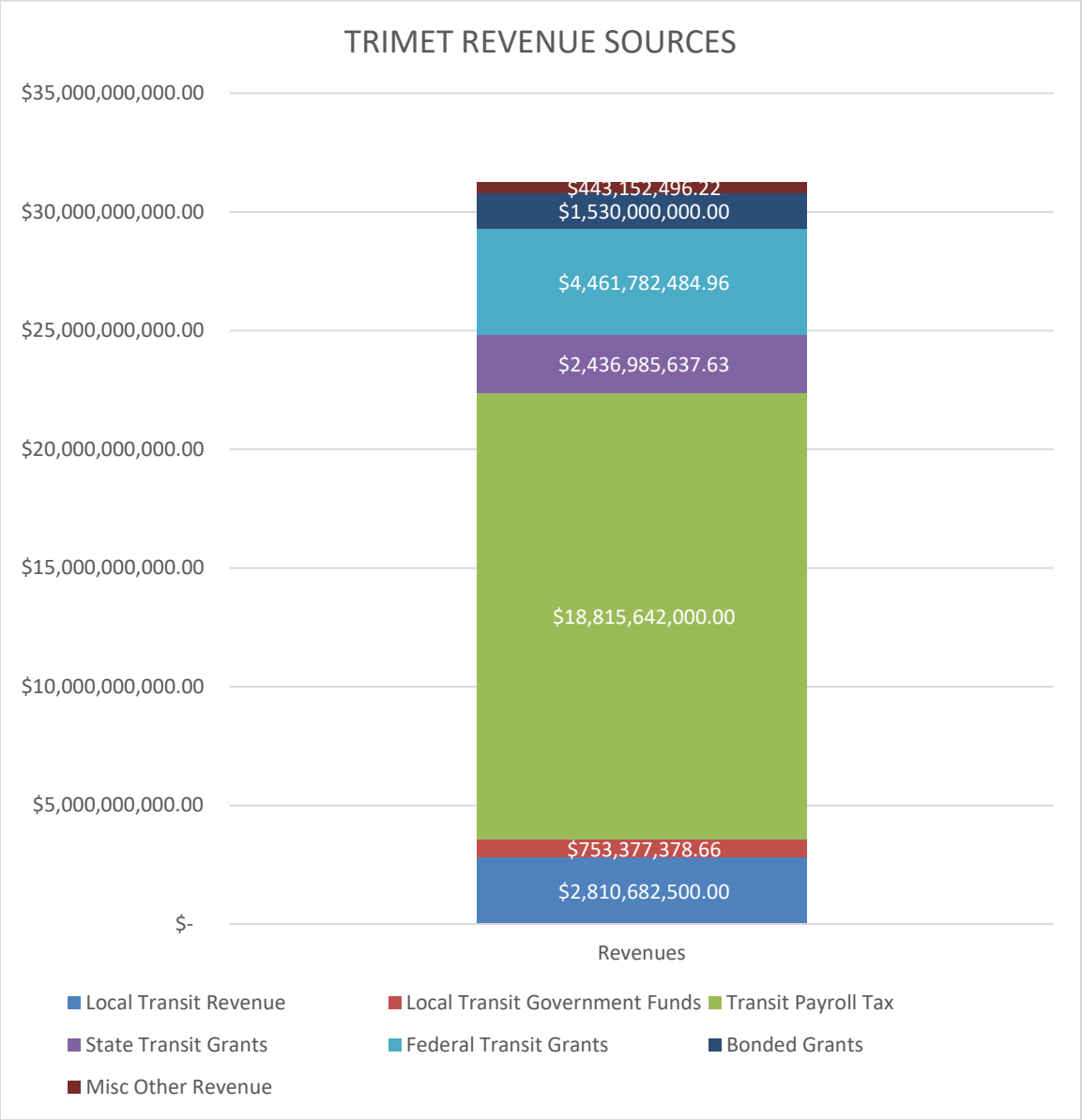
SMART

Figure 10. SMART revenue estimates by source, 2024-2045



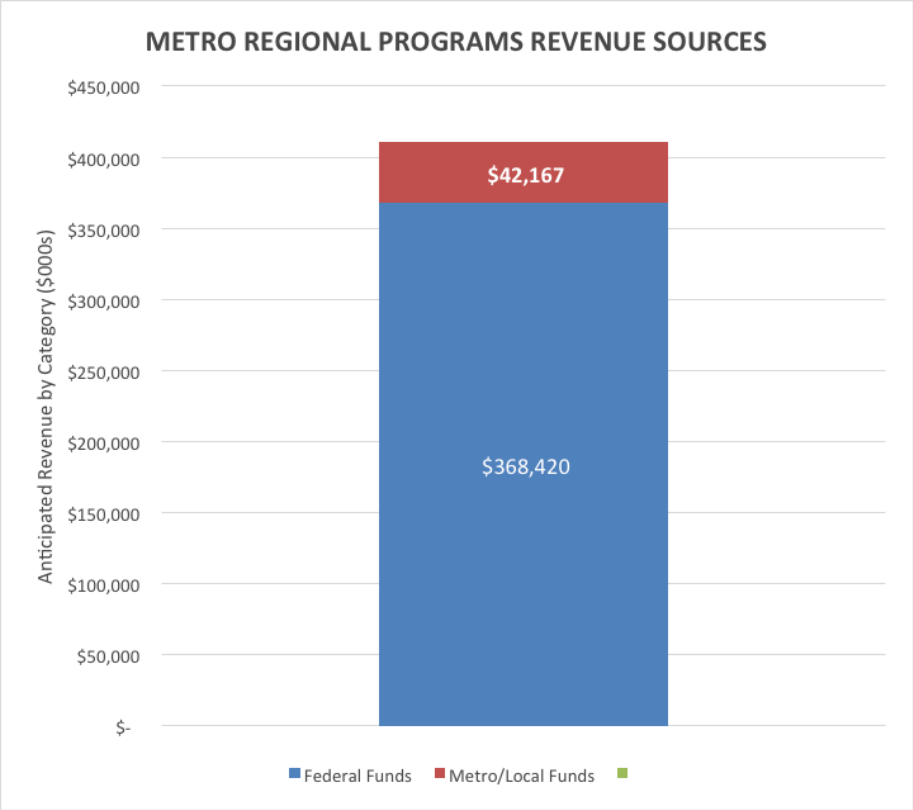
TriMet

Figure 11. TriMet revenue estimates by source, 2024-2045



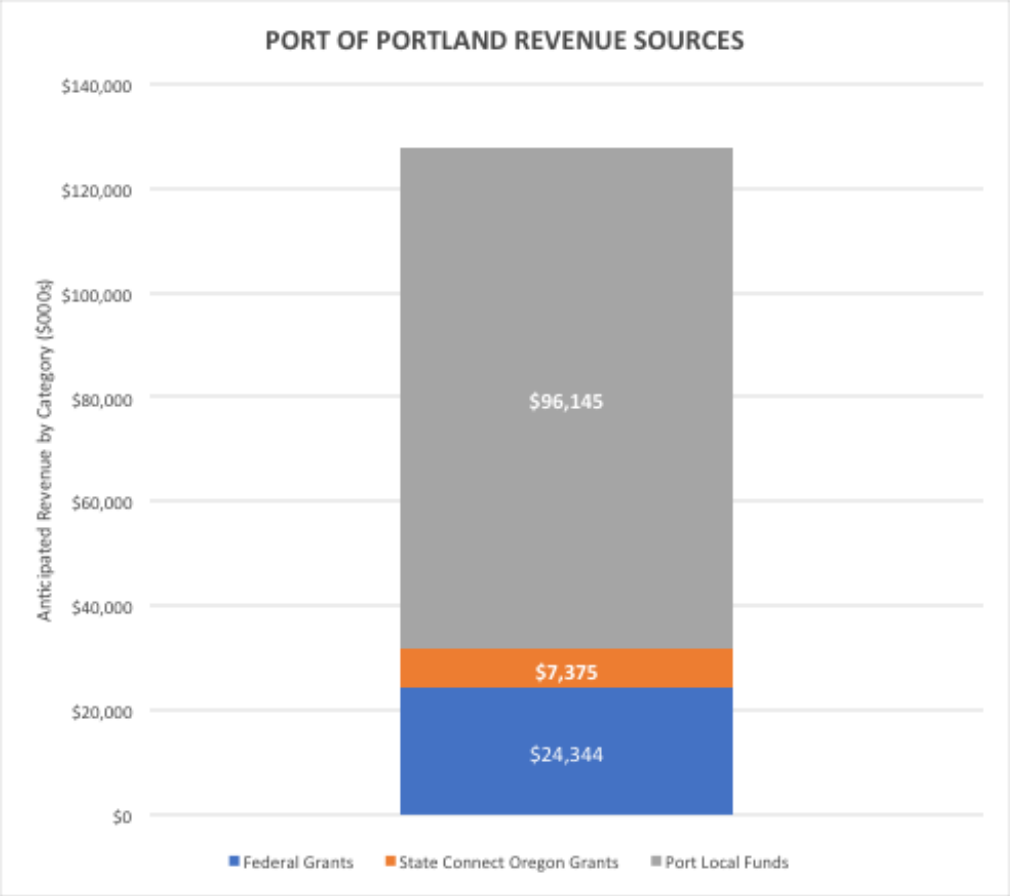
Metro

Figure 12.Metro revenue estimates by source, 2024-2045



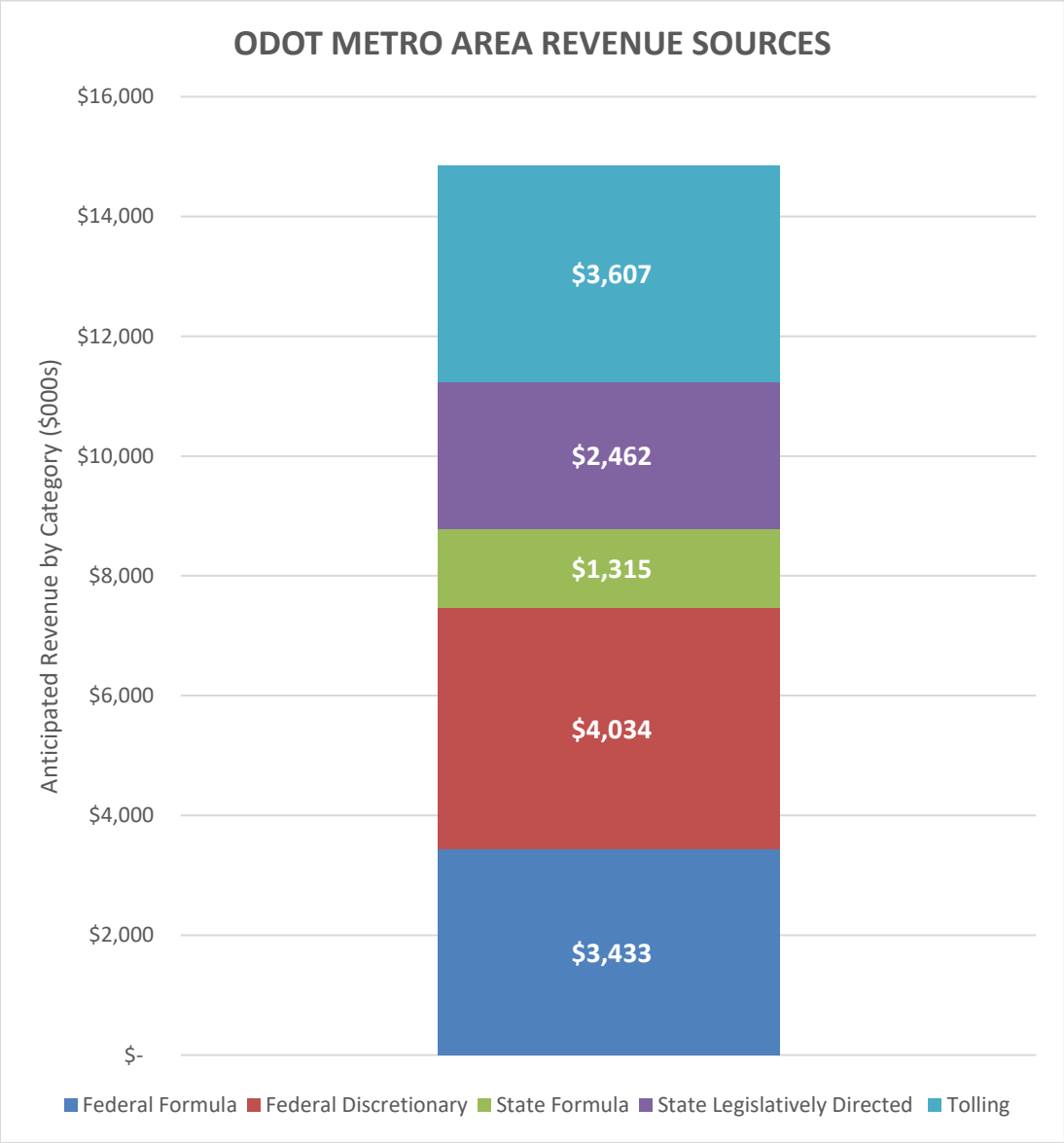
Port of Portland

Figure 13. Port of Portland revenue estimates by source, 2024-2045



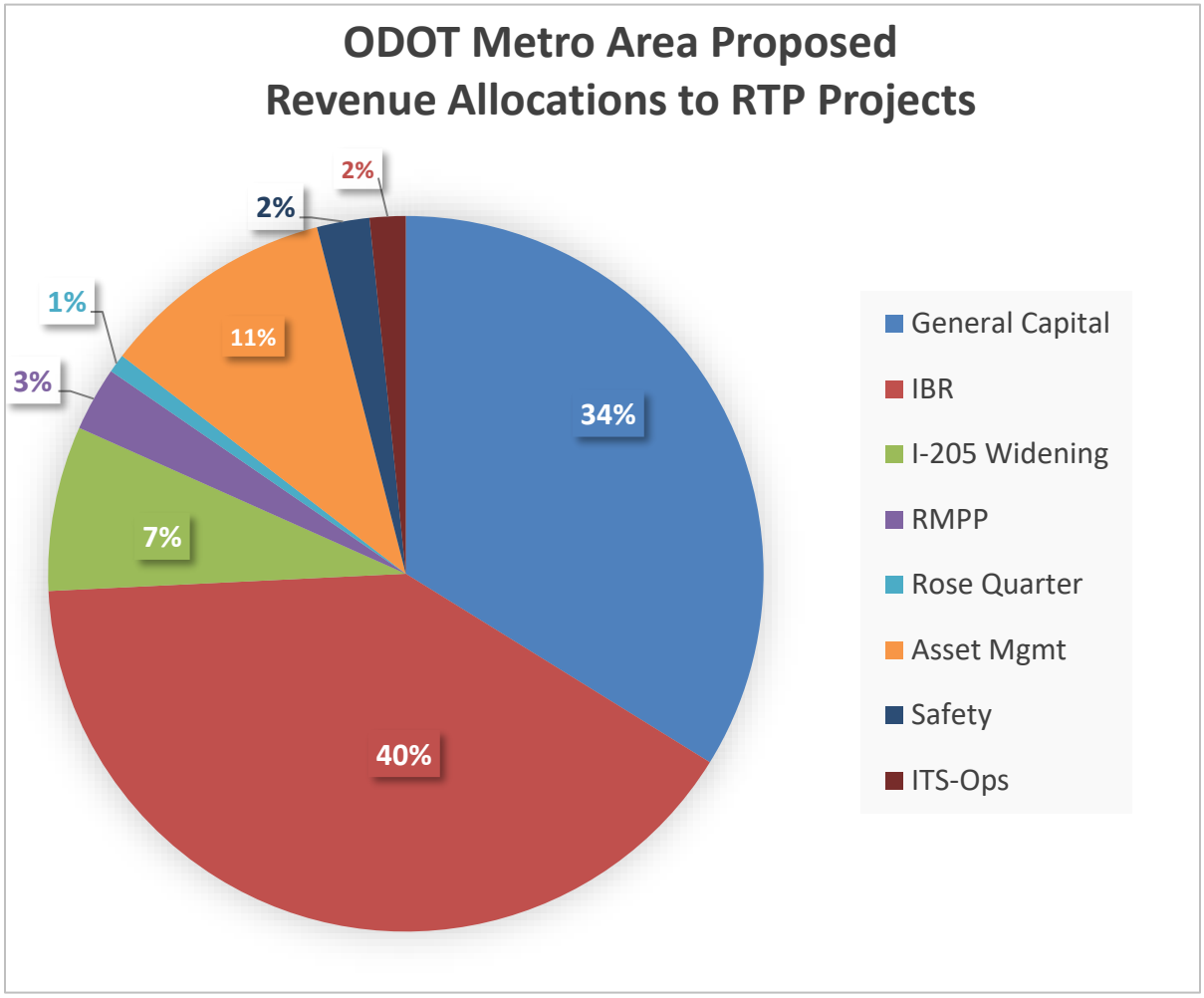
ODOT

Figure 14. ODOT Metro Area revenue estimates by source, 2024-2045



The I-5 IBR Replacement Program project is in an early stage of design as are the I-205 Toll Project and Regional Mobility Pricing Project (RMPP). These estimates may be adjusted higher or lower depending on the outcome of NEPA and updated design.

Figure 15. ODOT Metro Area Proposed Revenue Allocations to RTP Projects



The I-5 IBR Replacement Program project is in an early stage of design as are the I-205 Toll Project and Regional Mobility Pricing Project (RMPP). These estimates may be adjusted higher or lower depending on the outcome of NEPA and updated design.

WHERE DOES THIS DOCUMENT SUPPORT THE RTP?

For a project to receive federal funding, it must appear on the financially constrained list of a regional transportation plan.

Metro worked with ODOT and other partners to finalize the picture of state and federal funding that flows into the region. This work supported the creation of the near-term and long-term financially constrained capital projects lists in **Appendix A** to the 2023 RTP whose costs were constrained to the revenues forecast as available and documented in this appendix.

These estimates and this appendix are preliminary and will be finalized as part of the RTP adoption.

OREGON DEPARTMENT OF TRANSPORTATION

ODOT STATE TRANSPORTATION REVENUE FORECAST

April 2022

Economic & Financial Analysis

Foreword

This summary report presents a selection of Other Funds State Highway Revenue forecasts for the Oregon Department of Transportation (ODOT). It is published twice a year to assist in financial planning, the formulation of transportation budgets, and to support other decision-making activities. The forecast is consistent with the Department of Administrative Services' Oregon Economic and Revenue Forecast (Vol. XLII, No. 1, March 2022) and the associated baseline macroeconomic forecast from IHS Markit.

The projections set forth in this forecast represent the Oregon Department of Transportation's forecast of future results as of the date of preparation based on information then available to ODOT as well as estimates, trends and assumptions that are inherently subject to economic, political, regulatory and other uncertainties, all of which are difficult to predict and many of which are beyond the control of ODOT. No assurance can be given that the future results discussed herein will be achieved, and actual results may differ materially from the forecasts described. In this respect, the words "estimate," "project," "forecast," "anticipate," "expect," "intend," "believe," and similar expressions are intended to identify forward-looking statements.

The prospective financial information was not prepared with a view toward compliance with published guidelines of the United States Securities and Exchange Commission or the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information.

This document is also available online at:

https://www.oregon.gov/odot/Data/Pages/Revenue-Forecasts.aspx and scroll down to "Most Recent Forecasts."

Questions and comments should be directed to:

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Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Introduction

ODOT revenue collections can be broadly divided into four main groups: Driver and Motor Vehicle (DMV), Commerce and Compliance (CCD), Motor Fuels (FUELS), and Other Revenues (OTHER). This publication will discuss the details for each one of these groups. Distribution of revenues into funds is a bit more complicated. Prior to House Bill (HB) 2017 (2017 Session) passage, the share of highway funds was about 97 percent of all ODOT state revenues. However, HB 2017 added the new Transit Payroll Tax, Vehicle Privilege Tax, and Bicycle Excise Tax, which caused the share of highway fund to decline to 89 percent of state revenues. Public transit (transit payroll tax) is the second largest fund with a 6 percent share and Connect Oregon (vehicle privilege tax) is the third largest fund with about 2 percent share of total revenues. The diagram below summarizes graphically the flow of funds.

Figure 1. ODOT Collections and Distributions Diagram

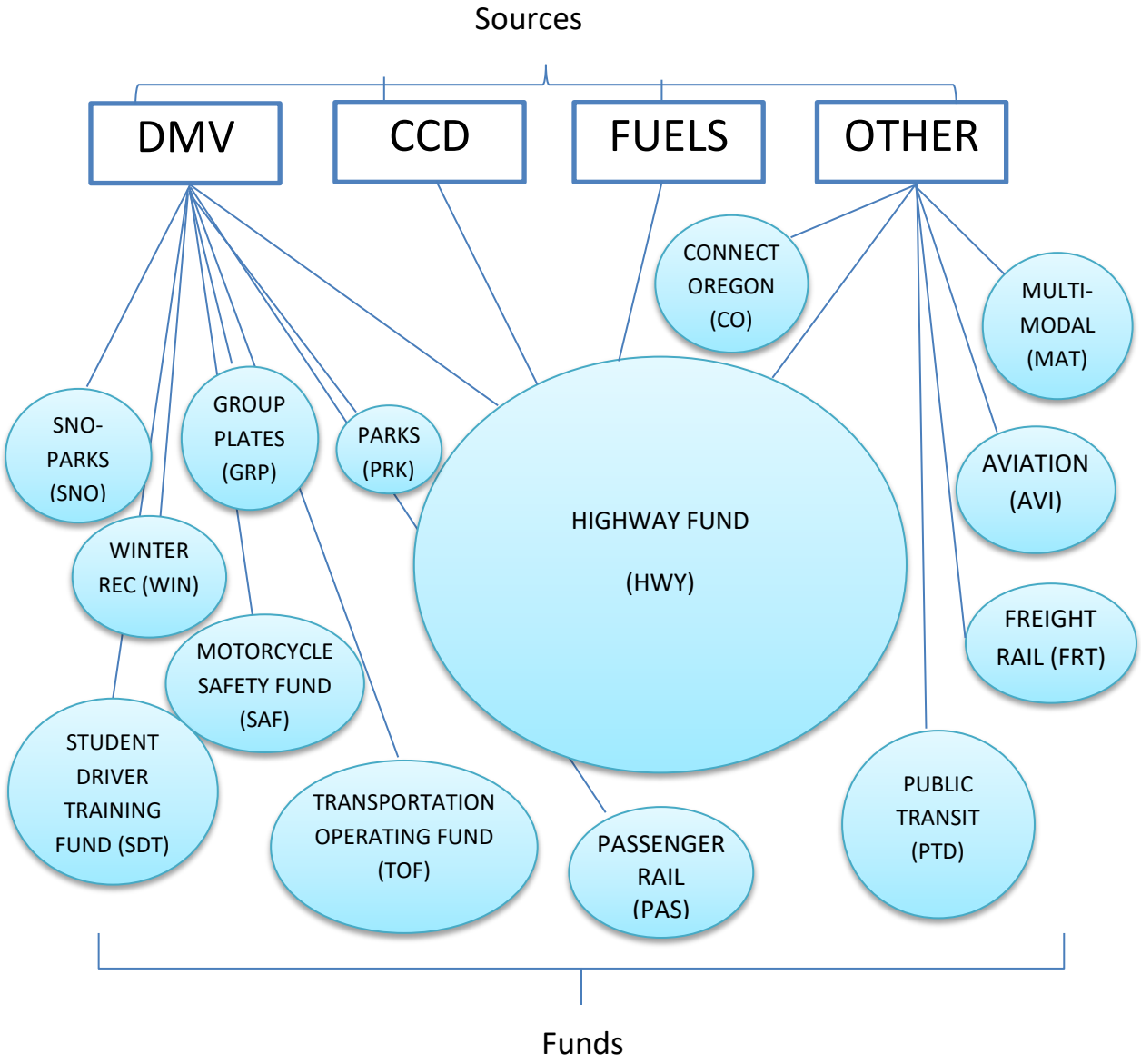
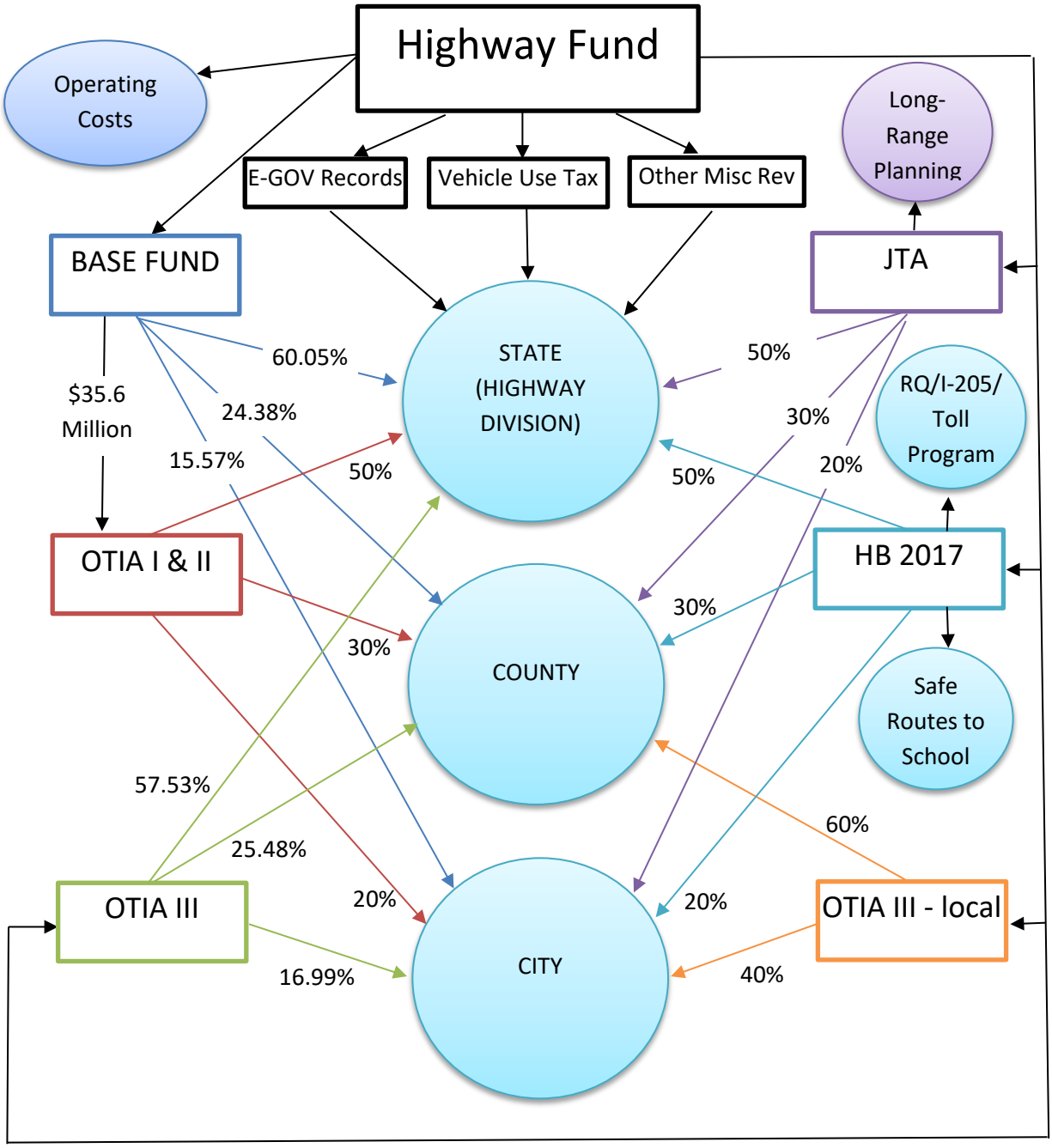


Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Appendix A lists all the revenue items that we forecast, including the associated current fee, forecast group, and fund. The revenues in the Highway Fund are divided into: Base Fund, OTIA I & II Set Aside, OTIA III Funds, JTA, and HB 2017. Within each of these buckets further distribution takes place into specific programs: State (Highway Division), City, and County Funds. The diagram below shows how Highway Funds get distributed.

Figure 2. Highway Funds Distribution Diagram



Revenue Forecast Overview

Over the last several forecasts, beginning with the April 2020 forecast at the start of the COVID-19 pandemic, our forecasts have generally predicted a sharp drop in revenue followed by a sustained, but slow, recovery. Actuals since the October 2020 forecast show the recovery assumption of this statement to be false. While ODOT's State Highway Fund revenues experienced a drop at the beginning of the pandemic, the recovery has been much quicker than expected.

In addition, the overall impact to each of our revenue sources has not been equal. DMV revenues were hit early in the pandemic with field office closures and the registration moratorium, but rebounded in 2021 as DMV put intensive effort into catching up on the backlog created in 2020 and meeting the pent-up demand. Likewise, Motor Fuels experienced a significant drop initially due to the mandatory stay at home orders, but 2021 motor fuels revenues have rebounded to within just a few percentage points below 2019 levels. This rebound is probably due to services reopening and consumers feeling more confident in getting out. Finally, trucking activity, which only experienced a small and short drop early in the pandemic, has grown almost 11 percent above 2019 levels, but we are expecting a slight decline in 2022.

This growth across the revenue sources combined with the continued implementation of HB 2017, where fiscal year (FY) 2021 revenue contains a full year of the 2020 tax and fee increases, yielded an impressive revenue increase in FY 2021 over FY 2020.

Figure 3. Total Gross State Highway Revenues by Fiscal Year

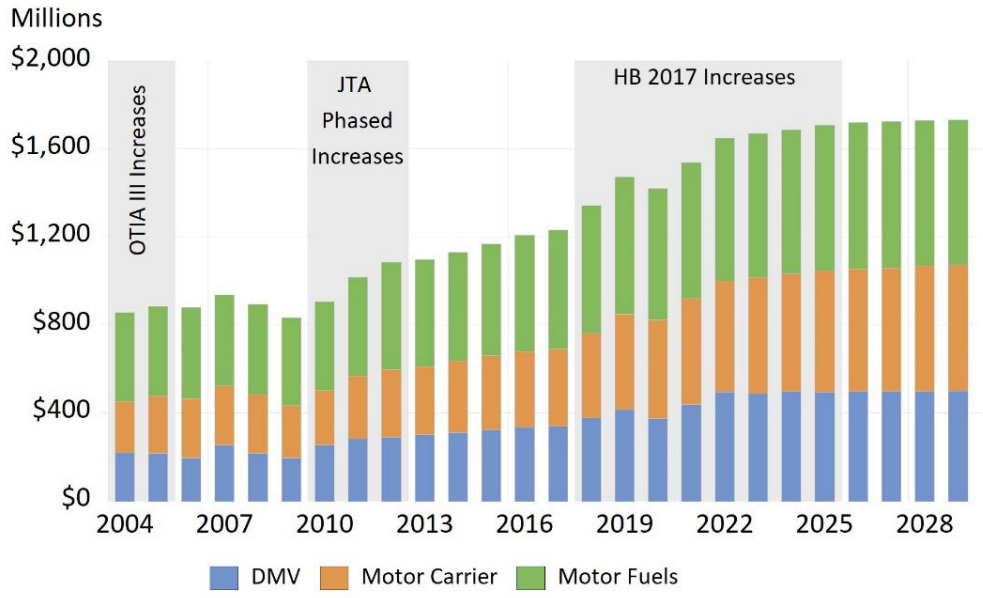


Figure 3 summarizes the forecast. First, there is a noticeable drop in FY 2020 revenues, despite the tax and fee increases implemented in January 2020. This drop is due to the COVID-19 impact. Revenues rebounded in 2021 and are expected to continue growing into 2022 as the economy recovers. A weight-mile tax increase is scheduled for January 2024, which will help boost overall revenues through 2025. An additional two-cent fuels tax increase will be implemented in January 2024, if the conditions are met for triggering this final increase. This would further boost revenues through 2025. Beyond 2025, revenue growth stagnates overall as the economic and demographic growth slow down and fuel demand declines due to increases in on-road vehicle fuel efficiency.

Table 1 below shows the biennial change in highway revenues from the October 2021 forecast. Total gross revenues have increased modestly over the prior forecast, mainly due to a stronger DMV forecast and the two-cent increase in fuels tax that took place in January 2022.

The net apportionable revenue changes are very similar to the gross revenue changes, which implies very little change in pre-apportionment administrative costs between forecasts. This is because we used the final Legislatively Adopted Budget for 2021-23 for both our forecasts.

Table 1. Change in Highway Revenues from the October 2021 Forecast

($ Millions)	2021-23	2023-25	2025-27	2027-29
Motor Fuels (w/o triggered increases)				
Gross	$ (4.1)	$ 5.5	$ 22.4	$ 24.1
Net Apportionable	$ (7.0)	$ 1.7	$ 18.5	$ 20.1
CCD				
Gross	$ 0.8	$ 7.2	$ 5.1	$ 3.0
Net Apportionable	$ (4.3)	$ 1.7	$ (0.7)	$ (3.3)
DMV				
Gross	$ 6.0	$ 20.2	$ 17.9	$ 23.4
Net Apportionable	$ 5.9	$ 20.1	$ 17.9	$ 23.4
Total (w/o triggered increases)				
Gross	$ 2.7	$ 32.9	$ 45.5	$ 50.5
Net Apportionable	$ (5.4)	$ 23.5	$ 35.7	$ 40.3

Table 2 highlights changes for some of the most important revenue generating transactions in the ODOT State Highway Revenue forecast. After double digit declines across the board (with the exception of weight-mile in calendar (CY) 2020 due to COVID-19 crisis), we have seen some rebounds in CY 2021, especially in Original Class C Licenses were there was substantial growth. Pent-up demand and implementation of HB 2015 were the main reasons for the growth. The negative growth rates in CY 2022 only indicate that the transaction volumes in 2021 were unusually high due to pent-up demand.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 2. Percentage Change in Selected Key Oregon Transportation Indicators

	Actual		Forecast							
	CY 20	CY 21	CY 22	CY 23	CY 24	CY 25	CY 26	CY 27	CY 28	CY 29
MOTOR FUELS GALLONS (WITH TRIGGERS)	-10.2%	8.4%	-2.3%	-0.7%	0.7%	1.0%	0.1%	-0.1%	-0.7%	-0.3%
ORIGINAL CLASS C LICENSES	-34.5%	118.4%	-22.3%	-4.2%	0.4%	-0.2%	-0.7%	-0.2%	0.1%	0.7%
PASSENGER VEHICLE REGISTRATIONS	-16.6%	24.6%	-3.1%	1.4%	-1.7%	1.3%	-0.9%	0.9%	-0.3%	0.3%
TITLE TRANSFERS	-40.2%	70.0%	-1.6%	-1.2%	-1.6%	-0.1%	-2.0%	-0.4%	-1.2%	-0.9%
TRUCKING ACTIVITY (WEIGHT-MILE)	3.6%	7.1%	-2.3%	0.0%	-1.7%	1.3%	1.2%	1.2%	1.1%	1.1%

Transportation Backdrop

The Oregon economy is in a state of flux. Employment, personal income, and consumer spending have been changing significantly over the last few years. This has led to the Oregon Office of Economic Analysis (OEA) to estimate two scenarios projecting changes to these factors. The baseline outlook is the most likely scenario given the most current economic data. However, with the amount of volatility in inflation forecasts, OEA have opted to also include a boom/bust scenario. This scenario includes higher inflation and growth in the short term with a larger recession rebound. Table 3 shows the percent change to each of these measures over the next five years, with the boom/bust scenario generally describing larger swings. A full discussion of the state and national economic forecasts can be found on the Oregon Office of Economic Analysis website: https://www.oregon.gov/das/OEA/Pages/index.aspx.

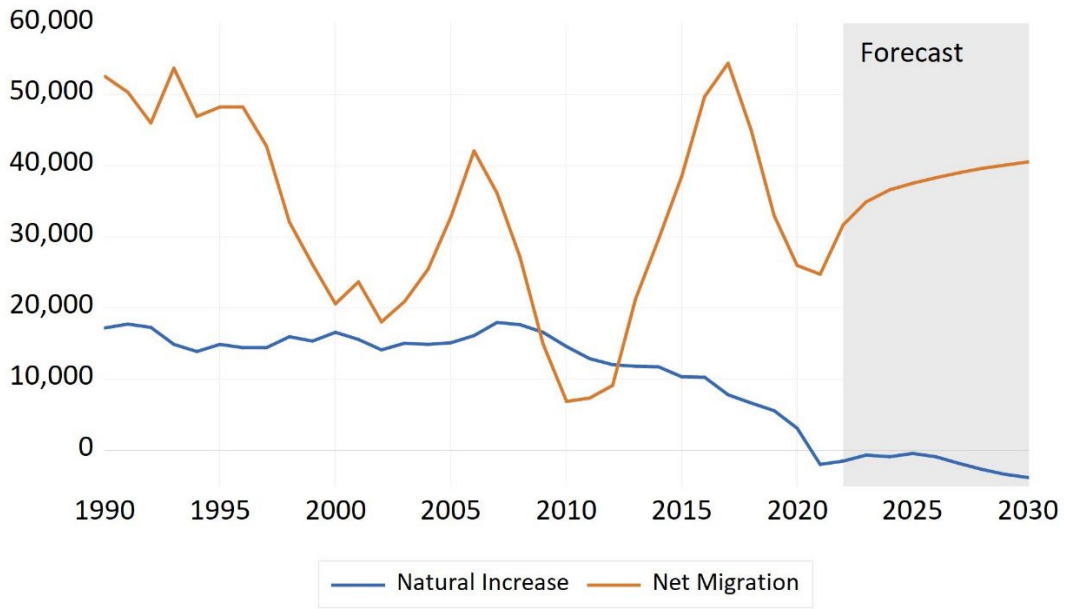
Table 3: Percent changes in four Oregon economic indicators

					Mar 2022	
	2021	2022	2023	2024	2025	2026
Employment						
Baseline	2.4%	3.6%	2.3%	1.2%	0.8%	0.7%
Boom/Bust	2.4%	4.8%	0.2%	-2.6%	-0.8%	1.7%
Unemployment Rate						
Baseline	5.3%	3.7%	3.6%	3.8%	4.0%	4.1%
Boom/Bust	5.3%	2.7%	5.1%	8.1%	8.6%	7.6%
Personal Income						
Baseline	7.8%	2.0%	5.8%	5.3%	5.2%	5.2%
Boom/Bust	7.8%	3.5%	3.4%	1.2%	5.7%	7.0%
Consumer Spending						
Baseline	12.2%	7.3%	4.2%	4.7%	5.0%	5.2%
Boom/Bust	12.2%	9.9%	-0.7%	1.4%	7.4%	7.8%

The economic health of Oregon is dependent on its people. While total population is projected to increase over the next eight years, net migration into the state in 2021 was at its lowest point since 2012 (Figure 4). In 2021, the natural population change (births minus deaths) was negative for the first time in over 30 years. This change is projected to continue to be negative until 2030, as the state becomes entirely dependent on in-migration to sustain its overall population increases. Total net migration is expected to increase until the end of the decade, and is likely to continue with a positive trend thereafter. This trend will have direct impacts on a number of important revenue drivers for the Oregon Department of Transportation. DMV transactions and fuels taxes are particularly dependent on the total Oregon population, as

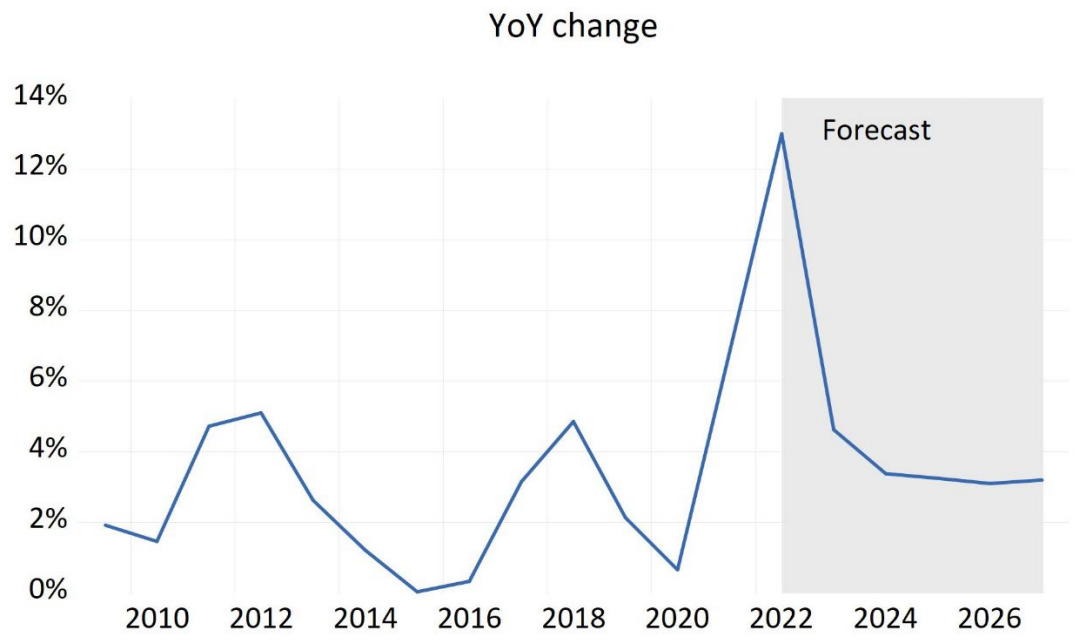
increased population means more drivers and gasoline consumers in the state. Higher population also stimulates the Oregon economy through consumer purchases. As a result, commercial trucking activity increases as well as tax collections resulting from fuel and weight-mile taxation. Thus, the population forecasts provide an optimistic outlook for ODOT revenues.

Figure 4: Oregon natural population change and net migration into the state.



The skyrocketing inflation has become a real problem in the last year or so, having large impacts on budgets and economic activity. One source of inflation we track as an agency is how the prices of "State and Local Highway Capital Projects" are changing. This price index is more closely related to the cost of transportation projects and not just household goods. This index tracks national costs on non-federal highway projects and has data going back to 1997. There has been steady and positive year-over-year growth to these costs in a range from roughly zero percent to 5 percent from 2012 to 2020 (Figure 5). This cost escalation hit a new high in 2021 with 13 percent when compared to 2020. These costs have the potential to impact ODOT's ability to complete these types of projects on time and within budget. Future projections of this inflation are estimating a return to a baseline increase by 2023. There are no other deviations from this inflation, so it will be more predictable in the future. This inflation measure has been very susceptible to significant changes from month-to-month. We carefully track these changes as they happen and incorporate them into our work as quickly as we can.

Figure 5: Year-over-year state and local highway cost escalation.



There are still substantial sources of uncertainty with the current economic forecast. As mentioned previously, the volatility surrounding inflation numbers make it difficult to accurately predict long term trends and their effects on transportation infrastructure in Oregon. Inflation for construction projects have the potential to delay and cancel projects if the cost increases cannot be supported by their current budgets. This problem is impossible to solve as over allocating funds to projects results in wasted state resources, while under allocating threatens the timing and probability projects move forward. As uncertainty surrounding inflation remains, there will continue to be instabilities in any economic forecast. We will continue to incorporate this uncertainty into our baseline forecast and reassess forecasts as we move forward.

Driver and Motor Vehicle

The Driver and Motor Vehicle Services Division is responsible for the administration of driver and motor vehicle related activities. Revenues collected from the fees charged for the various DMV activities flow into the State Highway Fund, the Transportation Operating Fund, and into other funds administered by ODOT divisions such as Public Transit and Passenger Rail. Additionally, some fees net-of-costs are transferred to outside entities. For example, recreational vehicle-related fees are transferred to the Oregon Parks and Recreation Department. Lastly, revenues remaining after deducting transfers and costs are apportioned to cities and counties statewide for local road repair, maintenance, and construction.

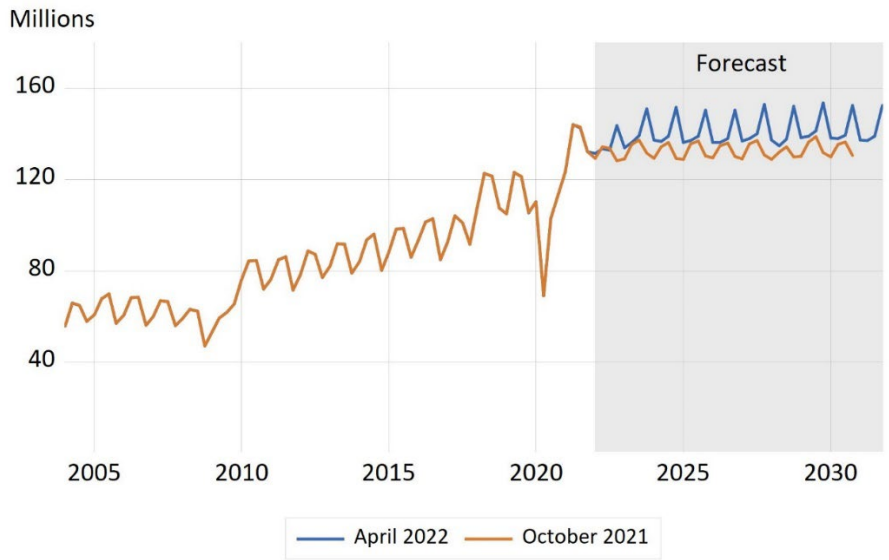
The DMV forecast is produced at the transaction level and aggregated to the summary level. The transactions are grouped into three different business lines: Vehicle, Driver, and Business Regulation. The Vehicle program area contains the transactions related to legal ownership and operation of a vehicle, including titling, plates, registrations, and permits. The Driver program contains the transactions related to the legal right to operate a vehicle, including permits, licenses, endorsements, and the associated tests to obtain these rights to drive. The Business Regulation program is tasked with ensuring the businesses that sell vehicles in Oregon are properly licensed along with those that dismantle and transport vehicles.

In total, the DMV forecast contains over 240 individual product transactions and over 100 different forecast equations. However, most of these transactions have little significant impact on the overall forecast as their volumes and fee levels are small. In FY 2021, 79 percent of the revenue was collected by the top ten DMV transactions. Passenger vehicle registrations alone (two-year and four-year registrations combined) accounted for about 48 percent of all revenues collected by DMV. Other top revenue contributors for FY 2021 were light title transactions, truck and travel trailer registrations, class C driver license renewals and original issuances, and plate manufacturing fees.

Various economic and demographic variables affect DMV activities and provide a reflection of broad undercurrents in the state. The impacts from changes in population, employment, migration, and economic production are evident in many of the DMV data series. In general, demographic changes affect DMV activities more strongly than economic changes. As such, demographic changes are generally more immune to cyclical swings typical with economic variables. Of the three business lines in DMV, the Vehicle and Business Regulation programs are most susceptible to economic influences, especially as they relate to new vehicle titles.

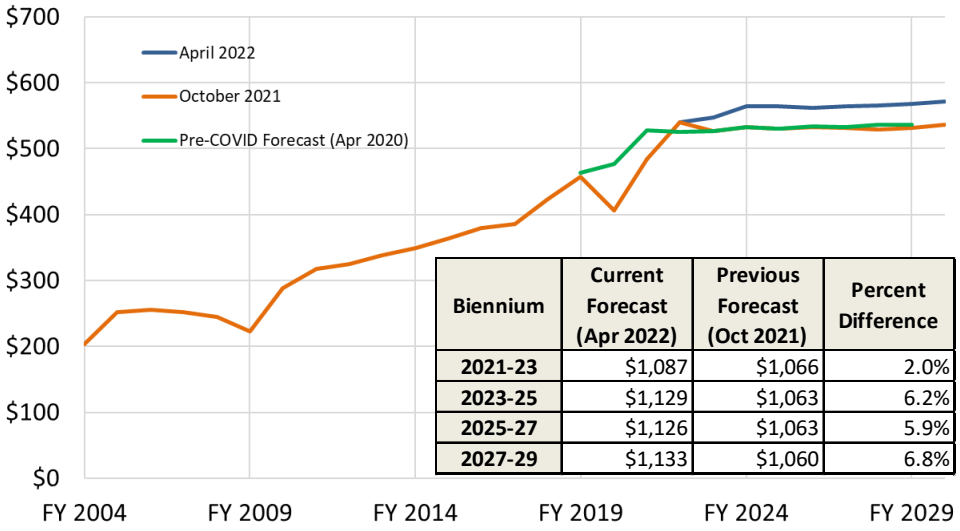
Figure 6 compares current forecast with the previous forecast (October 2021) for total DMV revenues on a quarterly basis. Overall, April 2022 forecast is higher than the previous forecast due to increased share of vehicle registrations and title transactions for higher MPG tiers compared to the previous forecast, and also there is an expectation of boosted new vehicle sales due to accumulated pent-up demand.

Figure 6. Total DMV Revenues (quarterly values)



In summary, we expect two percent higher revenues for the current 2021-23 biennium, compared to October 2021 forecast (Figure 7). We also expect an average six percent higher revenues for the forecast horizon compared to the previous forecast. The highest gain is expected for FY 2024, when revenues are forecasted to increase by three percent compared to the FY 2023 revenues. This is driven by the post-COVID economic recovery and the expectation of strong new light vehicle sales.

Figure 7. Total DMV Revenues by Fiscal Year (in Millions)



Biennium	Current Forecast (Apr 2022)	Previous Forecast (Oct 2021)	Percent Difference
2021-23	$1,087	$1,066	2.0%
2023-25	$1,129	$1,063	6.2%
2025-27	$1,126	$1,063	5.9%
2027-29	$1,133	$1,060	6.8%

In preparing our forecast, we used a number of national and Oregon indicators. The Oregon Office of Economic Analysis (OEA), supplies us with these forecasts. OEA prepares their

forecasts quarterly and use national forecasts from reputable sources, such IHS Markit. National light vehicle sales (Figure 8) and Oregon total non-farm employment (Figure 9) are two of the leading indicators that are used in the models for some of our key transactions. There is a little bit of positive news here as the actuals came in stronger than expected in the previous forecast.

Figure 8. Total US Light Vehicle Sales (quarterly frequency – seasonally adjusted)

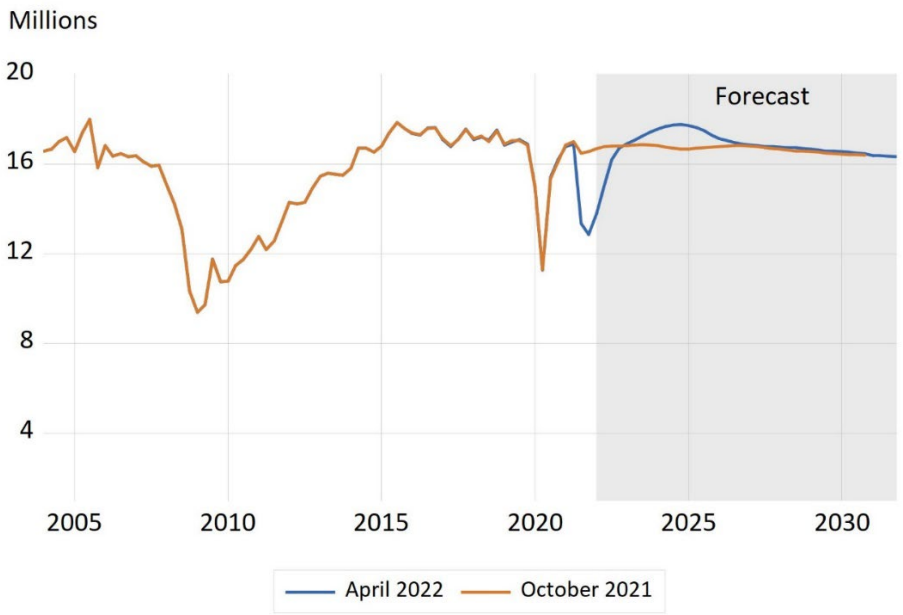
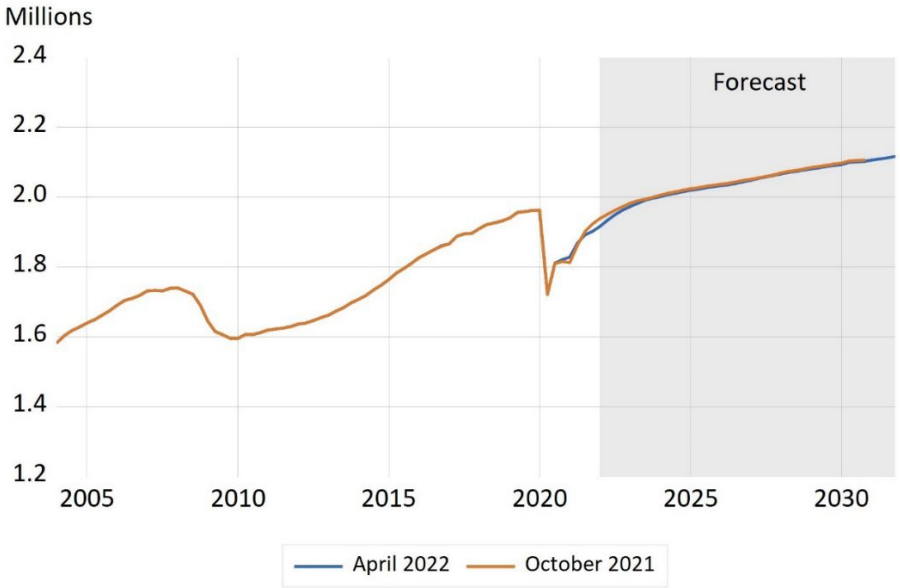


Figure 9. Total Non-Farm Employment (quarterly frequency – seasonally adjusted)



Two-year passenger registrations is one of the top DMV revenue transactions (Figure 10). The moratorium on citations due to expired registrations ended as of December 31, 2021 and we saw a subsequent spike in two-year registrations. We are expecting the transaction volumes to go back to normal levels. The forecast is similar to the October 2021 forecast. However, what is different is how the total registrations are distributed by miles per gallon (MPG) tiers (Figure 11). The shares of 20-39 MPG and 40 plus MPG tiers will grow faster than previously assumed.

Figure 10. Two-Year Passenger Vehicle Registrations (quarterly frequency – seasonally adjusted)

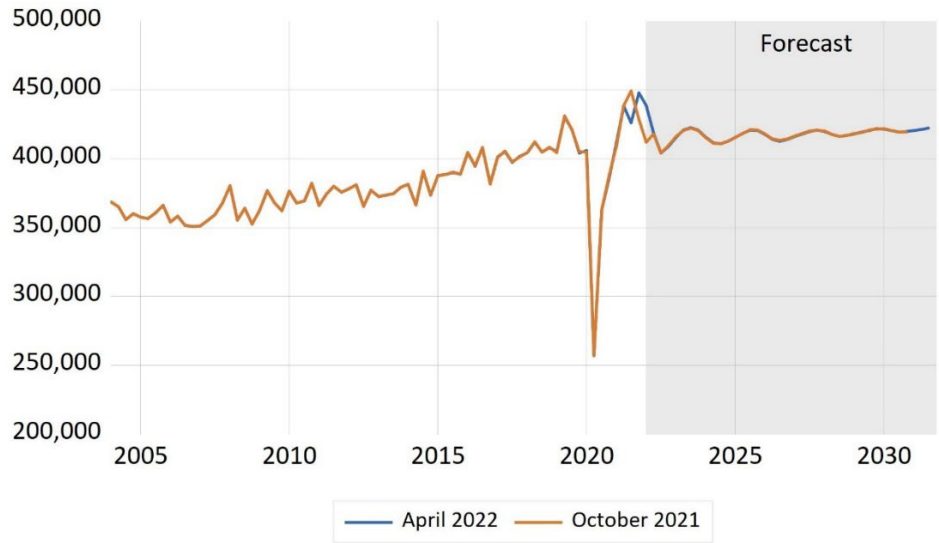
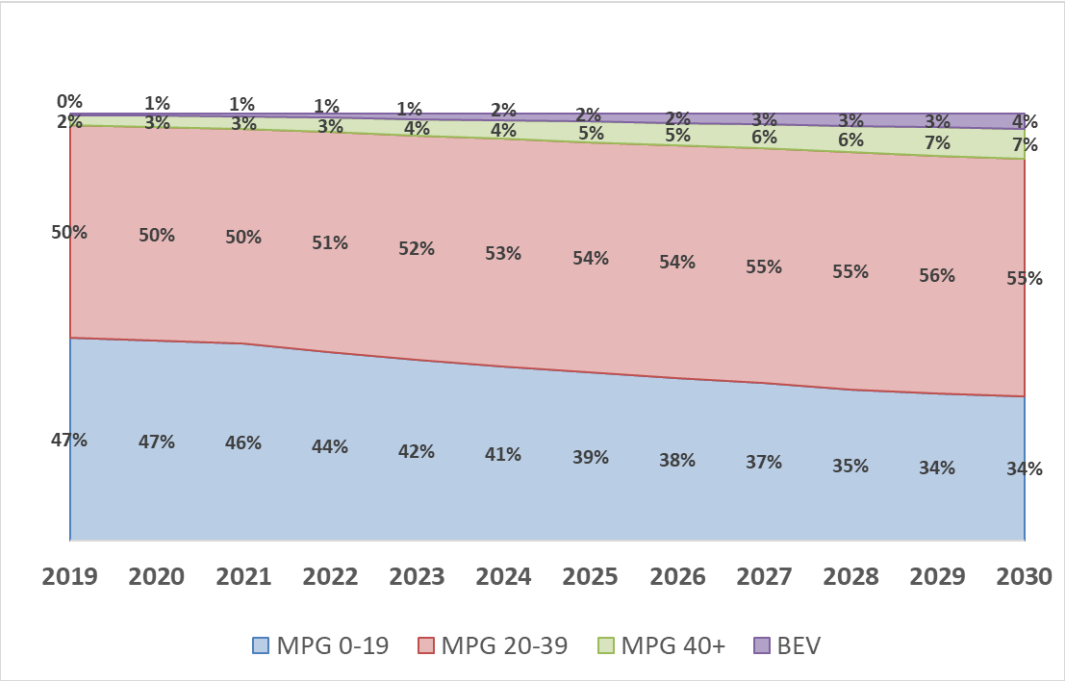


Figure 11. Passenger Vehicle Stock by MPG Tier



Light title transfers is another top revenue transaction for DMV. There was a significant backlog at the beginning of this year due to COVID-19. DMV resolved the title related backlogs around November 2021. The peak was a bit lower than we expected in our previous forecast, but not by a big margin. The current forecast has a bigger drop in transaction levels for 2022 compared to the previous forecast. Overall, the long-run forecast has not changed that much, coming in just a touch lower than the previous forecast (Figure 12). Unlike light title transfers, we expect a higher transaction volume for new light vehicle titles. This is driven by the IHS Markit forecast and the expectation of a big boost in the light duty vehicle sales for 2022 (Figure 13).

Figure 12. Light Title Transfers (quarterly frequency – seasonally adjusted)

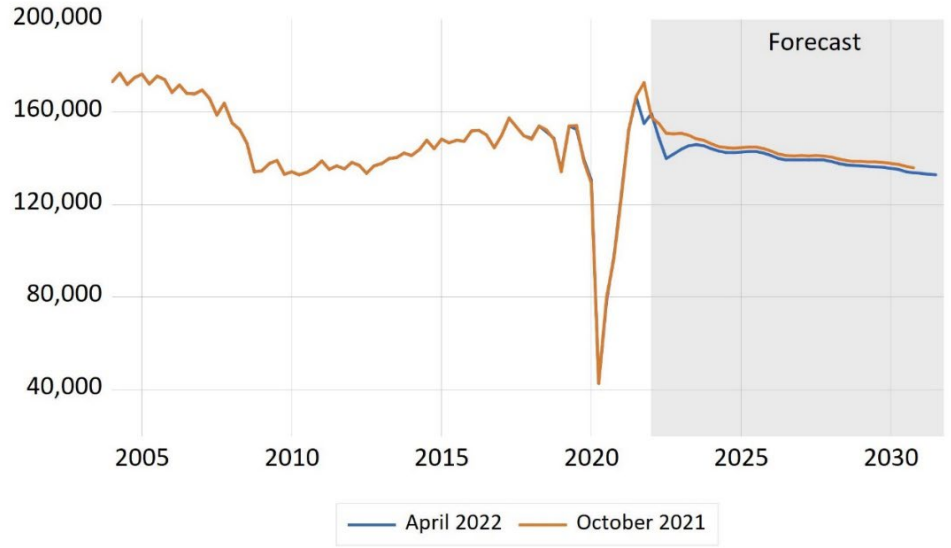
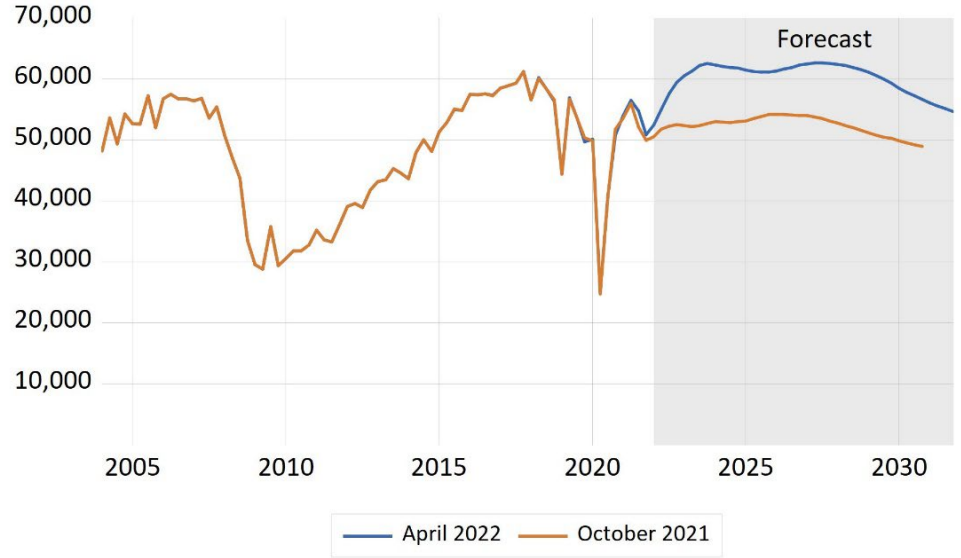
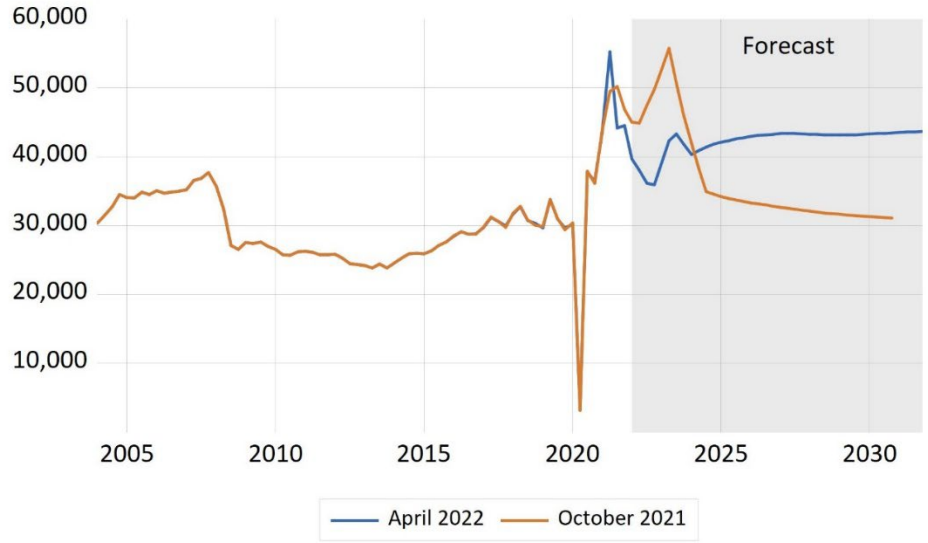


Figure 13. New Light Vehicle Titles (quarterly frequency – seasonally adjusted)



Within driver transactions, we see two distinct patterns: transactions impacted by Real ID versus transactions that are not. Replacement/Duplicate License is an example of a driver transaction that is impacted by Real ID. Prior to the pandemic, the federal cut-off date for requiring Real ID when flying was October 2020, then the cut-off date was pushed to October 2021, and now it has been pushed out to May 2023. Since there is still more than twelve months until the Real ID cut-off date, we continue to expect a decline in replacement cards because the post-COVID pent-up demand is wearing off. However, we expect the volumes to go up closer to the Real ID cat-off date and maintain at the higher level thereafter.

Figure 14. Replacement/Duplicate License (quarterly frequency – seasonally adjusted)



Original Class C Non-Commercial License (Figure 15) is an example of a driver transaction not impacted by the Real ID cut-off date in terms of volume. Getting Real ID credentials is an available option and many choose to acquire them. After the Real ID became available in July 2020, several patterns emerged. For the first six-months of issuing Real ID licenses (Jul-Dec 2020), on average 48 percent of people obtaining their first class C driver license chose to get a Real ID license. However, the average dropped to 30 percent from January to June 2021. We think it could have been due to HB 2015 implementation and the initial pent-up demand for original driver licenses by undocumented residents who would not qualify for a Real ID. The share of Real ID original licenses has been averaging 39 percent for the second half of 2022. For current forecast, we assumed a 45 percent average rate due to DMV's campaign to promote Real ID.

There were some transactions that were pushed out to the third parties, such as Class C non-commercial drive tests (Figure 16). The transaction volume here dropped to zero and remained low even after offices reopened. In the past few months DMV has increased field office capacity to conduct drive tests and approved a few more third party drive test businesses. These

measures should help restore the services to meet the current pent-up and future demand. The figure reflects only drive tests conducted by DMV field offices.

Figure 15. Original Class C Driver License (quarterly frequency – seasonally adjusted)

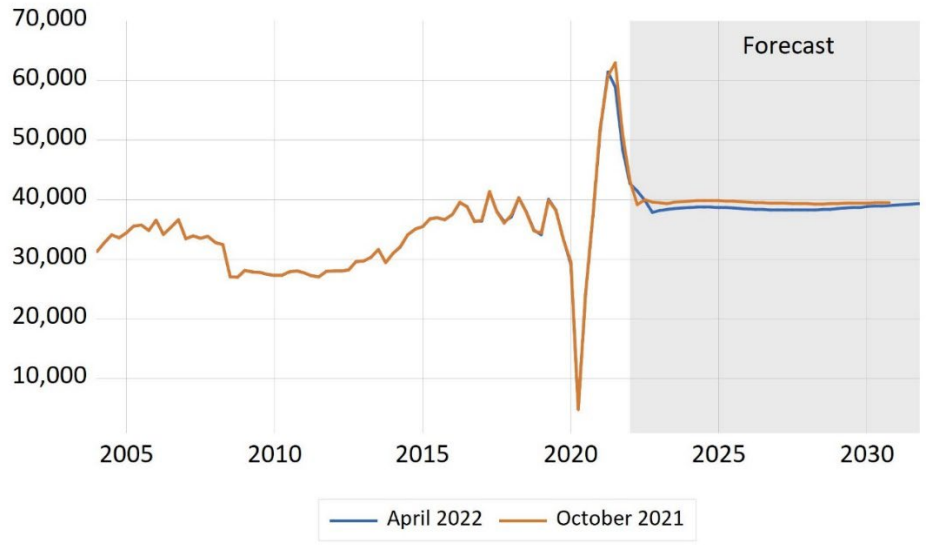
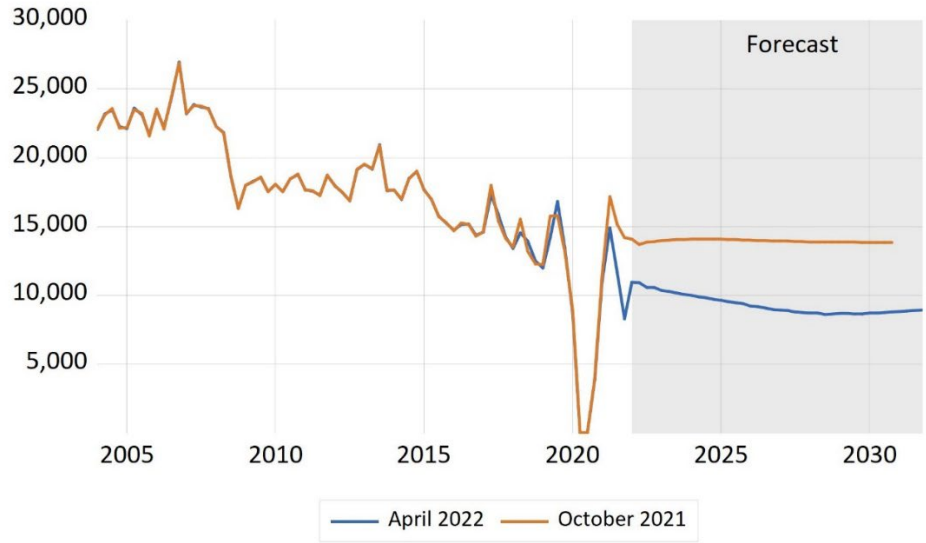
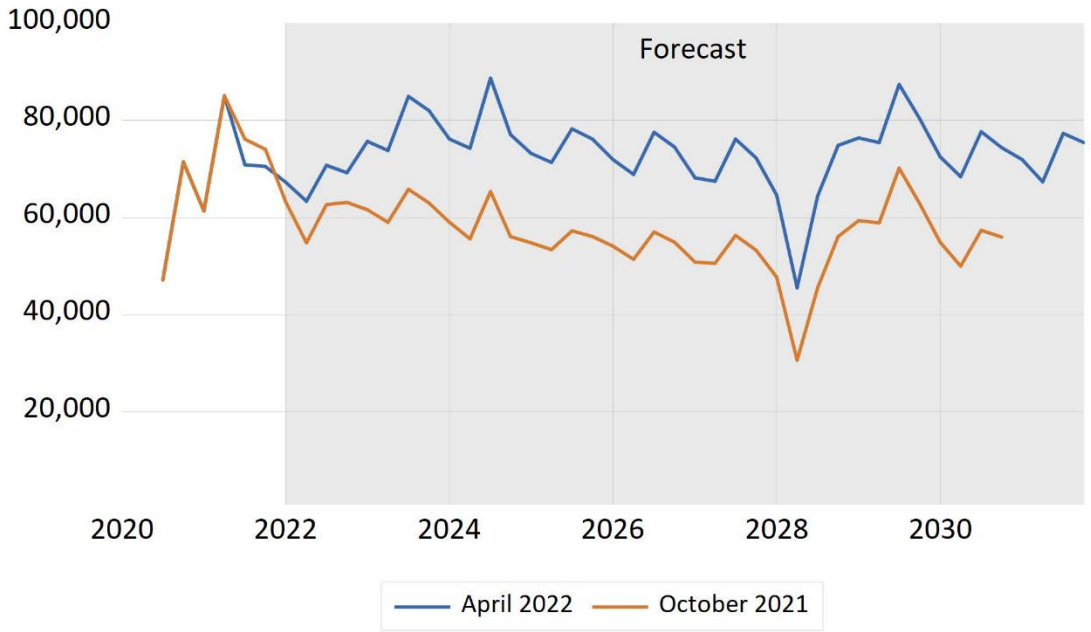


Figure 16. Class C Non-Commercial Drive Test (quarterly frequency – seasonally adjusted)



As of July 2020, DMV started issuing Real ID compliant licenses and ID cards. The fee for Real ID transaction is $30 and it will be collected each time it is renewed (every eight years). The current forecast is a bit higher than the previous because of DMV's promotion of Real ID (Figure 17).

Figure 17. Real ID Transactions (quarterly frequency – seasonally adjusted)



Some of the revenues collected by DMV are not Highway Fund revenues. The most prominent examples include ID card revenues, revenues from specialty plates (Smokey Bear, Gray Whale, Pacific Wonderland, etc.), Real ID revenues, snowmobile title and registration fees, motorhome, travel trailer, and camper registration fees. While we produce forecasts for all DMV revenues, not all of them can be used for highway construction and maintenance.

Table 4 shows the summary of DMVs Highway Fund revenues based on forecasted transaction volumes. The gross revenue portion of Table 4 is grouped into three major components reflecting the primary revenue sources: vehicle registrations, driver licenses, and vehicle titles. Overall, we expect $6 million more in gross Highway revenues for 2021-23 biennium compared to our previous forecast. The outlook for the next biennium has improved as well and we are expecting $20.2 million more for 2023-25 biennium.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 4. Highway Fund Revenues Collected by DMV (Millions of Dollars)

		Actual		Forecast							
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
1	VEHICLE REGISTRATIONS	$238.0	$277.7	$306.4	$305.8	$311.8	$310.4	$313.4	$313.3	$316.8	$316.2
2	DRIVER LICENSES & OTHER	$22.4	$36.7	$35.8	$32.8	$33.8	$33.6	$32.6	$32.1	$29.7	$32.6
3	TITLE, PLATE & OTHER	$114.5	$122.9	$151.7	$148.5	$151.9	$151.5	$151.3	$151.2	$151.6	$150.6
4	**TOTAL DMV COLLECTIONS**	**$374.8**	**$437.3**	**$493.9**	**$487.2**	**$497.5**	**$495.5**	**$497.3**	**$496.7**	**$498.1**	**$499.4**
5	Change from Previous Forecast	($0.3)	$0.0	$2.1	$3.9	$10.5	$9.7	$8.3	$9.6	$11.7	$11.8
6	COLLECTION/ADMINISTRATION & PROGRAM COST	($118.7)	($121.1)	($114.4)	($116.7)	($113.9)	($116.2)	($121.9)	($124.3)	($130.4)	($133.1)
7	TRAFFIC SAFETY TRANSFER	($0.6)	($0.6)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
8	DEPARTMENT OF EDUCATION TRANSFER	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
9	E-GOV RECORDS INCREMENTAL REVENUE TRANSFER	($8.4)	($8.3)	($8.4)	($8.4)	($8.4)	($8.4)	($8.5)	($8.5)	($8.5)	($8.5)
10	ODOT CENTRAL SERVICES ASSESSMENT	($30.7)	($31.3)	($36.4)	($37.2)	($39.0)	($39.8)	($41.7)	($42.6)	($44.6)	($45.5)
11	**NET DMV REVENUE**	**$216.4**	**$275.9**	**$334.6**	**$324.9**	**$336.2**	**$331.1**	**$325.3**	**$321.3**	**$314.6**	**$312.3**
12	REVENUE SET-ASIDE TO OTIA I & II - memo	($5.7)	($6.3)	($6.8)	($6.6)	($6.7)	($6.7)	($6.6)	($6.5)	($6.5)	($6.5)
13	REVENUE PLEDGED TO OTIA III - memo	($72.7)	($78.9)	($89.0)	($86.2)	($87.7)	($86.9)	($87.0)	($86.6)	($86.9)	($86.3)
14	REVENUE DUE TO JTA - memo	($96.5)	($103.3)	($115.3)	($111.8)	($113.6)	($113.0)	($113.4)	($113.0)	($113.5)	($112.7)
15	REVENUE DUE TO HB 2017 - memo	($78.6)	($109.2)	($130.0)	($136.1)	($140.4)	($140.9)	($143.0)	($144.0)	($146.4)	($147.1)

Actual	Forecast			
BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
$515.7	$612.2	$622.2	$626.7	$633.0
$59.0	$68.6	$67.4	$64.7	$62.3
$237.4	$300.2	$303.4	$302.6	$302.2
$812.1	**$981.0**	**$993.0**	**$994.0**	**$997.5**
($0.3)	$6.0	$20.2	$17.9	$23.4
($239.9)	($231.1)	($230.1)	($246.2)	($263.5)
($1.3)	$0.0	$0.0	$0.0	$0.0
$0.0	$0.0	$0.0	$0.0	$0.0
($16.7)	($16.8)	($16.8)	($16.9)	($17.0)
($62.0)	($73.6)	($78.8)	($84.3)	($90.2)
$492.2	**$659.5**	**$667.3**	**$646.5**	**$626.8**
($12.0)	($13.4)	($13.4)	($13.1)	($13.0)
($151.6)	($175.2)	($174.6)	($173.6)	($173.2)
($199.8)	($227.1)	($226.6)	($226.4)	($226.2)
($187.8)	($266.1)	($281.3)	($286.9)	($293.6)

Commerce and Compliance

Trucking activity and the freight industry contribute to the State Highway Fund through the weight-mile tax, heavy vehicle registration fees, and other fees. Changes in economic conditions within Oregon and the nation as a whole influence each of these revenue sources. State and federal legislation can also impact trucking activity.

The weight-mile tax is the largest source of trucking-related revenue at just under 90 percent of total revenue collected by CCD. This highway use tax applies to trucks with a gross weight over 26,000 pounds. The tax paid by a motor carrier varies with the weight of the vehicle, the number of miles traveled, and the axle configuration. The carriers generally have the option of paying on a monthly or quarterly schedule, but in some cases will pay by the trip. Certain qualifying motor carriers, such as those transporting logs, wood chips, and sand/gravel, may pay the highway use tax based on a flat monthly fee. The weight-mile revenue and transaction totals discussed in this report include the trip based, monthly, quarterly and flat fee revenue, as well as revenues from a small number of other trip-related fees.

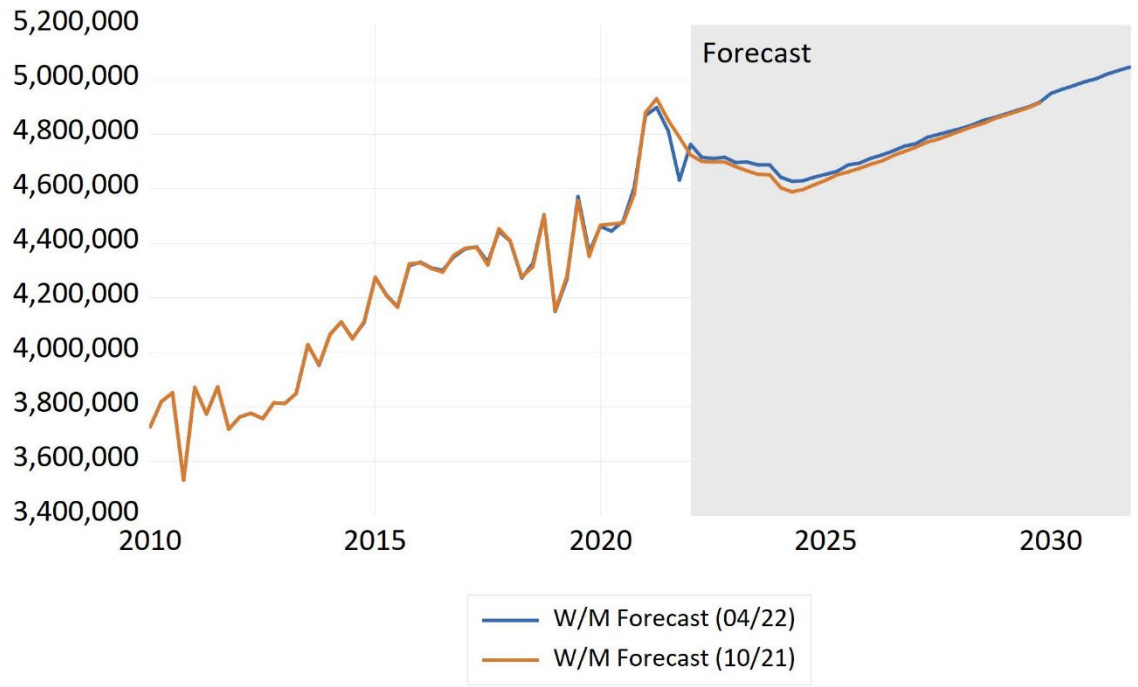
Over the course of the pandemic we have been consistently surprised by the resiliency in the weight-mile tax revenue. Normalized for the 2020 tax rate increase, overall transaction volumes increased four percent in 2020 and continued into 2021. Through the first half of the year, volumes were up ten percent over 2020. However, the second half of 2021 had reductions in these transactions for the first time since 2019. The last time two consecutive quarters had reductions to the weight-mile transactions was Q1 and Q2 in 2018. While these drops are not predicted to be sustained, they may be signaling a slowing of trucking activity in the state. One driver of reduced weight-mile activity is less real consumer spending from increased inflation. While the costs of good increases, there is less purchasing power from consumer personal income. Another potential driver could be global supply chain issues that were present throughout the last year as this normally acts as a drag on growth.

An estimate of weight-mile transactions provides the basis for the current forecast of weight-mile revenues. This methodology, also used for prior forecasts, constructs a measure of weight-mile transactions by normalizing revenues by the tax rate paid for a typical heavy vehicle. The forecasting model regresses the normalized weight-mile transactions on Oregon construction and durable goods employment, real consumer spending on durable goods, and industrial production and sales of heavy trucks in order to estimate weight-mile transactions. The variables in the model that have the most significant impact on the forecast are real consumer spending on durable goods and Oregon construction employment.

Figure 18 shows our current weight-mile transactions forecast compared to our previous forecast. Our updated model deviates from the previous projections only slightly after incorporating some of the drops in weight-mile transactions during the end of 2021. Oregon Construction employment and real consumer spending on durable goods both had slightly stronger projections over the next two years. However, both models expect trucking activity to decline from our current peak into 2024 as the consumer spending cools and new tax rates

become effective January 2022 and 2024. In the outer years of the forecast, continued, but slow, population and economic growth lead to increased trucking activity.

Figure 18. Weight-mile transaction forecast alternatives



In addition to the economic changes, under HB 2017 the weight-mile tax rates increased in 2018 and 2020, with upcoming increases scheduled for 2022 and 2024, for a total of 53 percent over the 2017 rates. These significant rate increases will likely have an impact on trucking activity as businesses look for ways to minimize the impact of these higher rates. The slight decline at the beginning of 2022 and 2024 are a direct result of these upcoming tax rate changes.

Row 1 of Table 5 shows the amount of weight-mile and flat fee revenues collected each fiscal year. In 2021, weight-mile and flat-fee revenues totaled $430.1 million, increasing 9.1 percent over 2020. This strong growth is both from the HB 2017 rate increase and positive COVID-19 impact on trucking activity. Revenue growth is strong in 2022 through 2025 as the next two rate increases are implemented and the economy fully recovers. Beyond 2025, growth slows to rates a little over one percent.

Row 2 of Table 5 shows heavy vehicle registration fee revenues. It includes both International Registration Plan (IRP) registration fees paid by interstate carriers and the Commercial registration fees paid by intrastate carriers. Together these heavy vehicle registration fees totaled $44.6 million in FY 2021. The drop between 2020 and 2021 is due to the moratorium on registration fees. For a brief period trucks were able to legally be on the road without updated

registration due to the pandemic and this resulted in a very low quarter of revenue. Looking ahead, we expect revenue to recover in FY 2022 and remain fairly constant through the remainder of the forecast.

Row 3 of Table 5 shows the revenues from Road Use Assessment Fees (RUAF), permits, passes, and credentials. This row also includes OTIA III Local Fund fee increments from the commercial driver permits, licenses, and tests, along with weight receipts. Overall, total revenues from these heavy vehicle sources increased slightly to $6.7 million in FY 2021 as the rates were increased for a few of these transactions as part of HB 2017. Looking forward we expect an increase slightly in FY 2022 and hold steady over the remainder of the forecast.

Row 4 of Table 5 reports the total gross revenues for the Commerce and Compliance Division and row 5 shows the change from the prior forecast. There is very little difference in these forecasts. The general increase to revenue from the combined projections puts estimated revenue at almost $21 million higher than the previous projection. FY 2022 is predicted to be $1.5 million less than our previous projection, but this is the only year that is not an increase.

Row 9 of Table 5 reports the revenues net-of-collection costs. Rows 10 through 13 of Table 5 are informational only and highlight the amounts CCD contributes to the OTIA, JTA, and HB 2017 programs.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 5. Highway Fund Revenues Collected by Commerce and Compliance (Millions of Dollars)

		Actual		Forecast								Actual	Forecast			
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	WEIGHT-MILE TAX	$394.3	$430.1	$449.4	$473.6	$480.2	$495.5	$501.7	$507.8	$513.5	$519.2	$824.4	$923.0	$975.7	$1,009.5	$1,032.7
2	IRP & COMMERCIAL VEHICLE REGISTRATIONS*	$48.4	$44.6	$49.0	$47.7	$47.8	$47.9	$47.9	$48.0	$48.0	$48.1	$92.9	$96.7	$95.7	$95.9	$96.1
3	RUAF, PERMITS, PASSES & CREDENTIALS**	$6.5	$6.7	$7.3	$7.2	$7.4	$7.5	$7.5	$7.6	$7.6	$7.7	$13.2	$14.5	$15.0	$15.1	$15.3
4	**TOTAL MCTD COLLECTIONS**	**$449.2**	**$481.3**	**$505.7**	**$528.5**	**$535.5**	**$550.9**	**$557.1**	**$563.3**	**$569.2**	**$575.0**	**$930.5**	**$1,034.2**	**$1,086.4**	**$1,120.5**	**$1,144.2**
5	Change from Previous Forecast	$0.0	$0.0	($1.5)	$2.3	$4.2	$2.9	$2.8	$2.3	$1.7	$1.2	$0.0	$0.8	$7.2	$5.1	$3.0
6	COLLECTION/ADMINISTRATION & PROGRAM COST	($35.4)	($36.2)	($38.4)	($39.2)	($41.1)	($42.0)	($44.0)	($44.9)	($47.1)	($48.0)	($71.6)	($77.7)	($83.1)	($88.9)	($95.1)
7	IFTA BUDGETED EXPENDITURES***	$0.4	$0.4	$1.4	$1.5	$1.4	$1.5	$1.4	$1.5	$1.4	$1.5	$0.7	$2.9	$2.9	$2.9	$2.9
8	ODOT CENTRAL SERVICES ASSESSMENT	($11.8)	($12.1)	($13.6)	($13.9)	($14.5)	($14.8)	($15.6)	($15.9)	($16.7)	($17.0)	($23.9)	($27.5)	($29.4)	($31.4)	($33.6)
9	**NET MCTD REVENUE**	**$402.3**	**$433.5**	**$455.1**	**$476.9**	**$481.2**	**$495.6**	**$499.0**	**$504.0**	**$506.9**	**$511.4**	**$835.8**	**$931.9**	**$976.8**	**$1,003.0**	**$1,018.3**
10	REVENUE SET-ASIDE TO OTIA I & II - memo	($11.3)	($11.3)	($11.0)	($11.2)	($11.0)	($11.0)	($11.1)	($11.2)	($11.3)	($11.4)	($22.6)	($22.2)	($22.1)	($22.3)	($22.7)
11	REVENUE PLEDGED TO OTIA III - memo	($30.9)	($31.5)	($32.2)	($32.0)	($31.7)	($31.7)	($32.0)	($32.3)	($32.6)	($32.9)	($62.4)	($64.2)	($63.4)	($64.3)	($65.5)
12	REVENUE DUE TO JTA - memo	($86.2)	($88.2)	($90.3)	($89.8)	($88.9)	($89.0)	($89.8)	($90.6)	($91.4)	($92.2)	($174.4)	($180.1)	($178.0)	($180.4)	($183.6)
13	REVENUE DUE TO HB 2017 - memo	($86.9)	($103.3)	($123.9)	($147.4)	($158.7)	($173.9)	($176.1)	($178.2)	($180.2)	($182.2)	($190.2)	($271.3)	($332.6)	($354.2)	($362.4)

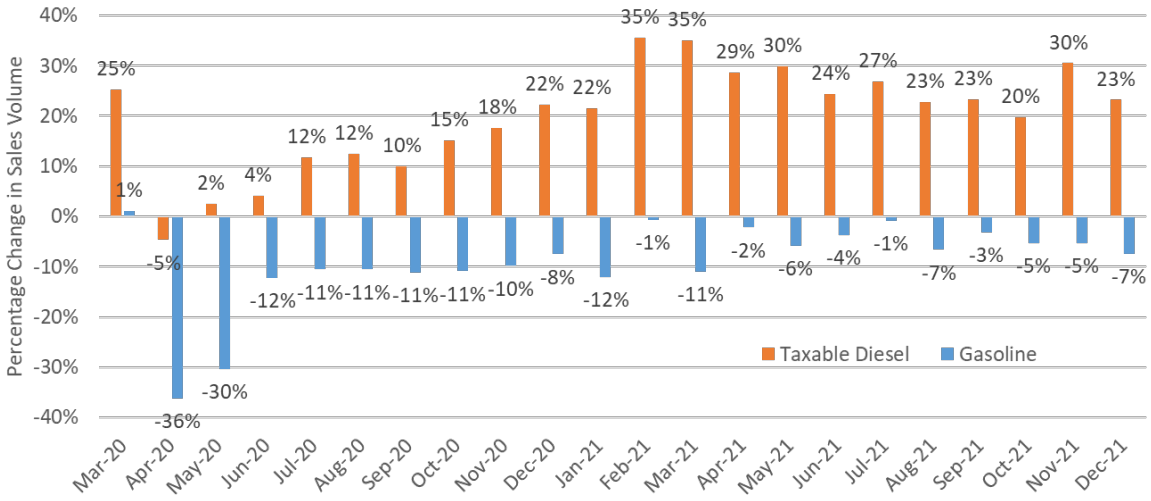
*IRP: International Registration Plan.
**RUAF: Road Use Assessment Fees.
***IFTA: International Fuel Tax Agreement.

Motor Fuels

Motor Fuels revenues are derived from the tax paid on the sale of both motor vehicle fuels (gasoline) and use fuels (predominately diesel). The distinction is important because the tax is collected in different parts of the supply chain. Gasoline is taxed at the point of first sale, when the dealer or distributor purchases the fuel from the terminal. Diesel on the other hand is taxed later in the supply chain, at the retail level. This gives retailers, like card lock stations, the option of not imposing the tax on heavy trucks that pay the weight-mile tax instead of the Motor Fuels tax. The separation between when a vehicle pays the fuels tax or pays the weight-mile tax is at the 26,000 pound weight class. Generally, a vehicle up to 26,000 pounds will pay the fuels tax and register their vehicle through DMV, while vehicles over this weight will pay the weight-mile tax and register their vehicle through CCD.

Prior to the ongoing COIVD-19 crisis, gasoline comprised the largest share of taxable fuel at roughly 89 percent, while diesel comprised the remaining eleven percent. This has not always been the case: in the past, taxable diesel represented as low as one percent of sales back in 1980. However, as more vehicles required to pay the fuels tax switch to diesel, its share has steadily increased until around 2014, when diesel's share leveled out at about eleven percent. Since COVID-19, travel patterns have changed resulting in the share of diesel increasing over this period, stabilizing at fourteen percent since the initial shock of early 2020 (Figure 19). This seems reasonable because a lot of the light trucking activity, like delivery vehicles, has increased as a result of COVID-19, while car use has declined as people stay home. The chart below shows the change in sales volume for both gasoline and taxable diesel compared to the same month in 2019. With the exception of April 2020, all other months have seen growth in taxable diesel over 2019 levels, while gasoline has struggled to regain prior levels.

Figure 19: Percentage change in Gasoline and Taxable Diesel sales over 2019



While the recovery to date has been impressive in how quickly overall fuel sales have rebounded, getting back to 2019 levels is not likely to occur as future growth faces significant challenges. First, the stock of passenger vehicles is not expected to reach 2019 levels until later this biennium. Extended teleworking has clearly changed how we work, for those who can work remotely. We would expect some of these changes to be permanent if businesses can save on costs and workers can still maintain their prior levels of productivity. Slow registration growth allows for growth in fuel efficiency to counteract any increase in fuel demand from additional vehicles. Additionally, the spike in fuel prices will continue to depress fuel sales over the next several years as prices remain elevated.

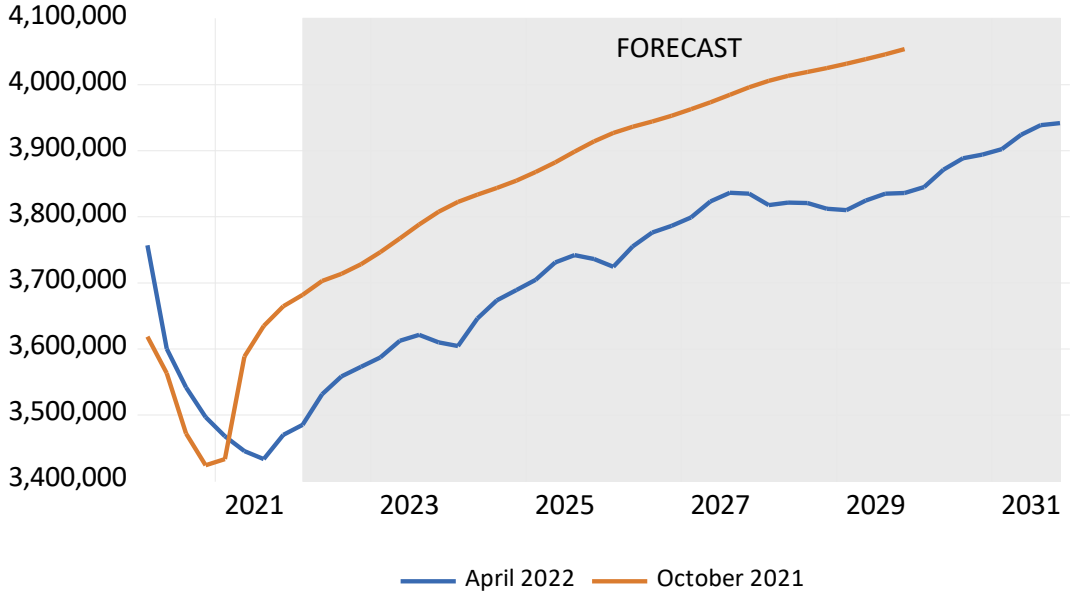
The Motor Fuels forecast model regresses the volume of Motor Fuels on the price of fuel, stock fuel efficiency of the light vehicle fleet, stock of passenger vehicles, and Oregon total non-farm employment. Compared to the prior forecast, only the total non-farm employment did not see a significant change between forecasts and the changes in the other variables all contribute to a weaker Motor Fuels forecast.

Generally, the forecast model does a good job of the six-months ahead forecast, with forecast errors averaging 1.3 percent over the last twelve years. However, since COVID-19, our forecast models have been less accurate due to high levels of uncertainty surrounding the explanatory variables, which most recently is due to the war in Ukraine and high fuel prices.

One of the strongest model variables is the stock of passenger vehicles. The number of registered vehicles provides a sense of scale for the amount of fuel sold. Small changes in registered vehicles over time help explain the variation in the amount of fuel sold. However, during 2020, the number of registered vehicles dropped significantly. This drop is at least in part an artifact of the pandemic's impact on the ability of vehicle owners to register their vehicles due to the shutdown of field offices and Department of Environmental Quality (DEQ) emissions testing sites during the early months of the pandemic. The inability for owners to register implies that some of this drop is artificial. DMV sent out several hundred thousand renewal reminders in the fall of 2021 to encourage those who were unable or forgot to renew their registrations to do so by the end of 2021, when the registration moratorium expired. There has been some increased registration activity through the end of 2021 and into the beginning of 2022, but at levels less than expected (Figure 20).

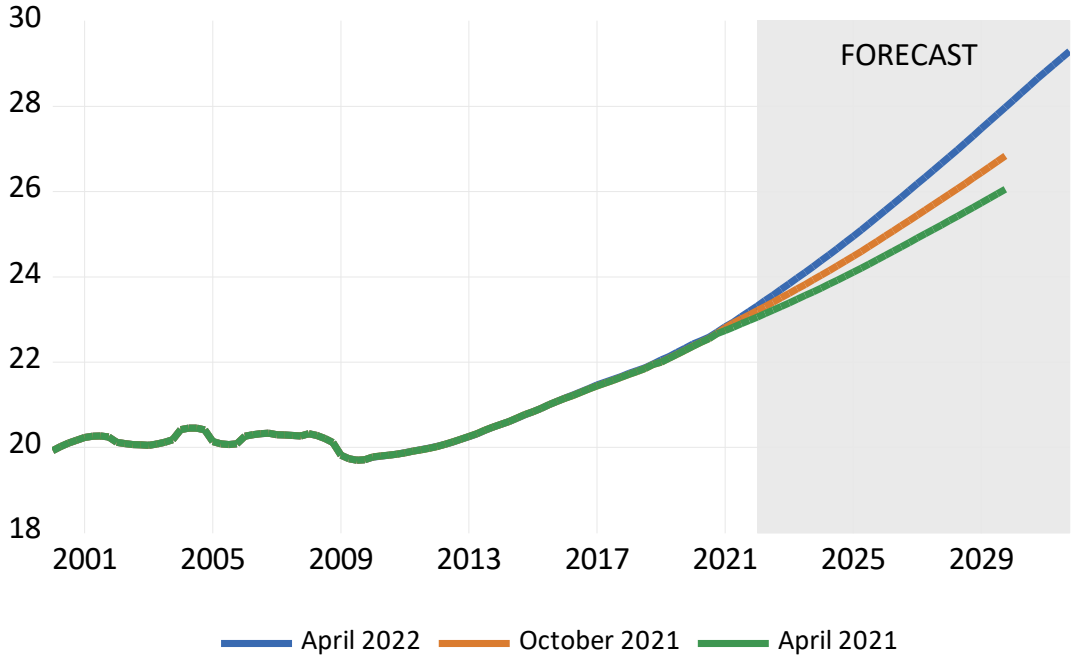
The result of a smaller than expected rebound in registrations is an overall lower forecast compared to the October 2021 forecast. While we generally expect growth rates to be similar to the prior forecast, the lack of a rebound causes a gap between forecasts and contributes to an overall lower fuels forecasts, since there is now an expectation of fewer vehicles on the road.

Figure 20: Stock of Passenger Vehicles



A lower stock forecast is not the only variable contributing to a weaker Motor Fuels forecast. Over the last several quarters the overall growth in fuel efficiency of the light vehicle fleet has accelerated resulting in consecutive stronger forecasts. This is in part due to strong new vehicle sales, which has led to a slight decline in the average age of the fleet. Since newer vehicles in the same class are generally more efficient than their older versions, this pushes the average fuel efficiency rating upward. In addition, policies that encourage electrification continue to contribute to increasing overall fleet fuel efficiency as these vehicles increase their share of total light vehicles.

Figure 21: Average Combined Light Vehicle Fuel Efficiency

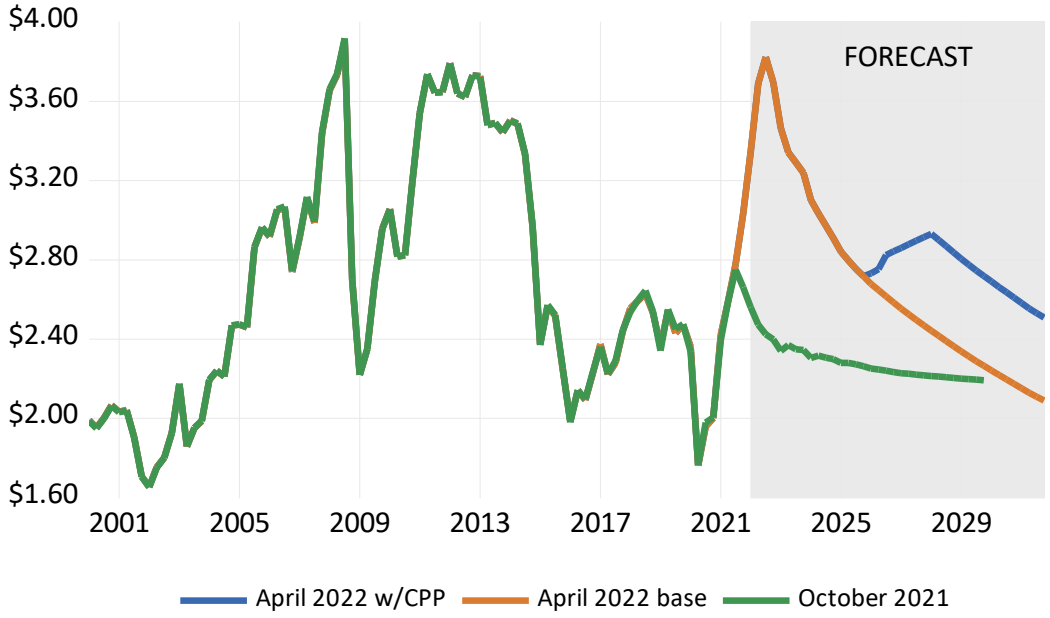


The single biggest change between this forecast and the prior one is fuel prices. While fuel demand is relatively unaffected by the price of fuel, large changes do have an impact. The price of fuel has increased roughly 50 percent in a year and about 25 percent just between February and March of this year. The reason for the large increase is directly tied to the war in Ukraine. The oil futures market is notoriously volatile and any political instability, especially in the world's third largest oil producing country (Russia) will lead to price changes. In this case, the sanctions on Russia are leaving a gap in the global market, thus pushing prices up. These increases are large enough to have a significant impact on fuel demand absent any other changes. While this conflict may not escalate further, the sanctions will likely last much longer and fuel prices will remain elevated over the next several years.

In addition to fuel prices being impacted by increasing oil prices, climate action is also expected to have an impact on prices. The Climate Protection Program (CPP), passed by the Environmental Quality Commission in December 2021, sets explicit limits on greenhouse gas emissions by the transportation sector each year. These limits will effectively set a cap on the amount of fossil fuel sold each year. To achieve these limits, electrification of the vehicle fleet becomes a long-run key strategy, along with developing alternative bio-fuels. In addition, fuel prices can become an important mechanism to encourage less consumption. While we do not know when prices will need to increase to incentivize less consumption, based on conversations with fuel suppliers, it is likely to happen later this decade.

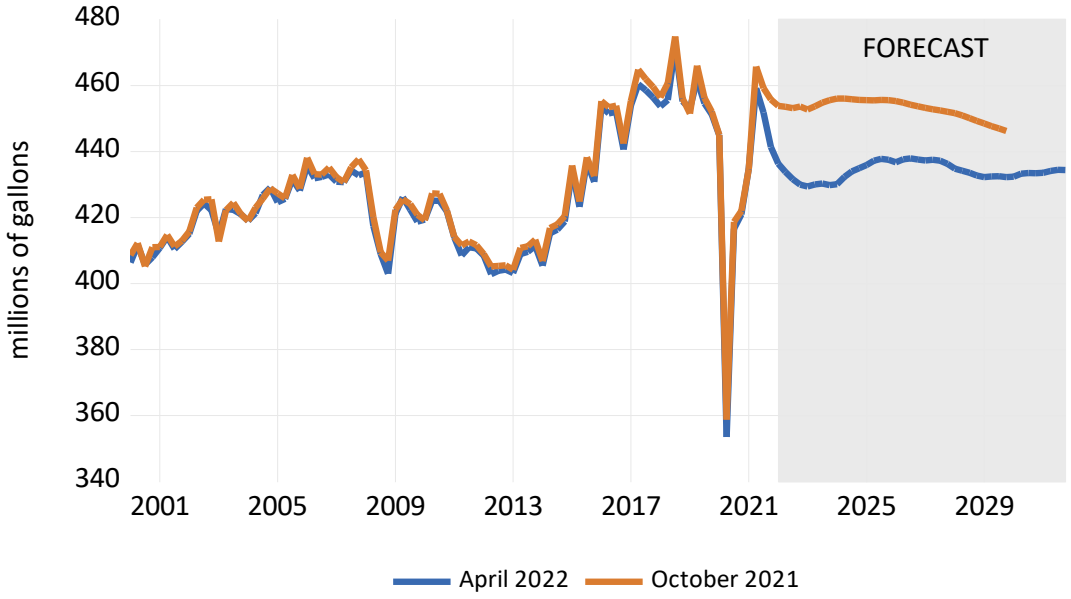
To capture this impact in the Motor Fuels model, beginning in 2026, prices are increased two percent until reaching 20 percent in 2028. Based on CPP rules, if price increases in Oregon are 20 percent higher than the average price increases in Washington, Idaho, and Nevada, the Environmental Quality Commission can take action to address the increase. Thus, we assumed prices do not increase more than 20 percent, but maintain a 20 percent increase over the remainder of the forecast from a baseline price without any additional price effect.

Figure 22: Real Price of Gasoline



The figure below shows the gallons sold forecast for Motor Fuels compared to the prior forecast. Looking at recent history, there was an unprecedented drop in sales during the second quarter of 2020 and a rapid partial recovery in the third quarter of 2020. As noted above, lower vehicle stock, an increase in fleet fuel efficiency, and the price of fuel all combine to act as a drag on the current forecast. Essentially, the price of fuel is expected to have a sustained impact over the next couple years, followed by a brief reprieve and then pick up again the outer years of the forecast with the CPP impact. This translates into a slight increase in fuel sales heading into 2025 before falling in the later years as the CPP price impact drags down sales. Overall, slow economic and registration growth, coupled with stronger fuel efficiency growth, keep fuel sales relatively flat in the outer years.

Figure 23. Motor Fuels forecast (millions of gallons of taxable fuel)



Lastly, HB 2017 included guaranteed and conditional fuels tax rate increases. Since the bill only guarantees the first four cent tax rate increase, this necessitates creating two distinct forecasts: one forecast where we assume all the conditions are met and the full ten cents in increases are implemented, and another forecast where only what is guaranteed is implemented. For now, the first eight cents are included in the guaranteed version. However, since fuel consumption is not very sensitive to price changes, the impact of the final two cents increase is very minor.

Row 2 of Table 6 shows the total gross revenues from the Motor Fuels taxes. FY 2021 finished with $620 million in gross revenues increasing by 4.2 percent over FY 2020 as demand recovered from the pandemic and benefited from a full year of the January 2020 two cent increase. FY 2022 also benefits for a partial year of the January 2022 two cent tax increase, leading to a $30 million increase in revenue. FY 2023 will include a full year of the most recent tax increase and revenues should continue to grow slightly in FY 2026 as fuel prices fall. In the outer years, revenues should drop slightly as the CPP price impact is applied to the price of fuel.

Row 3 shows the change from the prior forecast. This row does not provide a useful comparison for this forecast. The prior forecast did not include the January 2022 two cent increase, so while the forecast for gallons of fuel sold is lower than the previous forecast, the revenue comparison does not reflect this due to the added two cent increase in the current forecast.

Rows 4 through 13 of Table 6 list the costs associated with the Fuels Tax program and the statutory transfers that occur prior to apportionment.

Rows 16 through 19 of Table 6 highlight the amounts that the Motor Fuels tax contributes to the OTIA, JTA, and HB 2017 programs, either as a portion of the OTIA I set-aside shown in row 10 or as the incremental revenues from the OTIA III, JTA, and HB 2017 programs shown in rows 17 through 19. Note that the OTIA III legislation did not increase the Motor Fuels tax rate so the incremental amount is zero.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 6. Highway Fund Revenues Collected by FSB (Millions of Dollars) (Includes Guaranteed Fuels Tax Increases Only – Currently 8 Cents)

		Actual		Forecast								Actual	Forecast			
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	MOTOR FUELS TAXES	$595.1	$619.9	$649.9	$654.1	$654.7	$662.2	$665.1	$665.3	$662.5	$658.1	$1,215.0	$1,304.1	$1,316.9	$1,330.4	$1,320.5
2	**TOTAL FSB COLLECTIONS**	**$595.1**	**$619.9**	**$649.9**	**$654.1**	**$654.7**	**$662.2**	**$665.1**	**$665.3**	**$662.5**	**$658.1**	**$1,215.0**	**$1,304.1**	**$1,316.9**	**$1,330.4**	**$1,320.5**
3	Change from Previous Forecast	$0.0	$0.0	($5.8)	$1.6	($0.9)	$6.5	$9.8	$12.6	$12.2	$11.9	$0.0	($4.1)	$5.5	$22.4	$24.1
4	COLLECTION/ADMINISTRATION COST	($2.0)	($2.1)	($2.2)	($2.2)	($2.3)	($2.4)	($2.5)	($2.5)	($2.7)	($2.7)	($4.1)	($4.4)	($4.7)	($5.0)	($5.4)
5	ODOT CENTRAL SERVICES ASSESSMENT	($0.3)	($0.4)	($0.3)	($0.3)	($0.4)	($0.4)	($0.4)	($0.4)	($0.4)	($0.4)	($0.7)	($0.7)	($0.7)	($0.8)	($0.8)
6	SNOWMOBILE TRANSFER	($0.8)	($0.7)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($1.5)	($1.5)	($1.6)	($1.6)	($1.6)
7	CLASS I ATV TRANSFER	($2.8)	($3.0)	($3.0)	($3.1)	($3.1)	($3.1)	($3.0)	($3.0)	($3.0)	($3.0)	($5.7)	($6.1)	($6.1)	($6.1)	($6.0)
8	MARINE BOARD TRANSFER	($4.8)	($5.0)	($5.2)	($5.3)	($5.3)	($5.3)	($5.3)	($5.3)	($5.3)	($5.3)	($9.8)	($10.5)	($10.6)	($10.6)	($10.6)
9	CLASS II ATV TRANSFER	($1.5)	($1.8)	($1.9)	($1.9)	($1.9)	($1.9)	($1.9)	($1.9)	($1.9)	($1.9)	($3.3)	($3.8)	($3.8)	($3.8)	($3.8)
10	CLASS III ATV TRANSFER	($1.5)	($1.7)	($1.7)	($1.8)	($1.8)	($1.8)	($1.8)	($1.8)	($1.8)	($1.8)	($3.2)	($3.5)	($3.6)	($3.6)	($3.6)
11	CLASS IV ATV TRANSFER	($1.2)	($1.5)	($1.5)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($2.7)	($3.1)	($3.1)	($3.1)	($3.1)
12	TRANSPORTATION OPERATING FUND (TOF)	($14.6)	($15.8)	($16.5)	($17.2)	($17.5)	($17.7)	($18.0)	($18.3)	($18.6)	($18.8)	($30.5)	($33.7)	($35.2)	($36.3)	($37.4)
13	AVIATION TRANSFER	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.2)	($0.2)	($0.2)	($0.2)
14	HB 2435 (2013 Session) B20 FUEL TAX EXEMPTION -memo	($2.9)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	($2.9)	$0.0	$0.0	$0.0	$0.0
15	**NET FSB REVENUE**	**$562.7**	**$587.8**	**$616.8**	**$619.8**	**$620.0**	**$627.2**	**$629.7**	**$629.7**	**$626.4**	**$621.6**	**$1,150.5**	**$1,236.5**	**$1,247.3**	**$1,259.4**	**$1,248.0**
16	REVENUE ALLOCATION TO OTIA I & II SET-ASIDE - memo	($18.6)	($18.0)	($17.8)	($17.8)	($17.8)	($17.9)	($17.9)	($17.9)	($17.8)	($17.7)	($36.6)	($35.6)	($35.8)	($35.8)	($35.5)
17	REVENUE PLEDGED TO OTIA III - memo	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
18	REVENUE DUE TO JTA - memo	($102.3)	($103.3)	($105.5)	($103.3)	($103.4)	($104.6)	($105.0)	($105.1)	($104.6)	($103.9)	($205.6)	($208.8)	($207.9)	($210.1)	($208.5)
19	REVENUE DUE TO HB 2017 - memo	($83.5)	($103.3)	($122.3)	($137.7)	($137.8)	($139.4)	($140.0)	($140.1)	($139.5)	($138.5)	($186.8)	($260.0)	($277.3)	($280.1)	($278.0)

Other Revenues

In addition to the traditional highway revenues, ODOT also collects and distributes the following revenues:

1. HB 2017 Tax Programs
2. Aviation Fuel Tax
3. Gross Railroad Revenues
4. Other Highway Revenues

HB 2017 Tax Programs

The 2017 Oregon Legislature passed House Bill 2017, marking a significant investment in transportation to promote a clean environment, strong communities with good quality of life, a vibrant economy with good jobs, and safe, healthy people. This effort is referred to as Keep Oregon Moving. In addition to increasing the traditional Highway Fund taxes and fees, three new taxes were introduced to provide additional funding for Keep Oregon Moving:

1. Statewide **Transit Payroll Tax** for investments in public transportation.
2. **Vehicle Privilege Tax** (on new vehicles purchased and registered in Oregon) dedicated to the Connect Oregon program and to promote electric vehicle sales. New vehicles purchased outside of Oregon and registered in Oregon are subject to a similar tax called **Vehicle Use Tax**. However, these funds go to Highway Fund and thus are treated as a separate line item.
3. **Bike Excise Tax** also dedicated to the Connect Oregon program to provide grants for bicycle and pedestrian projects.

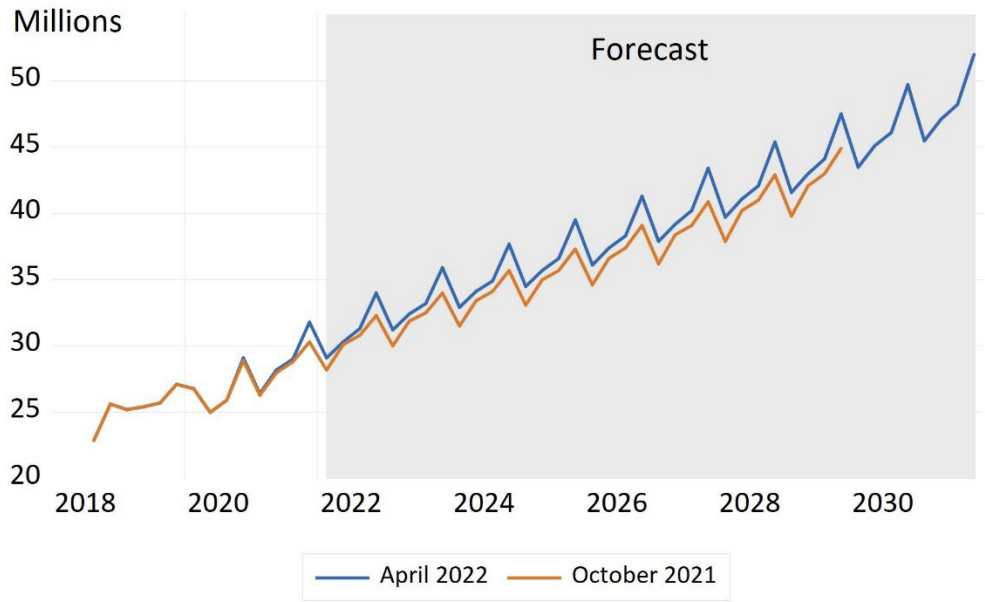
The Vehicle Privilege/Use Tax and Bike Excise Tax were implemented in January 2018. The Transit Payroll Tax went into effect in July 2018. The most significant update relative to the October 2021 forecast is the legislature restructuring the amounts transferred to DEQ, Senate Bill 1558 (2022).

The Transit Payroll Tax is a statewide payroll tax and is the largest of the HB 2017 taxes. A rate of one-tenth of one percent is imposed on the wages of employees who are Oregon residents regardless of where they work as well as residents of other states who work in Oregon. The revenue from this tax is directed to state transit agencies. About 90 percent is distributed by formula to statutorily defined Qualified Entities based on their respective share of state payrolls.

The current forecast method is a simple one because we have limited historical data to help predict future revenues. Payroll data from The Oregon Employment Department (OED) is multiplied by growth rates from the OEA forecasted growth in Oregon wages and salaries. These values are multiplied by the payroll tax rate to produce the estimated gross quarterly payroll tax, which assumes that OED payroll is equivalent to the total transit payroll tax liability.

However, since these are two different payroll programs, the payroll totals will likely not be completely comparable. To adjust for this, a ratio was created measuring the share of transit payroll tax liability to total OED payroll. The ratio is about 97 percent. Another feature of this data is that the most recent actuals will continue maturing as entities pay past due tax. As a result, some of the most recent historical data might still change and should be viewed as preliminary and not final. The forecast has been tracking well against the actuals. The current forecast is slightly higher for the current and next biennia, mainly due to a stronger than anticipated wage growth and lower unemployment through COVID-19 pandemic impacts.

Figure 24. Transit Payroll Tax Collections - Forecast Comparison (Quarterly Collections, Accrual)



Vehicle Privilege and Use Taxes only apply to manufacturer or dealer vehicle sales: private vehicle sales are excluded. The tax amount of 0.5 percent of the vehicle's sale price is assessed on the following vehicle types: passenger vehicles, trucks, trailers (except 1,800 lbs. or less), travel trailers, motor homes, campers, motorcycles, mopeds, buses, bus trailers, and fixed load trailers. Only vehicles with odometer reading of 7,500 miles or less (if there is an odometer) and gross vehicle weight rating of 26,000 lbs. or less are subject to this tax. For sales occurring in Oregon, the vehicle dealer is required to pay the **Privilege Tax**. An Oregon resident purchasing a new vehicle out-of-state pays the **Use Tax**. The rates are the same for both taxes. However, Use Tax revenue is Highway Fund revenue while Privilege Tax revenue is dedicated to ODOT's Connect Oregon program and to Department of Environmental Quality programs.

The forecast method uses reports of actual vehicles sold, historical sales, and national vehicle sale price forecasts. There is still limited history in this series, and the impact of COVID-19 and subsequently large federal policy responses presents challenges for typical methods. First, the

quantities of subject vehicles are forecasted. Second, the total revenue collections are estimated by multiplying the quantity by the price using National Average Light Vehicle Price forecast from IHS Markit. Third, the total dollar amount from the previous two steps is multiplied by the tax rate of 0.5 percent.

Figure 25 compares the current forecast with our previous (October 2021) forecast for Vehicle Privilege Tax, and Figure 26 shows the forecast comparison for Vehicle Use Tax. The expected revenues for FY 2022 and beyond are higher than previously forecasted due to a stronger new light vehicle sales forecast, higher average vehicle sales prices, and an improved overall economic outlook, though inflation and interest rate concerns have increased since our last forecast. Vehicle supply delays present risks to the timing of these improvements, but consumer savings and demand for vehicles continue to appear strong, which supports the upward adjustment of the forecast.

Figure 25. Vehicle Privilege Tax - Forecast Comparison (Quarterly Collections, Accrual)

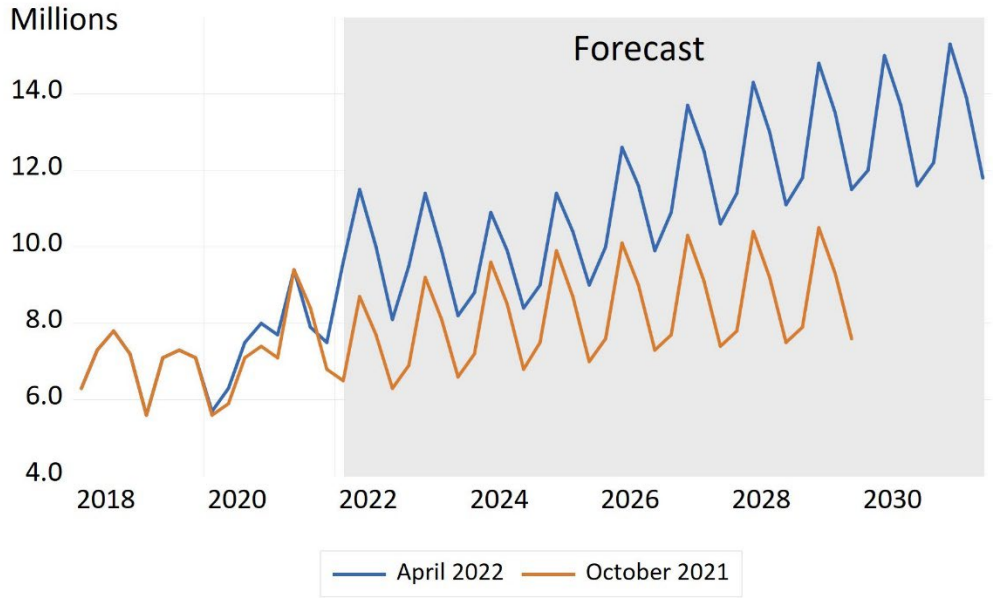


Figure 26. Vehicle Use Tax - Forecast Comparison (Quarterly Collections, Accrual)

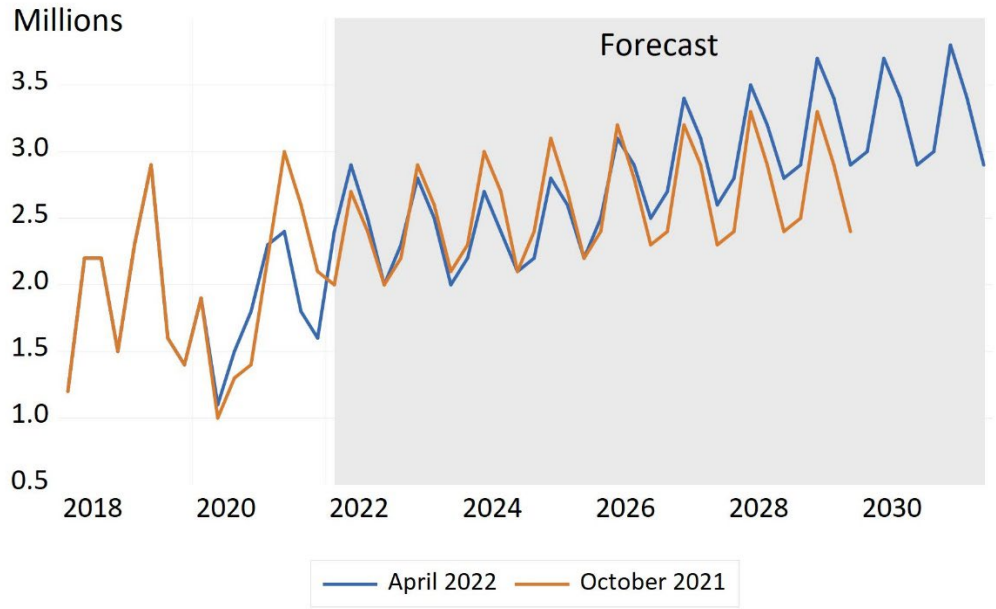


Table 7 provides a summary of expected total revenues, collection costs, transfers to DEQ (for electric vehicle rebates and promotions), and net revenues to ODOT. Collection costs have been consistent and are expected to remain stable. Recent legislation (HB 2165) extended the transfer each calendar year of Vehicle Privilege Tax to DEQ past its initial sunset on January 1, 2024. The amount of that transfer was adjusted in the 2022 Legislative Session by Senate Bill (SB) 1558. Going forward, DEQ will receive the maximum of either 45 percent of total collected revenues or $12 million each calendar year. This change will result in reduced transfers to ODOT relative to expectations if the transfer had remained at $12 million. Our current forecast for net revenues to ODOT accounts for this change.

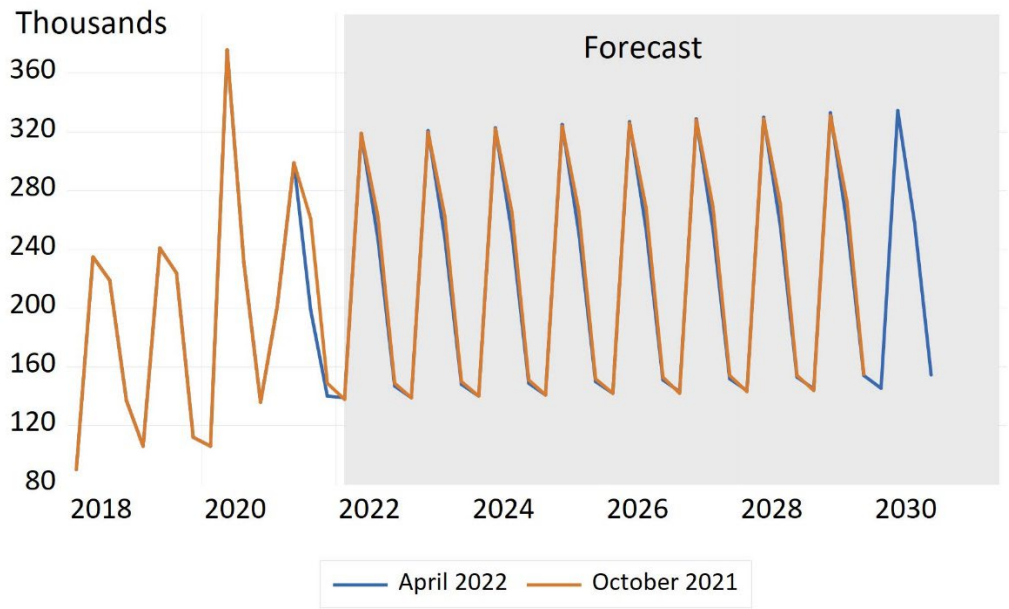
The Oregon Bicycle Excise Tax is a flat tax of $15, collected at the point of sale starting January 1, 2018. Revenue from the Bicycle Excise Tax goes into the Multimodal Active Transportation Fund to provide grants for bicycle and pedestrian transportation projects. This tax initially applied to bicycles with a wheel diameter of 26-inches or larger and excluded electric-assist bicycles. However, during the 2018 Legislative Session, these restrictions were removed (HB 4059) and now all new bicycles of $200 and higher are subject to the tax. While the tax is a liability of the purchaser, the seller is ultimately responsible for collecting it, filing quarterly returns with Department of Revenue, and making payments.

The forecast is developed using historical data from the Department of Revenue and Oregon population growth rates. There was an unexpectedly large increase in bicycle sales in the second quarter of 2020, which coincided with the start of COVID-19 related policy changes. It is too early to know if this increase was a result of stimulus money people received or if it was the

beginning of a new trend (Figure 27). Future data will provide more answers and insights into this forecast. The overall current forecast is not significantly different from our previous October 2021 forecast, though the previous forecast exceeded actuals for the last quarter of 2022.

Collection costs for the Bike Tax program are small, scaled to the revenue collected. Like the other HB 2017 taxes, FY 2018 and FY 2019 experienced some one-time costs that bumped up collection costs for those years. Going forward, we expect collection costs to average $44,000 per year through FY 2029.

Figure 27: Bicycle Excise Tax Collections – Forecast Comparison (Quarterly Collections, Accrual)



In summary, net tax revenues to ODOT for all three HB 2017 taxes totaled $256.7 million during the 2019-21 biennium. For 2021-23 biennium we anticipate a net revenue of $307.8 million, which is 3.6 percent ($10.7 million) more than the October 2021 forecast. Revenues for 2023-25 biennium are forecast up 2.5 percent ($8.1 million) compared to the previous forecast, and revenues for 2025-27 biennium are revised up 5.7 percent. This upward revision is driven by the strength of the Privilege Tax forecast and vehicle price inflation forecast.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 7. Total & Net Tax Revenues (Millions of Dollars)

	Actual		Forecast								Actual	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	BI 2019-21	BI 2021-23	BI 2023-25	BI 2025-27	BI 2027-29
TAX COLLECTIONS															
TRANSIT TAX	$104.6	$109.6	$120.2	$128.8	$136.1	$142.8	$149.6	$156.7	$164.3	$172.1	$214.18	$249.07	$278.92	$306.30	$336.47
VEHICLE PRIVILEGE TAX	$26.4	$32.6	$36.6	$38.9	$37.8	$38.6	$42.0	$46.2	$48.8	$50.8	$58.98	$75.51	$76.35	$88.27	$99.58
VEHICLE USE TAX	$6.0	$8.1	$8.7	$9.7	$9.4	$9.6	$10.4	$11.5	$12.1	$12.6	$14.13	$18.36	$18.93	$21.89	$24.70
BIKE EXCISE TAX	$0.8	$0.9	$0.8	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$1.68	$1.65	$1.72	$1.74	$1.77
TOTAL TAX COLLECTIONS	**$137.8**	**$151.2**	**$166.3**	**$178.3**	**$184.1**	**$191.8**	**$202.9**	**$215.3**	**$226.1**	**$236.4**	**$289.0**	**$344.6**	**$375.9**	**$418.2**	**$462.5**
Change from Previous Forecast	$0.6	$3.3	$13.0	$19.5	$15.4	$13.9	$16.6	$20.5	$226.1	$236.4	$4.0	$32.5	$29.2	$37.1	$462.5
COLLECTION COSTS:															
TRANSIT TAX	$3.6	$3.5	$3.5	$3.6	$3.7	$3.9	$4.0	$4.2	$4.3	$4.5	$7.12	$7.12	$7.63	$8.17	$8.76
VEHICLE PRIVILEGE TAX	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.5	$0.5	$0.78	$0.76	$0.82	$0.88	$0.94
VEHICLE USE TAX	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.31	$0.31	$0.33	$0.35	$0.38
BIKE EXCISE TAX	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.1	$0.08	$0.08	$0.09	$0.09	$0.10
TOTAL COLLECTION COSTS	**$4.2**	**$4.1**	**$4.1**	**$4.2**	**$4.4**	**$4.5**	**$4.7**	**$4.8**	**$5.0**	**$5.2**	**$8.3**	**$8.3**	**$8.9**	**$9.5**	**$10.2**
TRANSFER TO DEQ:															
VEHICLE PRIVILEGE TAX	$12.0	$12.0	$12.0	$16.5	$15.3	$15.6	$15.8	$16.2	$16.5	$16.7	**$24.0**	**$28.5**	**$30.9**	**$32.0**	**$33.2**
NET TAX REVENUES TO ODOT															
TRANSIT TAX	$101.0	$106.1	$116.7	$125.2	$132.3	$139.0	$145.6	$152.6	$160.0	$167.7	$207.1	$241.9	$271.3	$298.1	$327.72
VEHICLE PRIVILEGE TAX	$14.0	$20.2	$24.2	$22.0	$22.1	$22.6	$25.8	$29.6	$31.9	$33.6	$34.2	$46.2	$44.6	$55.4	$65.46
VEHICLE USE TAX	$5.9	$7.9	$8.6	$9.5	$9.2	$9.4	$10.3	$11.3	$11.9	$12.4	$13.8	$18.1	$18.6	$21.5	$24.32
BIKE EXCISE TAX	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$1.6	$1.6	$1.6	$1.7	$1.67
TOTAL NET REVENUES TO ODOT	**$121.6**	**$135.1**	**$150.2**	**$157.5**	**$164.4**	**$171.7**	**$182.4**	**$194.3**	**$204.7**	**$214.5**	**$256.7**	**$307.8**	**$336.2**	**$376.7**	**$419.2**
PRIOR FORECAST NET TAX REVENUES															
TRANSIT TAX	$101.0	$105.7	$113.9	$121.3	$127.8	$134.0	$140.3	$146.8	N/A	N/A	$206.7	$235.3	$261.8	$287.1	N/A
VEHICLE PRIVILEGE TAX	$14.0	$20.0	$20.6	$20.9	$22.0	$22.6	$23.1	$24.0	N/A	N/A	$33.9	$41.5	$44.7	$47.1	N/A
VEHICLE USE TAX	$5.9	$7.6	$9.1	$9.5	$9.9	$10.0	$10.2	$10.4	N/A	N/A	$13.5	$18.6	$19.9	$20.6	N/A
BIKE EXCISE TAX	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	N/A	N/A	$1.6	$1.7	$1.7	$1.7	N/A
CHANGE FROM PRIOR FORECAST															
TRANSIT TAX	$0.0	$0.4	$2.8	$3.9	$4.6	$4.9	$5.3	$5.7	N/A	N/A	$0.4	$6.7	$9.5	$11.0	N/A
VEHICLE PRIVILEGE TAX	$0.0	$0.3	$3.5	$1.1	$0.0	-$0.1	$2.7	$5.5	N/A	N/A	$0.3	$4.7	$0.0	$8.2	N/A
VEHICLE USE TAX	$0.0	$0.3	-$0.6	$0.0	-$0.7	-$0.6	$0.1	$0.9	N/A	N/A	$0.3	-$0.6	-$1.3	$0.9	N/A
BIKE EXCISE TAX	$0.0	$0.0	-$0.1	$0.0	$0.0	$0.0	$0.0	$0.0	N/A	N/A	$0.0	-$0.1	$0.0	$0.0	N/A

Note: Individual amounts may not add up to the total due to rounding.

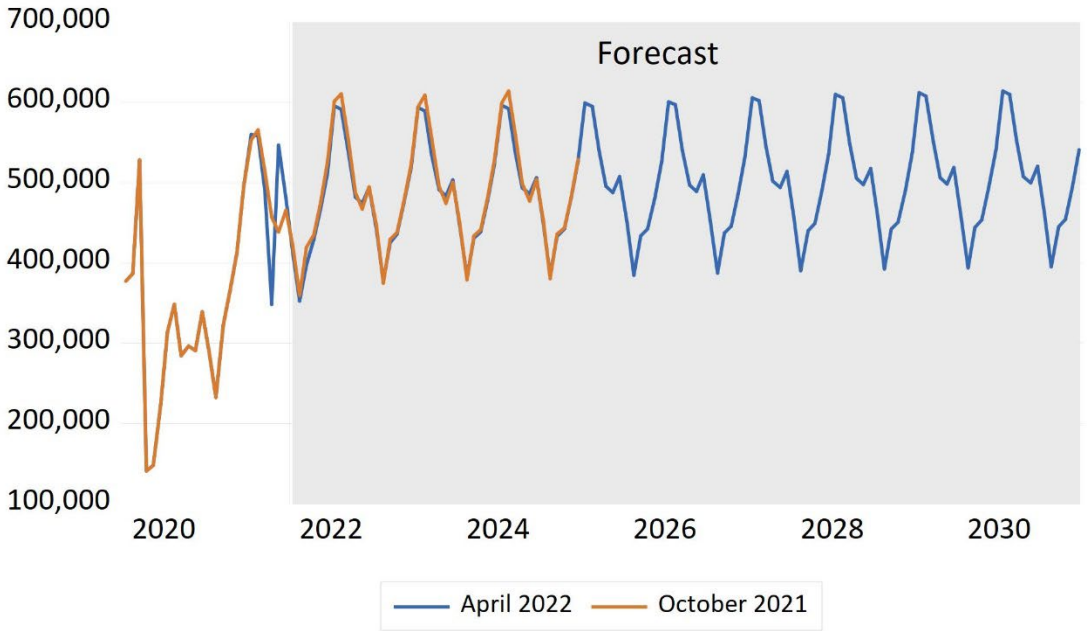
Aviation Fuel Tax

The April 2022 forecast shows a slight downward revision of forecast revenues from jet fuel and aviation gas taxes. Recent fuel price increases drive this result, as the model anticipates higher ticket prices and diminished demand for fuel as a result. Flights rebounded last summer reaching ODOT's pre-COVID forecast levels for the first time since the pandemic started. The downward revision may also be in part because of a large fall-off in October 2021 as the omicron COVID-19 affected air travel.

Flights themselves have remained below their pre-COVID trend, matching overall US air travel trends. Jet fuel and aviation gas use has followed suit, with a stronger than expected rebound in summer 2021 followed by a drop-off in fall 2021. The forecast does not differ drastically, though, predicting 1.7 percent lower revenues for the 2021-2023 than the October 2021 forecast.

Figure 28 shows the current forecast for April 2022 (data current through March 2021), the previous forecast from October 2021 (data current through June 2021), and actual revenues. The passage of HB 2434 in the 2021 legislative session removed the sunset of current jet fuel and aviation gas rates, locking in the $0.03 and $0.11 respective rates going forward from January 2022.

Figure 28: Jet Fuel Revenue - Forecast Comparison



Gross Railroad Revenues Tax

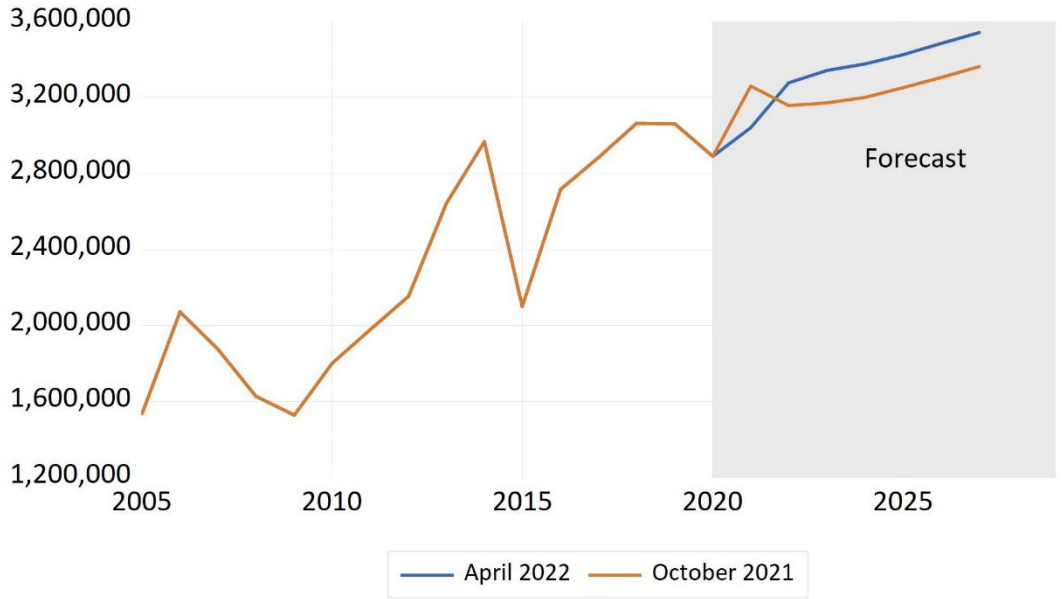
ODOT collects annual (calendar year) fees on gross operating revenues of railroads not to exceed 0.35 percent of any railroad's gross operating revenues (ORS 824.010). Funds collected

from this fee are separate from the General Fund and are directed to be used to defray costs to ODOT for carrying out its legal duties related to railroads, or to obtain matching funds for track improvement or rehabilitation. ODOT sets the rate and requests payment, after which railroads pay the fee and issue an accompanying statement of revenues upon which they based their fee payment. The fee is collected on any gross operating revenues associated with transportation of passengers (excludes Amtrak) and property.

The forecast methodology starts with forecasting of railroad gross operating revenues as reported by the railroads. Then, the forecast of the fees ODOT collects are calculated from the forecast of gross operating revenues. Inputs to the forecast include forecast from IHS Markit for the highest value goods reported to be carried on Oregon railroads. This forecast is still new, and annual data means few observations to work with so far. Still, the October forecast appears very close to currently reported 2021 revenues from Class I railroads, within one percent. The April forecast, which does not include any updated actual data on gross receipts, would under-forecast the current data, but shows stronger revenues for ODOT in coming years based on forecasts of those goods carried by the railroads.

The upward revision in April is likely related to the currently strong forecast for the Oregon lumber industry and overall economic picture for Oregon, as well as inflationary pressures on the overall economy and fuel prices. Uncertainty of economic conditions post-COVID continues to present forecast risk. Still, consumer spending and demand for durable goods, motor vehicles, and homes has proven more resilient than expected at the beginning of the pandemic in early 2020.

Figure 29: Gross Rail Revenue Tax – Forecast Comparison



Other Highway Revenues

There are other sources of highway fund revenue that do not fall under any previous category. These revenue sources include equipment sales, rental fees, property sales, billboard fees, material testing revenue, and interest income. Cumulatively, these revenue sources totaled $21,274,505 in 2021 which was an 11.5 percent drop from 2020 revenues ($24,043,471). The two largest individual sources of these revenues are damage recovery and interest from the highway fund. ODOT's efforts to recover damages from individuals and businesses has increased this revenue almost 50 percent ($4,758,569 in 2020 to $7,135,651 in 2021). As ODOT continues to pursue the recovery of these damages we can expect these revenues to be a significant source of other revenue. Interest from our highway fund is directly tied to the Oregon State Treasury Short Term Fund. These rates are used to forecast rates into the future to estimate total interest amounts.

Highway Revenue Forecast Summary

This forecast, like our previous forecasts, comes with a heightened level of uncertainty. While the uncertainty around the pandemic is somewhat easing up, there are other global uncertainties brewing in the background: the ongoing war in Ukraine, growing prices of fuel, overall inflation and consumer sentiment, and the growing risk of a recession. While our forecasts for DMV show an increase over the last forecast, boosted from the pent-up demand for new vehicle sales and a greater share of vehicles registering in higher MPG tiers with higher fees, the CCD and Motor Fuels forecasts have softened up a bit. Consumer spending is expected to cool off due to inflation impacting tracking activity. High prices of fuel, slow economic and vehicle registration growth, coupled with stronger fuel efficiency growth will keep fuel sales relatively flat for the forecast horizon. The historic accuracy of our Highway Revenue Forecast is presented in Appendix B.

Row 5 of Table 8 sums all the collection and program costs for DMV, CCD, and Motor Fuels, and pre-apportionment transfers. It also includes the incremental revenues from the OTIA III, JTA, and HB 2017 programs. Row 6 is the total gross revenues minus the amount in row 5.

Rows 7 through 19 of Table 8 are memo items creating summaries of different bill components related to forecast revenues. Note that HB 2017 not only created new revenues, it also included some dedicated funds prior to apportionment and created new bonding potential. Row 17 includes a placeholder for bonds to support the projects from Section 71 of the bill. The 2019 Legislature authorized the sale of these bonds, with the first round of bonds sold in the late summer of 2020.

Rows 20 through 26 of Table 8 summarize the net revenues for each OTIA, JTA, and HB 2017 programs disaggregated by amounts to the local governments or to the state. Row 27 represents the total net revenues for distribution by summing rows 20 through 26 plus row 6.

The purpose of Table 9 is to separate the totals from row 22 in Table 7 into county, city, and state apportionments by apportionment formula, whether it is pre-OTIA, OTIA I&II, OTIA III, JTA, or HB 2017.

If the conditions for HB 2017 are met and ODOT gets the final two-cent increase in the Motor Fuels tax rate in January of 2024, this will significantly increase future Motor Fuels tax revenues. Appendix C has the updated tables 6A, 8A, and 9A with the conditional tax increase. In addition to generating higher revenues for the State Highway Fund and local governments, it also increases the revenues transferred for the non-highway fuel uses.

A separate monthly forecast of the County/City Apportionments is available under “Highway Revenue Apportionment Forecasts” at http://www.oregon.gov/ODOT/Data/Pages/Revenue-Forecasts.aspx.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 8. Highway Fund Revenues by Fiscal Year and Biennium (Millions of Dollars) (Includes Guaranteed Fuels Tax Increases Only – Currently 8 Cents)

		Actual		Forecast								Actual	Forecast			
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	TOTAL MCTD COLLECTIONS	$449.2	$481.3	$505.7	$528.5	$535.5	$550.9	$557.1	$563.3	$569.2	$575.0	$930.5	$1,034.2	$1,086.4	$1,120.5	$1,144.2
2	TOTAL FSB COLLECTIONS	$595.1	$619.9	$649.9	$654.1	$654.7	$662.2	$665.1	$665.3	$662.5	$658.1	$1,215.0	$1,304.1	$1,316.9	$1,330.4	$1,320.5
3	TOTAL DMV COLLECTIONS	$374.8	$437.3	$493.9	$487.2	$497.5	$495.5	$497.3	$496.7	$498.1	$499.4	$812.1	$981.0	$993.0	$994.0	$997.5
4	**TOTAL GROSS HIGHWAY FUND**	**$1,419.2**	**$1,538.5**	**$1,649.5**	**$1,669.7**	**$1,687.7**	**$1,708.7**	**$1,719.5**	**$1,725.3**	**$1,729.8**	**$1,732.4**	**$2,957.6**	**$3,319.2**	**$3,396.4**	**$3,444.8**	**$3,462.2**
5	COLLECTION, PROGRAMS, & TRANSFERS (incl.obligated OTIA & JTA)	($856.5)	($941.1)	($1,026.3)	($1,068.7)	($1,088.6)	($1,109.9)	($1,127.3)	($1,135.6)	($1,152.3)	($1,158.3)	($1,797.6)	($2,095.0)	($2,198.5)	($2,262.9)	($2,310.6)
6	**NET REVENUE TO HIGHWAY FUND**	**$562.6**	**$597.4**	**$623.2**	**$601.1**	**$599.2**	**$598.7**	**$592.2**	**$589.8**	**$577.5**	**$574.1**	**$1,160.0**	**$1,224.3**	**$1,197.9**	**$1,182.0**	**$1,151.6**
7	OTIA I & II SET ASIDE - memo	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$71.2	$71.2	$71.2	$71.2	$71.2
8	DEBT SERVICE (OTIA I & II) - memo	($27.4)	($24.5)	($20.0)	($18.2)	($18.7)	($18.2)	($18.4)	($20.2)	($23.6)	($24.5)	($51.9)	($38.2)	($37.0)	($38.6)	($48.1)
9	OTIA III Dedicated Revenues - memo	$97.5	$103.5	$113.5	$110.6	$111.6	$110.9	$111.4	$111.3	$112.0	$111.6	$201.0	$224.1	$222.6	$222.7	$223.6
10	DEBT SERVICE (OTIA III) - memo	($90.7)	($96.1)	($105.4)	($106.7)	($106.1)	($105.1)	($103.6)	($111.8)	($124.7)	($133.1)	($186.7)	($212.1)	($211.2)	($215.3)	($257.8)
11	JTA Total Gross Revenues - memo	$285.0	$294.8	$311.2	$304.8	$305.9	$306.5	$308.2	$308.7	$309.5	$308.8	$579.8	$616.0	$612.5	$616.8	$618.2
12	JTA Allocation for Long-Range Planning - memo	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($48.0)	($48.0)	($48.0)	($48.0)	($48.0)
13	DEBT SERVICE (JTA) - State Only - memo	($62.4)	($64.7)	($65.1)	($65.4)	($65.4)	($66.5)	($67.4)	($58.2)	($41.0)	($30.4)	($127.1)	($130.6)	($132.0)	($125.6)	($71.4)
14	HB 2017 Total Gross Revenues - memo	$249.0	$315.8	$376.1	$421.2	$437.0	$454.2	$459.0	$462.2	$466.1	$467.9	$564.8	$797.3	$891.2	$921.3	$934.0
15	Safe Routes to School set aside - memo	($10.0)	($10.0)	($10.0)	($12.5)	($15.0)	($15.0)	($15.0)	($15.0)	($15.0)	($15.0)	($20.0)	($22.5)	($30.0)	($30.0)	($30.0)
16	Rose Quarter project set aside - memo	$0.0	$0.0	($15.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	$0.0	($45.0)	($60.0)	($60.0)	($60.0)
17	DEBT SERVICE (HB 2017 Section 71d) - State Only - memo	$0.0	($4.4)	($8.8)	($8.8)	($17.0)	($23.6)	($24.1)	($24.2)	($24.2)	($24.2)	($4.4)	($17.6)	($40.7)	($48.3)	($48.3)
18	Oregon Travel Experience Transfer - State Only - memo	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($18.3)	($18.3)	($18.3)	($18.3)	($18.3)
19	E-GOV Records Incremental Revenue Transfer - memo	($8.4)	($8.3)	($8.4)	($8.4)	($8.4)	($8.4)	($8.5)	($8.5)	($8.5)	($8.5)	($16.7)	($16.8)	($16.8)	($16.9)	($17.0)
20	NET OTIA I & II REVENUE FOR DISTRIBUTION	$8.2	$11.1	$15.6	$17.4	$16.9	$17.4	$17.2	$15.4	$12.0	$11.1	$19.3	$33.0	$34.2	$32.6	$23.1
21	NET OTIA III REVENUE FOR DISTRIBUTION - LOCAL	$33.7	$36.5	$35.6	$31.9	$32.9	$32.5	$32.7	$35.4	$37.7	$46.3	$70.2	$67.4	$65.5	$68.1	$84.0
22	NET OTIA III REVENUE FOR DISTRIBUTION -STATE	($20.9)	($22.1)	($19.8)	($20.4)	($19.7)	($19.0)	($17.2)	($28.3)	($42.9)	($60.1)	($43.0)	($40.2)	($38.7)	($45.5)	($103.0)
23	NET JTA REVENUE FOR DISTRIBUTION - LOCAL	$130.5	$135.4	$143.6	$140.4	$141.0	$141.3	$142.1	$142.3	$142.7	$142.4	$265.9	$284.0	$282.2	$284.4	$285.1
24	NET JTA REVENUE FOR DISTRIBUTION ABOVE D/S -STATE	$4.5	$4.7	$8.5	$6.5	$6.8	$5.9	$5.4	$14.7	$32.2	$42.6	$9.1	$15.0	$12.7	$20.2	$74.7
25	NET HB 2017 REVENUE FOR DISTRIBUTION - LOCAL	$119.5	$152.9	$175.5	$189.3	$196.0	$204.6	$207.0	$208.6	$210.5	$211.4	$272.3	$364.9	$400.5	$415.6	$421.9
26	NET HB 2017 REVENUE FOR DISTRIBUTION -STATE	$119.5	$148.5	$166.7	$180.5	$178.9	$180.9	$182.8	$184.4	$186.4	$187.2	$267.9	$347.2	$359.9	$367.3	$373.6
27	**TOTAL NET REVENUE FOR DISTRIBUTION**	**$957.5**	**$1,064.3**	**$1,149.0**	**$1,146.6**	**$1,151.9**	**$1,162.2**	**$1,162.2**	**$1,162.4**	**$1,156.1**	**$1,155.0**	**$2,021.8**	**$2,295.6**	**$2,314.2**	**$2,324.6**	**$2,311.1**

Note: Row and column sums may vary slightly due to rounding.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 9. Distribution of Total Net Revenues (Millions of Dollars) (Includes Guaranteed Fuels Tax Increases Only – Currently 8 Cents)

			Actual		Forecast								Actual	Forecast			
		Distribution Percentage	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	COUNTY APPORTIONMENT (ORS 366.739)	24.38%	$123.9	$131.8	$137.1	$132.1	$131.6	$131.4	$129.7	$129.1	$126.1	$125.3	$255.7	$269.2	$263.0	$258.8	$251.3
2	SPECIAL COUNTY (ORS 366.772)		($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($11.0)	($11.0)	($11.0)	($11.0)	($11.0)
4	COUNTY APPORTIONMENT (OTIA I & II)	30.00%	$2.5	$3.3	$4.7	$5.2	$5.1	$5.2	$5.2	$4.6	$3.6	$3.3	$5.8	$9.9	$10.3	$9.8	$6.9
5	COUNTY APPORTIONMENT (OTIA III)	25.48%	$24.8	$26.4	$28.9	$28.2	$28.4	$28.3	$28.4	$28.4	$28.5	$28.4	$51.2	$57.1	$56.7	$56.7	$57.0
6	DEBT SERVICE (OTIA III)	84.07%	($11.5)	($12.1)	($17.1)	($19.1)	($18.7)	($18.7)	($18.7)	($16.3)	($14.6)	($7.3)	($23.6)	($36.2)	($37.4)	($35.1)	($22.0)
7	COUNTY APPORTIONMENT (OTIA III-Local)	60.00%	$3.6	$4.1	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6	$4.5	$4.5	$7.8	$9.2	$9.3	$9.2	$9.1
8	COUNTY APPORTIONMENT (JTA)	30.00%	$78.3	$81.2	$86.1	$84.2	$84.6	$84.8	$85.3	$85.4	$85.6	$85.4	$159.5	$170.4	$169.3	$170.7	$171.1
9	COUNTY APPORTIONMENT (HB 2017)	30.00%	$71.7	$91.7	$105.3	$113.6	$117.6	$122.7	$124.2	$125.2	$126.3	$126.8	$163.4	$218.9	$240.3	$249.3	$253.2
10	**NET COUNTY APPORTIONMENT**		**$287.8**	**$321.0**	**$344.2**	**$343.3**	**$347.7**	**$352.8**	**$353.1**	**$355.3**	**$354.6**	**$361.1**	**$608.8**	**$687.5**	**$700.4**	**$708.4**	**$715.6**
11	CITY APPORTIONMENT (ORS 366.739)	15.57%	$79.1	$84.2	$87.6	$84.4	$84.0	$83.9	$82.8	$82.4	$80.5	$80.0	$163.3	$171.9	$167.9	$165.3	$160.5
12	SPECIAL CITY (ORS 366.805)		($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($5.0)	($5.0)	($5.0)	($5.0)	($5.0)
13	CITY APPORTIONMENT (OTIA I & II)	20.00%	$1.6	$2.2	$3.1	$3.5	$3.4	$3.5	$3.4	$3.1	$2.4	$2.2	$3.9	$6.6	$6.8	$6.5	$4.6
14	CITY APPORTIONMENT (OTIA III)	16.99%	$16.6	$17.6	$19.3	$18.8	$19.0	$18.8	$18.9	$18.9	$19.0	$19.0	$34.1	$38.1	$37.8	$37.8	$38.0
15	DEBT SERVICE (OTIA III)	15.93%	($2.2)	($2.3)	($3.2)	($3.6)	($3.5)	($3.5)	($3.5)	($3.1)	($2.8)	($1.4)	($4.5)	($6.9)	($7.1)	($6.6)	($4.2)
16	CITY APPORTIONMENT (OTIA III-Local)	40.00%	$2.4	$2.8	$3.1	$3.1	$3.1	$3.1	$3.1	$3.0	$3.0	$3.0	$5.2	$6.1	$6.2	$6.1	$6.1
17	CITY APPORTIONMENT (JTA)	20.00%	$52.2	$54.2	$57.4	$56.2	$56.4	$56.5	$56.8	$56.9	$57.1	$57.0	$106.4	$113.6	$112.9	$113.8	$114.0
18	CITY APPORTIONMENT (HB 2017)	20.00%	$47.8	$61.2	$70.2	$75.7	$78.4	$81.8	$82.8	$83.4	$84.2	$84.6	$108.9	$145.9	$160.2	$166.2	$168.8
19	**NET CITY APPORTIONMENT**		**$195.0**	**$217.3**	**$235.0**	**$235.4**	**$238.2**	**$241.6**	**$241.9**	**$242.2**	**$241.0**	**$241.9**	**$412.3**	**$470.4**	**$479.8**	**$484.1**	**$482.9**
20	HIGHWAY DIVISION (including small City/County)	60.05%	$305.2	$324.6	$337.7	$325.3	$324.0	$323.7	$319.5	$318.0	$310.5	$308.6	$629.8	$663.0	$647.7	$637.5	$619.1
21	SPECIAL COUNTY (ORS 366.772)		($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.5)	($0.5)	($0.5)	($0.5)	($0.5)
22	SPECIAL CITY (ORS 366.805)		($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($5.0)	($5.0)	($5.0)	($5.0)	($5.0)
23	HIGHWAY DIVISION: TOTAL (OTIA I & II)	50.00%	$4.1	$5.6	$7.8	$8.7	$8.4	$8.7	$8.6	$7.7	$6.0	$5.6	$9.7	$16.5	$17.1	$16.3	$11.6
24	HIGHWAY DIVISION: TOTAL (OTIA III)	57.53%	$56.1	$59.5	$65.3	$63.6	$64.2	$63.8	$64.1	$64.0	$64.4	$64.2	$115.6	$128.9	$128.0	$128.1	$128.6
25	DEBT SERVICE (OTIA III)	100.00%	($77.0)	($81.7)	($85.1)	($84.0)	($83.9)	($82.8)	($81.3)	($92.3)	($107.3)	($124.3)	($158.6)	($169.1)	($166.7)	($173.6)	($231.7)
26	STATE APPORTIONMENT (OTIA III)	0.00%	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
27	HIGHWAY DIVISION: NON-DEDICATED JTA REVENUES	48.75%	$63.6	$66.0	$70.0	$68.4	$68.7	$68.9	$69.3	$69.4	$69.6	$69.4	$129.6	$138.4	$137.6	$138.7	$139.0
28	HIGHWAY DIVISION: DEDICATED JTA DEBT SERVICE	51.25%	$66.9	$69.4	$73.6	$72.0	$72.2	$72.4	$72.8	$72.9	$73.2	$73.0	$136.3	$145.5	$144.6	$145.8	$146.1
29	DEBT SERVICE (JTA)		($62.4)	($64.7)	($65.1)	($65.4)	($65.4)	($66.5)	($67.4)	($58.2)	($41.0)	($30.4)	($127.1)	($130.6)	($132.0)	($125.6)	($71.4)
30	STATE APPORTIONMENT (HB 2017)	50.00%	$119.5	$152.9	$175.5	$189.3	$196.0	$204.6	$207.0	$208.6	$210.5	$211.4	$272.3	$364.9	$400.5	$415.6	$421.9
31	DEBT SERVICE (HB 2017 Section 71d)		$0.0	($4.4)	($8.8)	($8.8)	($17.0)	($23.6)	($24.1)	($24.2)	($24.2)	($24.2)	($4.4)	($17.6)	($40.7)	($48.3)	($48.3)
32	OREGON TRAVEL EXPERIENCE TRANSFER		($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($18.3)	($18.3)	($18.3)	($18.3)	($18.3)
33	**NET HIGHWAY DIVISION**		**$464.0**	**$515.3**	**$559.0**	**$557.2**	**$555.3**	**$557.1**	**$556.5**	**$554.0**	**$549.8**	**$541.3**	**$979.3**	**$1,116.2**	**$1,112.4**	**$1,110.6**	**$1,091.1**
34	Memo: HIGHWAY MODERNIZATION PROGRAM (included in NET HIGHWAY DIVISION)		$76.9	$79.7	$81.5	$79.9	$79.3	$79.7	$80.0	$80.2	$80.1	$79.9	$156.6	$161.4	$159.0	$160.2	$159.9
35	NET COUNTY APPORTIONMENT		$287.8	$321.0	$344.2	$343.3	$347.7	$352.8	$353.1	$355.3	$354.6	$361.1	$608.8	$687.5	$700.4	$708.4	$715.6
36	NET CITY APPORTIONMENT		$195.0	$217.3	$235.0	$235.4	$238.2	$241.6	$241.9	$242.2	$241.0	$241.9	$412.3	$470.4	$479.8	$484.1	$482.9
37	NET HIGHWAY DIVISION		$464.0	$515.3	$559.0	$557.2	$555.3	$557.1	$556.5	$554.0	$549.8	$541.3	$979.3	$1,116.2	$1,112.4	$1,110.6	$1,091.1
38	**NET HIGHWAY FUNDS REVENUE**		**$946.8**	**$1,053.6**	**$1,138.2**	**$1,135.9**	**$1,141.2**	**$1,151.5**	**$1,151.5**	**$1,151.6**	**$1,145.3**	**$1,144.2**	**$2,000.3**	**$2,274.1**	**$2,292.7**	**$2,303.1**	**$2,289.6**
39	SPECIAL COUNTY/CITY TRANSFERS TO ALLOTMENT FUND		$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.7	$21.5	$21.5	$21.5	$21.5	$21.5
40	**TOTAL NET REVENUES FOR DISTRIBUTION**		**$957.5**	**$1,064.3**	**$1,149.0**	**$1,146.6**	**$1,151.9**	**$1,162.2**	**$1,162.2**	**$1,162.4**	**$1,156.1**	**$1,155.0**	**$2,021.8**	**$2,295.6**	**$2,314.2**	**$2,324.6**	**$2,311.1**

Note: Row and column sums may vary slightly due to rounding.

Appendix A – Forecast Line Items, Current Fees and Funds

ID	Description	Group	Sub-Group	Fee	Fund
1001	Gasoline	FUELS	Motor Fuels	0.38	HWY
1002	Use Fuel (Diesel)	FUELS	Motor Fuels	0.38	HWY
2001	Jet Fuel	OTHER	Aircraft & Jet Fuels	0.03	AVI
2002	Aircraft Fuel	OTHER	Aircraft & Jet Fuels	0.11	AVI
3001	Weight Mile Revenues	CCD	Highway Use	22.83	HWY
3002	Road Use Assessment Fee (RUAF)	CCD	Highway Use	0.095	HWY
3003	Commercial Trip Permit	CCD	Highway Use	43	HWY
3004	Temporary Passes	CCD	Highway Use	9	HWY
3005	Over-Dimension (OD) Permit Revenue	CCD	Highway Use	8	HWY
3006	IRP Revenue	CCD	CCD Registration Fee	998	HWY
3007	Commercial Registration Revenue	CCD	CCD Registration Fee	998	HWY
3008	Commercial Cab Cards Revenue	CCD	CCD Registration Fee	3	HWY
3009	Weight Receipt Revenues (Commercial & IRP)	CCD	CCD Registration Fee	8	HWY
4001	Type 1 Dealer New Plate (Large & Small)	DMV	Business Licensing	54	HWY
4002	Type 1 Dealer Renew Plate	DMV	Business Licensing	42	HWY
4003	Type 1 Dealer Replacement Plate	DMV	Business Licensing	22	HWY
4004	Type 2 Dealer New Plate	DMV	Business Licensing	21	HWY
4005	Type 2 Dealer Renew Plate	DMV	Business Licensing	9	HWY
4006	Type 2 Dealer Replacement Plate	DMV	Business Licensing	12	HWY
4007	Transporter Vehicle Plate	DMV	Business Licensing	17	HWY
4008	Dealer Corrections	DMV	Business Licensing	30	HWY
4009	Replacement Sticker	DMV	Business Licensing	10	HWY
4010	Dealer Original Application	DMV	Business Licensing	1112	TOF
4011	Dealer Renewal Application	DMV	Business Licensing	1100	TOF
4012	Dealer Supplemental Location	DMV	Business Licensing	350	TOF
4013	Transporter Business Certificate	DMV	Business Licensing	150	TOF
4014	Dismantler Business Certificate	DMV	Business Licensing	500	TOF
4015	Dismantler Supplemental Location	DMV	Business Licensing	500	TOF
4016	Dismantler Duplicate Certificate	DMV	Business Licensing	40	TOF
4017	Compliance/Enforcement Fee	DMV	Business Licensing	75	TOF
4018	Vehicle Appraiser	DMV	Business Licensing	100	TOF
4019	RV Show License Certificate	DMV	Business Licensing	50	TOF
4020	Commercial Driving Schools	DMV	Business Licensing	200	TOF
4021	Commercial Driving School Instructor	DMV	Business Licensing	100	TOF
4022	Late Renewal Penalty	DMV	Business Licensing	150	TOF
4023	Dealer Civil Penalty	DMV	Business Licensing		TOF
5003	Registration - Passenger MPG 0-19	DMV	Registration Fee	122	HWY
5004	Registration - Passenger MPG 20-39	DMV	Registration Fee	132	HWY
5005	Registration - Passenger MPG 40+	DMV	Registration Fee	152	HWY
5006	Registration - Passenger Electric	DMV	Registration Fee	306	HWY
5007	Registration - Passenger OReGO	DMV	Registration Fee	86	HWY
5009	Registration - 4-Year Passenger MPG 0-19	DMV	Registration Fee	244	HWY

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
5010	Registration - 4 Year Passenger MPG 20-39	DMV	Registration Fee	264	HWY
5011	Registration - 4-Year Passenger MPG 40+	DMV	Registration Fee	304	HWY
5012	Registration - 4-Year Passenger Electric	DMV	Registration Fee	612	HWY
5013	Registration - 4-Year Passenger OReGO	DMV	Registration Fee	172	HWY
5015	Registration - Motorcycle	DMV	Registration Fee	78	HWY
5016	Registration - Moped	DMV	Registration Fee	78	HWY
5018	Registration - 4-Year Motorcycle	DMV	Registration Fee	156	HWY
5019	Registration - 4-Year Moped	DMV	Registration Fee	156	HWY
5020	Registration - Motor Home	DMV	Registration Fee		PRK
5021	Registration - Camper	DMV	Registration Fee		PRK
5022	Registration - Travel Trailer	DMV	Registration Fee		PRK
5023	Registration - Bus	DMV	Registration Fee		HWY
5024	Registration - School Bus	DMV	Registration Fee	5	HWY
5025	Registration - Truck	DMV	Registration Fee		HWY
5026	Registration - Farm	DMV	Registration Fee		HWY
5027	Registration - Heavy Fixed Load Vehicle	DMV	Registration Fee	82	HWY
5028	Registration - Manufactured Structure Toter	DMV	Registration Fee		HWY
5029	Registration - Tow Truck	DMV	Registration Fee		HWY
5031	Registration - Light Trailer	DMV	Registration Fee	116	HWY
5032	Registration - 4-Year Light Trailer	DMV	Registration Fee	232	HWY
5033	Registration - Light Fixed Load Trailer	DMV	Registration Fee	61	HWY
5034	Registration - For Rent Trailer	DMV	Registration Fee	30	HWY
5035	Registration - Special Use Trailer	DMV	Registration Fee		HWY
5036	Registration - Heavy Trailer	DMV	Registration Fee	10	HWY
5037	Registration - Exempt Government	DMV	Registration Fee	5	HWY
5038	Registration - 2 YR Government	DMV	Registration Fee	10	HWY
5039	Registration - Special Interest	DMV	Registration Fee	100	HWY
5040	Registration - Charitable/Non-Profit	DMV	Registration Fee		HWY
5041	Registration - Disabled Veteran	DMV	Registration Fee	15	HWY
5042	Registration - Medium Speed	DMV	Registration Fee	116	HWY
5043	Registration - Low Speed	DMV	Registration Fee	116	HWY
5044	Registration - Snowmobile	DMV	Registration Fee	10	SNO
5045	Registration - Antique	DMV	Registration Fee	100	HWY
5046	Registration - Ex-POW	DMV	Registration Fee	15	HWY
5047	Registration - Racing Activity	DMV	Registration Fee	100	HWY
5050	Standard Title 0-19 MPG - New from Dealer	DMV	Title Fee	98	HWY
5051	Standard Title 20-39 MPG - New from Dealer	DMV	Title Fee	103	HWY
5052	Standard Title 40+ MPG - New from Dealer	DMV	Title Fee	113	HWY
5053	Standard Title Electric - New from Dealer	DMV	Title Fee	187	HWY
5055	Standard Title 0-19 MPG - New to Oregon	DMV	Title Fee	98	HWY
5056	Standard Title 20-39 MPG- New to Oregon	DMV	Title Fee	103	HWY
5057	Standard Title 40+ - New to Oregon	DMV	Title Fee	113	HWY
5058	Standard Title Electric - New to Oregon	DMV	Title Fee	187	HWY
5060	Standard Title 0-19 MPG	DMV	Title Fee	98	HWY

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
5061	Standard Title 20-39 MPG	DMV	Title Fee	103	HWY
5062	Standard Title 40+ MPG	DMV	Title Fee	113	HWY
5063	Standard Title Electric	DMV	Title Fee	187	HWY
5065	Heavy Vehicle Title - New from Dealer	DMV	Title Fee	90	HWY
5066	Heavy Vehicle Title - New to Oregon	DMV	Title Fee	90	HWY
5067	Heavy Vehicle Title	DMV	Title Fee	90	HWY
5069	Salvage Title	DMV	Title Fee	27	HWY
5070	Salvage Title - New from Dealer	DMV	Title Fee	27	HWY
5071	Salvage Title - New to Oregon	DMV	Title Fee	27	HWY
5072	ATV Standard Title - New	DMV	Title Fee	98	HWY
5073	Snowmobile Standard Title	DMV	Title Fee	98	SNO
5075	Title Expedite Service Fee	DMV	Miscellaneous Vehicle	10	HWY
5076	Title Late Presentation Penalty - 30 Days	DMV	Miscellaneous Vehicle		HWY
5077	Title Late Presentation Penalty - Past 60 Days	DMV	Miscellaneous Vehicle		HWY
5078	Dealer Expedite Title	DMV	Miscellaneous Vehicle	100	HWY
5079	VIN Inspection	DMV	Miscellaneous Vehicle	7	HWY
5080	Fleet Licensing Service Fees	DMV	Miscellaneous Vehicle	2	HWY
5081	Fleet Licensing Initial Process	DMV	Miscellaneous Vehicle	3	HWY
5082	Fleet Licensing Process	DMV	Miscellaneous Vehicle	2	HWY
5083	Vehicle Code Book Sale	DMV	Miscellaneous Vehicle	7	HWY
5084	Replacement Registration Card	DMV	Miscellaneous Vehicle	5	HWY
5085	Vehicle Restoration Plate Fee	DMV	Miscellaneous Vehicle	10	HWY
5086	TOD Filing Fee	DMV	Miscellaneous Vehicle	13	HWY
5087	TOD Filing Account Registration Fee	DMV	Miscellaneous Vehicle	70	HWY
5088	Pre-paid Hearing Tape	DMV	Miscellaneous Vehicle	6	HWY
5089	Secure P.O.A. Filing Fee	DMV	Miscellaneous Vehicle	4	HWY
5090	Tow Truck Certificate	DMV	Miscellaneous Vehicle	17	HWY
5091	Special Interest Sticker (Customer-provided Plate)	DMV	Miscellaneous Vehicle	1	HWY
5092	Rental Vehicle Registration Surcharge	DMV	Miscellaneous Vehicle	2	HWY
5093	Dishonored Payment Handling Fee	DMV	Miscellaneous Vehicle	35	HWY
5094	Miscellaneous Revenue	DMV	Miscellaneous Vehicle		HWY
5096	Registered Vehicle Trip Permit	DMV	Permit Fee	7.5	HWY
5097	Light Motor Vehicle Trip Permit	DMV	Permit Fee	33	HWY
5098	Heavy Motor Vehicle Trip Permit	DMV	Permit Fee	43	HWY
5099	Registered Weight Trip Permit	DMV	Permit Fee	5	HWY
5100	Heavy Trailer Trip Permit	DMV	Permit Fee	10	HWY
5101	60 Day Out-of-State Permit	DMV	Permit Fee	7	HWY
5102	Dealer/Tower No Sticker Trip Permit	DMV	Permit Fee	15	HWY
5103	Unregistered Recreational Vehicle(RV) Trip Permit	DMV	Permit Fee	32	PRK
5104	1-Day Sno-Park Permit	DMV	Permit Fee	4	WIN
5105	3-Day Sno-Park Permit	DMV	Permit Fee	9	WIN
5106	Annual Sno-Park Permit	DMV	Permit Fee	25	WIN
5108	Plate Manufacturing Fee	DMV	Plate Fee	12	HWY
5109	Plate Manufacturing Fee (Pair)	DMV	Plate Fee	12.25	HWY

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
5111	Replacement Plate/Sticker	DMV	Plate Fee	10	HWY
5112	Replacement Plate/Sticker (At Renewal)	DMV	Plate Fee	5	HWY
5113	Plate Transfer Fee	DMV	Plate Fee	6	HWY
5114	Custom Plate	DMV	Plate Fee	50	PAS
5115	HAM (Amateur Radio Operator) Initial Plate	DMV	Plate Fee	5	HWY
5116	Specialty Plate - Crater Lake	DMV	Plate Fee	30	GRP
5117	Specialty Plate - Cultural Trust	DMV	Plate Fee	30	GRP
5118	Specialty Plate - Trail Blazers	DMV	Plate Fee	40	GRP
5119	Specialty Plate - Wine Country	DMV	Plate Fee	30	GRP
5120	Specialty Plate - Pacific Wonderland	DMV	Plate Fee	100	GRP
5121	Group Plate - Vietnam Veterans of America	DMV	Plate Fee	10	GRP
5122	Group Plate - U.S. Merchant Marine	DMV	Plate Fee	10	GRP
5123	Group Plate - Oregon Paralyzed Veterans of America	DMV	Plate Fee	10	GRP
5124	Group Plate - 1st Marine Division FMF	DMV	Plate Fee	10	GRP
5125	Group Plate - The Chosin Few	DMV	Plate Fee	10	GRP
5126	Group Plate - Veterans for Human Rights	DMV	Plate Fee	10	GRP
5127	Group Plate - Oregon Donor Program	DMV	Plate Fee	10	GRP
5128	Group Plate - George Fox College	DMV	Plate Fee	32	GRP
5129	Group Plate - Korean War Veteran 1950-1953	DMV	Plate Fee	10	GRP
5130	Group Plate - Oregon State Elks	DMV	Plate Fee	10	GRP
5131	Group Plate - Non Commissioned Officers Association	DMV	Plate Fee	10	GRP
5132	Group Plate - Square and Round Dancers	DMV	Plate Fee	10	GRP
5133	Specialty Plate - Salmon	DMV	Plate Fee	30	GRP
5134	Group Plate - Veterans Recognition	DMV	Plate Fee	10	GRP
5135	Group Plate - Purple Heart	DMV	Plate Fee	10	GRP
5136	Group Plate - Oregon Professional Firefighters	DMV	Plate Fee	10	GRP
5137	Group Plate - University of Oregon	DMV	Plate Fee	32	GRP
5138	Specialty Plate - University of Oregon Ducks	DMV	Plate Fee	40	GRP
5139	Group Plate - Oregon State University	DMV	Plate Fee	32	GRP
5140	Group Plate - Portland State University	DMV	Plate Fee	32	GRP
5141	Group Plate - Oregon Volunteer Firefighter	DMV	Plate Fee	10	GRP
5142	Group Plate - Lions Club of Oregon	DMV	Plate Fee	10	GRP
5143	Group Plate - Oregon Agricultural Foundation	DMV	Plate Fee	10	GRP
5144	Group Plate - Western Oregon University	DMV	Plate Fee	32	GRP
5145	Group Plate - University of Portland	DMV	Plate Fee	32	GRP
5146	Group Plate - Linfield College	DMV	Plate Fee	32	GRP
5147	Group Plate - Pacific University	DMV	Plate Fee	32	GRP
5148	Group Plate - Willamette University	DMV	Plate Fee	32	GRP
5149	Group Plate - Oregon Masonic Family	DMV	Plate Fee	10	GRP
5150	Group Plate - Oregon Grange	DMV	Plate Fee	10	GRP
5151	Group Plate - Eastern Oregon University	DMV	Plate Fee	32	GRP
5152	Group Plate - Support Our Troops	DMV	Plate Fee	10	GRP

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
5153	Group Plate - Share the Road	DMV	Plate Fee	10	GRP
5154	Group Plate - Fallen Public Safety Officer	DMV	Plate Fee	32	GRP
5155	Group Plate - Keep Kids Safe	DMV	Plate Fee	30	GRP
5156	Specialty Plate - Grey Whale	DMV	Plate Fee	40	GRP
5157	Specialty Plate - Smokey the Bear	DMV	Plate Fee	40	GRP
5158	Group Plate - Pearl Harbor Survivors	DMV	Plate Fee	10	PAS
5159	Fair Market Value	DMV	Record Sales	6.83	HWY
5160	Record Sales	DMV	Record Sales		HWY
5161	Commercial List Invoice	DMV	Record Sales	700	HWY
6001	Original NCL	DMV	Driver Fee	54	HWY
6002	Original NCL Limited Term	DMV	Driver Fee	23	HWY
6003	Instruction Driver Permit	DMV	Driver Fee	23	HWY
6004	Motorcycle Instruction Driver Permit	DMV	Driver Fee	23	HWY
6005	Special Limited Vision Condition Learner Permit	DMV	Driver Fee	13	HWY
6006	Special Student Driver Permit	DMV	Driver Fee	23	HWY
6007	Disability Golf Cart Driver Permit	DMV	Driver Fee	44	HWY
6008	Emergency Driver Permit	DMV	Driver Fee	23	HWY
6009	Motorcycle Endorsement Only	DMV	Driver Fee	49	HWY
6010	Motorcycle Endorsement	DMV	Driver Fee	46	HWY
6011	Farm Endorsement Only	DMV	Driver Fee	29	HWY
6012	Farm Endorsement	DMV	Driver Fee	26	HWY
6013	Renewal NCL	DMV	Driver Fee	34	HWY
6014	Renewal NCL Limited Term	DMV	Driver Fee	8	HWY
6015	Renewal Instruction Driver Permit	DMV	Driver Fee	23	HWY
6016	Renewal Motorcycle Instruction Permit	DMV	Driver Fee	23	HWY
6017	Renewal Disability Golf Cart Driver Permit	DMV	Driver Fee	32	HWY
6018	Renewal Moped-Restricted NCL	DMV	Driver Fee	34	HWY
6019	Renewal Moped-Restricted NCL Limited Term	DMV	Driver Fee	8	HWY
6020	Replacement NCL	DMV	Driver Fee	26	HWY
6021	Replacement Instruction Driver Permit	DMV	Driver Fee	26	HWY
6022	Replacement Motorcycle Instruction Driver Permit	DMV	Driver Fee	26	HWY
6023	Replacement Disability Golf Cart Driver Permit	DMV	Driver Fee	26	HWY
6024	Replacement Moped-Restricted NCL	DMV	Driver Fee	26	HWY
6025	Replacement Emergency Driver Permit	DMV	Driver Fee	26	HWY
6026	Replacement Special Student Driver Permit	DMV	Driver Fee	26	HWY
6027	NCL Knowledge Exam	DMV	Driver Fee	5	HWY
6028	NCL Skills Exam	DMV	Driver Fee	9	HWY
6029	Motorcycle Knowledge Exam	DMV	Driver Fee	5	HWY
6030	Hardship Driver Permit Application	DMV	Driver Fee	50	HWY
6031	Renewal Hardship Permit	DMV	Driver Fee	34	HWY
6032	Original Motorcycle Safety Fee	DMV	Driver Fee	38	SAF
6033	Renewal Motorcycle Safety Fee	DMV	Driver Fee	28	SAF
6034	Reinstatement Fee	DMV	Driver Fee	75	HWY
6035	Expedite Delivery	DMV	Driver Fee	25	HWY

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
6036	Student Driver Training Fund	DMV	Driver Fee	6	SDT
6037	Student Driver Training Fund Limited Term	DMV	Driver Fee	2	SDT
6040	Original CDL A	DMV	Driver Fee Comm	75	HWY
6041	Original CDL B	DMV	Driver Fee Comm	75	HWY
6042	Original CDL C	DMV	Driver Fee Comm	75	HWY
6044	Original CDL A Limited Term	DMV	Driver Fee Comm	45	HWY
6045	Original CDL B Limited Term	DMV	Driver Fee Comm	45	HWY
6046	Original CDL C Limited Term	DMV	Driver Fee Comm	45	HWY
6048	Original CLP A	DMV	Driver Fee Comm	23	HWY
6049	Original CLP B	DMV	Driver Fee Comm	23	HWY
6050	Original CLP C	DMV	Driver Fee Comm	23	HWY
6052	Renewal CDL A	DMV	Driver Fee Comm	55	HWY
6053	Renewal CDL B	DMV	Driver Fee Comm	55	HWY
6054	Renewal CDL C	DMV	Driver Fee Comm	55	HWY
6056	Renewal CDL A Limited Term	DMV	Driver Fee Comm	14	HWY
6057	Renewal CDL B Limited Term	DMV	Driver Fee Comm	14	HWY
6058	Renewal CDL C Limited Term	DMV	Driver Fee Comm	14	HWY
6060	Replacement CDL A	DMV	Driver Fee Comm	26	HWY
6061	Replacement CDL B	DMV	Driver Fee Comm	26	HWY
6062	Replacement CDL C	DMV	Driver Fee Comm	26	HWY
6064	Replacement Commercial Learner Driver Permit A	DMV	Driver Fee Comm	26	HWY
6065	Replacement Commercial Learner Driver Permit B	DMV	Driver Fee Comm	26	HWY
6066	Replacement Commercial Learner Driver Permit C	DMV	Driver Fee Comm	26	HWY
6067	CDL General Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6068	CDL Air Brake Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6069	CDL HazMat Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6070	CDL Tank Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6071	CDL Passenger Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6072	CDL Combination Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6073	CDL Doubles/Triples Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6074	CDL Skills Exam	DMV	Driver Fee Comm	70	HWY
6075	CDL School Bus Knowledge Exam	DMV	Driver Fee Comm	10	HWY
6076	Commercial Driver Certificate of Exam Completion	DMV	Driver Fee Comm	40	HWY
7001	Original Identification Card	DMV	ID Fee	44.5	TOF
7002	Original Identification Card Limited Term	DMV	ID Fee	20	TOF
7003	Renewal Identification Card	DMV	ID Fee	40.5	TOF
7004	Renewal Identification Card Limited Term	DMV	ID Fee	18	TOF
7005	Replacement Identification Card	DMV	ID Fee	39.5	TOF
7006	Real ID	DMV	Real ID	30	TOF
8001	Bill Board Fees & Sign Permits	OTHER	Other Revenue		HWY
8002	Equipment Sale	OTHER	Other Revenue		HWY
8003	Properties Sale (Right-of-Way Land & Timber)	OTHER	Other Revenue		HWY
8004	Highway Property Rental (Rent & Royalties)	OTHER	Other Revenue		HWY
8005	Damage Recovery/ Revenue Reimbursement	OTHER	Other Revenue		HWY

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

ID	Description	Group	Sub-Group	Fee	Fund
8006	Highway Division Interest Income	OTHER	Other Revenue		HWY
8007	Other Revenues	OTHER	Other Revenue		HWY
8008	Material Testing Revenue	OTHER	Other Revenue		HWY
8009	Sales Income (Pub, Signs, Other)	OTHER	Other Revenue		HWY
8010	Other Charges	OTHER	Other Revenue		HWY
8011	Charges for Public Records/Lab, Storeroom, Shop	OTHER	Other Revenue		HWY
8012	Utility Permit Fees	OTHER	Other Revenue		HWY
8013	Statewide Transit Tax	OTHER	DOR Taxes		PTD
8014	Vehicle Privilege Tax	OTHER	DOR Taxes		CO
8015	Vehicle Use Tax	OTHER	DOR Taxes		HWY
8016	Bicycle Exice Tax	OTHER	DOR Taxes	15	MAT

Note: If the fee is blank, that means fee is variable and it's based on weight, length, or other attribute

Appendix B – Highway Fund Forecast Quality

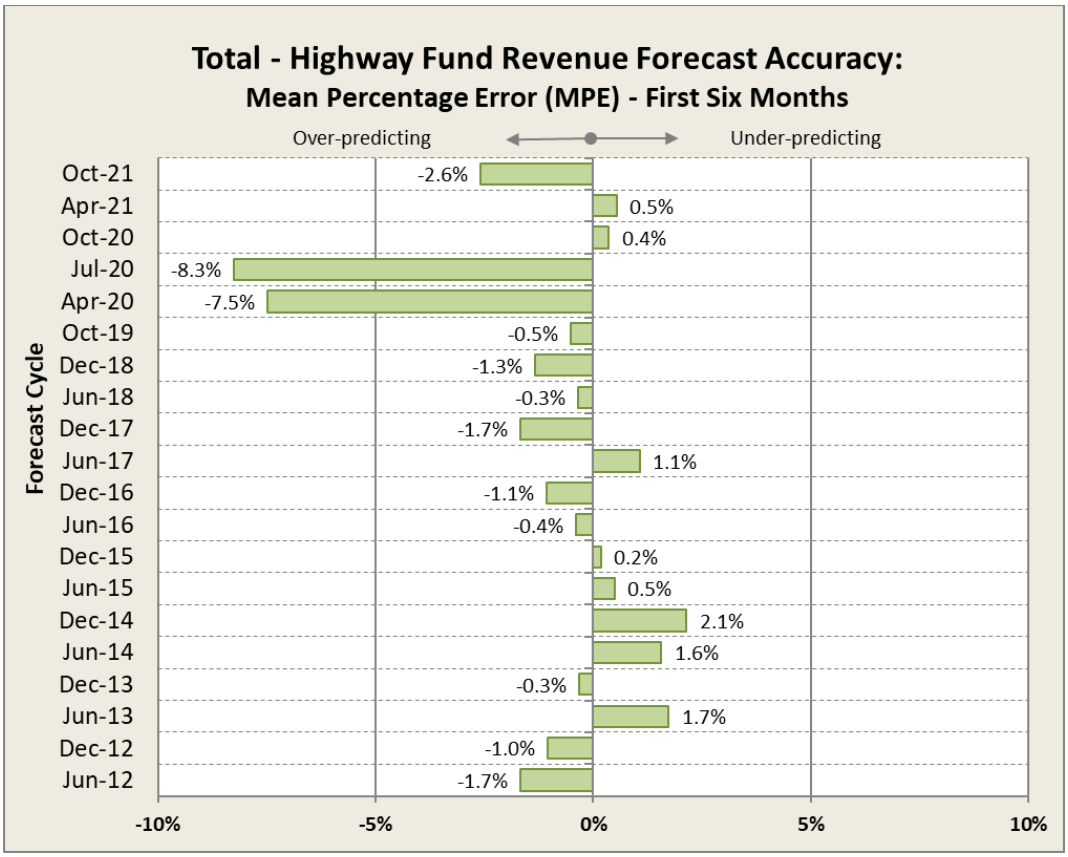
The two common measures for assessing forecast quality are: **statistical bias** and **accuracy**.

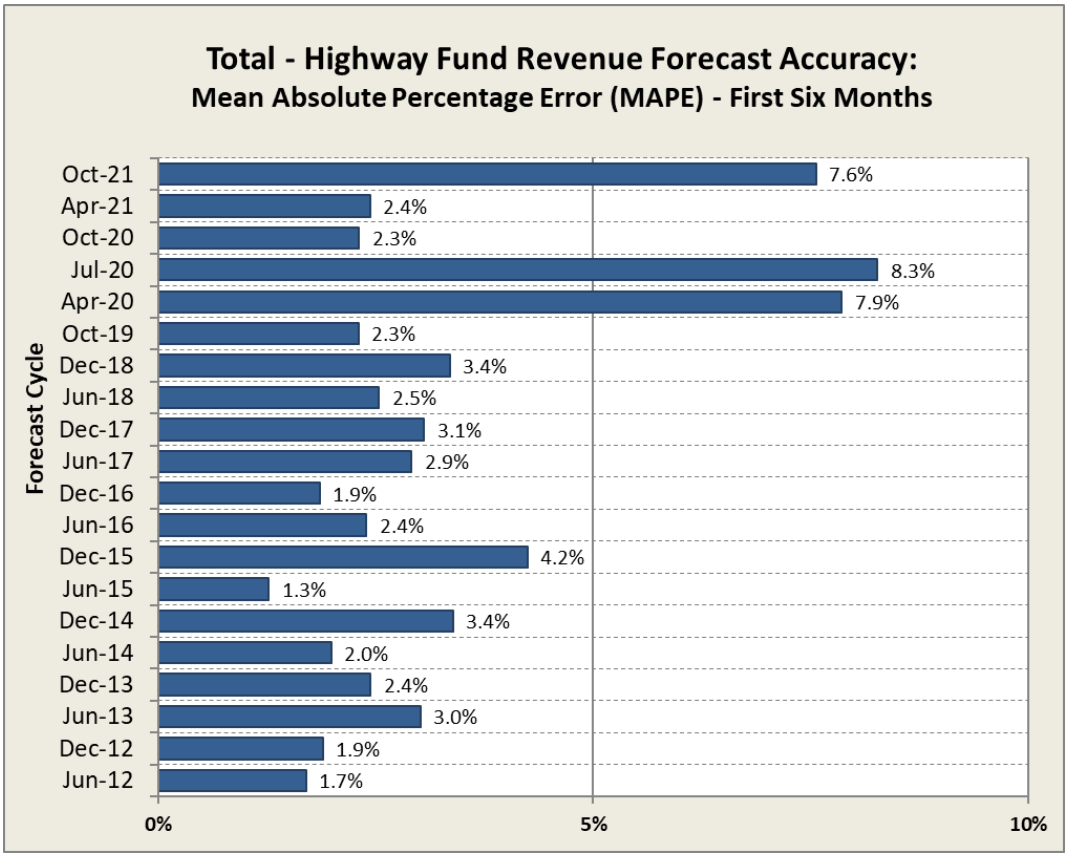
Statistical bias indicates the tendency of a forecast to over- or under-estimate real outcomes. Mean Percentage Error (MPE), the arithmetic average of the forecasting errors, is used for this purpose. A small MPE can be produced by errors (small or large) which are offset by errors in the opposite direction. MPE imperfectly measures the quality of a forecast. However, for budgeting purposes, MPE is probably the best measure of quality since what matters is total spending over time, and savings from one month are frequently used to offset excess costs in another month.

The **accuracy** of a forecast is the degree to which its values are narrowly dispersed around actual outcomes. Narrower dispersion indicates greater accuracy. Mean Absolute Percentage Error (MAPE), the average of the forecasting errors without regard to arithmetic sign, is used to evaluate accuracy. It does not allow underestimates and overestimates to offset each other. From a technical perspective, MAPE is usually considered a better measure of quality then MPE.

Table A1 – Quality of the first 6-months of the forecast – Total Highway Fund Revenue

Forecast Cycle	Average Monthly Revenue		MPE	MAPE
	Actual	Forecast		
Jun-12	$93,420,014	$94,963,125	-1.7%	1.7%
Dec-12	$89,881,376	$90,809,963	-1.0%	1.9%
Jun-13	$96,325,432	$94,621,010	1.7%	3.0%
Dec-13	$92,219,627	$92,475,473	-0.3%	2.4%
Jun-14	$99,487,597	$97,922,987	1.6%	2.0%
Dec-14	$95,889,819	$93,807,452	2.1%	3.4%
Jun-15	$103,127,239	$102,577,213	0.5%	1.3%
Dec-15	$98,366,249	$98,071,897	0.2%	4.2%
Jun-16	$105,221,712	$105,546,041	-0.4%	2.4%
Dec-16	$99,034,393	$100,027,733	-1.1%	1.9%
Jun-17	$107,547,692	$106,250,989	1.1%	2.9%
Dec-17	$108,744,341	$110,558,884	-1.7%	3.1%
Jun-18	$127,533,439	$127,942,230	-0.3%	2.5%
Dec-18	$119,174,714	$120,232,110	-1.3%	3.4%
Oct-19	$127,510,191	$128,043,921	-0.5%	2.3%
Apr-20	$110,873,028	$118,375,158	-7.5%	7.9%
Jul-20	$123,829,500	$133,854,613	-8.3%	8.3%
Oct-20	$121,291,601	$120,620,288	0.4%	2.3%
Apr-21	$129,410,171	$128,469,646	0.5%	2.4%
Oct-21	$140,226,925	$142,468,646	-2.6%	7.6%


Total - Highway Fund Revenue Forecast Accuracy:
Mean Percentage Error (MPE) - First Six Months
Over-predicting
Under-predicting
Forecast Cycle
Oct-21 -2.6%
Apr-21 0.5%
Oct-20 0.4%
Jul-20 -8.3%
Apr-20 -7.5%
Oct-19 -0.5%
Dec-18 -1.3%
Jun-18 -0.3%
Dec-17 -1.7%
Jun-17 1.1%
Dec-16 -1.1%
Jun-16 -0.4%
Dec-15 0.2%
Jun-15 0.5%
Dec-14 2.1%
Jun-14 1.6%
Dec-13 -0.3%
Jun-13 1.7%
Dec-12 -1.0%
Jun-12 -1.7%
-10%
-5%
0%
5%
10%


Total - Highway Fund Revenue Forecast Accuracy:
Mean Absolute Percentage Error (MAPE) - First Six Months
Forecast Cycle
Oct-21 7.6%
Apr-21 2.4%
Oct-20 2.3%
Jul-20 8.3%
Apr-20 7.9%
Oct-19 2.3%
Dec-18 3.4%
Jun-18 2.5%
Dec-17 3.1%
Jun-17 2.9%
Dec-16 1.9%
Jun-16 2.4%
Dec-15 4.2%
Jun-15 1.3%
Dec-14 3.4%
Jun-14 2.0%
Dec-13 2.4%
Jun-13 3.0%
Dec-12 1.9%
Jun-12 1.7%
0%
5%
10%

Appendix C – Alternative Conditional Motor Fuel Forecast Tables

Table 6A. Highway Fund Revenues Collected by FSB (Millions of Dollars) (Includes all Conditional Fuels Tax Increases – Currently an Additional 2 Cents)

		Actual		Forecast								Actual	Forecast			
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	MOTOR FUELS TAXES	$595.1	$619.9	$649.9	$654.1	$671.3	$697.1	$700.1	$700.4	$697.3	$692.7	$1,215.0	$1,304.1	$1,368.4	$1,400.4	$1,390.0
2	**TOTAL FSB COLLECTIONS**	**$595.1**	**$619.9**	**$649.9**	**$654.1**	**$671.3**	**$697.1**	**$700.1**	**$700.4**	**$697.3**	**$692.7**	**$1,215.0**	**$1,304.1**	**$1,368.4**	**$1,400.4**	**$1,390.0**
3	Change from Previous Forecast	$0.0	$0.0	($23.2)	($34.6)	($38.3)	($31.5)	($28.1)	($24.9)	($25.2)	($25.3)	$0.0	($57.8)	($69.8)	($52.9)	($50.5)
4	COLLECTION/ADMINISTRATION COST	($2.0)	($2.1)	($2.2)	($2.2)	($2.3)	($2.4)	($2.5)	($2.5)	($2.7)	($2.7)	($4.1)	($4.4)	($4.7)	($5.0)	($5.4)
5	ODOT CENTRAL SERVICES ASSESSMENT	($0.3)	($0.4)	($0.3)	($0.3)	($0.4)	($0.4)	($0.4)	($0.4)	($0.4)	($0.4)	($0.7)	($0.7)	($0.7)	($0.8)	($0.8)
6	SNOWMOBILE TRANSFER	($0.8)	($0.7)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($0.8)	($1.5)	($1.5)	($1.6)	($1.6)	($1.6)
7	CLASS I ATV TRANSFER	($2.8)	($3.0)	($3.0)	($3.1)	($3.2)	($3.2)	($3.2)	($3.2)	($3.2)	($3.2)	($5.7)	($6.1)	($6.4)	($6.4)	($6.3)
8	MARINE BOARD TRANSFER	($4.8)	($5.0)	($5.2)	($5.3)	($5.4)	($5.6)	($5.6)	($5.6)	($5.6)	($5.6)	($9.8)	($10.5)	($11.0)	($11.2)	($11.2)
9	CLASS II ATV TRANSFER	($1.5)	($1.8)	($1.9)	($1.9)	($2.0)	($2.0)	($2.0)	($2.0)	($2.0)	($2.0)	($3.3)	($3.8)	($4.0)	($4.0)	($4.0)
10	CLASS III ATV TRANSFER	($1.5)	($1.7)	($1.7)	($1.8)	($1.8)	($1.9)	($1.9)	($1.9)	($1.9)	($1.9)	($3.2)	($3.5)	($3.7)	($3.8)	($3.8)
11	CLASS IV ATV TRANSFER	($1.2)	($1.5)	($1.5)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($1.6)	($2.7)	($3.1)	($3.2)	($3.3)	($3.3)
12	TRANSPORTATION OPERATING FUND (TOF)	($14.6)	($15.8)	($16.5)	($17.2)	($17.9)	($18.7)	($19.0)	($19.2)	($19.5)	($19.8)	($30.5)	($33.7)	($36.6)	($38.2)	($39.4)
13	AVIATION TRANSFER	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.1)	($0.2)	($0.2)	($0.2)	($0.2)
14	HB 2435 (2013 Session) B20 FUEL TAX EXEMPTION -memo	($2.9)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	($2.9)	$0.0	$0.0	$0.0	$0.0
15	**NET FSB REVENUE**	**$562.7**	**$587.8**	**$616.8**	**$619.8**	**$635.8**	**$660.4**	**$663.0**	**$663.0**	**$659.5**	**$654.5**	**$1,150.5**	**$1,236.5**	**$1,296.2**	**$1,325.9**	**$1,314.0**
16	REVENUE ALLOCATION TO OTIA I & II SET-ASIDE - memo	($18.6)	($18.0)	($17.8)	($17.8)	($17.8)	($17.9)	($17.9)	($17.9)	($17.8)	($17.7)	($36.6)	($35.6)	($35.8)	($35.8)	($35.5)
17	REVENUE PLEDGED TO OTIA III - memo	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
18	REVENUE DUE TO JTA - memo	($102.3)	($103.3)	($105.5)	($103.3)	($103.4)	($104.6)	($105.0)	($105.1)	($104.6)	($103.9)	($205.6)	($208.8)	($207.9)	($210.1)	($208.5)
19	REVENUE DUE TO HB 2017 - memo	($83.5)	($103.3)	($122.3)	($137.7)	($154.4)	($174.3)	($175.0)	($175.1)	($174.3)	($173.2)	($186.8)	($260.0)	($328.7)	($350.1)	($347.5)

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 8A. Highway Fund Revenues by Fiscal Year and Biennium (Millions of Dollars) (Includes all Conditional Fuels Tax Increases – Currently an Additional 2 Cents)

		Actual		Forecast								Actual	Forecast			
		FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	BI 19-21	BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	TOTAL MCTD COLLECTIONS	$449.2	$481.3	$505.7	$528.5	$535.5	$550.9	$557.1	$563.3	$569.2	$575.0	$930.5	$1,034.2	$1,086.4	$1,120.5	$1,144.2
2	TOTAL FSB COLLECTIONS	$595.1	$619.9	$649.9	$654.1	$671.3	$697.1	$700.1	$700.4	$697.3	$692.7	$1,215.0	$1,304.1	$1,368.4	$1,400.4	$1,390.0
3	TOTAL DMV COLLECTIONS	$374.8	$437.3	$493.9	$487.2	$497.5	$495.5	$497.3	$496.7	$498.1	$499.4	$812.1	$981.0	$993.0	$994.0	$997.5
4	**TOTAL GROSS HIGHWAY FUND**	**$1,419.2**	**$1,538.5**	**$1,649.5**	**$1,669.7**	**$1,704.3**	**$1,743.5**	**$1,754.5**	**$1,760.3**	**$1,764.6**	**$1,767.1**	**$2,957.6**	**$3,319.2**	**$3,447.8**	**$3,514.9**	**$3,531.7**
5	COLLECTION, PROGRAMS, & TRANSFERS (incl.obligated OTIA & JTA)	($856.5)	($941.1)	($1,026.3)	($1,068.7)	($1,106.0)	($1,146.5)	($1,164.0)	($1,172.3)	($1,188.9)	($1,194.7)	($1,797.6)	($2,095.0)	($2,252.5)	($2,336.3)	($2,383.6)
6	**NET REVENUE TO HIGHWAY FUND**	**$562.6**	**$597.4**	**$623.2**	**$601.1**	**$598.3**	**$597.0**	**$590.5**	**$588.0**	**$575.8**	**$572.4**	**$1,160.0**	**$1,224.3**	**$1,195.3**	**$1,178.5**	**$1,148.1**
7	OTIA I & II SET ASIDE - memo	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$35.6	$71.2	$71.2	$71.2	$71.2	$71.2
8	DEBT SERVICE (OTIA I & II) - memo	($27.4)	($24.5)	($20.0)	($18.2)	($18.7)	($18.2)	($18.4)	($20.2)	($23.6)	($24.5)	($51.9)	($38.2)	($37.0)	($38.6)	($48.1)
9	OTIA III Dedicated Revenues - memo	$97.5	$103.5	$113.5	$110.6	$111.6	$110.9	$111.4	$111.3	$112.0	$111.6	$201.0	$224.1	$222.6	$222.7	$223.6
10	DEBT SERVICE (OTIA III) - memo	($90.7)	($96.1)	($105.4)	($106.7)	($106.1)	($105.1)	($103.6)	($111.8)	($124.7)	($133.1)	($186.7)	($212.1)	($211.2)	($215.3)	($257.8)
11	JTA Total Gross Revenues - memo	$285.0	$294.8	$311.2	$304.8	$305.9	$306.5	$308.2	$308.7	$309.5	$308.8	$579.8	$616.0	$612.5	$616.8	$618.2
12	JTA Allocation for Long-Range Planning - memo	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($24.0)	($48.0)	($48.0)	($48.0)	($48.0)	($48.0)
13	DEBT SERVICE (JTA) - State Only - memo	($62.4)	($64.7)	($65.1)	($65.4)	($65.4)	($66.5)	($67.4)	($58.2)	($41.0)	($30.4)	($127.1)	($130.6)	($132.0)	($125.6)	($71.4)
14	HB 2017 Total Gross Revenues - memo	$249.0	$315.8	$376.1	$421.2	$453.6	$489.0	$494.0	$497.3	$501.0	$502.5	$564.8	$797.3	$942.6	$991.3	$1,003.5
15	Safe Routes to School set aside - memo	($10.0)	($10.0)	($10.0)	($12.5)	($15.0)	($15.0)	($15.0)	($15.0)	($15.0)	($15.0)	($20.0)	($22.5)	($30.0)	($30.0)	($30.0)
16	Rose Quarter project set aside - memo	$0.0	$0.0	($15.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	($30.0)	$0.0	($45.0)	($60.0)	($60.0)	($60.0)
17	DEBT SERVICE (HB 2017 Section 71d) - State Only - memo	$0.0	($4.4)	($8.8)	($8.8)	($17.0)	($23.6)	($24.1)	($24.2)	($24.2)	($24.2)	($4.4)	($17.6)	($40.7)	($48.3)	($48.3)
18	Oregon Travel Experience Transfer - State Only - memo	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($18.3)	($18.3)	($18.3)	($18.3)	($18.3)
19	E-GOV Records Incremental Revenue Transfer - memo	($8.4)	($8.3)	($8.4)	($8.4)	($8.4)	($8.4)	($8.5)	($8.5)	($8.5)	($8.5)	($16.7)	($16.8)	($16.8)	($16.9)	($17.0)
20	NET OTIA I & II REVENUE FOR DISTRIBUTION	$8.2	$11.1	$15.6	$17.4	$16.9	$17.4	$17.2	$15.4	$12.0	$11.1	$19.3	$33.0	$34.2	$32.6	$23.1
21	NET OTIA III REVENUE FOR DISTRIBUTION - LOCAL	$33.7	$36.5	$35.6	$31.9	$32.9	$32.5	$32.7	$35.4	$37.7	$46.3	$70.2	$67.4	$65.5	$68.1	$84.0
22	NET OTIA III REVENUE FOR DISTRIBUTION -STATE	($20.9)	($22.1)	($19.8)	($20.4)	($19.7)	($19.0)	($17.2)	($28.3)	($42.9)	($60.1)	($43.0)	($40.2)	($38.7)	($45.5)	($103.0)
23	NET JTA REVENUE FOR DISTRIBUTION - LOCAL	$130.5	$135.4	$143.6	$140.4	$141.0	$141.3	$142.1	$142.3	$142.7	$142.4	$265.9	$284.0	$282.2	$284.4	$285.1
24	NET JTA REVENUE FOR DISTRIBUTION ABOVE D/S -STATE	$4.5	$4.7	$8.5	$6.5	$6.8	$5.9	$5.4	$14.7	$32.2	$42.6	$9.1	$15.0	$12.7	$20.2	$74.7
25	NET HB 2017 REVENUE FOR DISTRIBUTION - LOCAL	$119.5	$152.9	$175.5	$189.3	$204.2	$222.0	$224.5	$226.1	$228.0	$228.7	$272.3	$364.9	$426.2	$450.6	$456.7
26	NET HB 2017 REVENUE FOR DISTRIBUTION -STATE	$119.5	$148.5	$166.7	$180.5	$187.2	$198.4	$200.3	$201.9	$203.8	$204.6	$267.9	$347.2	$385.6	$402.3	$408.4
27	**TOTAL NET REVENUE FOR DISTRIBUTION**	**$957.5**	**$1,064.3**	**$1,149.0**	**$1,146.6**	**$1,167.7**	**$1,195.4**	**$1,195.5**	**$1,195.7**	**$1,189.2**	**$1,187.9**	**$2,021.8**	**$2,295.6**	**$2,363.0**	**$2,391.2**	**$2,377.1**

Note: Row and column sums may vary slightly due to rounding.

Exhibit A: Oregon State Transportation Revenue Forecast (April 2022)

Table 9A. Distribution of Total Net Revenues (Millions of Dollars) (Includes all Conditional Fuels Tax Increases – Currently an Additional 2 Cents)

		Distribution Percentage	Actual FY 20	Actual FY 21	Forecast FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	Actual BI 19-21	Forecast BI 21-23	BI 23-25	BI 25-27	BI 27-29
1	COUNTY APPORTIONMENT (ORS 366.739)	24.38%	$123.9	$131.8	$137.1	$132.1	$131.4	$131.0	$129.3	$128.7	$125.6	$124.9	$255.7	$269.2	$262.3	$258.0	$250.5
2	SPECIAL COUNTY (ORS 366.772)		($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($5.5)	($11.0)	($11.0)	($11.0)	($11.0)	($11.0)
4	COUNTY APPORTIONMENT (OTIA I & II)	30.00%	$2.5	$3.3	$4.7	$5.2	$5.1	$5.2	$5.2	$4.6	$3.6	$3.3	$5.8	$9.9	$10.3	$9.8	$6.9
5	COUNTY APPORTIONMENT (OTIA III)	25.48%	$24.8	$26.4	$28.9	$28.2	$28.4	$28.3	$28.4	$28.4	$28.5	$28.4	$51.2	$57.1	$56.7	$56.7	$57.0
6	DEBT SERVICE (OTIA III)	84.07%	($11.5)	($12.1)	($17.1)	($19.1)	($18.7)	($18.7)	($18.7)	($16.3)	($14.6)	($7.3)	($23.6)	($36.2)	($37.4)	($35.1)	($22.0)
7	COUNTY APPORTIONMENT (OTIA III-Local)	60.00%	$3.6	$4.1	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6	$4.5	$4.5	$7.8	$9.2	$9.3	$9.2	$9.1
8	COUNTY APPORTIONMENT (JTA)	30.00%	$78.3	$81.2	$86.1	$84.2	$84.6	$84.8	$85.3	$85.4	$85.6	$85.4	$159.5	$170.4	$169.3	$170.7	$171.1
9	COUNTY APPORTIONMENT (HB 2017)	30.00%	$71.7	$91.7	$105.3	$113.6	$122.5	$133.2	$134.7	$135.7	$136.8	$137.2	$163.4	$218.9	$255.7	$270.4	$274.0
10	**NET COUNTY APPORTIONMENT**		**$287.8**	**$321.0**	**$344.2**	**$343.3**	**$352.4**	**$362.8**	**$363.2**	**$365.4**	**$364.6**	**$371.0**	**$608.8**	**$687.5**	**$715.3**	**$728.6**	**$735.6**
11	CITY APPORTIONMENT (ORS 366.739)	15.57%	$79.1	$84.2	$87.6	$84.4	$83.9	$83.7	$82.6	$82.2	$80.2	$79.7	$163.3	$171.9	$167.5	$164.8	$160.0
12	SPECIAL CITY (ORS 366.805)		($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($5.0)	($5.0)	($5.0)	($5.0)	($5.0)
13	CITY APPORTIONMENT (OTIA I & II)	20.00%	$1.6	$2.2	$3.1	$3.5	$3.4	$3.5	$3.4	$3.1	$2.4	$2.2	$3.9	$6.6	$6.8	$6.5	$4.6
14	CITY APPORTIONMENT (OTIA III)	16.99%	$16.6	$17.6	$19.3	$18.8	$19.0	$18.8	$18.9	$18.9	$19.0	$19.0	$34.1	$38.1	$37.8	$37.8	$38.0
15	DEBT SERVICE (OTIA III)	15.93%	($2.2)	($2.3)	($3.2)	($3.6)	($3.5)	($3.5)	($3.5)	($3.1)	($2.8)	($1.4)	($4.5)	($6.9)	($7.1)	($6.6)	($4.2)
16	CITY APPORTIONMENT (OTIA III-Local)	40.00%	$2.4	$2.8	$3.1	$3.1	$3.1	$3.1	$3.1	$3.0	$3.0	$3.0	$5.2	$6.1	$6.2	$6.1	$6.1
17	CITY APPORTIONMENT (JTA)	20.00%	$52.2	$54.2	$57.4	$56.2	$56.4	$56.5	$56.8	$56.9	$57.1	$57.0	$106.4	$113.6	$112.9	$113.8	$114.0
18	CITY APPORTIONMENT (HB 2017)	20.00%	$47.8	$61.2	$70.2	$75.7	$81.7	$88.8	$89.8	$90.4	$91.2	$91.5	$108.9	$145.9	$170.5	$180.2	$182.7
19	**NET CITY APPORTIONMENT**		**$195.0**	**$217.3**	**$235.0**	**$235.4**	**$241.4**	**$248.3**	**$248.6**	**$249.0**	**$247.7**	**$248.5**	**$412.3**	**$470.4**	**$489.7**	**$497.6**	**$496.2**
20	HIGHWAY DIVISION (including small City/County)	60.05%	$305.2	$324.6	$337.7	$325.3	$323.5	$322.7	$318.5	$317.0	$309.5	$307.5	$629.8	$663.0	$646.2	$635.4	$617.0
21	SPECIAL COUNTY (ORS 366.772)		($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.3)	($0.5)	($0.5)	($0.5)	($0.5)	($0.5)
22	SPECIAL CITY (ORS 366.805)		($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($2.5)	($5.0)	($5.0)	($5.0)	($5.0)	($5.0)
23	HIGHWAY DIVISION: TOTAL (OTIA I & II)	50.00%	$4.1	$5.6	$7.8	$8.7	$8.4	$8.7	$8.6	$7.7	$6.0	$5.6	$9.7	$16.5	$17.1	$16.3	$11.6
24	HIGHWAY DIVISION: TOTAL (OTIA III)	57.53%	$56.1	$59.5	$65.3	$63.6	$64.2	$63.8	$64.1	$64.0	$64.4	$64.2	$115.6	$128.9	$128.0	$128.1	$128.6
25	DEBT SERVICE (OTIA III)	100.00%	($77.0)	($81.7)	($85.1)	($84.0)	($83.9)	($82.8)	($81.3)	($92.3)	($107.3)	($124.3)	($158.6)	($169.1)	($166.7)	($173.6)	($231.7)
26	STATE APPORTIONMENT (OTIA III)	0.00%	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
27	HIGHWAY DIVISION: NON-DEDICATED JTA REVENUES	48.75%	$63.6	$66.0	$70.0	$68.4	$68.7	$68.9	$69.3	$69.4	$69.6	$69.4	$129.6	$138.4	$137.6	$138.7	$139.0
28	HIGHWAY DIVISION: DEDICATED JTA DEBT SERVICE	51.25%	$66.9	$69.4	$73.6	$72.0	$72.2	$72.4	$72.8	$72.9	$73.2	$73.0	$136.3	$145.5	$144.6	$145.8	$146.1
29	DEBT SERVICE (JTA)		($62.4)	($64.7)	($65.1)	($65.4)	($65.4)	($66.5)	($67.4)	($58.2)	($41.0)	($30.4)	($127.1)	($130.6)	($132.0)	($125.6)	($71.4)
30	STATE APPORTIONMENT (HB 2017)	50.00%	$119.5	$152.9	$175.5	$189.3	$204.2	$222.0	$224.5	$226.1	$228.0	$228.7	$272.3	$364.9	$426.2	$450.6	$456.7
31	DEBT SERVICE (HB 2017 Section 71d)		$0.0	($4.4)	($8.8)	($8.8)	($17.0)	($23.6)	($24.1)	($24.2)	($24.2)	($24.2)	($4.4)	($17.6)	($40.7)	($48.3)	($48.3)
32	OREGON TRAVEL EXPERIENCE TRANSFER		($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($9.2)	($18.3)	($18.3)	($18.3)	($18.3)	($18.3)
33	**NET HIGHWAY DIVISION**		**$464.0**	**$515.3**	**$559.0**	**$557.2**	**$563.1**	**$573.5**	**$573.0**	**$570.5**	**$566.2**	**$557.6**	**$979.3**	**$1,116.2**	**$1,136.6**	**$1,143.5**	**$1,123.8**
34	Memo: HIGHWAY MODERNIZATION PROGRAM (included in NET HIGHWAY DIVISION)		$76.9	$79.7	$81.5	$79.9	$79.2	$79.5	$79.8	$80.1	$79.9	$79.7	$156.6	$161.4	$158.8	$159.9	$159.6
35	NET COUNTY APPORTIONMENT		$287.8	$321.0	$344.2	$343.3	$352.4	$362.8	$363.2	$365.4	$364.6	$371.0	$608.8	$687.5	$715.3	$728.6	$735.6
36	NET CITY APPORTIONMENT		$195.0	$217.3	$235.0	$235.4	$241.4	$248.3	$248.6	$249.0	$247.7	$248.5	$412.3	$470.4	$489.7	$497.6	$496.2
37	NET HIGHWAY DIVISION		$464.0	$515.3	$559.0	$557.2	$563.1	$573.5	$573.0	$570.5	$566.2	$557.6	$979.3	$1,116.2	$1,136.6	$1,143.5	$1,123.8
38	**NET HIGHWAY FUNDS REVENUE**		**$946.8**	**$1,053.6**	**$1,138.2**	**$1,135.9**	**$1,156.9**	**$1,184.6**	**$1,184.8**	**$1,184.9**	**$1,178.5**	**$1,177.1**	**$2,000.3**	**$2,274.1**	**$2,341.5**	**$2,369.7**	**$2,355.6**
39	SPECIAL COUNTY/CITY TRANSFERS TO ALLOTMENT FUND		$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.8	$10.7	$21.5	$21.5	$21.5	$21.5	$21.5
40	**TOTAL NET REVENUES FOR DISTRIBUTION**		**$957.5**	**$1,064.3**	**$1,149.0**	**$1,146.6**	**$1,167.7**	**$1,195.4**	**$1,195.5**	**$1,195.7**	**$1,189.2**	**$1,187.9**	**$2,021.8**	**$2,295.6**	**$2,363.0**	**$2,391.2**	**$2,377.1**

Note: Row and column sums may vary slightly due to rounding.

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FINANCIAL ASSUMPTIONS FOR THE DEVELOPMENT OF METROPOLITAN TRANSPORTATION PLANS SFY 2020/2021 – 2049/2050

Oregon Department of Transportation
Office of Revenue, Finance and Compliance
July 2022

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Contents

INTRODUCTION

The 2021 Infrastructure Investment and Jobs Act (IIJA, aka Bipartisan Infrastructure Bill) requires metropolitan planning organizations (MPOs), public transit operators (PTOs), and state transportation departments to cooperatively develop estimates of funds available to support long-range transportation plans. Plans financially constrained[1] in this way force early choices to be made about projects affecting mobility, land use, air quality and resiliency as well as the condition and performance of transportation assets. This requirement is one part of a federal effort to encourage more effective long-range planning and decision-making.

MPO long-range plan development is a separate process from development of Statewide Transportation Improvement Programs (STIPs), and metropolitan Transportation Improvement Programs (TIPs). However, the process utilizes some Highway and Transit Program transportation asset management plans (TAMP and TAM) and STIP regional distribution methodologies, and STIP and TIP projects must reflect the investment priorities established in the TAMP, TAM and long-range plans.

This document describes the methodology the Oregon Department of Transportation (ODOT), Oregon's MPOs, and directly affected PTOs adopted to meet the IIJA requirement as it concerns state and federal funding sources and the distribution and use of revenue expected from these sources. The methodology was developed by an ad hoc committee. The committee consisted of ODOT staff, staff of each of Oregon's eight MPOs, and representatives of the nine PTOs in the MPOs' planning areas.

The process of developing this methodology requires (1) projections of state and Federal revenue, (2) consideration of other factors affecting revenue availability and purchasing power (e.g., sharing among governments, inflation, etc.), (3) an estimate of how much of this revenue will be required for state highway maintenance, preservation, and other uses (e.g., debt service, Federal Transit Administration (FTA) programs), (4) calculation of resources remaining (if any) for highway modernization and their geographic distribution, and (5) the geographic distribution of transit funds for transit programs. Long-range projections of revenue from highway user fees depend not only upon the political climate, but also economic structure and conditions, population and demographics, patterns of land use, and vehicle technology.

Once long-range revenue projections are developed, current law revenues, new revenues, the effects of inflation, and the amounts needed to maintain present infrastructure condition and performance must be jointly considered to determine amounts that can be expended on highway and transit preservation and capacity improvements. These amounts can then be distributed among regions or jurisdictions (as applicable).

[1] IIJA Section 11202. FISCAL CONSTRAINT ON LONG-RANGE TRANSPORTATION PLANS. Changes the time period under with the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the project cost ranges/cost bands from "beyond the first 10 years" to beyond the first 4 years".

It is quite difficult to forecast transportation revenues over a long period of time. Fortunately, long-range plans are revised and updated on a frequent basis. The revenue assumptions contained in this document will be reconsidered as part of that on-going process. The first long-range revenue estimates under this requirement were published in 1995. As under previous efforts, current conditions and historical trends indicate it is reasonable to assume some increased revenue.

This paper is organized in three sections. The first examines individual revenue sources, the second considers other factors and assumptions, and the third presents revenue tables and supportive materials.

REVENUE SOURCES

Revenue sources relevant to this exercise are those received from the Federal government under the authority of the Infrastructure Investment and Jobs Act and those generated by the State of Oregon. Assumptions and the process of developing assumptions about these sources of funding are discussed below.

Assumptions concerning locally-generated revenue will be developed by individual MPOs.

State Highway Fund Revenue

In the distant past, long-range forecasting efforts divided consideration of State Highway Fund (Highway Fund) revenue into two parts. One part addressed operations, maintenance and preservation ("OM&P") needs. The other part addressed modernization needs. More recently and for this effort, the committee decided to initially consider the Highway Fund as a whole, with subsequent division between modernization as required by statute and OM&P, or as OM&P needs allow.

The committee considered several scenarios of growth in Highway Fund revenue. Scenarios ranged from current law with no tax and fee increases to growth averaging the long run 20 year trend over two different periods:

1. Current law;
2. Total revenue increase matching the 20-year long run average growth (3.3 percent annual average rate of growth) after state fiscal year (SFY) 2025, which covers the current set of state transportation tax increases; and
3. Total revenue matching the 20-year long run average growth (4.2 percent annual average rate of growth).

Revenue projections under these scenarios are based upon a large number of econometric equations, where each product is forecast separately and rolled up to create totals by revenue source. Models include exogenous variables relevant for each product. For example the motor fuels model, which is the single largest source of state funds include

factors such as fuel price, fuel efficiency, total state nonfarm employment, total state passenger vehicle registrations and historical data. .

An assumption of no change in highway user tax rates beyond those currently adopted (i.e., a current law assumption) would result in only very modest revenue increases over the course of the next 30 years. Such increases would be well below the level needed to maintain the purchasing power of the State Highway Fund. This situation would result in a sharp decline of state pavement and bridge conditions. An even sharper decline in purchasing power would occur if consumption of fuel was reduced as a result of greenhouse gas reduction policies and accelerated adoption of electric vehicles and no replacement revenue was assumed. The historical record of Highway Fund revenue indicates rejection of these scenarios is warranted (see **History Chart** on page 1 of Appendix B).

At the other end of the spectrum, Highway Fund revenue increases at a rate slightly greater than that of inflation would result in much higher levels of Highway Fund revenue growth. However, the committee concluded the current technical and social environment indicates such scenarios are overly optimistic. Hence, scenarios along these lines were also rejected.

The selected assumption for growth in state Highway Fund revenues is to look at the previous 20 year average growth rate and apply that growth rate to projected revenues beginning in state fiscal year 2026. This growth rate assumes future increases in the motor fuels tax rate, which will be necessary to avoid flat or negative growth. Applying the annual growth beginning in fiscal year 2026 allows for the current set of increases to be fully realized from passage of HB 2017 during the 2017 Legislative Session. In addition the proportion of revenues shared between the state and local governments is assumed to slowly move towards a split that shares more revenues with local governments. The last two transportation packages have set the shares at 50 percent state and 50 percent locals so it is reasonable to assume that share will continue into the future. By itself this growth rate still be insufficient to meet near-term ODOT OM&P needs; particularly if proportionately more revenue is distributed to cities and counties. Nevertheless this is the adopted scenario.

Some highway user fee increases are necessary for this scenario to be realized. The committee did not assume the needed tax or fee increases would take any particular form. The annual amounts of current law revenues with the average state, county and city shares noted, as well as the new revenues assumed for the state, counties, and cities, are listed on **Table 1.A: State Highway Fund Revenue History and Current Law Projection** and Table 1.B: Incremental OM&P Revenue Above Current Law of Appendix B.

Highway Fund revenue distribution is legislatively established. The 2022 base-level of Highway Fund revenue is distributed as follows: 60.05 percent is dedicated to state highway programs; 24.38 percent is dedicated to county road programs, and 15.57 percent is dedicated to city street programs. The county share is proportionately

distributed according to vehicle registrations, except that $5,500,000 per year is reserved to improve the equity of county road programs. The state contributes another $250,000 per year for this purpose. The city share is proportionately distributed according to population. However, $2,500,000 per year is reserved from this share to fund the Special City Allotment (SCA) program. The state contributes another $2,500,000 per year to the SCA program. Slightly greater proportions of the 2001, 2002 and 2003 Oregon Transportation Investment Acts (OTIA) revenues are distributed to counties and cities. Revenues from the 2009 Jobs and Transportation Act (JTA) and 2017 Keep Oregon Moving Act (HB 2017) have a distribution of 50 percent for state highway programs; 30 percent for county road programs, and; 20 percent to city street programs.

Through administrative agreements, the state contributes several million dollars each year from its share of Highway Fund revenues to the support of local road projects and programs. These include the Immediate Opportunity Fund (IOF), state match of certain Federal funds, and other programs (see the Other Factors and Assumptions section).

New revenue resulting from future increased tax rates is expected to be shared among the state, counties and cities on a "50-30-20 percent" basis rather than the previous "60.05-24.38-15.57 percent" basis. This represents a substantial shift of resources away from the state highway system and towards local road systems.

Oregon Revised Statutes (ORS) 366.507 requires ODOT to spend a certain amount of revenue on highway modernization. Certain program expenditures (e.g., debt service) qualify as modernization expenditures under this statute. These are subtracted from the required amounts to calculate the actual amounts that will be available for highway modernization. None of these amounts can be transferred to Federal Transit Administration (FTA) programs. Estimated amounts required under this statute are shown on **Table 2: Derivation of Funds Available to Finance State Highway Modernization Including Added Revenue of Appendix B**. Further discussion of how these estimates were developed is provided in the Other Factors and Assumptions section.

In 2009, the Legislature authorized ODOT to fund a list of projects totaling $960.3 million. This is in addition to modernization amounts required under ORS 366.507. Of the $960.3 million, $840 million is authorized to be financed through the sale of bonds, and the remaining $120.3 million financed through cash flow. Revenue needed to pay for the projects and their debt service is provided by the increased tax and fee rates contained in House Bill (HB) 2001 (2009). Estimated cash outlay for debt service and cash flow financing of these projects is shown in **Table 2 of Appendix B.** The estimated cash outlay is fully considered in the calculations of resources available for other purposes and projects.

In 2017, the Oregon Legislature authorized ODOT to fund a list of projects totaling $646.8 million. This is in addition to modernization amounts required under ORS 366.507. Of the $646.8 million, ODOT is authorized to issue user bonds not to exceed $480 million, and finance the remaining $166.8 million through cash flow. Revenue

needed to pay for the projects and their debt service is provided by the increased tax and fee rates contained in House Bill (HB) 2017 (2017). Estimated cash outlay for debt service and cash flow financing of these projects is shown in **Table 2, Appendix B** and is fully considered in the calculations of resources available for other purposes and projects.

MPOs know the location and funded amounts of these projects. Listed projects in their areas that have not yet been built are included in their financially constrained, long-range plans.

Finally, it is important to note that, other than during recessions, Oregon is a high population growth state. Previous long-range revenue forecasting efforts have noted that population growth means increasing demand for highway capacity and more congestion. As a result, in a long-term context, it is reasonable to expect the Legislature will enable some increase in highway modernization funding to occur. However, no such increase is assumed here.

Federal-Aid Highway Revenue

On November 15, 2021, the Infrastructure Investment and Jobs Act was signed into law. The bill establishes funding amounts for Federal highway and transit programs for Federal fiscal years 2022-2026. A 30 year planning horizon is a very long period of time, and the IIJA expires in 2026. Its successors are likely to be very different. In accordance with established Federal guidance, funds distributed according to congressionally established formulas may be assumed to increase after the expiration of the authorizing act at the same rate as they increased over the course of the authorizing act or may assume Federal funding to increase based on a straight-lined extrapolation of historic increases in Federal authorizations for that State or MPO, Forecasting and Fiscal Constraints - Planning - FHWA (dot.gov) Updated page, 6/28/2017. In Oregon, the annual average growth rate between 2009 and 2026 was 3.3 percent[2]. That rate is also applied to FFY 2027 formula funds and each year thereafter to produce the formula funds forecast.

The Federal-aid highway funds made available to states come from a variety of sources and subject to various distributional requirements. **Table 3: Distribution of Federal Highway Funds** of Appendix B presents year of expenditure amounts for major highway funding sources and distributions. Constant value figures for the major highway funding sources and distributions are presented on **Table 3A: Distribution of Federal Highway Funds ($2020)** of Appendix B.

[2] The average annual growth rate of Oregon formula funding between the final year of TEA-21 and final year of IIJA (2003-2026) is 3.4 percent; the average annual growth rate of formula funding between the final year of MAP-21 and IIJA (2014-2026) is also 3.4 percent. The average annual growth rate of formula funding between the final year of ISTEA and the final year of IIJA (1997-2026 is 4.1%. Adoption of an expected 3.3 percent rate of growth for Oregon formula funding is not an unreasonable expectation.

Federal formula funds include a number of small programs listed under "Other Local Allocations." Programs and funding amounts are presented in **Table 4: Distribution of "Other Local Allocations"** of Appendix B. As these programs are small and exist for special situations, the assumed geographic distribution of their funds will be handled by the MPOs. This is consistent with past practice, which has worked well.

While discretionary funds are not formula funds, they come out of the national amounts authorized for Federal highway and transit programs. As a result, they are assumed to increase at the 3.3 percent annual rate beginning in 2027. Before 2027, discretionary funds are assumed to increase consistent with yearly authorized amounts. Oregon has a historical record of attracting Federal discretionary funds in the amount of about $20 million per year. Oregon's share of discretionary program funding awards has routinely exceeded its share of apportionment funding and share of national population.

With the adoption of IIJA, an historic level of discretionary program funding was established. Funding for the limited number of pre-IIJA programs was increased significantly and a host of new discretionary programs established. Over the course of the IIJA, discretionary program funding totals more than $120 billion. Unknown is the expected continuation of such funding beyond the authorization of IIJA. Much of the additional discretionary program funding was provided by supplemental appropriations contained in the authorization bill. The growing gap between revenues to the Federal Highway Trust Funds and expected expenditures from the trust fund together with a clouded political future make expectations regarding future levels of discretionary program funding beyond IIJA highly questionable.

Based on past discretionary program awards and future expectations, the committee assumed that during the course of IIJA, Oregon would expect to be awarded around $120 million of discretionary grant funding each year. Beyond IIJA, the state's annual total for discretionary program awards would total $60 million. The committee has assumed that over time, half of the discretionary funds will go to ODOT, and the other half will go to local jurisdictions. Highway discretionary funds are assumed to be entirely modernization funds.

Finally, it should be noted for certain large projects (1) that are a high priority for the region, (2) that can only be built with large Federal discretionary grants, and (3) the likelihood of obtaining such grants is questionable an available alternative is to place the projects on an "illustrative projects list." These lists describe projects "*that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available.*" When funding becomes available for these projects, they can be quickly moved into the official long-range transportation plan. In light of the potential for very large award amounts under a number of discretionary programs, both the state and MPOs have indicated that they have projects that can only be completed with large discretionary program awards. For such MPO projects, it was to be left to MPOs to develop reasonable justifications for funding shares and potential award amounts.

FTA Urban Formula Funds - Sections 5307, 5337, and 5339(a)

Most FTA urbanized area formula funds (Section 5307) are used to finance capital equipment purchases and to finance preventive maintenance on existing capital equipment. In areas having a population of less than 200,000 or in areas that are over 200,000 but operate less than 100 buses, some of these funds may also be used to finance transit operations. Section 5340 funds are formula funds for growing and high density states, which is then combined with urbanized area calculations to determine the final Section 5307 distribution and reported as a single number by FTA. Section 5307 funds are supplemented by Section 5339(a) funds.

The committee assumed the growth of FTA Sections 5307 and 5339(a) funds would be the same as the growth of FHWA formula funds (3.3 percent per year). The assumption of similar growth comes from historical linkage in the program in funding growth and federal infrastructure policy packages including both programs. FHWA programs and Section 5307 programs are largely funded from the same revenue source, the Federal Highway Trust Fund. Historically, as Federal fuel tax rates of increased, the increased revenue has supported both highway and transit programs. In the most recent infrastructure funding bill passed by Congress, both highway and transit programs saw similar increases. Therefore, these programs are likely to grow in a similar manner. Finally, high capacity transit systems are eligible for State of Good Repair formula funds under Section 5337. The only systems eligible in Oregon at this time are Lane Transit District's Bus Rapid Transit (BRT) system and TriMet's Light Rail Transit (LRT) system. Section 5337 assumptions are included in the formula projects on **Table 5: Projections of Urban Formula Funds** of Appendix B.

FTA Sections 5310 and 5311

FTA Sections 5310 and 5311 are not usually considered as funding sources for development of long-range plans in metropolitan areas. Section 5310 revenue finances specialized equipment purchases by non-profit organizations that provide transportation services to the elderly and people with disabilities. Section 5311 revenue finances public transportation projects outside urbanized areas and/or beyond MPO jurisdiction. Neither program has a significant impact on air quality in areas under MPO jurisdiction. When programs supported by these revenue sources are incorporated into long-range plans, the committee assumed their rate of growth should be the same as that of Section 5307 growth.

Funding for intercity transit projects is available through a 15 percent set-aside of Section 5311(c) funds. Such funds may be leveraged by cooperation with jurisdictions having termini in their areas. The total Oregon apportionment in 2022 was $17,739,187, so the 15% Intercity Bus Set Aside still required would be $2,616,742.05 in 2022. Historical and projected values are in **Table 6: Projections of Discretionary Intercity Funds (5311(c))** of Appendix B. It is assumed these funds will be distributed based on MPO population share over time, though there may be year-to-year variation as funds are

directed by the state based on local needs. These funds are expected to grow at 3.3 percent annual, the same rate as Section 5307 and FHWA funds assumed above.

FTA Discretionary Funds – Sections 5339(b), 5339(c), 5309

FTA discretionary funds are only provided after application by an eligible transit provider through a competitive grant process. Funds available by competitive grant application include: Section 5309 Capital Investment Grants, which covers New Starts and Small Starts projects; Section 5339(b) Grants for Bus and Bus Facilities Program; and Section 5339(c) Low or No Emission Vehicle Program. The amounts the committee assumed for each category and year are shown on **Table 7: Assumed FTA Discretionary Distributions** of Appendix B.

Section 5309 projects ("new starts" and "small starts" projects) are highly situation specific. As a result, the committee left the amounts assumed to the public transit providers involved. Table 7 also shows the assumed values in year of expenditure and real values. The committee expects the transit providers seeking these funds to be able to identify the source of required matching funds, and it expects those matching funds to be financially constrained as required under 23 USC 134(i)(2)(E) in their long-range plans. The Portland area and the Eugene area have had ongoing success in obtaining Section 5309 funding to finance LRT and BRT construction.

Section 5339(b) and Section 5339(c) funding covers bus discretionary grants. Recent history has seen Oregon winning a share of available funding that exceeds their population share of those funds. Oregon's population share is around 1.3 percent of the US population, but since 2016, Oregon has received 1.61 percent of Section 5339(b) funds available and 3.8 percent of Section 5339(c) funds, or a combined 2.1 percent of total bus discretionary funds. The committee assumed that Oregon would, on average, receive 1.61 percent of both bus discretionary funds available on average over the planning time period. However, MPOs may wish to adjust these numbers based on the timing of planned projects. The assumed amounts can also be found in Table 7.

State Transit Funding –Formula Based

The 2017 Oregon Legislature passed House Bill 2017, marking a significant investment in transportation to promote a clean environment, strong communities with good quality of life, a vibrant economy with good jobs, and safe, healthy people. This effort is referred to as Keep Oregon Moving. In addition to increasing the traditional Highway Fund taxes and fees, three new taxes were introduced to provide additional funding for Keep Oregon Moving:

1. Statewide **Transit Payroll Tax** for investments in public transportation.
2. **Vehicle Privilege Tax** (on new vehicles purchased and registered in Oregon) dedicated to the Connect Oregon program and to promote electric vehicle sales. New vehicles purchased outside of Oregon and registered in Oregon are subject to

a similar tax called **Vehicle Use Tax**. However, these funds go to Highway Fund and thus are treated as a separate line item.

3. **Bike Excise Tax** also dedicated to the Connect Oregon program to provide grants for bicycle and pedestrian projects.

The Vehicle Privilege/Use Tax and Bike Excise Tax were implemented in January 2018. The Transit Payroll Tax went into effect in July 2018.

State transit funding from the Transit Payroll Tax becomes formula based funding to local transit districts known as Qualified Entities, which receive funding based on the share of payroll within their designated boundaries. These revenues grow based on Oregon's economic performance and population growth. The 2022 legislative session updated the formula distributions such that minimum amounts a Qualified Entity can receive over time will increase (decrease) along with revenues collected over the previous biennium. The forecast amounts reflect this change.

In the 2022 legislative session, Oregon passed SB 1601 which will combine the Statewide Transportation Improvement Fund (STIF) and the Special Transportation Fund (STF) under a single fund with updated formula rules for distributions and minimums. The state currently takes primary responsibility for funding programs serving the elderly and people with disabilities under the STF. The legislature provides formula based funding to designated entities primarily from revenues raised from taxes on cigarette sales, excess revenues from the sales of Photo ID cards.

The current STF provides financial support for operations, as well as funding for specialized equipment purchases by non-profit organizations that provide transportation service to the elderly and people with disabilities. This purpose will continue after SB 1601 is implemented. Indirectly, STF funded programs can result in enhanced service to the general public by funding required Americans with Disabilities Act compliance activities when additional service for the general public is implemented. In addition, this program can directly provide additional transit capacity to the general public on a space available basis.

The monies from the STF are distributed to the same Qualified Entities as those receiving formula funds from the Transit Payroll Tax, though the STF formula is based on population instead of payroll and has a different minimum distribution threshold. These changes have been accounted for in the forecast through 2051 in Appendix spreadsheet on **Table 8A: Estimated State Transit Formula Funding - Year of Expenditure Dollars** and **Table 8B: Estimated State Transit Formula Funding – Purchasing Power in 2020**. STF revenues are assumed to increase over time based on forecasts from Oregon's Department of Administrative Services.

State Transit Funding – Competitive Grant and Discretionary Funding

Discretionary state transit funding is done through the Connect Oregon program. The Connect Oregon program is funded primarily by the Vehicle Privilege Tax, the Vehicle Use Tax, and the Bike Excise Tax. These revenues are distributed through competitive grants each biennium the fund is forecast to exceed $50 million, though the total award amount has been less than $50 million to date. The growth rate of Vehicle Privilege Tax and the Vehicle Use Tax are based on ODOT's April 2022 forecast which uses vehicle prices, historical sales, and with other economic indicators for Oregon. While the recipients of these revenues are dependent on the competitive process, the committee assumed that over time funds will be distributed based on MPO population share. It is assumed that a Connect Oregon program will be run in each biennium, and the funds made available will be 85% of the total revenues to the fund, in keeping with historical precedent. The Appendix spreadsheet tab **Table 9: Estimated State Transit Discretionary Funds of Appendix B** shows the forecast annual average expected statewide total for Oregon.

This document provides revenue forecasts through State Fiscal Year 2051 for all three of these programs.. These amounts are based on total revenue minus collection costs minus transfer of privilege tax funds to the Department of Environmental Quality (DEQ). The legislature extended the DEQ transfers beyond January 1, 2024 in House Bill 2165 (2021), and it passed SB 1558 (2022) changing the distribution share to DEQ, increasing it to the greater of $12 million per year or 45 percent of available revenue starting January 1, 2023.

State Support for Non-Highway Bicycle and Pedestrian Facilities

The state has provided limited financial support for construction of bicycle and pedestrian facilities that are not part of a highway facility. Prior to the adoption of HB 2017, state support came from the Connect Oregon program, and consumed about 15 percent of the funding available through this program. Both the mode and specific projects were selected on a competitive basis. With the adoption of HB 2017, significant changes were made to the Connect Oregon Program. The focus of the program was changed to provide awards to aviation, rail and marine projects. The provision of funding for bicycle/pedestrian projects was shifted over to the Multimodal Active Transportation Fund (MAT). In accordance with HB 2592 adopted in 2019, 7 percent of Connect Oregon moneys is to be shifted to the MAT for the purposes of providing grants for bicycle and pedestrian transportation projects.

In addition, HB 2017 created a bicycle excise tax of $15 on the sale of each new bicycle sold $200 or greater. These funds are also dedicated to the MAT. The forecast for these funds is seen in Table 9 of Appendix B. MPOs should note that these amounts are statewide available funds.

Private Participation

Private sector participation in Oregon highway and transit projects is generally on a relatively small scale, and is not predictable. Also, it is project-specific. Legislation in 2003 created new opportunities for private sector participation in transportation projects. A state program designed to take advantage of this legislation has begun operation, but has not resulted in any construction projects. At this point, private sector participation cannot be forecasted on a long-term, statewide basis.

In 1997, the Oregon Legislature created the Oregon Transportation Infrastructure Fund (OTIF). It may be used for either public or public-private projects. This fund is designed to provide loans to projects that can generate enough cash flow to pay off the loans. As such, the OTIF is not a new source of revenue, but is a financing tool that can facilitate project implementation.

Possible funding from private sources is project-specific and is more easily dealt with on a local level than in this forum. Therefore, the committee chose to leave estimates of private sector participation with the individual MPOs.

OTHER FACTORS AND ASSUMPTIONS

Additional factors, beyond direct funding amounts, affect the availability of resources for highway and transit system continuity and improvements. Such factors include the expected rate of inflation, funding amounts needed to maintain and preserve the existing transportation system, legislative mandates, and factors affecting geographic distribution of funds. These are discussed below.

Inflation

The rate of inflation has a direct impact on the purchasing power of transportation funds. It is the purchasing power of available funds that determines the expansiveness of long-range transportation plans.

Initially, the committee discussed inflation scenarios of one to five percent annually, with the primary focus on the two to four percent (from informal Federal Highway Administration guidance) range. The current monetary stimulus, fiscal stimulus, international holdings of U.S. dollars, assumed economic recovery, dramatic growth in emerging markets, and changing demographic profile of the U.S. indicate the two percent scenario is too low. On the other hand, continual cost increases at the rate of four percent per year, considering their compounding effects, seemed too high to a majority of committee members. The previous assumed rate was 3.1 percent; which has also been adopted by the statewide plan. A number of alternative inflationary rates and forecasting sources were considered by the committee. After a couple of committee meeting discussions, a decision was made to adopt 3.3 percent as the average annual growth rate for costs of transportation projects and OM&P.

State System OM&P

A high priority of the Oregon Transportation Commission (OTC) has been to maintain and preserve the existing transportation system. Expenditures on OM&P activities preclude expenditures on system expansion (i.e., modernization). Projecting state highway system modernization funding levels is a primary goal of this effort. In order to estimate resources available for modernization activities in MPO areas, transportation providers must know the amount of available resources that will be expended on all other activities.

One of the largest and potentially most controversial of these is pavement preservation. While ODOT has a long-range goal of improving state highway pavement condition to 90 percent fair-or-better, on-going funding to meet this goal does not appear to be likely. In the past, ODOT OM&P needs estimates were based (with minor adjustments) on Scenario 3 of the 1999 Oregon Highway Plan. This would maintain pavement condition at the 78 percent fair-or-better level.

Provisions established by the Moving Ahead for Progress in the 21st Century Act (MAP-21) and continued under the FAST Act and IIJA require states and MPOs to adopt national performance measures and establish performance targets for Federal-aid highway measures and public transportation measures established by U.S. Department of Transportation. States and MPOs are to include a discussion in their transportation improvement programs as to how their planned programs will achieve the performance targets they have established. In accordance with provisions of the IIJA, states and MPOs are to consider resiliency and vulnerability of highway and transit assets and systems and use portions of planning funds on activities, plans and projects to increase safe and accessible options for multiple travel modes for people of all ages and abilities.

In addition, MPOs are to include a system performance report in their transportation plans to document progress in achieving established highway and transit performance targets. MPOs classified as Transportation Management Areas with populations over one million are to develop Congestion Mitigation and Air Quality Improvement Program Performance Plans. States are to develop and update at least every four years a Highway Asset Management Plan for National Highway System pavements and bridges and transit districts receiving federal financial assistance are to develop and update a Transit Asset Management Plan for capital asset used to provide public transportation.

In response to the threats to the safety and mobility of Americans presented by extreme weather due to climate change, FHWA has initiated rulemaking to require States and MPOs to establish declining carbon dioxide (CO2) targets and to establish a method for the measurement and reporting of greenhouse gas (GHG) emissions. Specifically the proposed rule would require States and MPOs that have NHS mileage within their planning area boundaries to establish declining CO2 emissions targets to reduce CO2 emissions generated by on-road mobile sources relative to a reference year defined as calendar year 2021.

Two requirements already placed on states are to: 1) maintain the condition of interstate pavement at a 95 percent fair or better condition, and 2) limit the percentage of NHS

bridge deck area that is structurally deficient to 10 percent. Failure to meet these requirements will require states to expend specified amounts of Federal funding to improve interstate pavement or NHS bridge condition.

An emerging state system priority is improved system operations and management through "intelligent transportation systems" (ITS). About 16 percent of current operations needs are ITS needs. The corresponding figures are shown on page 8 in the Appendix.

Bonding Program

Periodically, policy-makers contemplate the use of ODOT's existing cash-flow to back bonds issued to finance highway modernization projects. In the long-run, this reduces amounts available for modernization due to the need to pay interest at a rate above the rate of inflation. This occurred under OTIA III. The committee has assumed no new bonding of existing revenues. The last three state transportation funding packages (OTIA III, JTA, KOM) all linked any new bonding to incremental revenues resulting from the legislation. Further, the committee does not believe it is appropriate to assume revenues from beyond the planning horizon (SFY 2049/2050) are used to finance projects within the planning horizon.

Nonetheless, the committee recognizes bonding may be a useful cash flow management tool. If bonding is used, whether backed by existing revenues or new revenues, its costs should be reflected in the long-run calculation of available resources. As a reminder, individual local governments have authority to issue bonds financed with actual revenues (existing and new).

However, HB 2017, which was amended by HB 3055 (2021 Session) set aside $30 million per year in new tax revenue for use as cash or as debt service for a set of specific projects in the Portland Metro region. Additionally HB 2017 directed ODOT to develop a toll program for congestion management and to provide funding for these projects.

Legislative Requirements

The Oregon Legislature has placed a number of requirements on ODOT regarding how the state share of Highway Fund revenues is spent. These requirements concern city streets (SCA program), county equalization, bicycle and pedestrian facilities, bond revenue, and modernization expenditures. The most recently adopted transportation funding package, HB 2017, specified that of the funds made available to ODOT the first $10 million would go to safety, and the remainder split 40% for bridges, 30% for seismic improvements, 24% for state highway pavement preservation and culverts, and 6% for state highway maintenance and safety improvements. Most of these programs are figured into the calculation of resources needed for OM&P.

The exception is the modernization expenditure category. The legislative directive concerning modernization expenditures is contained in ORS 366.507. Under the adopted scenario, from SFY 2020/2021 – 2049/2050, the annual amounts available for state

highway modernization as a result of this statute will be greater than the modernization amount that would be available if the state paid for its OM&P needs before spending any funds on modernization. For all years, the funding needed to meet state highway OM&P needs is insufficient.

TMA Designations

When metropolitan areas exceed 200,000 in population, they become eligible to be designated as transportation management areas (TMAs). Among other things, TMA status reallocates federal apportionments within a state. TMAs receive a specific apportionment of Federal funds, while the apportionment for state highways is reduced by the amount received by TMAs within the state. For this reason, it is important to consider the impacts of these changes when estimating amounts of Federal funds expected to be received in coming decades. The Portland, Eugene, and Salem areas are already designated as TMAs. The committee assumed the Rogue Valley MPO will become a TMA in SFY 2032.

Federal-Aid Highway Distribution by Jurisdiction

Most federal-aid highway funds are apportioned or allocated to the state. However, some funds are allocated specifically for local governments (e.g., the TMA case under the Surface Transportation Block Grant Program and Transportation Alternatives Program). Under the IIJA new Carbon Reduction Program, 65 percent of each State's program apportionment is suballocated to MPOs, both TMAs and non-TMAs based on their relative share of population up. Other funds are apportioned to the state for expenditure on local projects or in local areas (e.g., Congestion Mitigation and Air Quality Improvement (CMAQ) funds, a share of Surface Transportation Block Grant Program (STBGP) funds, a share of STBGP funds reserved for off-system bridges). Still others are distributed to local jurisdictions by the state through intergovernmental agreements (e.g., Transportation Growth Management grants, Transportation Alternatives Program funds, Local Bridge Program funds, Working Agreement with Cities and Counties - see **Table 10: Estimated STBGP Apportionments for MPO Counties and Cities other than TMAs.**). Finally, the state transfers part of its share of STBGP funds to FTA for alternative mode and Transportation Demand Management programs.

Completion of this project requires assumptions to be made concerning how federal-aid highway funds are distributed. The committee assumed the existing agreements and distribution methods remain as they are currently established. This includes the activities of the CMAQ Committee and Transportation Alternatives Committee with the modification that MPOs with fewer than 200,000 are eligible to receive TAP awards. The funds controlled by these committees are distributed on a discretionary or cooperative basis.

It also assumed annual ODOT STBGP transfers to alternative mode programs would be $10.5 million in SFY 2018 and $15.5 million per year for FTA Section 5310 programs beginning in SFY 2019, and the total amount increasing ten percent every seventh year.

On a long-term basis, geographic distribution is expected to be the same as for the STF (see **Table 11: FLEX Funds (STBGP) Shift to FTA 5310**).

Regional Distribution of State-Controlled Funds Available for Modernization

Long-range plan development requires an assumption indicating how and where funds under OTC control and available for modernization will be distributed. The OTC determines allocation of these resources. The committee recognizes that OTC decision-making depends on many elements, and in the long-run cannot be precisely predicted. However, since this is a necessary component to plan development, the committee needed to adopt a methodology.

In the distant past, the committee assumed modernization funds would be allocated according to regional proportions of population, state system lane-miles, and estimated revenues paid into the Highway Fund. However, this often led to confusion with the STIP development process. The STIP development process relies upon similar factors to distribute modernization funds. In the past, factors such as population, VMT, registrations, ton miles, and revenues were used. The data to support the previous calculations are now significantly outdated. In reviewing the factors for updates, two of the factors dropped out as the Ton mile analysis is no longer conducted, nor are revenues by county something that is identifiable. The remaining three factors (population, VMT, and registrations) will be used going forward.

The distribution of projected modernization funds according to the STIP formula is by ODOT Region. Sub-distribution of these projected funds to MPO areas will be determined by deliberation among the MPOs, other affected local governments, ODOT Region Managers and Planners, Area Commissions on Transportation, and the OTC. For long-range forecasting purposes, associated MPOs and Region Planners will work together to determine the proportion of regional funds that are forecasted to be spent in each MPO area. The actual distribution of funds is determined by the OTC.

Regional Distribution of State-Controlled Funds Available for OM&P

The committee assumed that ODOT's OM&P needs as defined on **Table 12: Long Range Estimates of ODOT Highway Preservation, Maintenance and Other Costs of Appendix B** will be funded where they arise and to the extent funds are available. Over the relatively long-term planning horizon of MPO transportation plans, these needs are not expected to be disproportionately distributed. The resulting expenditures are assumed to be distributed on a lane-mile basis, with a double-weight in the Portland area.[3]

Flexibility for MPOs to Modify Assumptions

By their very nature, long-term forecasts are highly speculative. As these forecasts are only fully revised every three to six years, the committee assumes MPOs have the

[3] On a lane-mile basis, Portland area OM&P costs are about twice the statewide average.

flexibility to make adjustments among minor programs or minor adjustments to funding totals. The CMAQ Program is an example of a program in which fund distribution is expected to change in the near future; requiring some adjustments to long-range plans. Flexibility also exists to adjust for major, actual changes such as a new Federal authorizing act that is very different than forecast, or a legislative act that is not consistent with the long-term forecast.[4] When an MPO makes changes to assumptions developed by the committee, that activity should be accompanied by a written justification of why the new assumptions are more reasonable than the assumptions contained in this report and accompanying tables.

FINDINGS

The development of financial assumptions for long-range transportation plans has been accomplished four times in the past, plus three partial updates. The process is now almost routine.

Now informal Federal guidance that revenues *"may be projected based on historic trends, including consideration of past legislative or executive actions*" remains ambiguous. It is not clear whether this guidance applies to actual revenue or the underlying tax and fee schedules that generate the revenue. It is also unclear whether the historic trend should be viewed in an arithmetic sense (i.e., revenue or tax rate growth at a fixed dollar rate) or a geometric sense (i.e., revenue or tax rate growth at a compounding percentage rate). Assumptions that are too conservative imply that as the demand for highway and transit services increases, the willingness of society to pay for increased capacity decreases. Assumptions at the other end of the spectrum produce revenue figures that are unbelievably large.

The current outlook for public sector funding is uncertain. Yet the historical record indicates growth in transportation program purchasing power of Federal and state programs has been a normal occurrence. In contrast, the methodology adopted by the committee assumes Federal and state resources available, in terms of purchasing power, for highway and public transit purposes will gradually decline through the 2040s.[5] Therefore, the committee has been quite conservative in its financial outlook.

[4] ODOT and the committee's predecessors have a track record of providing partial updates for new Federal authorizing acts in a timely manner.
[5] The state lottery revenue assumption is an exception.

APPENDIX A:

REVENUE TABLES AND SUPPORTING MATERIALS

Attached Appendix Spreadsheet

(Copy of State Revenue Historical and Forecast (Publication DRAFT-V2).xlsx

Federal-Aid Highway Program Average Annual Rate of Growth (AARG)

Growth between last year of bill and first year of subsequent bill	US	Oregon
1997-1998	15.8%	22.3%
2003-2005	13.1%	6.5%
2009-2013	4.5%	17.5%
2014-2016	5.1%	5.1%
2020-2022	21.0%	20.3%
2020-2022 (with Approps)	35.2%	31.9%
Average Annuual Rate of Growth (AARG): Authorization Bills	**US**	**Oregon**
TEA-21 (1998-2003)	4.2%	3.8%
SAFETEA-LU (2005-2009)	3.4%	3.7%
MAP-21 (2013-2014)	1.1%	0.1%
FAST-Act (2016-2020)	2.2%	2.1%
IIJA (2022-2026)	2.0%	2.0%
IIJA with Approps (2022-2026)	1.8%	1.8%
AARG: Last year of an Authorization Bill to last year of IIJA	**US**	**Oregon**
1997-2026 (ISTEA - IIJA))	3.8%	4.1%
2003-2026 (TEA-21 - IIJA)	3.2%	3.4%
2009-2026 (SAFETEA-Lu - IIJA)	2.8%	**3.3%**
2014-2026 (MAP-21 - IIJA)	3.5%	3.4%
2020-2026 (FAST Act - IIJA)	4.6%	4.5%
OURCE: FHWA Annual Notices for Federal-aid Apportionments, Obligation Authority and Redistribution		
OOT Office of Revenue, Finance and Compliance (Apports-Lim Rates-Redistribution)		*February 7, 2022*

Summary of Bipartisan Infrastructure Law

IIJA
(Infrastructure Investment and Jobs Act)

Adopted November 15, 2021 provides funding for Highways and Transit Programs for Federal Fiscal Years (FYs) 2022 – FY 2026.

Estimated Oregon Federal-aid Highway Program Funding

	Millions						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
Total Oregon (W/o Spcl Appropriations)	$ 547.2	$ 662.2	$ 675.4	$ 688.9	$ 702.7	$ 716.8	
Annual Rate of Growth		21.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Total Oregon (With Spcl Appropriations)	$ 547.2	$ 726.3	$ 739.5	$ 753.0	$ 766.8	$ 780.9	
Annual Rate of Growth		32.7%	1.8%	1.8%	1.8%	1.8%	1.8%
AARG: Average Annual Rate of Growth (year over year increase)							

NOTE: Funding amounts, with the exception of figures presented for Metropolitan Planning, Carbon Reduction Program, and Protect Program are Apportionment amounts.

Federal-aid Highway Programs

National Highway Performance Program (NHPP). Largest Federal-aid Program accounting for 55 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
NHPP	$ 295.1	16.8%	2.0%	2.0%	2.0%	2.0%	2.0%

- Continues current program eligibilities
- Adds new program purpose for providing support for activities to increase the resiliency of the NHS
- Adds new eligible projects:
  - Underground public utility infrastructure carried out in an otherwise eligible project
  - Resiliency improvements (including protective features) on the NHS
  - Activities to protect the NHS segments from cybersecurity threats
  - Protective features (related to mitigating risk or recurring damage or the cost of future repairs from extreme weather events, flooding or other natural disasters on federal-aid highways/bridges off the NHS (≤15% of NHPP funds)
- Requires Asset Management Plans to consider extreme weather and resilience in lifecycle cost and risk management analysis

Surface Transportation Block Grant Program. Second largest Federal-aid Program accounting for nearly 27 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
STBGP	$ 143.9	10.5%	2.0%	2.0%	2.0%	2.0%	2.0%
Portland TMA	$ 30.8	10.5%	2.0%	2.0%	2.0%	2.0%	2.0%
Eugene TMA	$ 5.1	10.5%	2.0%	2.0%	2.0%	2.0%	2.0%
Salem TMA	$ 4.9	10.5%	2.0%	2.0%	2.0%	2.0%	2.0%
MPOs 50,000-200,000	$ 6.2	69.6%	2.0%	2.0%	2.0%	2.0%	2.0%
Off-System Bridge	$ 12.7	49.9%	0.0%	0.0%	0.0%	0.0%	0.0%

- Continues current program eligibilities
- Adds new eligible projects:
  - Electric Vehicle (EV) charging infrastructure

  - Protective features to enhance resilience
  - Wildlife crossing projects
- Increases off-system bridge set-aside from 15% to 20%; adds eligibility to include replacing a low water crossing with a bridge
- Continues Transportation Alternatives as a set-aside of total STBGP funding and increases annual TA funding to 10% of total STBGP funds
- Continues share of program funds subject to distribution among areas based on population at 55% for FY 2022-FY 2026.
- Population categories for funding suballocation split into smaller ranges
  - Requires States to consult with small urbanized areas with population between 50,000-200,000 and describe how funds allocated for the areas will be allocated equitably
  - Changes the special rule for areas of less than 5,000 to areas less than 50,000.
- Permits States to use up to 15% of rural area funds for eligible projects or maintenance on non-Federal aid highways in rural areas, and up to 5% for certain barge land, doc and waterfront infrastructure projects

<u>Transportation Alternatives (TA)</u>.

	Millions						
	FY 2021	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**AARG 22-26**
TA (less Rec Trails $1.6 million)	$ 7.8	$ 13.7	$ 14.0	$ 14.3	$ 14.7	$ 15.0	2.2%
Portland TMA	$ 1.5	$ 3.2	$ 3.2	$ 3.3	$ 3.4	$ 3.4	2.2%
Eugene TMA	$ 0.3	$ 0.5	$ 0.5	$ 0.5	$ 0.6	$ 0.6	2.2%
Salem TMA	$ 0.2	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	2.2%
50,000-200,000	$ 0.4	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	2.2%
Remaineder	$ 5.4	$ 8.7	$ 8.9	$ 9.1	$ 9.3	$ 9.5	2.2%

- Continues annual set-aside of $1,610,153 for Recreational Trails projects
- Increases form 50% to 59% the portion of TA funding that must be suballocated to areas of the State based on population
- Adds as eligible entities MPOs representing a population ≤200,000, nonprofit entities, and States at the request of another eligible entity
- Continues to permit States to transfer up to 50% of TA funds to any other apportioned program but establishes new conditions
- Allows States to use up to 5% of available funds (after suballocation) to fund staff to administer the TA program and assist applicants
- Reaffirms eligibility for safe routes to school projects and activities
- Adds activities relating to vulnerable road user safety assessments
- Makes changes to Federal share provisions subject to certain requirements
  - Provides for a Federal share up to 100%
  - Allows HSIP funds to be used toward the non-Federal share
  - Allows non-Federal share requirements to be met on an aggregate basis instead of by project

Highway Safety Improvement Program (HSIP). Third largest Federal-aid Highway Program accounting for nearly 6 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
HSIP	$ 30.4	21.1%	2.0%	2.0%	2.0%	2.0%	2.0%

- Adds eligibility (≤10%of HSIP fund) for specified safety projects (including non-infrastructure safety projects related to education, research, enforcement, emergency services, and safe routes to school)
- Modifies the HSIP definition of highway safety improvement project by adding or clarifying some project types. Examples include:
  - Railway-highway crossing grade separation projects;
  - Traffic control devices for pedestrians and bicyclists; and
  - Roadway improvements that separate motor vehicles from bicycles or pedestrians
- Requires States to complete vulnerability road user (VRU) safety assessments, taking into consideration a Safe System approach
- Adds special rule for States with total annual VRU fatalities comprising ≥15% of total annual crash fatalities in State

Railway-Highway Crossing Program (RHCP). HSIP related program accounting for less than 1 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
RHCP	$ 2.9	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%

- Clarifies funds are eligible for projects to reduce pedestrian fatalities and injuries form trespassing at grade crossings (ped safety improvements at crossing are already an eligible activity)
- Eliminates the 50% set-aside for “protective devices”
- Increases the maximum incentive payment that a State may pay a local government for closing a public at-grade rail-highway crossing from $7,500 to $100,00 subject to certain conditions
- Increases from 2% to 8% the amount a State may use for data compilation and analysis in support of its annual RHCP report
- Increases Federal share for projects financed with funds set-aside for this program from 90% to 100%
- Requires Federal Railroad Administration (FRA) to summarize highway-rail grade crossing action plans and evaluate each State railway-highway crossing program and submit report to Congress on the results
- Requires FRA, in consultation with FHWA, to update the report based on State annual reports required under the program and submit it to Congress

Congestion Mitigation and Air Quality Improvement Program (CMAQ). Fourth largest Federal-aid Highway program accounting for slightly more than 3 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
CMAQ	$ 20.7	2.2%	2.0%	2.0%	2.0%	2.0%	2.0%

- Continues existing project eligibilities
- Adds eligibilities for:
  - Shared micromobility (e.g. bikeshare, shared e-scooters)
  - Purchase of diesel replacements
  - Purchase of medium/heavy–duty zero emission vehicles and related charging equipment
  - Modernization/rehabilitation of a lock and dam or a marine highway corridor, connector, or crossing if certain criteria are met (≤10% of CMAQ funds)
- Permits use of CMAQ fund for rail/transit operating assistance (without time limitation) in association with certain CMAQ project located in certain areas
- Requires, to the maximum extent practicable, prioritizing disadvantaged communities or low-income populations when obligating funds to reduce PM2.5 emissions

Metropolitan Planning Organization (MPO) Planning (MPO Planning). Federal-aid Highway program accounting for approximately 1 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
MPO Planning	$ 4.3	23.1%	2.0%	2.0%	2.0%	2.0%	2.0%

NOTE: MPO Planning funds held harmless from obligation limitation and ODOT provides the required non-Federal match.

- Continues changes made under FAST Act including:
  - Expanded scope of planning process to include addressing "resiliency and reliability as well as enhancing travel and tourism of the transportation system
  - Encouraged consideration of intermodal facilities that support intercity buses as part of the metropolitan planning process
  - Addition of "intermodal facilities that support intercity transportation, including intercity bus facilities and commuter vanpool providers' to the indentified contents of plans and transportation improvement programs (TIPS)
  - Clarification that private providers of transportation include "intercity bus operators, employer-based commuting program, such as car-pool program, vanpool program, transit benefit program, parking cash-out program, shuttle program or telework program"

  - Permission of Transportation Management Areas (TMAs) to develop a Congestion Management Plan which includes projects and strategies that TMAs will considered in the MPO TIP
- IIJA adds new requirement that each MPO must use at least 2.5% of program funds on one or more activities to increase safe and accessible options for multiple travel modes for people (§11206)

National Highway Freight Program (NHFP). Sixth largest Federal-aid Highway Program accounting approximately 3 percent of Apportioned funding.

	Millions	Annual Percentage Increase in Program Funding					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
NHFP	$ 18.4	-7.7%	2.0%	2.0%	2.0%	2.0%	2.0%

- Continues program eligibilities and requirements established under the FAST Act. Oregon mileage identified as part of the 41,514 mile Primary Highway Freight System (PHFS) totaled 775.32 miles and included all Oregon Instate mileage. Oregon mileage identified as part of the National Highway Freight Network (NHFN) composed of the PNFS, Non-PHFS Interstate mileage, Critical Rural Freight Corridors (CRFCs) and Critical Urban Freight Corridors (CUFCs) totaled 775.91 miles. In accordance with FAST Act provisions, 155.1 miles of roadways in rural areas can be identified for designation as critical rural freight corridors and 77.5 miles of roadways in urban areas can be identified for designation as critical urban freight corridors (MPOs for urban areas with populations 500,000 and above can identify roadways for designation as CUFCs in consultation with the State while the State in consultation with MPOs with populations less than 500,00 can identify roadways for designation as CUFCs)
- IIJA allows the designation of more miles as CRFCs and CUFCs. As a State with a population density less than the national average Oregon can identify up to 600 miles as critical rural freight corridors and 150 miles as critical urban freight corridors
- Changes the portion of NHFP funding that a State may use on freight intermodal or freight rail projects (subject to certain restrictions) from 10% to ≤30%)
- Adds eligibility for modernization/rehabilitation of a lock and dam or a marine highway corridor, connector, or crossing (including an inland waterway corridor, connector, or crossing) that are:
  - Functionally connected to the National Highway Freight Network; and
  - Likely to reduce on-road mobile source emissions

Carbon Reduction Program (CRP). **New** formula program providing funding for projects to reduce transportation emissions (carbon dioxide emissions from on-road highway sources) or the development of carbon reduction strategies. Program is the seventh largest Federal-aid Highway program and accounts for more than 2 percent of total Apportioned funding.

	Millions		Annual Percentage Increase in Program Funding				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
Carbon Reduction Program		$ 15.9	2.0%	2.0%	2.0%	2.0%	2.0%
Portland TMA		$ 4.01	2.0%	2.0%	2.0%	2.0%	2.0%
Eugene TMA		$ 0.67	2.0%	2.0%	2.0%	2.0%	2.0%
Salem TMA		$ 0.64	2.0%	2.0%	2.0%	2.0%	2.0%
50,000-200,000		$ 1.10	2.0%	2.0%	2.0%	2.0%	2.0%

- Funding apportioned to States by formula
- 65% of program funding is suballocated to areas of the State based on population
- Requires State in consultation with MPOs, to develop a carbon reduction strategy and submit it to U.S. Department of Transportation (DOT) for approval within 2 years of bill enactment (November 15, 2023). Developed strategy is to be updated at least every 4 years
- DOT must certify that a State's strategy meets the statutory requirements
- A variety of eligible projects are identified that support the reduction of transportation emissions including:
    - Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists and other non-motorized forms of transportation
    - Public transportation projects
    - Project to replace street lighting and traffic control devices with energy-efficient alternatives
    - The development of a carbon reduction strategy
    - A project or strategy that is designed to support congestion pricing, shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads, including electronic toll collection, and travel demand management strategies and programs
    - Federal-share for undertaken projects is determined in accordance with section 120 of title 23.

Promoting, Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program. **New formula program** providing funding for planning, resilience improvement, community resilience and evacuation routes, and at-risk coastal infrastructure. Program is the fifth largest Federal-aid Highway Program and accounts for approximately 3 percent of total Apportioned funding. Program provisions require the Secretary to establish a **New Discretionary Protect Grant Program**.

	Millions		Annual Percentage Increase in Program Funding				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
Protect Formula Program		$ 18.0	2.0%	2.0%	2.0%	2.0%	2.0%

- Funding apportioned to States by formula for identified eligible projects under the categories of:

- Resilience Improvement Grants to improve the ability of an existing surface transportation asset to withstand 1 or more elements of a weather event or natural disaster, or to increase the resilience of surface transportation infrastructure from the impacts of changing conditions, such as sea level rise, flooding, wildfires, extreme weather events, and other natural disasters
- Community Resilience and Evacuation Route Grants for projects that strengthen and protect evacuation routes that are essential for providing and supporting evacuations caused by emergency events
- At-Risk Coastal Infrastructure Grants for projects that strengthen, stabilize, harden, elevate, relocate, or otherwise enhance the resilience of highway and no-rail infrastructure that are subject to, or face increased long-term future risks of a weather even, a natural disaster, or changing conditions, including coastal flooding, coastal erosion, wave action, storm surge, or sea level rise, in order to improve transportation and public safety and to reduce costs by avoiding larger future maintenance or rebuilding costs.
- Higher Federal share if the State develops a residence improvement plan and incorporates it into its long-range transportation plan

- Of the amounts apportioned to the Date for fiscal year, the State may use
  - Not more than 40% for construction of new capacity
  - Not more than 10% for development phase activities
- Federal share established at 80% subject to further reductions upon satisfaction of certain requirements, permits the use of other federal highway program funds as non-Federal match

Highway Apportionment Programs Added as Part of General Fund Supplement Appropriations Provisions

Bridge Replacement, Rehabilitation, Preservation, Protection and Construction Program (Bridge Formula Program). New formula program to provide funding to replace, rehabilitate, preserve, protect, and construct bridges on public roads. Program provisions require the Secretary to establish **New Discretionary Bridge Investment Program**

	Millions						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
Special Bridge (formula)		$ 53.6	$ 53.6	$ 53.6	$ 53.6	$ 53.6	0.0%
Any Area		$ 45.6	$ 45.6	$ 45.6	$ 45.6	$ 45.6	0.0%
0ff System Bridge		$ 8.0	$ 8.0	$ 8.0	$ 8.0	$ 8.0	0.0%

- Funded from the General Fund, program funds are not subject to obligation limitation
- Distribution formula: 75% based on relative costs of replacing State's poor condition bridges, 25% based on relative costs of rehabilitating State's fair condition bridges. No State is to receive less than $45 million per year.

- 15% of annual program funds are reserved for Off-System Bridges
- Federal share increases to 100% if project is owned by a local agency or Federally recognized Tribe

National Electric Vehicle Formula Program. **New formula program** providing funding to strategically deploy electric vehicle (EV) charging infrastructure and establish an interconnected network to facilitate data collection, access and reliability. Program provisions require the set-aside of 10% of Program funds for discretionary technical assistance grants to State and local governments.

	Millions						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	AARG 22-26
Electric Vehicles		$ 7.7	$ 7.7	$ 7.7	$ 7.7	$ 7.7	0.0%
Annual Rate of Growth			0.0%	0.0%	0.0%	0.0%	

- Funded from the General Fund, program funds are not subject to obligation limitation
- Funded projects are to be located along designated alternative fuel corridors
- States must submit plan to DOT describing planned use of funds; If State doesn't submit plan (or carry it out), DOT may withhold or withdraw funds and redistribute within the State or to other States. DOT is to establish a deadline for plan submission.
- Requires DOT to designated national EV charging corridors to support freight and goods movement
- Federal share set at 80%

Highway Apportionment Programs to be established by Secretary

Safe Routes to School Program

- Formula to be based on total student enrollment in primary, middle, and high schools in each State; bears to the total student enrollment in primary, middle and high schools in all States
- No State is to receive less than $1 million in a fiscal year
- Not less and 10% and not more than 30% in annual funding is to be used for non-infrastructure-related activities
- Each State is to fund a full-time position of coordinator of the safe routes to school program from program funding

Discretionary Grant Programs

The IIJA provides an historic level of transportation discretionary grant funding. Some 50 discretionary grant programs offered by FHWA, FTA, Office of the Secretary, Federal Railroad Administration, and National Highway Traffic Safety Administration combine to offer upwards of $200 billion in potential grant funding. It is important to note that

some of the funding is authorized but subject to annual Congressional appropriations; and some of the funding is provided as supplemental apportionments for the life of the bill.

Given the uncertainty of future discretionary grant funding, a decision was made to assume that during the course of IIJA, Oregon would expect to be awarded around $120 million of discretionary grant funding each year, $60 million to the state and $60 million to local jurisdictions. Beyond IIJA, the state's annual total for discretionary awards would total $60 million, $30 million to the state and $30 million to local jurisdictions. Annual funding amounts are assumed to grow 3.3 percent each year beginning in 2027.

In light of the potential for very large award amounts under a number of programs, both the state and MPOs indicated that they had projects that could only be completed with large discretionary program awards. For such MPO projects, it was to be left to MPOs to develop reasonable expectations for funding shares and potential award amounts.

APPENDIX B:

REVENUE TABLES

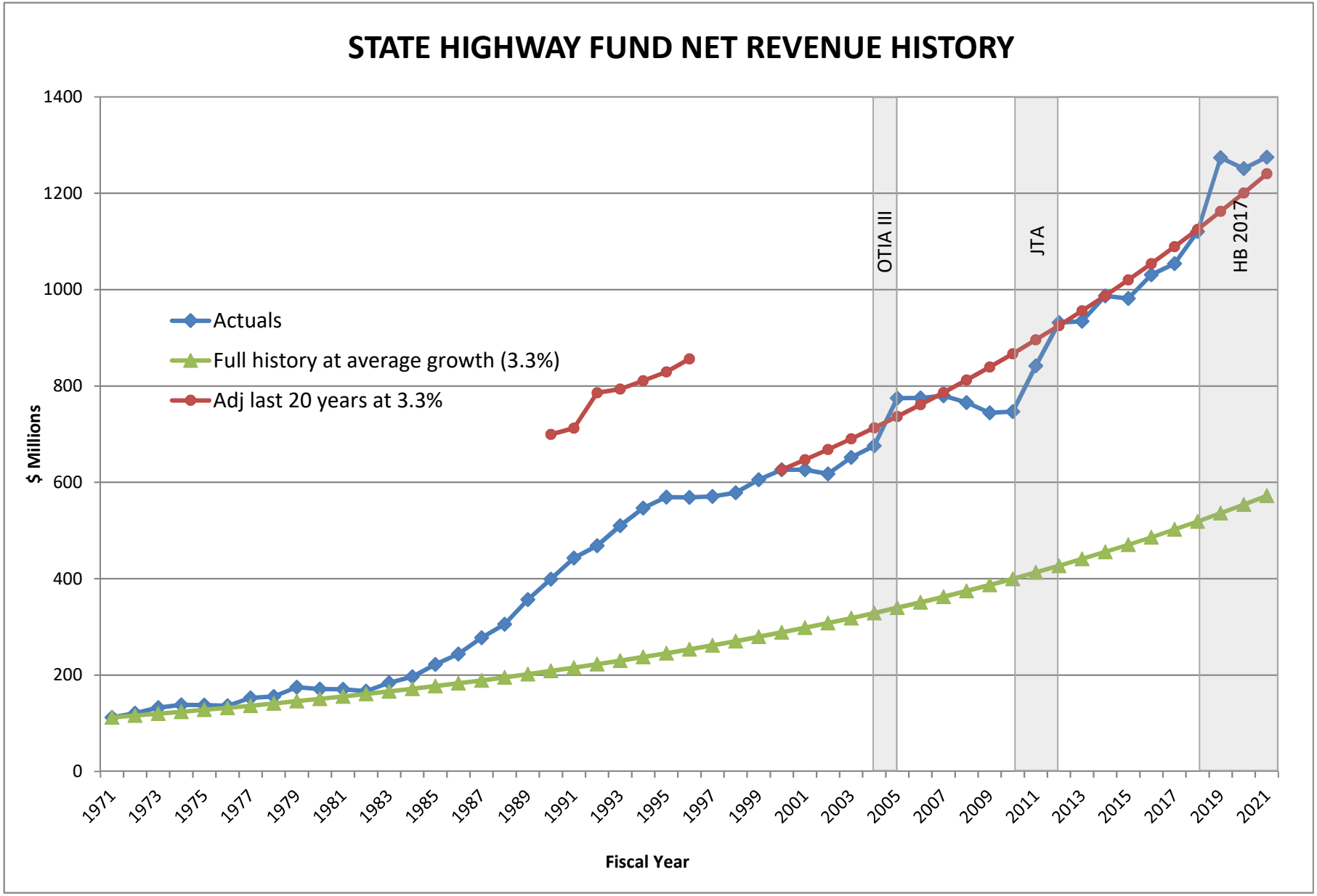
STATE HIGHWAY FUND NET REVENUE HISTORY
1400
1200
1000
800
600
400
200
0
$ Millions
Actuals
Full history at average growth (3.3%)
Adj last 20 years at 3.3%
OTIA III
JTA
HB 2017
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
Fiscal Year

TABLE 1.A: STATE HIGHWAY FUND REVENUE HISTORY AND CURRENT LAW PROJECTION ($ MILLION)

Fiscal Year	Actual Revenue	Fiscal Year	Projected Current Law Revenue	State Share	County Share	City Share
1971	112.3	2022	1,406.5	793.2	369.9	243.3
1972	120.8	2023	1,421.6	801.8	373.9	245.9
1973	132.5	2024	1,453.2	819.6	382.2	251.4
1974	138.0	2025	1,487.1	838.7	391.1	257.3
1975	137.6	2026	1,536.3	866.0	404.3	266.0
1976	136.2	2027	1,587.1	894.2	417.9	275.1
1977	152.5	2028	1,639.7	923.3	432.0	284.4
1978	155.5	2029	1,693.9	953.3	446.5	294.1
1979	174.7	2030	1,750.0	984.4	461.6	304.1
1980	170.8	2031	1,807.9	1016.4	477.1	314.4
1981	170.3	2032	1,867.7	1049.5	493.2	325.1
1982	166.7	2033	1,929.6	1083.6	509.8	336.1
1983	184.0	2034	1,993.4	1118.9	527.0	347.6
1984	196.6	2035	2,059.4	1155.3	544.7	359.4
1985	221.9	2036	2,127.5	1192.9	563.1	371.6
1986	243.8	2037	2,198.0	1231.7	582.0	384.2
1987	277.4	2038	2,270.7	1271.8	601.6	397.3
1988	305.6	2039	2,345.9	1313.2	621.9	410.8
1989	356.6	2040	2,423.5	1355.9	642.8	424.7
1990	399.1	2041	2,503.7	1400.1	664.5	439.1
1991	442.9	2042	2,586.6	1445.6	686.9	454.1
1992	468.8	2043	2,672.2	1492.7	710.0	469.5
1993	510.2	2044	2,760.6	1541.2	733.9	485.5
1994	546.9	2045	2,852.0	1591.4	758.6	501.9
1995	569.5	2046	2,946.3	1643.2	784.2	519.0
1996	568.8	2047	3,043.9	1696.6	810.6	536.6
1997	571.0	2048	3,144.6	1751.9	837.9	554.9
1998	578.7	2049	3,248.7	1808.9	866.1	573.7
1999	605.3	2050	3,356.2	1867.7	895.3	593.2
2000	626.1	2051	3,467.3	1928.5	925.4	613.4
2001	626.4					
2002	617.4					
2003	651.7					
2004	675.9					
2005	774.9					
2006	775.4					
2007	779.8					
2008	765.5					
2009	744.3					
2010	746.9					
2011	841.6					
2012	931.6					
2013	934.5					
2014	987.0					
2015	981.8					
2016	1030.8					
2017	1054.0					
2018	1120.4					
2019	1273.9					
2020	1251.3					
2021	1275.1					

(1) Includes amounts shared with counties and cities.
Assumed shares are: State - 56.4%; Counties 26.3%; Cities 17.3% (2022-2050).
(2) Also includes large amounts reserved for debt service on
expenditures in previous years. Does not include revenue from the sale of bonds.
(3) Sources: 1971-2021, Legislative Revenue Office; 2022-2029, ODOT
April 2022 Revenue Forecast; 2028-2047 "trend" growth rate of 3.3%.

TABLE 1.B: ASSUMED ADDITIONAL STATE HIGHWAY FUND REVENUE

INCREMENTAL OM&P REVENUE ABOVE CURRENT LAW*
($ MILLION)

SFY	State Share	County Share	City Share
2020	0.0	0.0	0.0
2021	0.0	0.0	0.0
2022	0.0	0.0	0.0
2023	0.0	0.0	0.0
2024	0.0	0.0	0.0
2025	0.0	0.0	0.0
2026	27.6	12.9	8.5
2027	55.7	26.0	17.1
2028	89.4	41.8	27.5
2029	121.4	56.9	37.4
2030	149.8	70.2	46.3
2031	182.3	85.6	56.4
2032	215.8	101.4	66.8
2033	250.4	117.8	77.7
2034	286.1	134.8	88.9
2035	323.0	152.3	100.5
2036	361.0	170.4	112.5
2037	400.3	189.1	124.9
2038	440.8	208.5	137.7
2039	482.7	228.6	151.0
2040	525.8	249.3	164.7
2041	570.4	270.7	178.9
2042	616.4	292.9	193.6
2043	663.9	315.8	208.8
2044	712.9	339.5	224.5
2045	763.5	364.0	240.8
2046	815.7	389.3	257.7
2047	869.7	415.5	275.1
2048	925.3	442.6	293.1
2049	982.8	470.5	311.7
2050	1042.1	499.5	331.0
2051	1103.3	529.4	350.9

*Includes cost-responsibility effects on heavy vehicles.

TABLE 2: ASSUMED ADDITIONAL STATE HIGHWAY FUND REVENUE
MODERNIZATION INCLUDING ADDED REVENUE
($ Million)

Fiscal Year	State Share of Statewide Highway User Fee Revenue Under Current Law (YOE $s)	Assumed New Revenue Available for O,M&P (YOE $s)	Total Federal Funds (YOE $s)	Federal Highway Funds Allocated to Local Governments for Highway Purposes (YOE $s)	Federal Highway Funds Available to State (YOE $s)	Total Highway Funds Available to State (YOE $s)	Total Highway Funds Available to State 2020 $s	Non-Modernization State Needs (YOE $s)	Amounts Required for Federal Modernization Projects (YOE $s)	*Federal Modernization constant $s (State FLAP, Freight, FastLane, TIGER) 2020 $s	Assumed ODOT STBGP** Transfer to FTA Programs (YOE $s)	Assumed ODOT STBGP** Transfer to FTA Programs 2020 $s
2020	740.8	0.0	628.9	183.7	445.2	1,186.0	1,186.0	1,714.7	44.5	44.5	15.5	15.5
2021	754.8	0.0	604.6	184.5	420.0	1,174.9	1,137.3	1,771.4	43.8	42.4	15.5	15.0
2022	793.2	0.0	858.3	266.4	591.9	1,385.1	1,298.0	1,855.9	48.0	45.0	15.5	14.5
2023	801.8	0.0	871.9	276.6	595.3	1,397.1	1,267.4	1,914.1	90.0	81.6	15.5	14.1
2024	819.6	0.0	892.1	286.4	605.7	1,425.3	1,251.7	1,973.7	93.1	81.8	15.5	13.6
2025	838.7	0.0	905.7	294.8	610.8	1,449.6	1,232.3	2,034.5	93.8	79.7	17.1	14.5
2026	866.0	27.6	920.1	303.2	616.9	1,510.6	1,243.2	2,097.3	94.7	77.9	17.1	14.1
2027	894.2	55.7	819.4	281.2	538.1	1,488.1	1,185.5	2,171.1	65.8	52.4	17.1	13.6
2028	923.3	89.4	846.4	290.5	555.9	1,568.6	1,209.8	2,251.9	68.0	52.4	17.1	13.2
2029	953.3	121.4	874.3	300.1	574.2	1,649.0	1,231.2	2,329.9	70.2	52.4	17.1	12.8
2030	984.4	149.8	903.2	310.0	593.2	1,727.4	1,248.5	2,402.7	72.6	52.4	17.1	12.4
2031	1,016.4	182.3	933.0	320.2	612.8	1,811.5	1,267.4	2,477.8	74.9	52.4	18.8	13.1
2032	1,049.5	215.8	964.2	335.4	628.8	1,894.1	1,282.9	2,555.5	77.4	52.4	18.8	12.7
2033	1,083.6	250.4	996.0	346.5	649.5	1,983.6	1,300.6	2,629.6	80.0	52.4	18.8	12.3
2034	1,118.9	286.1	1,028.9	357.9	671.0	2,076.0	1,317.7	2,712.5	82.6	52.4	18.8	11.9
2035	1,155.3	323.0	1,062.8	369.7	693.1	2,171.4	1,334.2	2,798.1	85.3	52.4	18.8	11.5
2036	1,192.9	361.0	1,097.9	381.9	716.0	2,269.9	1,350.2	2,886.5	88.2	52.4	18.8	11.2
2037	1,231.7	400.3	1,134.1	394.5	739.6	2,371.6	1,365.7	2,977.9	91.1	52.4	20.6	11.9
2038	1,271.8	440.8	1,171.6	407.6	764.0	2,476.6	1,380.6	3,072.3	94.1	52.4	20.6	11.5
2039	1,313.2	482.7	1,210.2	421.0	789.2	2,585.1	1,395.0	3,110.6	97.2	52.4	20.6	11.1
2040	1,355.9	525.8	1,250.2	434.9	815.3	2,697.0	1,408.9	3,152.2	100.4	52.4	20.6	10.8
2041	1,400.1	570.4	1,291.4	449.3	842.2	2,812.6	1,422.3	3,256.2	103.7	52.4	20.6	10.4
2042	1,445.6	616.4	1,334.0	464.1	870.0	2,932.0	1,435.3	3,363.7	107.1	52.4	20.6	10.1
2043	1,492.7	663.9	1,378.1	479.4	898.7	3,055.2	1,447.9	3,474.7	110.6	52.4	22.7	10.8
2044	1,541.2	712.9	1,423.5	495.2	928.3	3,182.5	1,460.0	3,589.4	114.3	52.4	22.7	10.4
2045	1,591.4	763.5	1,470.5	511.6	959.0	3,313.9	1,471.7	3,707.8	118.1	52.4	22.7	10.1
2046	1,643.2	815.7	1,519.0	528.4	990.6	3,449.5	1,483.0	3,830.2	122.0	52.4	22.7	9.8
2047	1,696.6	869.7	1,569.2	545.9	1,023.3	3,589.6	1,493.9	3,956.6	126.0	52.4	22.7	9.4
2048	1,751.9	925.3	1,620.9	563.9	1,057.1	3,734.2	1,504.5	4,087.1	130.2	52.4	22.7	9.1
2049	1,808.9	982.8	1,674.4	582.5	1,091.9	3,883.6	1,514.7	4,222.0	134.4	52.4	25.0	9.7
2050	1,867.7	1,042.1	1,729.7	601.7	1,128.0	4,037.7	1,524.5	4,361.3	138.9	52.4	25.0	9.4
2051	1,928.5	1,103.3	1,786.8	621.6	1,165.2	4,197.0	1,534.0	4,505.3	143.5	52.4	25.0	9.1

*2020–2051 amounts reflect federal funds exclusive of match requirements.
**Flexible Federal Surface Transportation Program funds that would otherwise be programmed for construction on State highways.

TABLE 2: DERIVATION OF FUNDS AVAILABLE TO FINANCE STATE HIGHWAY MODERNIZATION INCLUDING ADDED REVENUE, CONTINUED
($ Million)

Fiscal Year	JTA Debt Service @ 5% & 25 Years (YOE $s)	JTA Debt Service @ 5% & 25 Years+ 2020 $s	Required Additional JTA Project Funding (YOE $s)	Statewide Funds Available for Highway Modernization or Other Purposes (YOE $s)	Purchasing Power Available for Modernization or Other Net of Debt Service 2020 $s	Statewide Funds Reserved for Highway Modernization Under ORS 366.507 (YOE $s)	ORS 366.507 Funds Reserved for Debt Service (YOE $s)	ORS 366.507 Funds Net of Debt Service & Federal Match (YOE $s)	Net of DS Purchasing Power Available for Modernization Under ORS 366.507 2020 $s	ODOT FLAP Mod. Amounts (for Reference)*** (YOE $s)	ODOT FLAP Mod. in constant $s (for Reference)*** 2020 $s	Local FLAP Mod. Amounts (for Reference)*** (YOE $s)	Local FLAP Mod. in constant $s (for Reference)*** 2020 $s	Discretionary for Mod. - Local*** (YOE $s)	Discretionary for Mod. - Local in constant $s (for Reference)*** 2020 $s
2020	57.8	57.8	0.0	-652.1	-652.1	$76.9	0.0	65.8	65.8	12.5	12.5	12.5	12.5	15.0	15.0
2021	63.5	61.5	0.0	-719.1	-697.5	$79.7	0.0	68.7	66.6	12.4	12.0	12.4	12.0	15.0	14.5
2022	63.5	59.5	0.0	-603.7	-568.0	$81.5	0.0	69.5	65.1	13.6	12.7	13.6	12.7	60.0	56.2
2023	64.4	58.4	0.0	-697.1	-636.1	$79.9	0.0	57.4	52.1	14.1	12.8	14.1	12.8	60.0	54.4
2024	64.4	56.6	24.1	-757.0	-670.0	$79.2	0.0	55.9	49.1	17.0	14.9	17.0	14.9	60.0	52.7
2025	64.4	54.8	24.1	-795.9	-683.3	$79.2	0.0	55.8	47.4	17.3	14.7	17.3	14.7	60.0	51.0
2026	66.3	54.6	0.0	-774.6	-645.0	$79.5	0.0	55.8	45.9	17.9	14.7	17.9	14.7	60.0	49.4
2027	66.2	52.7	0.0	-840.4	-678.7	$79.8	0.0	63.3	50.5	18.5	14.7	18.5	14.7	30.0	23.9
2028	50.6	39.0	0.0	-843.0	-660.3	$80.1	0.0	63.1	48.7	19.1	14.7	19.1	14.7	31.0	23.9
2029	30	22.4	0.0	-827.5	-628.7	$79.9	0.0	62.3	46.5	19.7	14.7	19.7	14.7	32.0	23.9
2030	30	21.7	0.0	-803.9	-592.4	$79.7	0.0	61.6	44.5	20.4	14.7	20.4	14.7	33.1	23.9
2031	30.8	21.5	0.0	-799.3	-571.3	$79.7	0.0	61.0	42.7	21.0	14.7	21.0	14.7	34.2	23.9
2032	30.7	20.8	0.0	-798.0	-553.2	$80.0	0.0	60.6	41.1	21.7	14.7	21.7	14.7	35.3	23.9
2033	30.8	20.2	0.0	-785.3	-528.1	$80.0	0.0	60.0	39.3	22.4	14.7	22.4	14.7	36.5	23.9
2034	30.7	19.5	0.0	-778.9	-508.0	$80.0	0.0	59.3	37.7	23.2	14.7	23.2	14.7	37.7	23.9
2035	30.6	18.8	0.0	-772.0	-488.4	$80.0	0.0	58.7	36.0	23.9	14.7	23.9	14.7	38.9	23.9
2036	39.5	23.5	0.0	-765.0	-469.4	$80.0	0.0	58.0	34.5	24.7	14.7	24.7	14.7	40.2	23.9
2037	39.5	22.7	0.0	-768.7	-457.5	$80.0	0.0	57.2	33.0	25.6	14.7	25.6	14.7	41.5	23.9
2038	39.5	22.0	0.0	-761.4	-439.5	$80.0	0.0	56.5	31.5	26.4	14.7	26.4	14.7	42.9	23.9
2039	39.5	21.3	0.0	-694.9	-389.0	$80.0	0.0	55.7	30.1	27.3	14.7	27.3	14.7	44.3	23.9
2040	12.2	6.4	0.0	-628.1	-341.1	$80.0	0.0	54.9	28.7	28.2	14.7	28.2	14.7	45.8	23.9
2041	12.2	6.2	0.0	-593.0	-312.3	$80.0	0.0	54.1	27.3	29.1	14.7	29.1	14.7	47.3	23.9
2042	12.2	6.0	0.0	-584.9	-298.8	$80.0	0.0	53.2	26.1	30.1	14.7	30.1	14.7	48.8	23.9
2043	12.2	5.8	0.0	-578.7	-286.8	$80.0	0.0	52.3	24.8	31.0	14.7	31.0	14.7	50.4	23.9
2044	0.0	0.0	0.0	-558.0	-268.2	$80.0	0.0	51.4	23.6	32.1	14.7	32.1	14.7	52.1	23.9
2045	0.0	0.0	0.0	-549.3	-256.1	$80.0	0.0	50.5	22.4	33.1	14.7	33.1	14.7	53.8	23.9
2046	0.0	0.0	0.0	-540.4	-244.3	$80.0	0.0	49.5	21.3	34.2	14.7	34.2	14.7	55.6	23.9
2047	0.0	0.0	0.0	-531.2	-233.0	$80.0	0.0	48.5	20.2	35.4	14.7	35.4	14.7	57.4	23.9
2048	0.0	0.0	0.0	-521.9	-222.0	$80.0	0.0	47.5	19.1	36.5	14.7	36.5	14.7	59.3	23.9
2049	0.0	0.0	0.0	-514.5	-212.3	$80.0	0.0	46.4	18.1	37.7	14.7	37.7	14.7	61.3	23.9
2050	0.0	0.0	0.0	-504.6	-201.9	$80.0	0.0	45.3	17.1	39.0	14.7	39.0	14.7	63.3	23.9
2051	0.0	0.0	0.0	-494.5	-191.9	$80.0	0.0	44.1	16.1	40.3	14.7	40.3	14.7	65.4	23.9
									1,024.3		**423.0**		**423.0**		**837.4**

***Amounts are already accounted for in other columns (state) or worksheets (local).

TABLE 3.A: DISTRIBUTION OF FEDERAL HIGHWAY FUNDS (Year of Exepnditure)

($ Millions)

YEAR	TOTAL FEDERAL HWY FUNDS TO OREGON (YOE $s)	FORMULA FUNDS TO OREGON (YOE $s)	HIGHWAY FREIGHT PROGRAM (MOD.) (YOE $s)	IIJA SUPPLEMENTAL APPROPRIATIONS (YOE $s)	FEDERAL LANDS ACCESS - STATE* (YOE $s)	FEDERAL LANDS ACCESS - LOCAL* (YOE $s)	DISCRETIONARY FOR MOD. - STATE** (YOE $s)	DISCRETIONARY FOR MOD. - LOCAL** (YOE $s)	REDISTRIBUTION ODOT (YOE $s)	REDISTRIBUTION TMAS (YOE $s)	COUNTY ALLOCATION (STBGP)*** (YOE $s)	SMALL CITY ALLOCATION (STBGP)*** (YOE $s)	PORTLAND TMA (STBGP) (YOE $s)	EUGENE TMA (STBGP) (YOE $s)	SALEM TMA (STBGP) (YOE $s)	MEDFORD TMA (STBGP) (YOE $s)	FTA 5310 SET-ASIDE (STBGP) (YOE $s)	OTHER LOCAL ALLOCATIONS (YOE $s)	LOCAL TOTAL (YOE $s)	BALANCE TO STATE FOR HIGHWAYS (YOE $s)
2020	628.9	482.6	17.0		17.4	17.4	15.0	15.0	64.5		18.4	12.4	28.1	4.7	4.5	0.0	15.5	83.3	199.2	429.7
2021	604.6	471.3	16.4		17.3	17.3	15.0	15.0	52.3		20.1	13.6	27.4	4.5	4.4	0.0	15.5	82.3	200.0	404.5
2022	858.3	590.0	15.5	65.0	18.9	18.9	60.0	60.0	26.7	3.3	18.5	12.5	30.6	5.1	4.9	0.0	15.5	112.6	281.9	576.4
2023	871.9	601.8	15.8	65.0	19.6	19.6	60.0	60.0	26.7	3.3	22.2	15.0	31.7	5.3	4.9	0.0	15.5	114.6	292.1	579.8
2024	892.1	613.9	16.1	65.0	23.6	23.6	60.0	60.0	26.7	3.3	22.7	18.0	32.3	5.4	5.1	0.0	15.5	116.1	301.9	590.2
2025	905.7	626.1	16.5	65.0	24.0	24.0	60.0	60.0	26.7	3.3	23.1	21.5	33.0	5.5	5.2	0.0	17.1	119.1	311.9	593.7
2026	920.1	638.7	16.8	65.0	24.8	24.8	60.0	60.0	26.7	3.3	23.6	25.9	33.6	5.6	5.3	0.0	17.1	121.1	320.3	599.8
2027	819.4	659.7	17.3		25.6	25.6	30.0	30.0	27.6	3.4	24.4	26.7	34.7	5.8	5.5	0.0	17.1	125.1	298.3	521.0
2028	846.4	681.5	17.9		26.5	26.5	31.0	31.0	28.5	3.5	25.2	27.6	35.9	6.0	5.7	0.0	17.1	129.2	307.6	538.8
2029	874.3	704.0	18.5		27.4	27.4	32.0	32.0	29.4	3.6	26.0	28.5	37.1	6.2	5.9	0.0	17.1	133.4	317.2	557.1
2030	903.2	727.2	19.1		28.3	28.3	33.1	33.1	30.4	3.8	26.9	29.4	38.3	6.4	6.1	0.0	17.1	137.8	327.1	576.1
2031	933.0	751.2	19.8		29.2	29.2	34.2	34.2	31.4	3.9	27.8	30.4	39.6	6.6	6.3	0.0	18.8	142.4	339.0	594.0
2032*	964.2	776.0	20.4		30.2	30.2	35.3	35.3	32.4	4.5	28.7	31.4	40.9	6.8	6.5	4.5	18.8	146.7	354.2	610.0
2033	996.0	801.6	21.1		31.2	31.2	36.5	36.5	33.5	4.6	29.6	32.5	42.2	7.0	6.7	4.7	18.8	151.6	365.2	630.8
2034	1,028.9	828.1	21.8		32.2	32.2	37.7	37.7	34.6	4.7	30.6	33.5	43.6	7.2	6.9	4.8	18.8	156.6	376.7	652.2
2035	1,062.8	855.4	22.5		33.3	33.3	38.9	38.9	35.7	4.9	31.6	34.6	45.0	7.5	7.2	5.0	18.8	161.7	388.5	674.3
2036	1,097.9	883.6	23.2		34.4	34.4	40.2	40.2	36.9	5.1	32.7	35.8	46.5	7.7	7.4	5.2	18.8	167.1	400.7	697.2
2037	1,134.1	912.8	24.0		35.5	35.5	41.5	41.5	38.1	5.2	33.7	37.0	48.1	8.0	7.6	5.3	20.6	172.6	415.2	719.0
2038	1,171.6	942.9	24.8		36.7	36.7	42.9	42.9	39.4	5.4	34.9	38.2	49.7	8.2	7.9	5.5	20.6	178.3	428.2	743.4
2039	1,210.2	974.0	25.6		37.9	37.9	44.3	44.3	40.7	5.6	36.0	39.4	51.3	8.5	8.1	5.7	20.6	184.2	441.6	768.6
2040	1,250.2	1,006.2	26.5		39.1	39.1	45.8	45.8	42.0	5.8	37.2	40.7	53.0	8.8	8.4	5.9	20.6	190.2	455.5	794.6
2041	1,291.4	1,039.4	27.3		40.4	40.4	47.3	47.3	43.4	6.0	38.4	42.1	54.7	9.1	8.7	6.1	20.6	196.5	469.9	821.5
2042	1,334.0	1,073.7	28.2		41.7	41.7	48.8	48.8	44.8	6.2	39.7	43.5	56.5	9.4	9.0	6.3	20.6	203.0	484.7	849.3
2043	1,378.1	1,109.1	29.2		43.1	43.1	50.4	50.4	46.3	6.4	41.0	44.9	58.4	9.7	9.3	6.5	22.7	209.7	502.1	876.0
2044	1,423.5	1,145.7	30.1		44.5	44.5	52.1	52.1	47.8	6.6	42.3	46.4	60.3	10.0	9.6	6.7	22.7	216.6	517.9	905.6
2045	1,470.5	1,183.5	31.1		46.0	46.0	53.8	53.8	49.4	6.8	43.7	47.9	62.3	10.3	9.9	6.9	22.7	223.8	534.3	936.3
2046	1,519.0	1,222.6	32.2		47.5	47.5	55.6	55.6	51.0	7.0	45.2	49.5	64.4	10.7	10.2	7.2	22.7	231.2	551.1	967.9
2047	1,569.2	1,262.9	33.2		49.1	49.1	57.4	57.4	52.7	7.2	46.7	51.1	66.5	11.0	10.6	7.4	22.7	238.8	568.6	1,000.6
2048	1,620.9	1,304.6	34.3		50.7	50.7	59.3	59.3	54.5	7.5	48.2	52.8	68.7	11.4	10.9	7.6	22.7	246.7	586.6	1,034.4
2049	1,674.4	1,347.7	35.4		52.4	52.4	61.3	61.3	56.3	7.7	49.8	54.6	71.0	11.8	11.3	7.9	25.0	254.8	607.5	1,067.0
2050	1,729.7	1,392.1	36.6		54.1	54.1	63.3	63.3	58.1	8.0	51.5	56.4	73.3	12.2	11.6	8.1	25.0	263.2	626.7	1,103.0
2051	1,786.8	1,438.1	37.8		55.9	55.9	65.4	65.4	60.0	8.2	53.2	58.2	75.7	12.6	12.0	8.4	25.0	271.9	646.5	1,140.2

NOTES:

2032* Medford MPO becomes a TMA

NOTE: Metropolitan Planning funding amount is held harmless from oblitation limitation and includes State supplied required match

NOTE: County and small city allocations are distributed the following year. This lag is reflected above.

NOTE: FTA Set-Asides are OTC decisions. Table assumes OTC increases annual distributions by 10 percent every 7th year.

***Assumes IIJA 2022 increase occurs in 2023, increases 2022 City and County funding amount by 20 percent

**Assumes 50/50 split between state and local governments.

*Assumes 50/50 split between state and local governments; reflects historic distribution of Forest Highway funding carried forward in new program. Historically, 72% of FLAP has been spent on modernization.

FORMULA FUNDS TO OREGON: Equals formula limitation plus 154 and 164 Penalties limitation plus allocations if any to other Penalities (HRR) plus Exempt minus limitation allocated to National Highway Freight Program

REDUSTRIBUTION: TMAs share of annual State amount equals 11.03%, split among TMAs based on population; Annual Redistribution is a factor in annual funding calculations under the STBGP working agreement.

TABLE 3.B: DISTRIBUTION OF FEDERAL HIGHWAY FUNDS ($2020)

($ Millions)

YEAR	TOTAL FEDERAL HWY FUNDS TO OREGON 2020 $s	FORMULA FUNDS TO OREGON 2020 $s	HIGHWAY FREIGHT PROGRAM (MOD.) 2020 $s	IIJA SUPPLEMENTAL APPROPRIATIONS 2020 $s	FEDERAL LANDS ACCESS - STATE* 2020 $s	FEDERAL LANDS ACCESS - LOCAL* 2020 $s	DISCRETIONARY FOR MOD. - STATE** 2020 $s	DISCRETIONARY FOR MOD. - LOCAL** 2020 $s	REDISTRIBUTION ODOT 2020 $s	REDISTRIBUTION TMAS 2020 $s	COUNTY ALLOCATION (STBGP)*** 2020 $s	SMALL CITY ALLOCATION (STBGP)*** 2020 $s	PORTLAND TMA (STBGP) 2020 $s	EUGENE TMA (STBGP) 2020 $s	SALEM TMA (STBGP) 2020 $s	MEDFORD TMA (STBGP) 2020 $s	FTA 5310 SET-ASIDE (STBGP) 2020 $s	OTHER LOCAL ALLOCATIONS 2020 $s	LOCAL TOTAL 2020 $s	BALANCE TO STATE FOR HIGHWAYS 2020 $s
2020	628.9	482.6	17.0	0.0	17.4	17.4	15.0	15.0	64.5	0.0	18.4	12.4	28.1	4.7	4.5	0.0	15.5	83.3	199.2	429.7
2021	585.3	456.3	15.9	0.0	16.7	16.7	14.5	14.5	50.6	0.0	19.5	13.1	26.5	4.4	4.2	0.0	15.0	79.6	193.7	391.6
2022	804.3	552.9	14.5	60.9	17.7	17.7	56.2	56.2	25.0	3.1	17.4	11.7	28.7	4.8	4.6	0.0	14.5	105.5	264.2	540.2
2023	791.0	546.0	14.4	59.0	17.8	17.8	54.4	54.4	24.2	3.0	20.2	13.6	28.8	4.8	4.4	0.0	14.1	104.0	265.0	526.0
2024	783.5	539.1	14.2	57.1	20.7	20.7	52.7	52.7	23.4	2.9	19.9	15.8	28.4	4.7	4.5	0.0	13.6	101.9	265.2	518.3
2025	770.0	532.3	14.0	55.3	20.4	20.4	51.0	51.0	22.7	2.8	19.7	18.3	28.0	4.7	4.5	0.0	14.5	101.3	265.2	504.8
2026	757.3	525.6	13.8	53.5	20.4	20.4	49.4	49.4	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	14.1	99.6	263.6	493.6
2027	652.8	525.6	13.8	0.0	20.4	20.4	23.9	23.9	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	13.6	99.6	237.7	415.1
2028	652.8	525.6	13.8	0.0	20.4	20.4	23.9	23.9	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	13.2	99.6	237.3	415.5
2029	652.8	525.6	13.8	0.0	20.4	20.4	23.9	23.9	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	12.8	99.6	236.8	416.0
2030	652.8	525.6	13.8	0.0	20.4	20.4	23.9	23.9	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	12.4	99.6	236.4	416.4
2031	652.8	525.6	13.8	0.0	20.4	20.4	23.9	23.9	22.0	2.7	19.4	21.3	27.7	4.6	4.4	0.0	13.1	99.6	237.2	415.6
2032*	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	12.7	99.4	239.9	413.2
2033	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	12.3	99.4	239.5	413.6
2034	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.9	99.4	239.1	414.0
2035	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.5	99.4	238.7	414.4
2036	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.2	99.4	238.3	414.7
2037	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.9	99.4	239.1	414.0
2038	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.5	99.4	238.7	414.4
2039	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	11.1	99.4	238.3	414.7
2040	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.8	99.4	238.0	415.1
2041	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.4	99.4	237.6	415.4
2042	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.1	99.4	237.3	415.8
2043	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.8	99.4	237.9	415.1
2044	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.4	99.4	237.6	415.5
2045	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	10.1	99.4	237.3	415.8
2046	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.8	99.4	236.9	416.1
2047	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.4	99.4	236.6	416.4
2048	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.1	99.4	236.3	416.7
2049	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.7	99.4	236.9	416.1
2050	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.4	99.4	236.6	416.5
2051	653.1	525.6	13.8	0.0	20.4	20.4	23.9	23.9	21.9	3.0	19.4	21.3	27.7	4.6	4.4	3.1	9.1	99.4	236.3	416.8

NOTES:

2032* Medford MPO becomes a TMA

NOTE: Metropolitan Planning funding amount is held harmless from oblitation limitation and includes State supplied required match

NOTE: County and small city allocations are distributed the following year. This lag is reflected above.

NOTE: FTA Set-Asides are OTC decisions. Table assumes OTC increases annual distributions by 10 percent every 7th year.

***Assumes IIJA 2022 increase occurs in 2023, increases 2022 City and County funding amount by 20 percent

**Assumes 50/50 split between state and local governments.

*Assumes 50/50 split between state and local governments; reflects historic distribution of Forest Highway funding carried forward in new program. Historically, 72% of FLAP has been spent on modernization.

FORMULA FUNDS TO OREGON: Equals formula limitation plus 154 and 164 Penalties limitation plus allocations if any to other Penalities (HRR) plus Exempt minus limitation allocated to National Highway Freight Program

REDUSTRIBUTION: TMAs share of annual State amount equals 11.03%, split among TMAs based on population; Annual Redistribution is a factor in annual funding calculations under the STBGP working agreement.

TABLE 4: DISTRIBUTION OF "OTHER LOCAL ALLOCATIONS"
($ Million)

YEAR	CMAQ		CRP -TMAs		CRP - Small MPOs)		CPR Other/Any Area		STBGP -TGM		STBGP - TDM		TAP - TMAs		TAP-Others		LOCAL BRIDGE		FHWA METROPOLITAN PLANNING**		RAIL/HWY CROSSINGS		HSIP		MISC.		TOTAL -- OTHER LOCAL ALLOCATIONS	
	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s	(YOE $s)	2020 $s
2020	18.5	18.5							4.3	4.3	1.2	1.2	1.8	1.8	5.0	5.0	28.2	28.2	4.4	4.4	3.5	3.5	13.6	13.6	3.0	3.0	83.3	83.3
2021	18.0	17.5							4.3	4.1	1.2	1.1	1.8	1.7	5.1	4.9	28.2	27.3	4.3	4.2	2.9	2.8	13.5	13.1	3.0	2.9	82.3	79.6
2022	18.6	17.5	4.8	4.5	1.0	1.0	8.5	7.9	5.0	4.7	1.6	1.5	3.8	3.5	8.6	8.1	32.5	30.5	5.3	5.0	2.9	2.7	16.8	15.8	3.1	2.9	112.6	105.5
2023	19.0	17.3	4.9	4.4	1.0	0.9	8.6	7.8	5.0	4.5	1.6	1.4	3.8	3.5	8.8	8.0	33.2	30.1	5.4	4.9	2.9	2.7	17.2	15.6	3.2	2.9	114.6	104.0
2024	19.4	17.0	5.0	4.4	1.1	0.9	8.8	7.7	5.0	4.4	1.6	1.4	3.9	3.4	8.9	7.9	33.2	29.1	5.5	4.9	2.9	2.6	17.5	15.4	3.2	2.8	116.1	101.9
2025	19.8	16.8	5.1	4.3	1.1	0.9	9.0	7.6	5.0	4.3	2.5	2.1	4.0	3.4	9.1	7.8	33.8	28.8	5.6	4.8	2.9	2.5	17.9	15.2	3.3	2.8	119.1	101.3
2026	20.2	16.6	5.2	4.3	1.1	0.9	9.2	7.6	5.0	4.1	2.5	2.1	4.1	3.3	9.3	7.7	34.3	28.2	5.8	4.7	2.9	2.4	18.2	15.0	3.4	2.8	121.1	99.6
2027	20.8	16.6	5.3	4.3	1.1	0.9	9.5	7.6	5.2	4.1	2.6	2.1	4.2	3.3	9.6	7.7	35.4	28.2	6.0	4.7	3.0	2.4	18.8	15.0	3.5	2.8	125.1	99.6
2028	21.5	16.6	5.5	4.3	1.2	0.9	9.8	7.6	5.3	4.1	2.7	2.1	4.3	3.3	9.9	7.7	36.6	28.2	6.1	4.7	3.1	2.4	19.5	15.0	3.6	2.8	129.2	99.6
2029	22.2	16.6	5.7	4.3	1.2	0.9	10.1	7.6	5.5	4.1	2.8	2.1	4.5	3.3	10.3	7.7	37.8	28.2	6.3	4.7	3.2	2.4	20.1	15.0	3.7	2.8	133.4	99.6
2030	23.0	16.6	5.9	4.3	1.3	0.9	10.5	7.6	5.7	4.1	2.8	2.1	4.6	3.3	10.6	7.7	39.0	28.2	6.6	4.7	3.3	2.4	20.8	15.0	3.8	2.8	137.8	99.6
2031	23.7	16.6	6.1	4.3	1.3	0.9	10.8	7.6	5.9	4.1	2.9	2.1	4.8	3.3	10.9	7.7	40.3	28.2	6.8	4.7	3.4	2.4	21.5	15.0	3.9	2.8	142.4	99.6
2032*	24.5	16.6	6.8	4.6	0.9	0.6	10.7	7.3	6.1	4.1	3.0	2.1	4.9	3.3	11.3	7.7	41.6	28.2	7.0	4.7	3.6	2.4	22.2	15.0	4.1	2.8	146.7	99.4
2033	25.3	16.6	7.0	4.6	0.9	0.6	11.1	7.3	6.3	4.1	3.1	2.1	5.1	3.3	11.7	7.7	43.0	28.2	7.2	4.7	3.7	2.4	22.9	15.0	4.2	2.8	151.6	99.4
2034	26.2	16.6	7.3	4.6	1.0	0.6	11.4	7.3	6.5	4.1	3.2	2.1	5.3	3.3	12.1	7.7	44.4	28.2	7.5	4.7	3.8	2.4	23.6	15.0	4.4	2.8	156.6	99.4
2035	27.0	16.6	7.5	4.6	1.0	0.6	11.8	7.3	6.7	4.1	3.3	2.1	5.4	3.3	12.5	7.7	45.9	28.2	7.7	4.7	3.9	2.4	24.4	15.0	4.5	2.8	161.7	99.4
2036	27.9	16.6	7.7	4.6	1.0	0.6	12.2	7.3	6.9	4.1	3.5	2.1	5.4	3.2	13.1	7.8	47.4	28.2	8.0	4.7	4.1	2.4	25.2	15.0	4.6	2.8	167.1	99.4
2037	28.8	16.6	8.0	4.6	1.1	0.6	12.6	7.3	7.1	4.1	3.6	2.1	5.6	3.2	13.5	7.8	49.0	28.2	8.2	4.7	4.2	2.4	26.1	15.0	4.8	2.8	172.6	99.4
2038	29.8	16.6	8.3	4.6	1.1	0.6	13.0	7.3	7.4	4.1	3.7	2.1	5.8	3.2	14.0	7.8	50.6	28.2	8.5	4.7	4.3	2.4	26.9	15.0	5.0	2.8	178.3	99.4
2039	30.8	16.6	8.5	4.6	1.1	0.6	13.4	7.3	7.6	4.1	3.8	2.1	6.0	3.2	14.4	7.8	52.3	28.2	8.8	4.7	4.5	2.4	27.8	15.0	5.1	2.8	184.2	99.4
2040	31.8	16.6	8.8	4.6	1.2	0.6	13.9	7.3	7.9	4.1	3.9	2.1	6.2	3.2	14.9	7.8	54.0	28.2	9.1	4.7	4.6	2.4	28.7	15.0	5.3	2.8	190.2	99.4
2041	32.8	16.6	9.1	4.6	1.2	0.6	14.3	7.3	8.1	4.1	4.1	2.1	6.4	3.2	15.4	7.8	55.8	28.2	9.4	4.7	4.8	2.4	29.7	15.0	5.5	2.8	196.5	99.4
2042	33.9	16.6	9.4	4.6	1.2	0.6	14.8	7.3	8.4	4.1	4.2	2.1	6.6	3.2	15.9	7.8	57.6	28.2	9.7	4.7	4.9	2.4	30.7	15.0	5.6	2.8	203.0	99.4
2043	35.0	16.6	9.7	4.6	1.3	0.6	15.3	7.3	8.7	4.1	4.3	2.1	6.8	3.2	16.4	7.8	59.5	28.2	10.0	4.7	5.1	2.4	31.7	15.0	5.8	2.8	209.7	99.4
2044	36.2	16.6	10.0	4.6	1.3	0.6	15.8	7.3	9.0	4.1	4.5	2.1	7.0	3.2	17.0	7.8	61.5	28.2	10.3	4.7	5.3	2.4	32.7	15.0	6.0	2.8	216.6	99.4
2045	37.4	16.6	10.4	4.6	1.4	0.6	16.3	7.3	9.3	4.1	4.6	2.1	7.3	3.2	17.5	7.8	63.5	28.2	10.7	4.7	5.4	2.4	33.8	15.0	6.2	2.8	223.8	99.4
2046	38.6	16.6	10.7	4.6	1.4	0.6	16.9	7.3	9.6	4.1	4.8	2.1	7.5	3.2	18.1	7.8	65.6	28.2	11.0	4.7	5.6	2.4	34.9	15.0	6.4	2.8	231.2	99.4
2047	39.9	16.6	11.1	4.6	1.5	0.6	17.4	7.3	9.9	4.1	4.9	2.1	7.7	3.2	18.7	7.8	67.8	28.2	11.4	4.7	5.8	2.4	36.1	15.0	6.6	2.8	238.8	99.4
2048	41.2	16.6	11.4	4.6	1.5	0.6	18.0	7.3	10.2	4.1	5.1	2.1	8.0	3.2	19.3	7.8	70.0	28.2	11.8	4.7	6.0	2.4	37.3	15.0	6.9	2.8	246.7	99.4
2049	42.6	16.6	11.8	4.6	1.6	0.6	18.6	7.3	10.6	4.1	5.3	2.1	8.3	3.2	20.0	7.8	72.3	28.2	12.2	4.7	6.2	2.4	38.5	15.0	7.1	2.8	254.8	99.4
2050	44.0	16.6	12.2	4.6	1.6	0.6	19.2	7.3	10.9	4.1	5.4	2.1	8.5	3.2	20.6	7.8	74.7	28.2	12.6	4.7	6.4	2.4	39.8	15.0	7.3	2.8	263.2	99.4
2051	45.4	16.6	12.6	4.6	1.7	0.6	19.9	7.3	11.3	4.1	5.6	2.1	8.8	3.2	21.3	7.8	77.1	28.2	13.0	4.7	6.6	2.4	41.1	15.0	7.6	2.8	271.9	99.4

Medford MPO becomes a TMA
MPO Planning funds held harmless for limitation and funding amount includes State supplied non-federal matching share
LOCAL BRIDGE based on revised Local Bridge Program Agreement.
Metro planning includes State provision of match; Misc.: includes Safe Routes to School, High Risk Rural Roads, Bike Ped Quick fix, OTC STIP directions.
HSIP: Assumes jurisdictionally blind allocation of 50% state, 50% local.

TABLE 5: PROJECTIONS OF URBAN FORMULA FUNDS (PRIMARILY BUS-ORIENTED*)

Year	Oregon Total YOE $s	Oregon Total 2020 $s	Portland Area* YOE $s	Portland Area 2020 $s	Salem YOE $s	Salem 2020 $s	Lane* (Eugene) YOE $s	Lane 2020 $s
2019	60.7	60.7	64.9	64.9	7.0	7.0	10.2	10.2
2020	59.6	59.6	62.9	62.9	6.2	6.2	9.8	9.8
2021	58.0	56.1	63.1	61.1	4.7	4.6	9.9	9.6
2022	75.0	70.3	85.1	79.8	5.9	5.5	12.6	11.8
2023	77.5	70.3	87.9	79.8	6.1	5.5	13.1	11.8
2024	80.0	70.3	90.8	79.8	6.3	5.5	13.5	11.8
2025	82.7	70.3	93.8	79.8	6.5	5.5	13.9	11.8
2026	85.4	70.3	96.9	79.8	6.7	5.5	14.4	11.8
2027	88.2	70.3	100.1	79.8	6.9	5.5	14.9	11.8
2028	91.1	70.3	103.4	79.8	7.2	5.5	15.4	11.8
2029	94.1	70.3	106.9	79.8	7.4	5.5	15.9	11.8
2030	97.2	70.3	110.4	79.8	7.6	5.5	16.4	11.8
2031	100.4	70.3	114.0	79.8	7.9	5.5	16.9	11.8
2032	103.8	70.3	117.8	79.8	8.2	5.5	17.5	11.8
2033	107.2	70.3	121.7	79.8	8.4	5.5	18.1	11.8
2034	110.7	70.3	125.7	79.8	8.7	5.5	18.7	11.8
2035	114.4	70.3	129.8	79.8	9.0	5.5	19.3	11.8
2036	118.1	70.3	134.1	79.8	9.3	5.5	19.9	11.8
2037	122.0	70.3	138.6	79.8	9.6	5.5	20.6	11.8
2038	126.1	70.3	143.1	79.8	9.9	5.5	21.2	11.8
2039	130.2	70.3	147.9	79.8	10.2	5.5	21.9	11.8
2040	134.5	70.3	152.7	79.8	10.6	5.5	22.7	11.8
2041	139.0	70.3	157.8	79.8	10.9	5.5	23.4	11.8
2042	143.6	70.3	163.0	79.8	11.3	5.5	24.2	11.8
2043	148.3	70.3	168.4	79.8	11.6	5.5	25.0	11.8
2044	153.2	70.3	173.9	79.8	12.0	5.5	25.8	11.8
2045	158.2	70.3	179.7	79.8	12.4	5.5	26.7	11.8
2046	163.5	70.3	185.6	79.8	12.8	5.5	27.5	11.8
2047	168.9	70.3	191.7	79.8	13.3	5.5	28.4	11.8
2048	174.4	70.3	198.0	79.8	13.7	5.5	29.4	11.8
2049	180.2	70.3	204.6	79.8	14.2	5.5	30.4	11.8
2050	186.1	70.3	211.3	79.8	14.6	5.5	31.4	11.8
2051	192.3	70.3	218.3	79.8	15.1	5.5	32.4	11.8

*Includes FTA Section 5337 $s.

**Rogue Valley Transit area expected to move into next population area around 2030. Formula funding will then depend on bus revenue miles as well as urban population and population density.

TABLE 5: PROJECTIONS OF URBAN FORMULA FUNDS (PRIMARILY BUS-ORIENTED*)

Year	Rogue Valley YOE $s	Rogue Valley** 2020 $s	Corvallis YOE $s	Corvallis 2020 $s	Bend YOE $s	Bend 2020 $s	Albany YOE $s	Albany 2020 $s	Grants Pass YOE $s	Grants Pass 2020 $s
2019	2.7	2.7	2.5	2.5	1.3	1.3	1.0	1.0	0.8	0.8
2020	2.7	2.7	2.6	2.6	1.4	1.4	1.0	1.0	0.8	0.8
2021	2.7	2.6	2.1	2.0	1.4	1.3	1.0	1.0	0.8	0.8
2022	3.5	3.3	3.2	3.0	1.8	1.7	1.3	1.2	1.1	1.0
2023	3.6	3.3	3.3	3.0	1.8	1.7	1.3	1.2	1.1	1.0
2024	3.7	3.3	3.4	3.0	1.9	1.7	1.4	1.2	1.1	1.0
2025	3.9	3.3	3.5	3.0	2.0	1.7	1.4	1.2	1.2	1.0
2026	4.0	3.3	3.7	3.0	2.0	1.7	1.4	1.2	1.2	1.0
2027	4.1	3.3	3.8	3.0	2.1	1.7	1.5	1.2	1.2	1.0
2028	4.3	3.3	3.9	3.0	2.1	1.7	1.5	1.2	1.3	1.0
2029	4.4	3.3	4.0	3.0	2.2	1.7	1.6	1.2	1.3	1.0
2030	4.6	3.3	4.2	3.0	2.3	1.7	1.6	1.2	1.4	1.0
2031	4.7	3.3	4.3	3.0	2.4	1.7	1.7	1.2	1.4	1.0
2032	4.9	3.3	4.4	3.0	2.4	1.7	1.8	1.2	1.5	1.0
2033	5.0	3.3	4.6	3.0	2.5	1.7	1.8	1.2	1.5	1.0
2034	5.2	3.3	4.7	3.0	2.6	1.7	1.9	1.2	1.6	1.0
2035	5.4	3.3	4.9	3.0	2.7	1.7	1.9	1.2	1.6	1.0
2036	5.5	3.3	5.1	3.0	2.8	1.7	2.0	1.2	1.7	1.0
2037	5.7	3.3	5.2	3.0	2.9	1.7	2.1	1.2	1.7	1.0
2038	5.9	3.3	5.4	3.0	3.0	1.7	2.1	1.2	1.8	1.0
2039	6.1	3.3	5.6	3.0	3.1	1.7	2.2	1.2	1.8	1.0
2040	6.3	3.3	5.8	3.0	3.2	1.7	2.3	1.2	1.9	1.0
2041	6.5	3.3	5.9	3.0	3.3	1.7	2.4	1.2	2.0	1.0
2042	6.7	3.3	6.1	3.0	3.4	1.7	2.4	1.2	2.0	1.0
2043	6.9	3.3	6.3	3.0	3.5	1.7	2.5	1.2	2.1	1.0
2044	7.2	3.3	6.6	3.0	3.6	1.7	2.6	1.2	2.1	1.0
2045	7.4	3.3	6.8	3.0	3.7	1.7	2.7	1.2	2.2	1.0
2046	7.7	3.3	7.0	3.0	3.9	1.7	2.8	1.2	2.3	1.0
2047	7.9	3.3	7.2	3.0	4.0	1.7	2.9	1.2	2.4	1.0
2048	8.2	3.3	7.5	3.0	4.1	1.7	3.0	1.2	2.4	1.0
2049	8.4	3.3	7.7	3.0	4.3	1.7	3.1	1.2	2.5	1.0
2050	8.7	3.3	8.0	3.0	4.4	1.7	3.2	1.2	2.6	1.0
2051	9.0	3.3	8.2	3.0	4.5	1.7	3.3	1.2	2.7	1.0

*Includes FTA Section 5337 $s.

**Rogue Valley Transit area expected to move into next population area around 2030. Formula funding will then depend on bus revenue miles as well as urban population and population density.

TABLE 5: PROJECTIONS OF URBAN FORMULA FUNDS (PRIMARILY BUS-ORIENTED*)

Year	Rainier YOE $s	Rainier 2020 $s	Milton-Freewater YOE $s	Milton-Freewater 2020 $s
2019	0.0	0.0	0.2	0.2
2020	0.0	0.0	0.2	0.2
2021	0.0	0.0	0.2	0.2
2022	0.1	0.1	0.4	0.3
2023	0.1	0.1	0.4	0.3
2024	0.1	0.1	0.4	0.3
2025	0.1	0.1	0.4	0.3
2026	0.1	0.1	0.4	0.3
2027	0.1	0.1	0.4	0.3
2028	0.1	0.1	0.4	0.3
2029	0.1	0.1	0.4	0.3
2030	0.1	0.1	0.5	0.3
2031	0.1	0.1	0.5	0.3
2032	0.1	0.1	0.5	0.3
2033	0.1	0.1	0.5	0.3
2034	0.1	0.1	0.5	0.3
2035	0.1	0.1	0.5	0.3
2036	0.1	0.1	0.6	0.3
2037	0.1	0.1	0.6	0.3
2038	0.1	0.1	0.6	0.3
2039	0.1	0.1	0.6	0.3
2040	0.1	0.1	0.6	0.3
2041	0.1	0.1	0.7	0.3
2042	0.1	0.1	0.7	0.3
2043	0.1	0.1	0.7	0.3
2044	0.1	0.1	0.7	0.3
2045	0.1	0.1	0.7	0.3
2046	0.2	0.1	0.8	0.3
2047	0.2	0.1	0.8	0.3
2048	0.2	0.1	0.8	0.3
2049	0.2	0.1	0.8	0.3
2050	0.2	0.1	0.9	0.3
2051	0.2	0.1	0.9	0.3

*Includes FTA Section 5337 $s.

**Rogue Valley Transit area expected to move into next population area around 2030. Formula funding will then depend on bus revenue miles as well as urban population and population density.

TABLE 6: PROJECTIONS OF DISCRETIONARY INTERCITY FUNDS (5311 (C))

Year	Oregon Total YOE $s	Oregon Total 2020 $s	Portland Area YOE $s	Portland Area 2020 $s	Salem YOE $s	Salem 2020 $s	Lane YOE $s	Lane 2020 $s
2016	1.8	1.8	0.71	0.7	0.10	0.1	0.14	0.1
2017	1.9	1.9	0.73	0.7	0.10	0.1	0.14	0.1
2018	1.9	1.9	0.76	0.8	0.11	0.1	0.14	0.1
2019	2.1	2.1	0.82	0.8	0.12	0.1	0.16	0.2
2020	2.1	2.1	0.84	0.8	0.12	0.1	0.16	0.2
2021	2.1	2.1	0.84	0.8	0.12	0.1	0.16	0.2
2022	2.6	2.5	1.03	1.0	0.14	0.1	0.20	0.2
2023	2.7	2.5	1.06	1.0	0.15	0.1	0.20	0.2
2024	2.8	2.5	1.09	1.0	0.15	0.1	0.21	0.2
2025	2.9	2.5	1.13	1.0	0.16	0.1	0.22	0.2
2026	3.0	2.5	1.17	1.0	0.16	0.1	0.22	0.2
2027	3.1	2.5	1.21	1.0	0.17	0.1	0.23	0.2
2028	3.2	2.5	1.25	1.0	0.18	0.1	0.24	0.2
2029	3.3	2.5	1.29	1.0	0.18	0.1	0.25	0.2
2030	3.4	2.5	1.33	1.0	0.19	0.1	0.25	0.2
2031	3.5	2.5	1.37	1.0	0.19	0.1	0.26	0.2
2032	3.6	2.5	1.42	1.0	0.20	0.1	0.27	0.2
2033	3.7	2.5	1.47	1.0	0.21	0.1	0.28	0.2
2034	3.9	2.5	1.51	1.0	0.21	0.1	0.29	0.2
2035	4.0	2.5	1.56	1.0	0.22	0.1	0.30	0.2
2036	4.1	2.5	1.62	1.0	0.23	0.1	0.31	0.2
2037	4.3	2.5	1.67	1.0	0.24	0.1	0.32	0.2
2038	4.4	2.5	1.72	1.0	0.24	0.1	0.33	0.2
2039	4.5	2.5	1.78	1.0	0.25	0.1	0.34	0.2
2040	4.7	2.5	1.84	1.0	0.26	0.1	0.35	0.2
2041	4.8	2.5	1.90	1.0	0.27	0.1	0.36	0.2
2042	5.0	2.5	1.96	1.0	0.28	0.1	0.37	0.2
2043	5.2	2.5	2.03	1.0	0.29	0.1	0.39	0.2
2044	5.3	2.5	2.09	1.0	0.30	0.1	0.40	0.2
2045	5.5	2.5	2.16	1.0	0.31	0.1	0.41	0.2
2046	5.7	2.5	2.23	1.0	0.32	0.1	0.43	0.2
2047	5.9	2.5	2.31	1.0	0.33	0.1	0.44	0.2
2048	6.1	2.5	2.38	1.0	0.34	0.1	0.45	0.2
2049	6.3	2.5	2.46	1.0	0.35	0.1	0.47	0.2
2050	6.5	2.5	2.54	1.0	0.36	0.1	0.49	0.2
2051	6.7	2.5	2.63	1.0	0.37	0.1	0.50	0.2

TABLE 6: PROJECTIONS OF DISCRETIONARY INTERCITY FUNDS (5311 (C))

Year	Rogue Valley YOE $s	Rogue Valley 2020 $s	Corvallis YOE $s	Corvallis 2020 $s	Bend YOE $s	Bend 2020 $s	Albany YOE $s	Albany 2020 $s	Grants Pass YOE $s	Grants Pass 2020 $s
2016	0.07	0.1	0.04	0.0	0.09	0.1	0.06	0.1	0.04	0.0
2017	0.07	0.1	0.04	0.0	0.09	0.1	0.06	0.1	0.04	0.0
2018	0.08	0.1	0.04	0.0	0.09	0.1	0.06	0.1	0.04	0.0
2019	0.08	0.1	0.05	0.0	0.10	0.1	0.06	0.1	0.04	0.0
2020	0.08	0.1	0.05	0.0	0.10	0.1	0.06	0.1	0.04	0.0
2021	0.08	0.1	0.05	0.0	0.10	0.1	0.06	0.1	0.04	0.0
2022	0.10	0.1	0.06	0.1	0.12	0.1	0.08	0.1	0.05	0.1
2023	0.11	0.1	0.06	0.1	0.13	0.1	0.08	0.1	0.06	0.1
2024	0.11	0.1	0.06	0.1	0.13	0.1	0.08	0.1	0.06	0.1
2025	0.11	0.1	0.06	0.1	0.13	0.1	0.09	0.1	0.06	0.1
2026	0.12	0.1	0.07	0.1	0.14	0.1	0.09	0.1	0.06	0.1
2027	0.12	0.1	0.07	0.1	0.14	0.1	0.09	0.1	0.06	0.1
2028	0.12	0.1	0.07	0.1	0.15	0.1	0.10	0.1	0.07	0.1
2029	0.13	0.1	0.07	0.1	0.15	0.1	0.10	0.1	0.07	0.1
2030	0.13	0.1	0.08	0.1	0.16	0.1	0.10	0.1	0.07	0.1
2031	0.14	0.1	0.08	0.1	0.16	0.1	0.11	0.1	0.07	0.1
2032	0.14	0.1	0.08	0.1	0.17	0.1	0.11	0.1	0.08	0.1
2033	0.15	0.1	0.08	0.1	0.17	0.1	0.11	0.1	0.08	0.1
2034	0.15	0.1	0.09	0.1	0.18	0.1	0.12	0.1	0.08	0.1
2035	0.16	0.1	0.09	0.1	0.19	0.1	0.12	0.1	0.08	0.1
2036	0.16	0.1	0.09	0.1	0.19	0.1	0.13	0.1	0.09	0.1
2037	0.17	0.1	0.10	0.1	0.20	0.1	0.13	0.1	0.09	0.1
2038	0.17	0.1	0.10	0.1	0.21	0.1	0.13	0.1	0.09	0.1
2039	0.18	0.1	0.10	0.1	0.21	0.1	0.14	0.1	0.09	0.1
2040	0.18	0.1	0.11	0.1	0.22	0.1	0.14	0.1	0.10	0.1
2041	0.19	0.1	0.11	0.1	0.23	0.1	0.15	0.1	0.10	0.1
2042	0.20	0.1	0.11	0.1	0.23	0.1	0.15	0.1	0.10	0.1
2043	0.20	0.1	0.12	0.1	0.24	0.1	0.16	0.1	0.11	0.1
2044	0.21	0.1	0.12	0.1	0.25	0.1	0.16	0.1	0.11	0.1
2045	0.21	0.1	0.12	0.1	0.26	0.1	0.17	0.1	0.11	0.1
2046	0.22	0.1	0.13	0.1	0.27	0.1	0.17	0.1	0.12	0.1
2047	0.23	0.1	0.13	0.1	0.28	0.1	0.18	0.1	0.12	0.1
2048	0.24	0.1	0.14	0.1	0.28	0.1	0.18	0.1	0.13	0.1
2049	0.24	0.1	0.14	0.1	0.29	0.1	0.19	0.1	0.13	0.1
2050	0.25	0.1	0.15	0.1	0.30	0.1	0.20	0.1	0.14	0.1
2051	0.26	0.1	0.15	0.1	0.31	0.1	0.20	0.1	0.14	0.1

TABLE 1.B: ASSUMED ADDITIONAL STATE HIGHWAY FUND REVENUE
($ Million)

Year	Statewide Bus Discretionary	Statewide Bus Discretionary ($2020)	Oregon Share of 5339(b) Discretionary	Oregon Share of 5339(b) Discretionary ($2020)	Oregon Share of 5339(c) Discretionary	Oregon Share of 5339(c) Discretionary ($2020)	Section 5309 CIG Funds Available to ALL STATES	Section 5309 CIG Funds Available to ALL STATES ($2020)
2019	86.5	78.9	1.6	1.6	85.0	85.0	2527.2	2527.2
2020	136.6	120.9	6.6	6.6	130.0	130.0	1958.2	1958.2
2021	199.8	193.5	17.7	17.1	182.2	176.3	2101.3	2034.2
2022	27.7	26.0	8.8	8.3	18.9	17.7	3822.0	3581.7
2023	27.7	25.2	8.8	8.0	18.9	17.2	3910.0	3547.1
2024	27.7	24.4	8.8	7.7	18.9	16.6	3910.0	3433.8
2025	27.7	23.6	8.8	7.5	18.9	16.1	3910.0	3324.1
2026	27.7	22.8	8.8	7.3	18.9	15.6	3910.0	3217.9
2027	32.6	26.0	10.4	8.3	22.3	17.7	4599.2	3664.2
2028	32.6	25.2	10.4	8.0	22.3	17.2	4599.2	3547.1
2029	32.6	24.4	10.4	7.7	22.3	16.6	4599.2	3433.8
2030	32.6	23.6	10.4	7.5	22.3	16.1	4599.2	3324.1
2031	32.6	22.8	10.4	7.3	22.3	15.6	4599.2	3217.9
2032	38.4	26.0	12.2	8.3	26.2	17.7	5409.8	3664.2
2033	38.4	25.2	12.2	8.0	26.2	17.2	5409.8	3547.1
2034	38.4	24.4	12.2	7.7	26.2	16.6	5409.8	3433.8
2035	38.4	23.6	12.2	7.5	26.2	16.1	5409.8	3324.1
2036	38.4	22.8	12.2	7.3	26.2	15.6	5409.8	3217.9
2037	45.1	26.0	14.3	8.3	30.8	17.7	6363.3	3664.2
2038	45.1	25.2	14.3	8.0	30.8	17.2	6363.3	3547.1
2039	45.1	24.4	14.3	7.7	30.8	16.6	6363.3	3433.8
2040	45.1	23.6	14.3	7.5	30.8	16.1	6363.3	3324.1
2041	45.1	22.8	14.3	7.3	30.8	15.6	6363.3	3217.9
2042	53.1	26.0	16.9	8.3	36.2	17.7	7484.9	3664.2
2043	53.1	25.2	16.9	8.0	36.2	17.2	7484.9	3547.1
2044	53.1	24.4	16.9	7.7	36.2	16.6	7484.9	3433.8
2045	53.1	23.6	16.9	7.5	36.2	16.1	7484.9	3324.1
2046	53.1	22.8	16.9	7.3	36.2	15.6	7484.9	3217.9
2047	62.4	26.0	19.8	8.3	42.6	17.7	8804.1	3664.2
2048	62.4	25.2	19.8	8.0	42.6	17.2	8804.1	3547.1
2049	62.4	24.4	19.8	7.7	42.6	16.6	8804.1	3433.8
2050	62.4	23.6	19.8	7.5	42.6	16.1	8804.1	3324.1
2051	62.4	22.8	19.8	7.3	42.6	15.6	8804.1	3217.9

TABLE 8A: Estimated State Transit Formula Funding -Year of Expenditure Dollars

Year	Baker County	Basin Transit Service District (TOTAL)*	Basin Transit Service District (In district)	Basin Transit Service District (Out of district - Klamath County)	Benton County	Columbia County	Coos County	Crook County	Curry County	Deschutes County
2019	163,135	738,162	609,373	128,789	1,606,790	362,094	720,512	199,053	185,333	3,023,367
2020	190,413	854,064	705,053	149,011	1,896,964	433,051	856,061	252,381	221,158	3,562,396
2021	200,538	884,912	730,519	154,393	1,975,214	450,521	907,520	274,001	234,054	3,848,768
2022	213,453	920,232	760,839	159,393	2,051,253	484,152	967,318	338,787	246,017	4,198,804
2023	226,074	974,641	806,223	168,418	2,172,532	512,778	1,024,510	358,818	260,563	4,447,057
2024	263,890	1,086,050	873,686	212,364	2,339,972	593,225	1,130,702	399,543	298,984	4,794,438
2025	338,659	1,386,991	1,109,123	277,868	2,966,556	763,494	1,441,072	509,286	383,132	6,079,562
2026	310,751	1,244,889	977,339	267,550	2,603,161	701,319	1,285,404	456,094	348,746	5,338,386
2027	322,655	1,302,876	1,022,723	280,153	2,723,958	734,110	1,345,217	477,187	363,740	5,586,138
2028	335,231	1,365,714	1,071,886	293,828	2,854,800	769,661	1,410,024	500,195	380,669	5,854,494
2029	348,266	1,430,946	1,122,921	308,025	2,990,622	806,567	1,477,301	524,079	398,895	6,133,064
2030	359,759	1,478,167	1,159,977	318,190	3,089,313	833,184	1,526,052	541,373	412,059	6,335,455
2031	371,631	1,526,947	1,198,256	328,690	3,191,260	860,679	1,576,411	559,239	425,657	6,544,525
2032	383,895	1,577,336	1,237,799	339,537	3,296,572	889,081	1,628,433	577,693	439,704	6,760,495
2033	396,563	1,629,388	1,278,646	350,742	3,405,359	918,421	1,682,171	596,757	454,214	6,983,591
2034	409,650	1,683,158	1,320,841	362,316	3,517,736	948,729	1,737,683	616,450	469,203	7,214,050
2035	423,168	1,738,702	1,364,429	374,273	3,633,821	980,037	1,795,026	636,793	484,686	7,452,113
2036	437,133	1,796,079	1,409,455	386,624	3,753,737	1,012,378	1,854,262	657,807	500,681	7,698,033
2037	451,558	1,855,350	1,455,967	399,382	3,877,610	1,045,787	1,915,453	679,515	517,204	7,952,068
2038	466,460	1,916,576	1,504,014	412,562	4,005,571	1,080,298	1,978,663	701,939	534,271	8,214,486
2039	481,853	1,979,823	1,553,647	426,177	4,137,755	1,115,948	2,043,959	725,103	551,902	8,485,564
2040	497,754	2,045,158	1,604,917	440,240	4,274,301	1,152,774	2,111,409	749,031	570,115	8,765,588
2041	514,180	2,112,648	1,657,879	454,768	4,415,353	1,190,815	2,181,086	773,749	588,929	9,054,852
2042	531,148	2,182,365	1,712,589	469,776	4,561,060	1,230,112	2,253,062	799,283	608,364	9,353,663
2043	548,676	2,254,383	1,769,105	485,278	4,711,575	1,270,706	2,327,413	825,659	628,439	9,662,333
2044	566,782	2,328,778	1,827,485	501,293	4,867,057	1,312,639	2,404,217	852,906	649,178	9,981,190
2045	585,486	2,405,627	1,887,792	517,835	5,027,669	1,355,956	2,483,556	881,052	670,601	10,310,570
2046	604,807	2,485,013	1,950,089	534,924	5,193,583	1,400,703	2,565,514	910,127	692,731	10,650,819
2047	624,766	2,567,019	2,014,442	552,576	5,364,971	1,446,926	2,650,176	940,161	715,591	11,002,296
2048	645,383	2,651,730	2,080,919	570,811	5,542,015	1,494,675	2,737,632	971,186	739,205	11,365,371
2049	666,680	2,739,237	2,149,589	589,648	5,724,901	1,543,999	2,827,973	1,003,235	763,599	11,740,429
2050	688,681	2,829,632	2,220,526	609,106	5,913,823	1,594,951	2,921,297	1,036,342	788,798	12,127,863
2051	711,407	2,923,010	2,293,803	629,207	6,108,979	1,647,584	3,017,699	1,070,541	814,828	12,528,082

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8A: Estimated State Transit Formula Funding -Year of Expenditure Dollars

Year	Gilliam County	Grant County Transportation District	Harney County	Hood River County Transportation District	Jefferson County	Josephine County	Lake County	Lane Transit District (TOTAL)*	Lane Transit District (In district)	Lane Transit District (Out of District)
2019	100,000	100,000	100,000	442,094	212,593	815,289	100,000	5,526,966	5,227,945	299,021
2020	100,000	100,185	100,000	533,363	257,011	964,070	101,573	6,465,934	6,116,112	349,822
2021	100,000	100,625	100,000	559,697	270,406	1,043,715	103,502	6,763,899	6,397,957	365,942
2022	100,000	100,000	100,000	559,727	286,690	1,129,557	102,244	7,109,895	6,709,809	400,086
2023	100,000	100,000	100,000	592,821	303,641	1,196,342	100,000	7,530,266	7,101,218	429,048
2024	133,850	137,257	137,146	637,113	343,231	1,337,016	143,522	8,182,711	7,655,956	526,755
2025	175,775	184,910	184,631	806,629	438,776	1,708,558	200,645	10,393,941	9,708,102	685,839
2026	169,535	181,341	181,106	705,282	396,434	1,536,393	194,585	9,175,923	8,524,583	651,341
2027	171,369	187,283	187,037	737,494	414,608	1,607,982	201,137	9,602,161	8,920,204	681,956
2028	172,598	193,407	193,150	772,641	434,631	1,685,561	207,922	10,063,897	9,348,728	715,169
2029	173,826	199,746	199,477	809,381	455,416	1,766,095	214,946	10,543,212	9,793,562	749,649
2030	179,562	206,337	206,059	836,091	470,445	1,824,377	222,039	10,891,138	10,116,750	774,388
2031	185,488	213,146	212,859	863,682	485,970	1,884,581	229,366	11,250,545	10,450,603	799,943
2032	191,609	220,180	219,884	892,183	502,007	1,946,772	236,936	11,621,813	10,795,473	826,341
2033	197,932	227,446	227,140	921,625	518,573	2,011,016	244,754	12,005,333	11,151,723	853,610
2034	204,463	234,952	234,635	952,039	535,686	2,077,379	252,831	12,401,509	11,519,730	881,779
2035	211,211	242,705	242,378	983,456	553,364	2,145,933	261,175	12,810,759	11,899,881	910,878
2036	218,181	250,715	250,377	1,015,910	571,625	2,216,748	269,793	13,233,514	12,292,577	940,937
2037	225,381	258,988	258,639	1,049,435	590,488	2,289,901	278,697	13,670,220	12,698,232	971,988
2038	232,818	267,535	267,174	1,084,067	609,974	2,365,468	287,894	14,121,337	13,117,274	1,004,063
2039	240,501	276,363	275,991	1,119,841	630,103	2,443,528	297,394	14,587,342	13,550,144	1,037,197
2040	248,438	285,483	285,099	1,156,796	650,897	2,524,165	307,208	15,068,724	13,997,299	1,071,425
2041	256,636	294,904	294,507	1,194,970	672,376	2,607,462	317,346	15,565,992	14,459,210	1,106,782
2042	265,105	304,636	304,226	1,234,404	694,565	2,693,508	327,818	16,079,669	14,936,364	1,143,306
2043	273,854	314,689	314,265	1,275,139	717,485	2,782,394	338,636	16,610,298	15,429,264	1,181,035
2044	282,891	325,074	324,636	1,317,219	741,163	2,874,213	349,811	17,158,438	15,938,429	1,220,009
2045	292,226	335,801	335,349	1,360,687	765,621	2,969,062	361,355	17,724,667	16,464,397	1,260,269
2046	301,870	346,883	346,415	1,405,590	790,886	3,067,041	373,280	18,309,581	17,007,723	1,301,858
2047	311,831	358,330	357,847	1,451,974	816,986	3,168,254	385,598	18,913,797	17,568,977	1,344,820
2048	322,122	370,155	369,656	1,499,889	843,946	3,272,806	398,323	19,537,952	18,148,754	1,389,199
2049	332,752	382,370	381,855	1,549,386	871,796	3,380,809	411,468	20,182,705	18,747,663	1,435,042
2050	343,733	394,988	394,456	1,600,515	900,566	3,492,375	425,046	20,848,734	19,366,335	1,482,399
2051	355,076	408,023	407,473	1,653,332	930,284	3,607,624	439,073	21,536,742	20,005,424	1,531,318

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8A: Estimated State Transit Formula Funding -Year of Expenditure Dollars

Year	Lincoln County	Linn County	Malheur County	Morrow County	Rogue Valley Transportation District (TOTAL)*	Rogue Valley Transportation District (In district)	Rogue Valley Transportation District (Out of district - Jackson County)	Salem Area Mass Transit District (TOTAL)*	Salem Area Mass Transit District (In district)	Salem Area Mass Transit District (Out of district - Marion County)	Salem Area Mass Transit District (Out of district - Polk County)
2019	560,970	1,584,542	382,351	246,131	3,045,470	2,772,228	273,242	6,602,539	4,790,635	1,362,796	517,467
2020	667,384	1,920,776	436,855	293,481	3,568,636	3,248,455	320,181	7,607,526	5,519,829	1,570,230	517,467
2021	702,495	2,048,874	461,424	296,329	3,807,796	3,466,158	341,638	8,093,232	5,872,245	1,670,482	550,505
2022	688,079	2,078,466	509,932	323,507	4,062,169	3,705,424	356,745	8,356,129	5,914,116	1,621,510	534,367
2023	728,761	2,201,355	540,082	342,634	4,302,345	3,927,161	375,183	8,745,053	6,408,835	1,757,151	579,067
2024	810,017	2,414,715	592,452	382,495	4,681,162	4,220,180	460,982	9,487,263	6,840,038	1,968,995	678,230
2025	1,033,919	3,073,506	754,093	487,088	5,947,835	5,347,544	600,290	12,046,742	8,654,125	2,517,561	875,057
2026	926,485	2,730,483	669,950	435,683	5,255,419	4,685,090	570,329	10,623,303	7,545,962	2,267,703	809,638
2027	969,630	2,857,454	701,103	453,342	5,499,579	4,902,440	597,139	11,116,682	7,895,747	2,373,396	847,539
2028	1,016,381	2,995,016	734,855	472,147	5,764,077	5,137,855	626,222	11,651,139	8,274,568	2,487,938	888,634
2029	1,064,914	3,137,817	769,893	491,647	6,038,646	5,382,229	656,417	12,205,943	8,667,803	2,606,844	931,296
2030	1,100,056	3,241,365	795,300	507,871	6,237,921	5,559,843	678,078	12,608,739	8,953,840	2,692,870	962,029
2031	1,136,358	3,348,330	821,544	524,631	6,443,772	5,743,317	700,455	13,024,828	9,249,317	2,781,735	993,776
2032	1,173,858	3,458,825	848,655	541,944	6,656,417	5,932,847	723,570	13,454,647	9,554,544	2,873,532	1,026,570
2033	1,212,595	3,572,966	876,661	559,828	6,876,079	6,128,631	747,448	13,898,650	9,869,844	2,968,359	1,060,447
2034	1,252,611	3,690,874	905,591	578,302	7,102,989	6,330,876	772,114	14,357,306	10,195,549	3,066,315	1,095,442
2035	1,293,947	3,812,673	935,475	597,386	7,337,388	6,539,794	797,593	14,831,097	10,532,002	3,167,503	1,131,591
2036	1,336,647	3,938,491	966,346	617,100	7,579,522	6,755,608	823,914	15,320,523	10,879,558	3,272,031	1,168,934
2037	1,380,757	4,068,461	998,236	637,464	7,829,646	6,978,543	851,103	15,826,100	11,238,584	3,380,008	1,207,509
2038	1,426,322	4,202,720	1,031,177	658,501	8,088,024	7,208,835	879,189	16,348,362	11,609,457	3,491,548	1,247,357
2039	1,473,390	4,341,410	1,065,206	680,231	8,354,929	7,446,726	908,203	16,887,857	11,992,569	3,606,769	1,288,519
2040	1,522,012	4,484,676	1,100,358	702,679	8,630,642	7,692,468	938,173	17,445,157	12,388,324	3,725,792	1,331,040
2041	1,572,239	4,632,671	1,136,670	725,867	8,915,453	7,946,320	969,133	18,020,847	12,797,139	3,848,743	1,374,965
2042	1,624,123	4,785,549	1,174,180	749,821	9,209,663	8,208,548	1,001,115	18,615,535	13,219,444	3,975,752	1,420,339
2043	1,677,719	4,943,472	1,212,928	774,565	9,513,582	8,479,430	1,034,151	19,229,848	13,655,686	4,106,952	1,467,210
2044	1,733,083	5,106,607	1,252,954	800,126	9,827,530	8,759,251	1,068,278	19,864,433	14,106,324	4,242,481	1,515,628
2045	1,790,275	5,275,125	1,294,302	826,530	10,151,838	9,048,307	1,103,531	20,519,959	14,571,832	4,382,483	1,565,643
2046	1,849,354	5,449,204	1,337,014	853,805	10,486,849	9,346,901	1,139,948	21,197,117	15,052,703	4,527,105	1,617,310
2047	1,910,383	5,629,027	1,381,135	881,981	10,832,915	9,655,349	1,177,566	21,896,622	15,549,442	4,676,499	1,670,681
2048	1,973,425	5,814,785	1,426,713	911,086	11,190,401	9,973,975	1,216,426	22,619,211	16,062,574	4,830,824	1,725,813
2049	2,038,548	6,006,673	1,473,794	941,152	11,559,684	10,303,116	1,256,568	23,365,645	16,592,639	4,990,241	1,782,765
2050	2,105,821	6,204,893	1,522,430	972,210	11,941,154	10,643,119	1,298,035	24,136,711	17,140,196	5,154,919	1,841,596
2051	2,175,313	6,409,655	1,572,670	1,004,293	12,335,212	10,994,342	1,340,870	24,933,223	17,705,822	5,325,031	1,902,369

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8A: Estimated State Transit Formula Funding -Year of Expenditure Dollars

Year	Sherman County	Sunset Empire Transportation District (Clatsop County)	Tillamook County Transportation District	Tri County Metropolitan Transportation District (TOTAL)*	Tri County Metropolitan Transportation District (In district)	Tri County Metropolitan Transportation District (Out of district - Clackamas County)	Tri County Metropolitan Transportation District (Out of district - Multnomah County)	Tri County Metropolitan Transportation District (Out of district - Washington County)	Umatilla County	Umpqua Public Transportation District (Douglas County)
2019	100,000	567,965	304,696	47,630,704	45,586,758	1,578,988	43,228	421,730	989,075	1,271,407
2020	100,000	669,269	355,809	56,280,741	53,865,601	1,865,742	51,078	498,319	1,161,396	1,508,071
2021	100,000	709,845	379,753	59,008,568	56,476,371	1,956,171	53,554	522,472	1,210,272	1,558,529
2022	100,000	733,055	395,570	60,505,631	57,914,930	2,001,366	54,791	534,543	1,299,649	1,640,678
2023	100,000	776,397	418,958	64,017,012	61,277,943	2,115,983	57,929	565,156	1,376,491	1,737,682
2024	133,850	845,822	463,523	67,636,292	64,608,383	2,330,848	66,776	630,285	1,509,436	1,919,255
2025	175,775	1,074,986	591,067	85,380,820	81,520,426	2,969,437	85,879	805,077	1,921,118	2,446,475
2026	169,535	950,646	528,065	73,914,895	70,467,842	2,645,355	78,715	722,982	1,706,359	2,183,286
2027	171,369	994,818	552,644	77,336,915	73,729,435	2,768,424	82,395	756,661	1,785,703	2,284,888
2028	172,598	1,042,671	579,276	81,042,435	77,261,126	2,901,767	86,383	793,159	1,871,667	2,394,975
2029	173,826	1,092,345	606,922	84,888,911	80,927,152	3,040,188	90,524	831,047	1,960,904	2,509,256
2030	179,562	1,128,393	626,951	87,690,245	83,597,748	3,140,515	93,511	858,471	2,025,614	2,592,062
2031	185,488	1,165,629	647,640	90,584,023	86,356,474	3,244,152	96,597	886,801	2,092,459	2,677,600
2032	191,609	1,204,095	669,012	93,573,296	89,206,237	3,351,209	99,785	916,065	2,161,510	2,765,960
2033	197,932	1,243,830	691,090	96,661,215	92,150,043	3,461,799	103,078	946,295	2,232,840	2,857,237
2034	204,463	1,284,877	713,896	99,851,035	95,190,995	3,576,038	106,479	977,523	2,306,524	2,951,526
2035	211,211	1,327,278	737,454	103,146,119	98,332,298	3,694,047	109,993	1,009,781	2,382,639	3,048,926
2036	218,181	1,371,078	761,790	106,549,941	101,577,263	3,815,951	113,623	1,043,104	2,461,266	3,149,541
2037	225,381	1,416,323	786,929	110,066,089	104,929,313	3,941,877	117,372	1,077,526	2,542,488	3,253,476
2038	232,818	1,463,062	812,898	113,698,270	108,391,980	4,071,959	121,246	1,113,085	2,626,390	3,360,840
2039	240,501	1,511,343	839,724	117,450,313	111,968,916	4,206,334	125,247	1,149,817	2,713,061	3,471,748
2040	248,438	1,561,217	867,435	121,326,173	115,663,890	4,345,143	129,380	1,187,761	2,802,592	3,586,316
2041	256,636	1,612,738	896,060	125,329,937	119,480,798	4,488,532	133,650	1,226,957	2,895,077	3,704,664
2042	265,105	1,665,958	925,630	129,465,825	123,423,665	4,636,654	138,060	1,267,446	2,990,615	3,826,918
2043	273,854	1,720,935	956,176	133,738,197	127,496,646	4,789,664	142,616	1,309,272	3,089,305	3,953,206
2044	282,891	1,777,725	987,729	138,151,557	131,704,035	4,947,722	147,322	1,352,478	3,191,252	4,083,662
2045	292,226	1,836,390	1,020,324	142,710,559	136,050,268	5,110,997	152,184	1,397,110	3,296,563	4,218,423
2046	301,870	1,896,991	1,053,995	147,420,007	140,539,927	5,279,660	157,206	1,443,214	3,405,350	4,357,631
2047	311,831	1,959,592	1,088,777	152,284,868	145,177,744	5,453,889	162,394	1,490,840	3,517,727	4,501,433
2048	322,122	2,024,259	1,124,707	157,310,268	149,968,610	5,633,867	167,753	1,540,038	3,633,812	4,649,980
2049	332,752	2,091,059	1,161,822	162,501,507	154,917,574	5,819,785	173,289	1,590,859	3,753,727	4,803,429
2050	343,733	2,160,064	1,200,162	167,864,057	160,029,854	6,011,838	179,007	1,643,358	3,877,600	4,961,943
2051	355,076	2,231,346	1,239,767	173,403,571	165,310,839	6,210,228	184,914	1,697,589	4,005,561	5,125,687

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8A: Estimated State Transit Formula Funding -Year of Expenditure Dollars

Year	Union County	Wallowa County	Wasco County	Wheeler County	Yamhill County
2019	318,169	100,000	386,812	100,000	1,206,154
2020	377,966	100,000	438,762	100,000	1,440,292
2021	387,265	100,000	453,587	100,000	1,535,938
2022	393,900	100,000	487,769	100,000	1,611,087
2023	417,189	100,000	516,608	100,000	1,706,342
2024	460,100	139,363	561,908	133,850	1,882,637
2025	586,304	190,200	713,902	175,775	2,399,254
2026	522,724	185,794	630,651	169,535	2,139,658
2027	547,046	191,941	659,949	171,369	2,239,218
2028	573,398	198,288	691,688	172,598	2,347,092
2029	600,754	204,857	724,635	173,826	2,459,074
2030	620,579	211,617	748,548	179,562	2,540,224
2031	641,058	218,600	773,250	185,488	2,624,051
2032	662,213	225,814	798,767	191,609	2,710,645
2033	684,066	233,266	825,126	197,932	2,800,096
2034	706,641	240,964	852,355	204,463	2,892,499
2035	729,960	248,915	880,483	211,211	2,987,952
2036	754,048	257,130	909,539	218,181	3,086,554
2037	778,932	265,615	939,554	225,381	3,188,410
2038	804,637	274,380	970,559	232,818	3,293,628
2039	831,190	283,435	1,002,588	240,501	3,402,318
2040	858,619	292,788	1,035,673	248,438	3,514,594
2041	886,953	302,450	1,069,850	256,636	3,630,576
2042	916,223	312,431	1,105,155	265,105	3,750,385
2043	946,458	322,741	1,141,625	273,854	3,874,148
2044	977,691	333,392	1,179,299	282,891	4,001,994
2045	1,009,955	344,393	1,218,216	292,226	4,134,060
2046	1,043,284	355,758	1,258,417	301,870	4,270,484
2047	1,077,712	367,499	1,299,945	311,831	4,411,410
2048	1,113,277	379,626	1,342,843	322,122	4,556,987
2049	1,150,015	392,154	1,387,157	332,752	4,707,367
2050	1,187,965	405,095	1,432,933	343,733	4,862,710
2051	1,227,168	418,463	1,480,220	355,076	5,023,180

TABLE 8B: Estimated State Transit Formula Funding - Purchasing Power in 2020 Dollars

Year	Baker County	Basin Transit Service District (TOTAL)*	Basin Transit Service District (In district)	Basin Transit Service District (Out of district - Klamath County)	Benton County	Columbia County	Coos County	Crook County	Curry County	Deschutes County
2019	163,135	738,162	609,373	128,789	1,606,790	362,094	720,512	199,053	185,333	3,023,367
2020	190,413	854,064	705,053	149,011	1,896,964	433,051	856,061	252,381	221,158	3,562,396
2021	194,132	856,643	707,182	149,461	1,912,114	436,129	878,529	265,248	226,577	3,725,816
2022	200,033	862,376	713,004	149,372	1,922,288	453,713	906,502	317,487	230,549	3,934,821
2023	205,092	884,186	731,399	152,787	1,970,903	465,188	929,427	325,517	236,380	4,034,333
2024	231,751	953,781	767,281	186,500	2,054,988	520,977	992,994	350,883	262,571	4,210,527
2025	287,913	1,179,158	942,927	236,231	2,522,034	649,089	1,225,135	432,972	325,722	5,168,573
2026	255,747	1,024,539	804,346	220,193	2,142,392	577,183	1,057,883	375,364	287,017	4,393,474
2027	257,061	1,038,009	814,809	223,199	2,170,192	584,870	1,071,741	380,178	289,793	4,450,506
2028	258,548	1,053,312	826,697	226,616	2,201,776	593,604	1,087,487	385,777	293,593	4,515,302
2029	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2030	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2031	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2032	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2033	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2034	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2035	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2036	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2037	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2038	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2039	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2040	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2041	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2042	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2043	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2044	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2045	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2046	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2047	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2048	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2049	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2050	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042
2051	260,021	1,068,367	838,390	229,977	2,232,846	602,196	1,102,976	391,285	297,822	4,579,042

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8B: Estimated State Transit Formula Funding - Purchasing Power in 2020 Dollars

Year	Gilliam County	Grant County Transportation District	Harney County	Hood River County Transportation District	Jefferson County	Josephine County	Lake County	Lane Transit District (TOTAL)*	Lane Transit District (In district)	Lane Transit District (Out of District)	Year
2019	100,000	100,000	100,000	442,094	212,593	815,289	100,000	5,526,966	5,227,945	299,021	2019
2020	100,000	100,185	100,000	533,363	257,011	964,070	101,573	6,465,934	6,116,112	349,822	2020
2021	96,805	97,410	96,805	541,817	261,768	1,010,373	100,196	6,547,821	6,193,569	354,252	2021
2022	93,713	93,713	93,713	524,536	268,666	1,058,541	95,816	6,662,889	6,287,956	374,933	2022
2023	90,719	90,719	90,719	537,802	275,461	1,085,311	90,719	6,831,394	6,442,165	389,229	2023
2024	117,548	120,540	120,443	559,519	301,429	1,174,182	126,042	7,186,144	6,723,543	462,602	2024
2025	149,436	157,202	156,965	685,760	373,028	1,452,540	170,580	8,836,467	8,253,397	583,070	2025
2026	139,526	149,243	149,050	580,445	326,264	1,264,447	160,143	7,551,754	7,015,703	536,051	2026
2027	136,531	149,209	149,014	587,566	330,321	1,281,088	160,247	7,650,093	7,106,775	543,318	2027
2028	133,117	149,166	148,968	595,902	335,211	1,299,995	160,361	7,761,821	7,210,244	551,577	2028
2029	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2029
2030	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2030
2031	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2031
2032	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2032
2033	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2033
2034	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2034
2035	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2035
2036	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2036
2037	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2037
2038	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2038
2039	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2039
2040	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2040
2041	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2041
2042	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2042
2043	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2043
2044	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2044
2045	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2045
2046	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2046
2047	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2047
2048	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2048
2049	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2049
2050	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2050
2051	129,781	149,133	148,932	604,297	340,021	1,318,595	160,482	7,871,727	7,312,027	559,700	2051

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8B: Estimated State Transit Formula Funding - Purchasing Power in 2020 Dollars

Lincoln County	Linn County	Malheur County	Morrow County	Rogue Valley Transportation District (TOTAL)*	Rogue Valley Transportation District (In district)	Rogue Valley Transportation District (Out of district - Jackson County)	Salem Area Mass Transit District (TOTAL)*	Salem Area Mass Transit District (In district)	Salem Area Mass Transit District (Out of district - Marion County)	Salem Area Mass Transit District (Out of district - Polk County)	Year
560,970	1,584,542	382,351	246,131	3,045,470	2,772,228	273,242	6,602,539	4,790,635	1,362,796	449,108	2019
667,384	1,920,776	436,855	293,481	3,568,636	3,248,455	320,181	7,607,526	5,519,829	1,570,230	517,467	2020
680,053	1,983,421	446,683	286,863	3,686,153	3,355,429	330,724	7,834,687	5,684,651	1,617,117	532,919	2021
644,818	1,947,791	477,872	303,167	3,806,777	3,472,460	334,316	7,830,770	5,542,289	1,519,564	500,770	2022
661,126	1,997,051	489,958	310,835	3,903,051	3,562,688	340,363	7,933,439	5,814,042	1,594,072	525,324	2023
711,366	2,120,629	520,298	335,911	4,111,047	3,706,208	404,839	8,331,816	6,006,995	1,729,192	595,629	2024
878,992	2,612,958	641,096	414,101	5,056,585	4,546,244	510,340	10,241,605	7,357,352	2,140,318	743,934	2025
762,494	2,247,179	551,366	358,566	4,325,192	3,855,813	469,379	8,742,943	6,210,301	1,866,312	666,330	2026
772,509	2,276,549	558,573	361,180	4,381,544	3,905,800	475,744	8,856,721	6,290,584	1,890,898	675,239	2027
783,888	2,309,918	566,760	364,145	4,445,567	3,962,591	482,976	8,985,988	6,381,793	1,918,832	685,362	2028
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2029
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2030
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2031
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2032
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2033
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2034
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2035
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2036
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2037
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2038
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2039
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2040
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2041
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2042
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2043
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2044
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2045
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2046
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2047
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2048
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2049
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2050
795,082	2,342,743	574,814	367,071	4,508,547	4,018,457	490,091	9,113,148	6,471,517	1,946,311	695,320	2051

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8B: Estimated State Transit Formula Funding - Purchasing Power in 2020 Dollars

Sherman County	Sunset Empire Transportation District (Clatsop County)	Tillamook County Transportation District	Tri County Metropolitan Transportation District (TOTAL)*	Tri-Met (In district)	Tri-Met (Out of district - Clackamas County)	Tri-Met (Out of district - Multnomah County)	Tri-Met (Out of district - Washington County)	Umatilla County	Umpqua Public Transportation District (Douglas County)	Year
100,000	567,965	304,696	47,630,704	45,586,758	1,578,988	43,228	421,730	989,075	1,271,407	2019
100,000	669,269	355,809	56,280,741	53,865,601	1,865,742	51,078	498,319	1,161,396	1,508,071	2020
96,805	687,168	367,621	57,123,493	54,672,188	1,893,680	51,843	505,781	1,171,609	1,508,741	2021
93,713	686,967	370,700	56,701,579	54,273,758	1,875,538	51,347	500,936	1,217,939	1,537,527	2022
90,719	704,341	380,075	58,075,697	55,590,837	1,919,602	52,553	512,705	1,248,741	1,576,411	2023
117,548	742,810	407,071	59,398,914	56,739,772	2,046,976	58,643	553,523	1,325,603	1,685,510	2024
149,436	913,905	502,499	72,586,977	69,305,043	2,524,483	73,010	684,441	1,633,249	2,079,884	2025
139,526	782,379	434,596	60,831,711	57,994,798	2,177,119	64,783	595,011	1,404,328	1,796,837	2026
136,531	792,577	440,294	61,614,736	58,740,637	2,205,619	65,644	602,836	1,422,680	1,820,382	2027
133,117	804,164	446,769	62,504,302	59,587,952	2,237,999	66,623	611,727	1,443,531	1,847,134	2028
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2029
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2030
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2031
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2032
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2033
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2034
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2035
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2036
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2037
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2038
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2039
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2040
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2041
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2042
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2043
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2044
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2045
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2046
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2047
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2048
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2049
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2050
129,781	815,562	453,138	63,379,392	60,421,481	2,269,852	67,587	620,472	1,464,042	1,873,450	2051

* TOTAL indicates all money for recipient district, and is the sum of in and out of district funds.

TABLE 8B: Estimated State Transit Formula Funding - Purchasing Power in 2020 Dollars

Union County	Wallowa County	Wasco County	Wheeler County	Yamhill County
318,169	100,000	386,812	100,000	1,206,154
377,966	100,000	438,762	100,000	1,440,292
374,894	96,805	439,097	96,805	1,486,871
369,135	93,713	457,102	93,713	1,509,796
378,470	90,719	468,663	90,719	1,547,979
404,065	122,390	493,473	117,548	1,653,352
498,450	161,700	606,928	149,436	2,039,739
430,200	152,908	519,024	139,526	1,760,932
435,834	152,921	525,785	136,531	1,783,997
442,236	152,930	533,467	133,117	1,810,204
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983
448,533	152,949	541,024	129,781	1,835,983

Table 9: Estimated State Transit Discretionary Funds

Year	Estimated Connect Oregon Funding Available for Competitive Grants (Statewide)*	Connect Oregon Purchasing Power - 2020 $s	MAT Funds Available (Statewide)	MAT Purchasing Power - 2020 $s
2019	0	0.0	1,243,987	1,243,987
2020	0	0.0	1,516,151	1,516,151
2021	0	0.0	2,354,417	2,279,203
2022	46,197,635	43,293,141	2,472,518	2,317,068
2023	0	0	2,297,883	2,084,620
2024	57,323,748	50,342,328	2,256,816	1,981,959
2025	0	0	2,288,931	1,945,947
2026	46,593,659	38,346,426	2,426,014	1,996,601
2027	0	0	2,590,284	2,063,693
2028	49,878,055	38,468,649	2,693,012	2,076,996
2029	0	0	2,770,869	2,068,774
2030	48,653,490	35,165,013	2,859,766	2,066,937
2031	0	0	2,918,855	2,042,251
2032	49,252,630	33,359,964	2,990,958	2,025,846
2033	0	0	3,081,040	2,020,194
2034	49,136,235	31,188,707	3,176,086	2,015,987
2035	0	0	3,269,052	2,008,709
2036	49,179,140	29,253,362	3,356,007	1,996,263
2037	0	0	3,438,951	1,980,252
2038	49,180,719	27,415,053	3,522,088	1,963,335
2039	0	0	3,606,514	1,946,174
2040	49,178,679	25,690,374	3,691,976	1,928,646
2041	0	0	3,778,932	1,911,007
2042	49,181,268	24,076,461	3,865,978	1,892,572
2043	0	0	3,952,242	1,872,993
2044	49,180,260	22,562,286	4,037,830	1,852,424
2045	0	0	4,123,187	1,831,154
2046	49,180,723	21,143,971	4,208,719	1,809,429
2047	0	0	4,294,538	1,787,342
2048	49,180,590	19,814,573	4,380,517	1,764,885
2049	0	0	4,466,517	1,742,046
2050	49,180,630	18,568,826	4,552,454	1,718,842
2051	0.0	0	4,638,287	1,695,304

*2022 Connect Oregon funds have already been awarded

Exhibit B: Financial Assumptions for the Development Metropolitan Transportation Plans
SFY 2020/2021 – 2049/2050 (July 2022)

ONAL STATE HIGHWAY FUND REVENUE

TABLE 10.A: ESTIMATED STBGP APPORTIONMENTS FOR MPO COUNTIES AND CITIES OTHER THAN TMAs

(STP Funds to Local Jurisdictions - Expanded)

1.22

YEAR	Clackamas	Multnomah	Washington	Canby	Molalla	Sandy	Marion	Silverton	Stayton	Woodburn	Polk	Dalles	Independence	Monmouth	Yamhill	McMinnville	Newberg	Sheridan
2020	$1,176,955	$265,835	$667,951	$220,961	$128,861	$144,374	$978,602	$135,314	$102,594	$327,661	$368,076	$211,966	$124,234	$129,318	$663,531	$442,313	$313,452	$80,889
2021*	$1,066,384	$259,436	$615,308	$202,646	$116,689	$137,178	$886,068	$104,714	$92,786	$296,551	$334,036	$194,934	$113,922	$117,043	$599,132	$407,589	$284,011	$71,827
2022	$1,087,712	$264,625	$627,614	$206,699	$119,023	$139,922	$903,789	$106,808	$94,642	$302,482	$340,717	$198,833	$116,200	$119,384	$611,115	$415,741	$289,691	$73,264
2023	$1,305,254	$317,550	$753,137	$248,039	$142,827	$167,906	$1,084,547	$128,170	$113,570	$362,978	$408,860	$238,599	$139,441	$143,261	$733,338	$498,889	$347,629	$87,916
2024	$1,331,359	$323,901	$768,200	$252,999	$145,684	$171,264	$1,106,238	$130,733	$115,841	$370,238	$417,037	$243,371	$142,229	$146,126	$748,004	$508,867	$354,582	$89,675
2025	$1,357,986	$330,379	$783,564	$258,059	$148,598	$174,689	$1,128,363	$133,348	$118,158	$377,643	$425,378	$248,239	$145,074	$149,048	$762,964	$519,044	$361,674	$91,468
2026	$1,385,146	$336,986	$799,235	$263,221	$151,570	$178,183	$1,150,930	$136,015	$120,521	$385,196	$433,886	$253,203	$147,975	$152,029	$778,224	$529,425	$368,907	$93,297
2027	$1,430,856	$348,107	$825,610	$271,907	$156,571	$184,063	$1,188,911	$140,503	$124,499	$397,907	$448,204	$261,559	$152,859	$157,046	$803,905	$546,896	$381,081	$96,376
2028	$1,478,074	$359,594	$852,855	$280,880	$161,738	$190,137	$1,228,145	$145,140	$128,607	$411,038	$462,995	$270,191	$157,903	$162,229	$830,434	$564,944	$393,657	$99,557
2029	$1,526,851	$371,461	$880,999	$290,149	$167,076	$196,412	$1,268,674	$149,930	$132,851	$424,602	$478,273	$279,107	$163,114	$167,582	$857,838	$583,587	$406,647	$102,842
2030	$1,577,237	$383,719	$910,072	$299,724	$172,589	$202,893	$1,310,540	$154,877	$137,235	$438,614	$494,056	$288,317	$168,496	$173,113	$886,147	$602,845	$420,067	$106,236
2031	$1,629,285	$396,382	$940,104	$309,615	$178,284	$209,589	$1,353,788	$159,988	$141,764	$453,088	$510,360	$297,832	$174,057	$178,825	$915,390	$622,739	$433,929	$109,742
2032*	$1,925,491	$468,444	$1,111,016	$365,903	$210,697	$247,692	$1,599,907	$189,074	$167,537	$535,460	$603,144	$351,978	$205,701	$211,336	$1,081,808	$735,953	$512,818	$129,693
2033	$1,989,032	$483,903	$1,147,680	$377,978	$217,650	$255,866	$1,652,704	$195,314	$173,066	$553,130	$623,048	$363,593	$212,489	$218,310	$1,117,508	$760,240	$529,741	$133,973
2034	$2,054,670	$499,872	$1,185,553	$390,451	$224,832	$264,310	$1,707,244	$201,759	$178,777	$571,384	$643,608	$375,592	$219,501	$225,514	$1,154,386	$785,328	$547,222	$138,394
2035	$2,122,474	$516,368	$1,224,676	$403,336	$232,252	$273,032	$1,763,583	$208,417	$184,676	$590,239	$664,848	$387,986	$226,744	$232,956	$1,192,481	$811,243	$565,280	$142,961
2036	$2,192,516	$533,408	$1,265,091	$416,646	$239,916	$282,042	$1,821,781	$215,295	$190,771	$609,717	$686,787	$400,790	$234,227	$240,644	$1,231,832	$838,015	$583,935	$147,678
2037	$2,264,869	$551,010	$1,306,839	$430,395	$247,833	$291,349	$1,881,900	$222,400	$197,066	$629,838	$709,451	$414,016	$241,956	$248,585	$1,272,483	$865,669	$603,205	$152,552
2038	$2,339,609	$569,194	$1,349,964	$444,598	$256,012	$300,964	$1,944,002	$229,739	$203,569	$650,623	$732,863	$427,678	$249,941	$256,788	$1,314,475	$894,236	$623,110	$157,586
2039	$2,416,817	$587,977	$1,394,513	$459,270	$264,460	$310,896	$2,008,154	$237,320	$210,287	$672,093	$757,048	$441,792	$258,189	$265,262	$1,357,852	$923,746	$643,673	$162,786
2040	$2,496,571	$607,380	$1,440,532	$474,426	$273,187	$321,155	$2,074,424	$245,152	$217,227	$694,272	$782,030	$456,371	$266,709	$274,016	$1,402,662	$954,229	$664,914	$168,158
2041	$2,578,958	$627,424	$1,488,070	$490,082	$282,202	$331,753	$2,142,880	$253,242	$224,395	$717,183	$807,837	$471,431	$275,511	$283,058	$1,448,949	$985,719	$686,856	$173,707
2042	$2,664,064	$648,129	$1,537,176	$506,255	$291,515	$342,701	$2,213,595	$261,599	$231,800	$740,850	$834,496	$486,988	$284,602	$292,399	$1,496,765	$1,018,248	$709,523	$179,440
2043	$2,751,978	$669,517	$1,587,903	$522,961	$301,135	$354,010	$2,286,643	$270,232	$239,449	$765,298	$862,034	$503,059	$293,994	$302,049	$1,546,158	$1,051,850	$732,937	$185,361
2044	$2,842,793	$691,611	$1,640,304	$540,219	$311,072	$365,693	$2,362,102	$279,149	$247,351	$790,553	$890,482	$519,660	$303,696	$312,016	$1,597,181	$1,086,561	$757,124	$191,478
2045	$2,936,606	$714,434	$1,694,434	$558,046	$321,338	$377,760	$2,440,052	$288,361	$255,514	$816,641	$919,867	$536,809	$313,718	$322,313	$1,649,888	$1,122,418	$782,109	$197,797
2046	$3,033,513	$738,011	$1,750,350	$576,462	$331,942	$390,227	$2,520,573	$297,877	$263,946	$843,591	$950,223	$554,523	$324,071	$332,949	$1,704,334	$1,159,457	$807,918	$204,324
2047	$3,133,619	$762,365	$1,808,111	$595,485	$342,896	$403,104	$2,603,752	$307,707	$272,656	$871,429	$981,580	$572,823	$334,765	$343,936	$1,760,577	$1,197,719	$834,580	$211,067
2048	$3,237,029	$787,523	$1,867,779	$615,136	$354,212	$416,406	$2,689,676	$317,861	$281,654	$900,186	$1,013,973	$591,726	$345,812	$355,286	$1,818,677	$1,237,244	$862,121	$218,032
2049	$3,343,851	$813,511	$1,929,416	$635,435	$365,901	$430,148	$2,778,436	$328,351	$290,948	$929,892	$1,047,434	$611,253	$357,224	$367,011	$1,878,693	$1,278,073	$890,571	$225,227
2050	$3,454,198	$840,357	$1,993,087	$656,405	$377,975	$444,343	$2,870,124	$339,186	$300,550	$960,579	$1,081,999	$631,424	$369,013	$379,122	$1,940,690	$1,320,250	$919,960	$232,660
2051	$3,568,186	$868,089	$2,058,858	$678,066	$390,449	$459,006	$2,964,838	$350,379	$310,468	$992,278	$1,117,705	$652,261	$381,190	$391,633	$2,004,733	$1,363,818	$950,318	$240,338

Note: County, small MPO and city allocations are presently lagged one year, IIJA funding increases observed for FY 2022 do not show up in distributions to Local Jurisdictions until 2023 (assumes a one-time increase of 20%).

* Assumes Medford's expected funding distributed among remaining small MPOs and cities over 5,000. Assumes that populations of a few addition cities outside MPO boundaries exceed 5,000 and one city (Veneta) is within an MPO county

ONAL STA

ESTIMATED STBGP APPORTIONMENTS FOR MPO COUNTIES AND CITIES OTHER THAN TMAs, CONTINUED

YEAR	Bend MPO	Deschutes	Lane	Cottage Grove	Florence	Junction City	Veneta	Corvallis MPO	Benton	Medford MPO	Jackson	Albany MPO	Linn	Lebanon	Sweet Home	Grants Pass MPO	Josephine
2020	$1,332,603	$867,128	$1,145,686	$132,186	$115,369	$80,432		$894,882	$351,738	$2,214,645	$719,266	$850,548	$742,047	$223,373	$121,757	$709,894	$585,965
2021*	$1,226,684	$786,467	$1,036,353	$119,574	$105,091	$73,004	$62,066	$817,290	$312,922	$2,020,387	$652,908	$778,642	$668,715	$204,118	$110,861	$647,174	$523,744
2022	$1,251,218	$802,196	$1,057,080	$121,965	$107,193	$74,464	$63,307	$833,636	$319,180	$2,060,795	$665,966	$794,215	$682,089	$208,200	$113,078	$660,117	$534,219
2023	$1,501,461	$962,636	$1,268,496	$146,359	$128,631	$89,357	$75,969	$1,000,363	$383,017	$2,472,954	$799,159	$953,058	$818,507	$249,840	$135,694	$792,141	$641,063
2024	$1,531,490	$981,888	$1,293,866	$149,286	$131,204	$91,144	$77,488	$1,020,370	$390,677	$2,522,413	$815,143	$972,119	$834,877	$254,837	$138,408	$807,984	$653,884
2025	$1,562,120	$1,001,526	$1,319,743	$152,271	$133,828	$92,967	$79,038	$1,040,778	$398,490	$2,572,861	$831,445	$991,561	$851,575	$259,934	$141,176	$824,143	$666,962
2026	$1,593,363	$1,021,557	$1,346,138	$155,317	$136,505	$94,826	$80,619	$1,061,593	$406,460	$2,624,318	$848,074	$1,011,393	$868,606	$265,133	$143,999	$840,626	$680,301
2027	$1,645,944	$1,055,268	$1,390,561	$160,442	$141,009	$97,956	$83,279	$1,096,626	$419,873	$2,710,921	$876,061	$1,044,769	$897,270	$273,882	$148,751	$868,367	$702,751
2028	$1,700,260	$1,090,092	$1,436,449	$165,737	$145,663	$101,188	$86,027	$1,132,814	$433,729	$2,800,381	$904,971	$1,079,246	$926,880	$282,920	$153,660	$897,023	$725,942
2029	$1,756,368	$1,126,065	$1,483,852	$171,206	$150,469	$104,527	$88,866	$1,170,197	$448,042	$2,892,794	$934,835	$1,114,861	$957,467	$292,257	$158,731	$926,625	$749,898
2030	$1,814,328	$1,163,225	$1,532,819	$176,856	$155,435	$107,977	$91,799	$1,208,814	$462,828	$2,988,256	$965,684	$1,151,651	$989,064	$301,901	$163,969	$957,204	$774,644
2031	$1,874,201	$1,201,611	$1,583,402	$182,692	$160,564	$111,540	$94,828	$1,248,705	$478,101	$3,086,868	$997,552	$1,189,656	$1,021,703	$311,864	$169,380	$988,791	$800,207
2032*	$2,214,933	$1,420,065	$1,871,266	$215,906	$189,755	$131,818	$112,068	$1,475,720	$565,020		$1,178,908	$1,405,936	$1,207,449	$368,561	$200,174	$1,168,554	$945,686
2033	$2,288,025	$1,466,927	$1,933,018	$223,031	$196,017	$136,168	$115,766	$1,524,419	$583,666		$1,217,812	$1,452,332	$1,247,295	$380,723	$206,779	$1,207,117	$976,893
2034	$2,363,530	$1,515,336	$1,996,807	$230,391	$202,486	$140,661	$119,587	$1,574,725	$602,927		$1,257,999	$1,500,259	$1,288,456	$393,287	$213,603	$1,246,951	$1,009,131
2035	$2,441,527	$1,565,342	$2,062,702	$237,994	$209,168	$145,303	$123,533	$1,626,691	$622,823		$1,299,513	$1,549,768	$1,330,975	$406,266	$220,652	$1,288,101	$1,042,432
2036	$2,522,097	$1,616,998	$2,130,771	$245,848	$216,070	$150,098	$127,609	$1,680,371	$643,376		$1,342,397	$1,600,910	$1,374,897	$419,672	$227,933	$1,330,608	$1,076,833
2037	$2,605,326	$1,670,359	$2,201,087	$253,960	$223,200	$155,052	$131,821	$1,735,824	$664,608		$1,386,696	$1,653,740	$1,420,269	$433,522	$235,455	$1,374,518	$1,112,368
2038	$2,691,302	$1,725,481	$2,273,722	$262,341	$230,566	$160,168	$136,171	$1,793,106	$686,540		$1,432,457	$1,708,313	$1,467,137	$447,828	$243,225	$1,419,877	$1,149,076
2039	$2,780,115	$1,782,422	$2,348,755	$270,998	$238,175	$165,454	$140,664	$1,852,278	$709,196		$1,479,729	$1,764,688	$1,515,553	$462,606	$251,252	$1,466,733	$1,186,996
2040	$2,871,859	$1,841,242	$2,426,264	$279,941	$246,034	$170,914	$145,306	$1,913,404	$732,599		$1,528,560	$1,822,923	$1,565,566	$477,872	$259,543	$1,515,135	$1,226,166
2041	$2,966,630	$1,902,003	$2,506,331	$289,179	$254,154	$176,554	$150,101	$1,976,546	$756,775		$1,579,002	$1,883,079	$1,617,230	$493,642	$268,108	$1,565,135	$1,266,630
2042	$3,064,529	$1,964,769	$2,589,040	$298,722	$262,541	$182,380	$155,055	$2,041,772	$781,749		$1,631,109	$1,945,221	$1,670,599	$509,932	$276,955	$1,616,784	$1,308,429
2043	$3,165,658	$2,029,607	$2,674,478	$308,580	$271,204	$188,399	$160,171	$2,109,150	$807,546		$1,684,936	$2,009,413	$1,725,728	$526,760	$286,095	$1,670,138	$1,351,607
2044	$3,270,125	$2,096,584	$2,762,736	$318,763	$280,154	$194,616	$165,457	$2,178,752	$834,195		$1,740,539	$2,075,723	$1,782,677	$544,143	$295,536	$1,725,253	$1,396,210
2045	$3,378,039	$2,165,771	$2,853,906	$329,283	$289,399	$201,038	$170,917	$2,250,651	$861,724		$1,797,976	$2,144,222	$1,841,506	$562,100	$305,289	$1,782,186	$1,442,285
2046	$3,489,515	$2,237,241	$2,948,085	$340,149	$298,950	$207,672	$176,557	$2,324,923	$890,161		$1,857,310	$2,214,982	$1,902,275	$580,649	$315,363	$1,840,998	$1,489,880
2047	$3,604,669	$2,311,070	$3,045,372	$351,374	$308,815	$214,526	$182,384	$2,401,645	$919,536		$1,918,601	$2,288,076	$1,965,050	$599,810	$325,770	$1,901,751	$1,539,046
2048	$3,723,623	$2,387,336	$3,145,869	$362,969	$319,006	$221,605	$188,403	$2,480,899	$949,881		$1,981,915	$2,363,583	$2,029,897	$619,604	$336,521	$1,964,509	$1,589,835
2049	$3,846,502	$2,466,118	$3,249,683	$374,947	$329,533	$228,918	$194,620	$2,562,769	$981,227		$2,047,318	$2,441,581	$2,096,884	$640,051	$347,626	$2,029,338	$1,642,299
2050	$3,973,437	$2,547,499	$3,356,922	$387,320	$340,408	$236,472	$201,042	$2,647,340	$1,013,607		$2,114,879	$2,522,153	$2,166,081	$661,173	$359,098	$2,096,306	$1,696,495
2051	$4,104,560	$2,631,567	$3,467,701	$400,102	$351,641	$244,276	$207,677	$2,734,703	$1,047,056		$2,184,670	$2,605,384	$2,237,562	$682,991	$370,948	$2,165,484	$1,752,480

ONAL STATE HIGHWAY FUND REVENUE **TABLE 10.B: ESTIMATED STBGP APPORTIONMENTS FOR MPO COUNTIES AND CITIES OTHER THAN TMAs (2020 $s)**

(STPFundstoLocalJurisdictions - Expanded)

YEAR	Clackamas	Multnomah	Washington	Canby	Molalla	Sandy	Marion	Silverton	Stayton	Woodburn	Polk	Dalles	Independence	Monmouth	Yamhill	McMinnville	Newberg
2020	$1,176,955	$265,835	$667,951	$220,961	$128,861	$144,374	$978,602	$135,314	$102,594	$327,661	$368,076	$211,966	$124,234	$129,318	$663,531	$442,313	$313,452
2021*	$1,032,318	$251,148	$595,652	$196,172	$112,961	$132,796	$857,762	$101,369	$89,822	$287,077	$323,365	$188,707	$110,283	$113,304	$579,992	$394,568	$274,938
2022	$1,019,326	$247,987	$588,155	$193,704	$111,540	$131,125	$846,967	$100,093	$88,691	$283,465	$319,296	$186,332	$108,895	$111,878	$572,693	$389,603	$271,478
2023	$1,184,116	$288,078	$683,240	$225,019	$129,572	$152,323	$983,892	$116,275	$103,030	$329,291	$370,914	$216,455	$126,499	$129,965	$665,278	$452,588	$315,367
2024	$1,169,214	$284,453	$674,641	$222,187	$127,941	$150,406	$971,510	$114,811	$101,733	$325,147	$366,247	$213,731	$124,907	$128,329	$656,905	$446,892	$311,398
2025	$1,154,500	$280,873	$666,151	$219,391	$126,331	$148,513	$959,284	$113,367	$100,453	$321,055	$361,637	$211,041	$123,335	$126,714	$648,638	$441,268	$307,479
2026	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2027	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2028	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2029	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2030	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2031	$1,139,971	$277,339	$657,768	$216,630	$124,741	$146,644	$947,212	$111,940	$99,189	$317,015	$357,086	$208,386	$121,783	$125,120	$640,475	$435,715	$303,609
2032*	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2033	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2034	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2035	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2036	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2037	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2038	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2039	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2040	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2041	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2042	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2043	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2044	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2045	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2046	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2047	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2048	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2049	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2050	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343
2051	$1,304,180	$317,288	$752,517	$247,835	$142,710	$167,768	$1,083,655	$128,064	$113,477	$362,680	$408,524	$238,403	$139,326	$143,143	$732,734	$498,478	$347,343

Note: County, small MPO and city allocations are presently lagged one year, IIJA funding increases observed for FY 2022 do not show up in distributions to Local Jurisdictions until 2023 (assumes a one-time increase of 20%).

* Assumes Medford's expected funding distributed among remaining small MPOs and cities over 5,000. Assumes that populations of a few addition cities outside MPO boundaries exceed 5,000 and one city (Veneta) is within an MPO county

ΓIMATED STBGP APPORTIONMENTS FOR MPO COUNTIES AND CITIES OTHER THAN TMAs, CONTINUED (2020

Sheridan	Bend MPO	Deschutes	Lane	Cottage Grove	Florence	Junction City	Veneta	Corvallis MPO	Benton	Medford MPO	Jackson	Albany MPO	Linn	Lebanon	Sweet Home	Grants Pass MPO	Josephine
$80,889	$1,332,603	$867,128	$1,145,686	$132,186	$115,369	$80,432	$0	$894,882	$351,738	$2,214,645	$719,266	$850,548	$742,047	$223,373	$121,757	$709,894	$585,965
$69,532	$1,187,497	$761,343	$1,003,246	$115,754	$101,734	$70,672	$60,083	$791,181	$302,925	$1,955,844	$632,050	$753,768	$647,352	$197,597	$107,319	$626,500	$507,013
$68,657	$1,172,552	$751,761	$990,620	$114,297	$100,453	$69,782	$59,327	$781,224	$299,113	$1,931,230	$624,096	$744,282	$639,206	$195,111	$105,969	$618,615	$500,632
$79,757	$1,362,113	$873,295	$1,150,769	$132,775	$116,693	$81,064	$68,918	$907,521	$347,469	$2,243,443	$724,991	$864,606	$742,543	$226,653	$123,100	$718,624	$581,567
$78,753	$1,344,971	$862,305	$1,136,287	$131,104	$115,225	$80,044	$68,051	$896,100	$343,097	$2,215,210	$715,867	$853,725	$733,198	$223,801	$121,551	$709,580	$574,248
$77,762	$1,328,045	$851,453	$1,121,987	$129,454	$113,775	$79,036	$67,195	$884,823	$338,779	$2,187,332	$706,858	$842,981	$723,971	$220,984	$120,021	$700,650	$567,021
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$76,783	$1,311,332	$840,738	$1,107,867	$127,825	$112,343	$78,042	$66,349	$873,688	$334,515	$2,159,805	$697,962	$832,373	$714,860	$218,203	$118,511	$691,833	$559,885
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535
$87,844	$1,500,226	$961,844	$1,267,452	$146,238	$128,526	$89,283	$75,906	$999,540	$382,701	$0	$798,502	$952,274	$817,834	$249,635	$135,582	$791,489	$640,535

IONAL STATE HIGHWAY FUND REVENUE

TABLE 11: FLEX Funds (STBGP) Shift to FTA 5310

Year	Tri-Met (YOE $s)	Tri-Met 2020 $s	LTD (YOE $s)	LTD 2020 $s	SAMTD (YOE $s)	SAMTD 2020 $s	RVTD (YOE $s)	RVTD 2020 $s	Benton (YOE $s)	Benton 2020 $s	Deschutes (YOE $s)	Deschutes 2020 $s	Josephine (YOE $s)	Josephine 2020 $s	Linn (YOE $s)	Linn 2020 $s	Remaining STF (YOE $s)	Remaining STF 2020 $s
2020	4.9	4.9	1.3	1.3	1.4	1.4	1.0	1.0	0.4	0.4	0.7	0.7	0.3	0.3	0.5	0.5	5.0	5.0
2021	4.9	4.7	1.3	1.3	1.4	1.4	1.0	1.0	0.4	0.3	0.7	0.7	0.3	0.3	0.5	0.5	5.0	4.9
2022	4.9	4.6	1.3	1.2	1.4	1.3	1.0	0.9	0.4	0.3	0.7	0.7	0.3	0.2	0.5	0.5	5.0	4.7
2023	4.9	4.4	1.3	1.2	1.4	1.3	1.0	0.9	0.4	0.3	0.7	0.7	0.3	0.2	0.5	0.5	5.0	4.6
2024	4.9	4.3	1.3	1.2	1.4	1.2	1.0	0.9	0.4	0.3	0.7	0.6	0.3	0.2	0.5	0.5	5.0	4.4
2025	5.4	4.6	1.5	1.2	1.6	1.3	1.1	0.9	0.4	0.3	0.8	0.7	0.3	0.2	0.6	0.5	5.5	4.7
2026	5.4	4.4	1.5	1.2	1.6	1.3	1.1	0.9	0.4	0.3	0.8	0.7	0.3	0.2	0.6	0.5	5.5	4.6
2027	5.4	4.3	1.5	1.2	1.6	1.2	1.1	0.9	0.4	0.3	0.8	0.6	0.3	0.2	0.6	0.5	5.5	4.4
2028	5.4	4.1	1.5	1.1	1.6	1.2	1.1	0.9	0.4	0.3	0.8	0.6	0.3	0.2	0.6	0.4	5.5	4.3
2029	5.4	4.0	1.5	1.1	1.6	1.2	1.1	0.8	0.4	0.3	0.8	0.6	0.3	0.2	0.6	0.4	5.5	4.1
2030	5.4	3.9	1.5	1.1	1.6	1.1	1.1	0.8	0.4	0.3	0.8	0.6	0.3	0.2	0.6	0.4	5.5	4.0
2031	5.9	4.1	1.6	1.1	1.7	1.2	1.2	0.9	0.4	0.3	0.9	0.6	0.3	0.2	0.6	0.4	6.1	4.3
2032	5.9	4.0	1.6	1.1	1.7	1.2	1.2	0.8	0.4	0.3	0.9	0.6	0.3	0.2	0.6	0.4	6.1	4.1
2033	5.9	3.9	1.6	1.0	1.7	1.1	1.2	0.8	0.4	0.3	0.9	0.6	0.3	0.2	0.6	0.4	6.1	4.0
2034	5.9	3.7	1.6	1.0	1.7	1.1	1.2	0.8	0.4	0.3	0.9	0.6	0.3	0.2	0.6	0.4	6.1	3.9
2035	5.9	3.6	1.6	1.0	1.7	1.0	1.2	0.7	0.4	0.3	0.9	0.5	0.3	0.2	0.6	0.4	6.1	3.7
2036	5.9	3.5	1.6	0.9	1.7	1.0	1.2	0.7	0.4	0.3	0.9	0.5	0.3	0.2	0.6	0.4	6.1	3.6
2037	6.5	3.7	1.8	1.0	1.9	1.1	1.3	0.8	0.5	0.3	1.0	0.6	0.4	0.2	0.7	0.4	6.7	3.8
2038	6.5	3.6	1.8	1.0	1.9	1.0	1.3	0.7	0.5	0.3	1.0	0.5	0.4	0.2	0.7	0.4	6.7	3.7
2039	6.5	3.5	1.8	0.9	1.9	1.0	1.3	0.7	0.5	0.3	1.0	0.5	0.4	0.2	0.7	0.4	6.7	3.6
2040	6.5	3.4	1.8	0.9	1.9	1.0	1.3	0.7	0.5	0.2	1.0	0.5	0.4	0.2	0.7	0.4	6.7	3.5
2041	6.5	3.3	1.8	0.9	1.9	0.9	1.3	0.7	0.5	0.2	1.0	0.5	0.4	0.2	0.7	0.4	6.7	3.4
2042	6.5	3.2	1.8	0.9	1.9	0.9	1.3	0.7	0.5	0.2	1.0	0.5	0.4	0.2	0.7	0.3	6.7	3.3
2043	7.1	3.4	1.9	0.9	2.1	1.0	1.5	0.7	0.5	0.2	1.1	0.5	0.4	0.2	0.8	0.4	7.4	3.5
2044	7.1	3.3	1.9	0.9	2.1	0.9	1.5	0.7	0.5	0.2	1.1	0.5	0.4	0.2	0.8	0.4	7.4	3.4
2045	7.1	3.2	1.9	0.9	2.1	0.9	1.5	0.7	0.5	0.2	1.1	0.5	0.4	0.2	0.8	0.3	7.4	3.3
2046	7.1	3.1	1.9	0.8	2.1	0.9	1.5	0.6	0.5	0.2	1.1	0.5	0.4	0.2	0.8	0.3	7.4	3.2
2047	7.1	3.0	1.9	0.8	2.1	0.9	1.5	0.6	0.5	0.2	1.1	0.4	0.4	0.2	0.8	0.3	7.4	3.1
2048	7.1	2.9	1.9	0.8	2.1	0.8	1.5	0.6	0.5	0.2	1.1	0.4	0.4	0.2	0.8	0.3	7.4	3.0
2049	7.8	3.1	2.1	0.8	2.3	0.9	1.6	0.6	0.6	0.2	1.2	0.5	0.4	0.2	0.8	0.3	8.1	3.2
2050	7.8	3.0	2.1	0.8	2.3	0.9	1.6	0.6	0.6	0.2	1.2	0.4	0.4	0.2	0.8	0.3	8.1	3.1
2051	7.8	2.9	2.1	0.8	2.3	0.8	1.6	0.6	0.6	0.2	1.2	0.4	0.4	0.2	0.8	0.3	8.1	3.0
2020 - 2049		**113.4**		**30.7**		**32.9**		**23.5**		**8.3**		**17.0**		**6.1**		**12.3**		**117.0**
2021 - 2050		**111.5**		**30.2**		**32.3**		**23.1**		**8.2**		**16.7**		**6.0**		**12.1**		**115.0**

Note: The figures show amounts reserved. They are not actually awarded until the following year. Assumes Flex Funding amounts increase by 10 percent every 7th year.
The FY 2020 total amount is assumed to be $15.5 million.

TABLE 12: LONG RANGE ESTIMATES OF ODOT HIGHWAY PRESERVATION, MAINTENANCE AND OTHER COSTS
($ Millions)

Fiscal Year	Pavement Preservation (YOE $s)	Pavement Preservation 2020 $s	Maintenance (YOE $s)	Maintenance 2020 $s	Safety Construction (YOE $s)	Safety Construction 2020 $s	Traditional Operations (YOE $s)	Traditional Operations 2020 $s	ITS (YOE $s)	ITS 2020 $s
2020	124	124	392	392	392	392	80	80	15	15
2021	128	124	405	392	405	392	83	80	16	15
2022	156	146	418	392	418	392	85	80	16	15
2023	161	146	432	392	432	392	88	80	17	15
2024	166	146	446	392	446	392	91	80	17	15
2025	172	146	461	392	461	392	94	80	18	15
2026	178	146	476	392	476	392	97	80	19	15
2027	183	146	492	392	492	392	100	80	19	15
2028	190	146	508	392	508	392	104	80	20	15
2029	196	146	525	392	525	392	107	80	20	15
2030	202	146	542	392	542	392	111	80	21	15
2031	209	146	560	392	560	392	114	80	22	15
2032	216	146	579	392	579	392	118	80	23	15
2033	223	146	598	392	598	392	122	80	23	15
2034	230	146	617	392	617	392	126	80	24	15
2035	238	146	638	392	638	392	130	80	25	15
2036	246	146	659	392	659	392	135	80	26	15
2037	254	146	680	392	680	392	139	80	26	15
2038	262	146	703	392	703	392	144	80	27	15
2039	271	146	726	392	726	392	148	80	28	15
2040	280	146	750	392	750	392	153	80	29	15
2041	289	146	775	392	775	392	158	80	30	15
2042	299	146	800	392	800	392	164	80	31	15
2043	308	146	827	392	827	392	169	80	32	15
2044	319	146	854	392	854	392	174	80	33	15
2045	329	146	882	392	882	392	180	80	34	15
2046	340	146	911	392	911	392	186	80	35	15
2047	351	146	942	392	942	392	192	80	37	15
2048	363	146	973	392	973	392	199	80	38	15
2049	375	146	1,005	392	1,005	392	205	80	39	15
2050	387	146	1,038	392	1,038	392	212	80	40	15
2051	400	146	1,072	392	1,072	392	219	80	42	15

*For comparison, Scenario 3, "Protecting Current Infrastructure," of the 1999 Oregon Highway Plan required $599 million in 1997 $s, or $961 million in 2020 $s. or $1,027in 2021$s.
These amounts exclude debt service costs.

TABLE 12: LONG RANGE ESTIMATES OF ODOT HIGHWAY PRESERVATION, MAINTENANCE AND OTHER COSTS, CONT'D
($ Millions)

Fiscal Year	Bridge (YOE $s)	Bridge 2020 $s	Central Services (Hwy. Portion) (YOE $s)	Central Services (Hwy. Portion) 2020 $s	Other (YOE $s)	Other (2020 $s)	Non-Mod. Debt S. (YOE $s)	All Non-Mod. Hwy Programs (YOE $s)	All Non-Mod Programs Excluding DS* (2020 $s)
2020	274	274	90	90	257	257	90	1,715	1,625
2021	283	274	93	90	266	257	93	1,771	1,625
2022	293	274	96	90	275	257	99	1,856	1,647
2023	302	274	99	90	284	257	99	1,914	1,647
2024	312	274	103	90	293	257	99	1,974	1,647
2025	322	274	106	90	303	257	98	2,035	1,647
2026	333	274	109	90	313	257	96	2,097	1,647
2027	344	274	113	90	323	257	104	2,171	1,647
2028	355	274	117	90	334	257	117	2,252	1,647
2029	367	274	121	90	345	257	124	2,330	1,647
2030	379	274	125	90	356	257	124	2,403	1,647
2031	392	274	129	90	368	257	124	2,478	1,647
2032	405	274	133	90	380	257	124	2,556	1,647
2033	418	274	137	90	392	257	118	2,630	1,647
2034	432	274	142	90	405	257	118	2,712	1,647
2035	446	274	147	90	419	257	118	2,798	1,647
2036	461	274	151	90	433	257	118	2,887	1,647
2037	476	274	156	90	447	257	118	2,978	1,647
2038	492	274	162	90	462	257	118	3,072	1,647
2039	508	274	167	90	477	257	59	3,111	1,647
2040	525	274	172	90	493	257		3,152	1,647
2041	542	274	178	90	509	257		3,256	1,647
2042	560	274	184	90	526	257		3,364	1,647
2043	578	274	190	90	543	257		3,475	1,647
2044	598	274	196	90	561	257		3,589	1,647
2045	617	274	203	90	579	257		3,708	1,647
2046	638	274	209	90	599	257		3,830	1,647
2047	659	274	216	90	618	257		3,957	1,647
2048	680	274	223	90	639	257		4,087	1,647
2049	703	274	231	90	660	257		4,222	1,647
2050	726	274	238	90	682	257		4,361	1,647
2051	750	274	246	90	704	257		4,505	1,647

Exhibit C: Local and Regional Revenue Estimates, 2024-2045

Exhibit A to Ordinance No. 23-1496

Revenue Source(s)	Clackamas Co. and cities	Multnomah Co. and cities	Washington Co. and Cities	Port of Portland	Confederated Tribes of Grand Ronde	SMART	TriMet		6/28/23
		$ 10,000,000		$ 24,344,031	$ 6,760,000				
Connect Oregon				$ 7,374,500					
State Pass Through	$ 403,852,711	$ 1,047,852,385	$ 661,721,080						
County VRF	$ 363,578,331	$ 200,113,389	$ 10,763,449						
County Fuel Tax			$ 750,025						
General Funds	$ 1,174,762,907								
Development and System Impact Charges			$ 1,107,530,647						
Property Taxes			$ 1,767,894,873						
Other Taxes and Fees			$ 5,200,000						
Misc Revenues and Fees		$ 492,018,585							
Dedicated Taxes and Fees	$ 122,368,866	$ 7,376,866	$ 112,147,693						
Development and System Impact Charges	$ 390,618,434	$ 572,937,172	$ 385,838,577						
Development and System Impact Charges			$ 267,387,997						
Dedicated Taxes and Fees	$ 5,291,822	$ 27,374,379	$ 16,720,000						
Property Taxes	$ 108,736,049	$ 129,081,817	$ 285,013,496						
Property Taxes	$ 418,047,810								
Misc Taxes, Charges, and Fees	$ 110,616,735	$ 49,473,884	$ 10,299,919						
Dedicated Taxes and Fees	$ 43,000,000								
Dedicated Parks Funding	$ 1,776,060		$ 125,001,000						
Regional Body Revenues				$ 96,145,400					
Local Partner Revenues					$ 400,000				
Local Transit Funds						$ 2,810,682,500	$ 2,766,500		
Local Transit Funds						$ 753,377,379			
Local Transit Funds						$ 18,815,642,000	$ 202,573,000		
State Transit Funds						$ 2,436,985,638	$ 51,806,000		
Federal Transit Funds						$ 4,461,782,485	$ 48,223,415		
						$ 1,530,000,000			
						$ 443,152,496			
									Total
These estimates are preliminary and will be finalized as part of the RTP adoption.									$ 42,127,162,300.73

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Exhibit 5: ODOT Metro Area Revenue Estimates and Forecasted Non-Capital Expenditures, 2024-2045

6/28/23

	ODOT Region 1 Forecasted Revenues								Forecasted Expenditures of Revenue to Non-Capital elements					
									Region 1 Fix-It Program Budgeted Spending (1,3)					
YEAR	*Region 1 Federal Funding Net of Discretionary Awards*	*Region 1 Federal Discretionary Funding Awards*	*Region 1 State Funding*	*I-205 Toll Revenues (5,8)*	*Interstate Bridge Replacement (IBR) Toll Revenues (8)*	*Regional Mobility Pricing Project (RMPP) Toll Revenues (8)*	*Region 1 Federal Funding Net of Discretionary Awards for Safety, OMP, Other Non-Capacity (1)*	*Region 1 State Funds for Safety, OMP, Other Non-Capacity (1,2)*	*Safety*	*Preservation & Maintenance*	*Operations*	*Culverts*	*Bridge*	*I-205 Toll Revenues for Operations and Preservation*
	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)
2020	169.10	5.34	171.00				55.57	0.00	11.03	13.83	5.40		25.31	
2021	151.17	5.34	54.17				55.57	0.00	11.03	13.83	5.40		25.31	
2022	225.81	21.36	61.60				41.21	0.00	11.16	13.08	7.63		9.33	
2023	198.56	21.36	525.32				41.21	0.00	11.16	13.08	7.63		9.33	
2024	202.25	21.36	259.50				43.21	0.00	11.16	13.08	7.63	2.00	9.33	
2025	205.66	471.36	478.37				44.62	0.00	11.53	13.52	7.88	2.04	9.64	19.20
2026	192.93	471.36	258.89				46.07	0.00	11.91	13.96	8.14	2.09	9.96	26.70
2027	193.23	460.68	259.12	800.00	1600.00	100.00	47.56	0.00	12.30	14.42	8.41	2.13	10.29	29.23
2028	199.61	461.03	258.74			100.00	49.11	0.00	12.71	14.90	8.69	2.18	10.63	31.29
2029	206.20	461.40	254.77			100.00	50.70	0.00	13.13	15.39	8.98	2.23	10.98	32.17
2030	213.00	361.77	251.84			100.00	52.35	0.00	13.56	15.90	9.27	2.28	11.34	33.07
2031	220.03	112.16	252.10			0.00	54.06	0.00	14.01	16.42	9.58	2.33	11.72	34.00
2032	227.32	12.56	253.24			0.00	55.81	0.00	14.47	16.96	9.89	2.38	12.10	34.96
2033	234.82	12.98	254.42			0.00	57.63	0.00	14.95	17.52	10.22	2.43	12.50	35.94
2034	242.57	13.41	55.61			0.00	59.51	0.00	15.44	18.10	10.56	2.49	12.91	36.95
2035	250.57	13.85	56.84			0.00	61.44	0.00	15.95	18.70	10.91	2.54	13.34	37.99
2036	258.84	14.30	58.09			0.00	63.44	0.00	16.48	19.32	11.27	2.60	13.78	39.23
2037	267.38	14.78	59.37			0.00	65.51	0.00	17.02	19.95	11.64	2.65	14.24	40.51
2038	276.21	15.26	60.67			0.00	67.64	0.00	17.59	20.61	12.02	2.71	14.71	41.84
2039	285.32	15.77	62.01			0.00	69.84	0.00	18.17	21.29	12.42	2.77	15.19	43.21
2040	294.74	16.29	63.37			0.00	72.12	0.00	18.77	21.99	12.83	2.83	15.69	44.62
2041	304.46	16.83	64.76			0.00	74.46	0.00	19.39	22.72	13.25	2.90	16.21	46.09
2042	314.51	17.38	66.19			0.00	76.89	0.00	20.02	23.47	13.69	2.96	16.75	47.61
2043	324.89	17.95	67.65			0.00	79.39	0.00	20.69	24.25	14.14	3.02	17.30	49.18
2044	335.61	18.55	69.13			0.00	81.98	0.00	21.37	25.05	14.61	3.09	17.87	50.80
2045	346.69	19.16	70.65			0.00	84.65	0.00	22.07	25.87	15.09	3.16	18.46	52.48
2046	358.13	19.79	72.21			0.00	87.41	0.00	22.80	26.73	15.59	3.23	19.07	54.00
2047	370.74	20.44	73.80			0.00	90.26	0.00	23.55	27.61	16.10	3.30	19.70	55.56
2048	382.98	21.12	75.42			0.00	93.20	0.00	24.33	28.52	16.63	3.37	20.35	57.17
2049	395.61	21.82	77.08			0.00	96.24	0.00	25.13	29.46	17.18	3.45	21.02	58.83
Total 2024-2045	**5,596.9**	**3040.18**	**3,535.3**	**800.0**	**1,600.0**	**400.0**	**1,358.0**	**-**	**352.7**	**413.4**	**241.1**	**55.8**	**294.9**	**807.1** #
2024-2030	1412.89	2708.96	2021.24	800.00	1600.00	400.00	333.62	0.00	86.31	101.17	59.01		72.18	171.66
2031-2045	4183.96	331.22	1514.09	0.00	0.00	0.00	1024.37	0.00	266.39	312.23	182.12		222.76	635.41

Notes:
(1) This funding is for projects or programatic spending on activities that do not provide new capacity for motor vehicles.
(2) State revenues available for these activities. (Difference between projected spending on Fix-It program and federal revenues available for these activities)
(3) Programmatic spending or projects that do not provide new capacity for motor vehicles. (Need description of ARTS/Safety program exceptions?)
(4) Pre-2024 revenues for legislatively directed spending on specific projects is included in 2024-2030 and total revenues to account for total project costs of projects to be included in the plan.
(5) I-205 tolling revenue to pay for toll facility operations/maintenance (including low-income program and reserve account), a bonded revenue stream to generate $600 to $800 million to pay for I-205 widening capital project expense, and a net remaining revenue stream. Bond payment forecast to extend through year 2054.
(6) Metro area spending/revenues for capital/modernization projects is forecasted to be 81% of revenue available to ODOT Region 1 for these purposes. This is exclusive of Metro area projects forecasted to receive federal or state legislatively directed spending or of toll project revenues.
(7) Bond sale proceeds authorized by HB3055 is forecasted to be allocated as: $125 M to Rose Quarter project, $307 M to I-205 Abernethy, and $30 M to the Regional Mobility Pricing Project. When I-205 Toll bond revenues of $800 M become available to the project, they pay back the $307 of prior revenues made available to the project
(8) The I-5 IBR Replacement Program project is in an early stage of design as are the I-205 Toll Project and Regional Mobility Pricing Project (RMPP). These estimates may be adjusted higher or lower depending on the outcome of NEPA and updated design.

Exhibit 5: ODOT Metro Area Revenue Estimates and Forecasted Non-Capital Expenditures, 2024-2045

6/28/23

Federal Revenues for Modernization/Capital Projects									State Revenues for Modernization/Capital Projects (4)																			
Region 1 Federal Funding Net of Discrtnry Awards for Mod	*Metro Area Federal Funding Net of Discrtnry Awards for Mod (6)*	*Region 1 ODOT Fed Discrtnry Programs For Mod (Share)*	*Metro Area ODOT Fed Discrtnry Programs For Mod (Share) (6)*	*IBR FHWA Discrtnry Programs (low)*	*IBR FHWA Discrtnry Programs (high)*	*IBR FTA Discrtnry Programs (low)*	*IBR FTA Discrtnry Programs (high)*		*State Funds for Capital Projects (Region 1)*	*State Funds for Capital Projects (Metro Area of Region 1) (6)*	*HB 2017 Specifically Named Projects*	HB3055 Bond Proceeds for Rose Qtr, I-205 Abernethy, Toll Program (7)	*IBR Legislative Directed Spending WA & OR*	*Metro Area of Region 1 Total State Highway Funding for Capital Projects*		*I-205 Bonded Toll Revenues for I-205 widening and toll project*	*IBR Toll Revenues for IBR project*	*RMPP Toll Revenues for RMPP project*		*Total ODOT Region 1 Metro Area Revenues available for Capital Projects (high)*		*ODOT Region 1 Metro Area Non-Tolling Revenues available for Capital Projects not dedicated to named projects*	*IBR Project Cost Revenues*	*I-205 Project Cost Revenues*	*RMPP Project Cost Revenues*	*Rose Quarter Project Cost Revenues*	*Asset Management (Maintenance, Preservation, Bridge, Culverts, I-205 Toll Ops)*	*Safety*	*Operations - ITS*
(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)		(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)		(YOE $s)	(YOE $s)	(YOE $s)		(YOE $s)		(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)	(YOE $s)
113.53	91.96	5.34	4.33						56.79	46.00	125.00			171.00						267.28		142.28	0.00	0	0		39.14	11.03	5.40
95.60	77.43	5.34	4.33						66.88	54.17				54.17						135.93		135.93	0.00	0	0		39.14	11.03	5.40
184.60	149.53	21.36	17.30						76.05	61.60				61.60						228.43		228.43	0.00	0	0		22.42	11.16	7.63
157.35	127.45	21.36	17.30						75.71	61.32	124.00	242.00	98.00	525.32						670.08		206.08	98.00	117.00	0	125	22.42	11.16	7.63
159.04	128.82	21.36	17.30						73.46	59.50			200.00	259.50						405.62		205.62	200.00	0	0		24.42	11.16	7.63
161.04	130.45	21.36	17.30	200.00	250.00	200.00	200.00		72.06	58.37		220.00	200.00	478.37						1,076.12		206.12	650.00	190.00	30.00		44.41	11.53	7.88
146.87	118.96	21.36	17.30	200.00	250.00	200.00	200.00		72.70	58.89			200.00	258.89		800.00		400.00		2,045.15		195.15	650.00	800	400		52.71	11.91	8.14
145.67	117.99	10.68	8.65	200.00	250.00	200.00	200.00		72.99	59.12			200.00	259.12			1,600.00			2,435.77		185.77	2250.00	0	0		56.08	12.30	8.41
150.50	121.91	11.03	8.94	200.00	250.00	200.00	200.00		72.52	58.74			200.00	258.74						839.59		189.59	650.00	0	0		59.00	12.71	8.69
155.49	125.95	11.40	9.23	60.00	250.00	100.00	200.00		67.62	54.77			200.00	254.77						839.95		189.95	650.00	0	0		60.77	13.13	8.98
160.65	130.13	11.77	9.54		250.00		100.00		64.00	51.84			200.00	251.84						741.50		191.50	550.00	0	0		62.59	13.56	9.27
165.98	134.44	12.16	9.85		100.00				64.32	52.10			200.00	252.10						496.39		196.39	300.00	0	0		64.47	14.01	9.58
171.50	138.92	12.56	10.18						65.73	53.24			200.00	253.24						402.34		202.34	200.00	0	0		66.40	14.47	9.89
177.19	143.52	12.98	10.51						67.18	54.42			200.00	254.42						408.45		208.45	200.00	0	0		68.40	14.95	10.22
183.06	148.28	13.41	10.86						68.66	55.61				55.61						214.75		214.75	0.00	0	0		70.45	15.44	10.56
189.13	153.20	13.85	11.22						70.17	56.84				56.84						221.25		221.25	0.00	0	0		72.57	15.95	10.91
195.40	158.27	14.30	11.59						71.71	58.09				58.09						227.95		227.95	0.00	0	0		74.92	16.48	11.27
201.88	163.52	14.78	11.97						73.29	59.37				59.37						234.85		234.85	0.00	0	0		77.36	17.02	11.64
208.57	168.94	15.26	12.36						74.90	60.67				60.67						241.98		241.98	0.00	0	0		79.87	17.59	12.02
215.48	174.54	15.77	12.77						76.55	62.01				62.01						249.32		249.32	0.00	0	0		82.46	18.17	12.42
222.62	180.32	16.29	13.19						78.23	63.37				63.37						256.89		256.89	0.00	0	0		85.14	18.77	12.83
230.00	186.30	16.83	13.63						79.96	64.76				64.76						264.69		264.69	0.00	0	0		87.92	19.39	13.25
237.62	192.47	17.38	14.08						81.71	66.19				66.19						272.74		272.74	0.00	0	0		90.78	20.02	13.69
245.50	198.85	17.95	14.54						83.51	67.65				67.65						281.04		281.04	0.00	0	0		93.75	20.69	14.14
253.63	205.44	18.55	15.02						85.35	69.13				69.13						289.60		289.60	0.00	0	0		96.81	21.37	14.61
262.03	212.25	19.16	15.52						87.23	70.65				70.65						298.42		298.42	0.00	0	0		99.97	22.07	15.09
270.72	219.28	19.79	16.03						89.15	72.21				72.21						307.52		307.52	0.00	0	0		103.02	22.80	15.59
280.48	227.19	20.44	16.56						91.11	73.80				73.80						317.55		317.55	0.00	0	0		106.16	23.55	16.10
289.77	234.72	21.12	17.11						93.11	75.42				75.42						327.24		327.24	0.00	0	0		109.41	24.33	16.63
299.37	242.49	21.82	17.67						95.16	77.08				77.08						337.24		337.24	0.00	0	0		112.75	25.13	17.18
4,238.9	3,433.5	340.2	275.5	860.0	1,600.0	900.0	1,100.0	-	1,623.9	1,315.3	249.0	462.0	2,098.0	4,124.3	-	800.0	1,600.0	400.0	-	13,333.36	-	5024.36	6398.00	1107	430	125	1571.23	352.70	241.13
																		Project cost											
1079.27	874.21	108.96	88.26	860.00	1500.00	900.00	1100.00		495.35	401.24	249.00	462.00	1498.00	2610.24		800.00	1600.00	400.00		8,972.71									
3159.59	2559.27	231.22	187.29	0.00	100.00	0.00	0.00		1041.28	843.44	0.00	0.00	600.00	1443.44		0.00	0.00	0.00		4,290.00									

Notes:

(1) This funding is for projects or programatic spending on activities that do not provide new capacity for motor vehicles.

(2) State revenues available for these activities. (Difference between projected spending on Fix-It program and federal revenues available for these activities)

(3) Programmatic spending or projects that do not provide new capacity for motor vehicles. (Need description of ARTS/Safety program exceptions?)

(4) Pre-2024 revenues for legislatively directed spending on specific projects is included in 2024-2030 and total revenues to account for total project costs of projects to be included in the plan.

(5) I-205 tolling revenue to pay for toll facility operations/maintenance (including low-income program and reserve account), a bonded revenue stream to generate $600 to $800 million to pay for I-205 widening capital project expense, and a net remaining revenue stream. Bond payment forecast to extend through year 2054.

(6) Metro area spending/revenues for capital/modernization projects is forecasted to be 81% of revenue available to ODOT Region 1 for these purposes. This is exclusive of Metro area projects forecasted to receive federal or state legislatively directed spending or of toll project revenues.

(7) Bond sale proceeds authorized by HB3055 is forecasted to be allocated as: $125 M to Rose Quarter project, $307 M to I-205 Abernethy, and $30 M to the Regional Mobility Pricing Project. When I-205 Toll bond revenues of $800 M become available to the project, they pay back the $307 of prior revenues made available to the project.

(8) The I-5 IBR Replacement Program project is in an early stage of design as are the I-205 Toll Project and Regional Mobility Pricing Project (RMPP). These estimates may be adjusted higher or lower depending on the outcome of NEPA and updated design.

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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT
APPENDIX I

2023 Regional Transportation Plan

Performance evaluation documentation

July 10, 2023

oregonmetro.gov/rtp

Metro respects civil rights

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

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If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit oregonmetro.gov/civilrights or call 503-797-1536.

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

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

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

Project website: **oregonmetro.gov/rtp**

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

Purpose

This appendix contains data outputs derived from the regional travel demand model in support of the system performance evaluation conducted for the 2023 Regional Transportation Plan (RTP). Chapter 7 of the RTP reports on the system performance using this and other data. Appendix M (Regional Analysis) describes key model assumptions and methodologies used in the analysis.

List of System Performance Evaluation Data

- System Performance Measures for Intra-Metropolitan Planning Area (MPA) trips
- System Performance Measures for Total Region trips (4 -county, includes Clark Co., Wa.)
- Mode Share By RTP Subarea (work and non-work person trips)
    - Region (4 -county, includes Clark Co., Wa.)
    - Metropolitan Planning Area (MPA)
    - City of Portland (within the MPA)
    - Urban Clackamas County (within the MPA)
    - Urban Washington County (within the MPA)
    - East Multnomah County (within the MPA)
- Multimodal Travel (miles traveled)
- Auto Travel Times
- Transit Travel Times
- List of RTP Throughways that do not meet mobility policy speed threshold *(under development)*
    - 2020 Base Year
    - 2030 No Build
    - 2030 Constrained
    - 2045 No Build
    - 2045 Constrained
- Map of RTP Throughways that do not meet mobility policy speed threshold (under development) *(under development)*
    - 2020 Base Year
    - 2030 No Build
    - 2030 Constrained
    - 2045 No Build
    - 2045 Constrained

Additional data and information will be added.

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2023 Regional Transportation Plan (RTP) Update

System Performance Measures for Intra-MPA* Trips

Preliminary draft - subject to refinement

* within Metropolitan Planning Area (excludes Clark County, Washington)

4/12/23

			2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
Demographic Data												
1		Population	1,740,943		1,933,475		1,933,475		2,242,128		2,242,128	
		change from 2020			192,532	11.1%	192,532	11.1%	501,185	28.8%	501,185	28.8%
2		Households	693,123		794,613		794,613		950,634		950,634	
		change from 2020			101,490	14.6%	101,490	14.6%	257,511	37.2%	257,511	37.2%
3		Employment	985,260		1,050,958		1,050,958		1,210,997		1,210,997	
		change from 2020			65,698	6.7%	65,698	6.7%	225,737	22.9%	225,737	22.9%
Network Data												
1	a	Total Road Miles in Network	3,723		3,726		3,754		3,726		3,789	
		change from 2020			3	0.1%	31	0.8%	3	0.1%	67	1.8%
		change from No Build					28	0.7%			64	1.7%
	b	*Freeway Miles*	232		232		228		232		234	
		change from 2020			0	0.0%	-3	-1.4%	0	0.0%	2	0.9%
	c	Arterial Miles	3,491		3,494		3,525		3,494		3,556	
		change from 2020			3	0.1%	34	1.0%	3	0.1%	65	1.9%
		change from No Build					31	0.9%			62	1.8%
2	a	Total Lane Miles	5,510		5,536		5,640		5,536		5,776	
		change from 2020			26	0.5%	130	2.4%	26	0.5%	266	4.8%
		change from No Build					104	1.9%			240	4.3%
	b	Freeway Lane Miles	627		634		645		634		663	
		change from 2020			6	1.0%	18	2.9%	6	1.0%	35	5.6%
		change from No Build					12	1.8%			29	4.6%
	c	Arterial Lane Miles	4,883		4,903		4,995		4,903		5,113	
		change from 2020			20	0.4%	112	2.3%	20	0.4%	230	4.7%
		change from No Build					92	1.9%			211	4.3%
Travel Data - Average Weekday (AWD)												
1	a	*AWD Total Person Trips*	6,270,685		7,002,412		7,015,726		8,097,302		8,109,538	
		change from 2020			731,727	11.7%	745,041	11.9%	1,826,617	29.1%	1,838,853	29.3%
	b	*AWD Total Work Trips (share of total person trips)*	1,752,226	27.9%	1,877,707	26.8%	1,885,560	26.9%	2,181,541	26.9%	2,188,145	27.0%
		change from 2020			125,481	7.2%	133,334	7.6%	429,315	24.5%	435,919	24.9%
	c	*AWD Total Non-Work Trips (share of total person trips)*	4,518,459	72.1%	5,124,705	73.2%	5,130,166	73.1%	5,915,761	73.1%	5,921,394	73.0%
		change from 2020			606,246	13.4%	611,707	13.5%	1,397,302	30.9%	1,402,935	31.0%
2		AWD Total Passenger Vehicle Person Trips	5,137,489		5,713,224		5,712,964		6,556,161		6,497,665	
		change from 2020			575,735	11.2%	575,475	11.2%	1,418,672	27.6%	1,360,176	26.5%
		change from No Build					-260	0.0%			-58,496	-0.9%
3		*AWD Total Passenger Vehicle Trips*	3,732,280		4,124,107		4,106,244		4,731,079		4,657,264	
4		AWD Total Passenger Vehicle VMT	19,749,327		22,037,188		21,679,951		25,629,428		25,004,277	
		change from 2020			2,287,861	11.6%	1,930,624	9.8%	5,880,101	29.8%	5,254,950	26.6%
		change from No Build					-357,237.0	-1.6%			-625,151.0	-2.4%
5		AWD Passenger Vehicle VMT/Capita	11.3		11.4		11.2		11.4		11.2	
		change from 2020			0.1	0.5%	-0.1	-1.2%	0.1	0.8%	-0.2	-1.7%
		change from No Build					-0.2	-1.6%			-0.3	-2.4%
6		AWD Passenger Vehicle VMT/Employee	20.0		21.0		20.6		21.2		20.6	
		change from 2020			92.4%	4.6%	58.4%	2.9%	111.9%	5.6%	60.3%	3.0%
		change from No Build					-0.3	-1.6%			-0.5	-2.4%
7		Single Occupant Vehicle (SOV) Percent of Person Trips	43.5%		42.7%		42.4%		42.4%		41.6%	
8		Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	56.5%		57.3%		57.6%		57.6%		58.4%	

Metro

2023 Regional Transportation Plan (RTP) Update

System Performance Measures for Intra-MPA* Trips

Preliminary draft - subject to refinement

* within Metropolitan Planning Area (excludes Clark County, Washington)

4/12/23

		2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
9	AWD Average Trip Length (miles)	4.7		4.7		4.7		4.8		4.8	
Passenger Vehicle Data - PM 2 Hour Peak											
1	PM 2-HR Passenger Vehicle Average Travel Time (minutes)	12.0		12.6		12.3		13.1		12.7	
2	PM 2-HR Average Passenger Vehicle Travel Speed (miles per hour)	27.1		26.2		26.4		25.1		25.7	
Passenger Vehicle Data - Midday 1 Hour											
1	MD 1-HR Passenger Vehicle Average Travel Time (minutes)	10.4		10.7		10.5		11.2		11.0	
2	MD 1-HR Average Passenger Vehicle Travel Speed (miles per hour)	29.0		28.4		28.5		27.2		27.7	
Freight Data - Average Weekday (AWD)											
1	AWD Total Truck Trips	498,275		530,069		533,254		577,760		585,723	
	change from 2020			31,794	6.4%	34,979	7.0%	79,485	16.0%	87,448	17.6%
	change from No Build					3,185	0.6%			7,963	1.4%
2	*AWD Truck Average Trip Length (miles)*	4.5		4.7		4.7		4.9		4.9	
2	5-6p Truck Hours	1,476		1,664		1,674		1,929		1,935	
Freight Data - PM 2 Hour Peak											
1	PM 2-HR Truck Average Travel Time (minutes)	8.7		9.2		9.2		9.8		9.6	
2	PM 2-HR Truck Hours	3,578		4,029		4,038		4,698		4,655	
Freight Data - Midday 1 Hour											
1	MD 1-HR Truck Average Travel Time (minutes)	9.0		9.5		9.3		10.3		10.0	
2	MD 1-HR Truck Hours	4,255		4,718		4,691		5,515		5,424	
Transit Data											
1	AWD Total Transit Trips (originating riders)	255,159		305,960		313,925		387,950		440,270	
	change from 2020			50,801	19.9%	58,766	23.0%	132,791	52.0%	185,111	72.5%
	change from No Build					7,965	2.6%			52,320	13.5%
2	Transit Percent of Person Trips	4.1%		4.4%		4.5%		4.8%		5.4%	
Pedestrian Data											
1	AWD Total Walk Trips (does not include walk trips to transit)	471,979		525,511		528,593		615,643		632,862	
	change from 2020			53,532	11.3%	56,614	12.0%	143,664	30.4%	160,884	34.1%
	change from No Build					3,082	0.6%			17,219	2.8%
2	Walk Percent of Person Trips	7.5%		7.5%		7.5%		7.6%		7.8%	
Bicycle Data											
1	AWD Total Bike Trips	232,420		262,539		265,267		313,554		317,282	
	change from 2020			30,120	13.0%	32,848	14.1%	81,134	34.9%	84,862	36.5%
	change from No Build					2,728	1.0%			3,728	1.2%
2	Bike Percent of Person Trips	3.7%		3.7%		3.8%		3.9%		3.9%	
3	AWD Bike Miles Traveled (BMT)	732,112		850,771		869,750		1,097,199		1,108,464	
4	AWD BMT/Capita	0.42		0.44		0.45		0.49		0.49	

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2023 Regional Transportation Plan (RTP) Update

System Performance Measures for Total Region* Trips

* includes Clackamas, Multnomah, Washington and Clark counties

Preliminary draft - subject to refinement
4/12/23

			2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
Demographic Data												
1		Population	2,384,703		2,669,698		2,669,698		3,093,854		3,093,854	
		change from 2020			284,995	12.0%	284,995	12.0%	709,151	29.7%	709,151	29.7%
2		Households	930,121		1,074,364		1,074,364		1,282,760		1,282,760	
		change from 2020			144,243	15.5%	144,243	15.5%	352,639	37.9%	352,639	37.9%
3		Employment	1,192,694		1,304,460		1,304,460		1,535,571		1,535,571	
		change from 2020			111,766	9.4%	111,766	9.4%	342,877	28.7%	342,877	28.7%
Network Data												
1	a	Total Road Miles in Network	7,301		7,305		7,334		7,305		7,370	
		change from 2020			3	0.0%	32	0.4%	3	0.0%	68	0.9%
		change from No Build					29	0.4%			65	0.9%
	b	*Freeway Miles*	424		424		420		424		426	
		change from 2020			0	0.0%	-3	-0.8%	0	0.0%	2	0.5%
	c	Arterial Miles	6,878		6,881		6,913		6,881		6,944	
		change from 2020			3	0.0%	35	0.5%	3	0.0%	66	1.0%
		change from No Build					32	0.5%			63	0.9%
2	a	Total Lane Miles	9,944		9,970		10,078		9,970		10,220	
		change from 2020			26	0.3%	134	1.3%	26	0.3%	277	2.8%
		change from No Build					108	1.1%			251	2.5%
	b	Freeway Lane Miles	1,062		1,068		1,080		1,068		1,103	
		change from 2020			6	0.6%	18	1.7%	6	0.6%	42	3.9%
		change from No Build					12	1.1%			35	3.3%
	c	Arterial Lane Miles	8,882		8,902		8,998		8,902		9,117	
		change from 2020			20	0.2%	116	1.3%	20	0.2%	235	2.6%
		change from No Build					96	1.1%			215	2.4%
Travel Data - Average Weekday (AWD)												
1	a	*AWD Total Person Trips*	8,531,494		9,677,219		9,677,316		11,270,650		11,270,675	
		change from 2020			1,145,725	13.4%	1,145,822	13.4%	2,739,156	32.1%	2,739,181	32.1%
	b	*AWD Total Work Trips (share of total person trips)*	2,372,886	27.8%	2,596,099	26.8%	2,596,123	26.8%	3,057,861	27.1%	3,057,844	27.1%
		change from 2020			223,213	9.4%	223,237	9.4%	684,975	28.9%	684,958	28.9%
	c	*AWD Total Non-Work Trips (share of total person trips)*	6,158,608	72.2%	7,081,120	73.2%	7,081,193	73.2%	8,212,788	72.9%	8,212,831	72.9%
		change from 2020			922,512	15.0%	922,585	15.0%	2,054,180	33.4%	2,054,223	33.4%
2		AWD Total Passenger Vehicle Person Trips	7,104,367		8,042,864		8,024,566		9,336,340		9,251,239	
		change from 2020			938,497	13.2%	920,199	13.0%	2,231,973	31.4%	2,146,872	30.2%
		change from No Build					-18,298	-0.2%			-85,101	-0.9%
3		*AWD Total Passenger Vehicle Trips*	5,168,543		5,822,519		5,775,902		6,768,858		6,655,017	
4		AWD Total Passenger Vehicle VMT	31,259,654		35,365,580		34,506,383		41,079,158		39,868,064	
		change from 2020			4,105,926	13.1%	3,246,729	10.4%	9,819,504	31.4%	8,608,410	27.5%
		change from No Build					-859,197.0	-2.4%			-1,211,094.0	-2.9%
5		AWD Passenger Vehicle VMT/Capita	13.1		13.2		12.9		13.3		12.9	
		change from 2020			0.1	1.1%	-0.2	-1.4%	0.2	1.3%	-0.2	-1.7%
		change from No Build					-0.3	-2.4%			-0.4	-2.9%
6		AWD Passenger Vehicle VMT/Employee	26.2		27.1		26.5		26.8		26.0	
		change from 2020			90.2%	3.4%	24.3%	0.9%	54.2%	2.1%	-24.6%	-0.9%
		change from No Build					-0.7	-2.4%			-0.8	-2.9%
7		Single Occupant Vehicle (SOV) Percent of Person Trips	44.3%		43.7%		43.2%		43.7%		42.8%	

Metro

2023 Regional Transportation Plan (RTP) Update

System Performance Measures for Total Region* Trips

Preliminary draft - subject to refinement

* includes Clackamas, Multnomah, Washington and Clark counties

4/12/23

		2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
8	Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	55.7%		56.3%		56.8%		56.3%		57.2%	
9	AWD Average Trip Length (miles)	5.3		5.3		5.3		5.3		5.3	
Passenger Vehicle Data - PM 2 Hour Peak											
1	*PM 2-HR Passenger Vehicle Average Travel Time (minutes)*	13.8		14.2		13.8		14.7		14.2	
2	*PM 2-HR Average Passenger Vehicle Travel Speed (miles per hour)*	30.8		29.8		30.4		28.6		29.5	
5	PM 2-HR Passenger Vehicle Hours	178,309		207,947		199,552		246,836		234,504	
Passenger Vehicle Data - Midday 1 Hour											
1	MD 1-HR Passenger Vehicle Average Travel Time (minutes)	11.8		12.1		11.9		12.6		12.2	
2	MD 1-HR Average Passenger Vehicle Travel Speed (miles per hour)	32.5		31.9		32.2		30.5		31.3	
5	MD 1-HR Passenger Vehicle Hours	63,046		72,792		70,634		88,166		84,132	
Freight Data - Average Weekday (AWD)											
1	AWD Total Truck Trips	736,537		805,854		809,918		909,829		919,990	
	change from 2020			69,317	9.4%	73,381	10.0%	173,292	23.5%	183,453	24.9%
	change from No Build					4,064	0.5%			10,161	1.1%
2	*AWD Truck Average Trip Length (miles)*	8.2		8.5		8.5		8.8		8.8	
2	5-6p Truck Hours	3,244		3,742		3,742		4,490		4,462	
Freight Data - PM 2 Hour Peak											
1	PM 2-HR Truck Average Travel Time (minutes)	12.9		13.8		13.7		15.0		14.6	
2	PM 2-HR Truck Hours	7,756		9,013		8,966		10,990		10,763	
Freight Data - Midday 1 Hour											
1	MD 1-HR Truck Average Travel Time (minutes)	12.1		12.8		12.5		13.8		13.3	
2	MD 1-HR Truck Hours	7,929		8,985		8,855		10,796		10,472	
1	*1pm - 3pm Truck Hours*	14,813		16,890		16,815		20,764		20,419	
	change from 2020			2,077	14.0%	2,001	13.5%	5,951	40.2%	5,605	37.8%
Transit Data											
1	AWD Total Transit Trips (originating riders)	277,691		340,740		352,042		427,295		492,601	
	change from 2020			63,049	22.7%	74,351	26.8%	149,605	53.9%	214,910	77.4%
	change from No Build					11,302	3.3%			65,306	15.3%
2	Transit Percent of Person Trips	3.3%		3.5%		3.6%		3.8%		4.4%	
Pedestrian Data											
1	AWD Total Walk Trips (does not include walk trips to transit)	610,182		683,047		686,687		795,944		816,932	
	change from 2020			72,865	11.9%	76,506	12.5%	185,762	30.4%	206,750	33.9%
	change from No Build					3,640	0.5%			20,988	2.6%
2	Walk Percent of Person Trips	7.2%		7.1%		7.1%		7.1%		7.2%	
Bicycle Data											
1	AWD Total Bike Trips	261,206		295,132		299,103		352,915		358,100	
	change from 2020			33,926	13.0%	37,897	14.5%	91,709	35.1%	96,894	37.1%
	change from No Build					3,972	1.3%			5,184	1.5%
2	Bike Percent of Person Trips	3.1%		3.0%		3.1%		3.1%		3.2%	
3	AWD Bike Miles Traveled (BMT)	852,085		987,529		1,020,384		1,271,793		1,295,897	
4	AWD BMT/Capita	0.36		0.37		0.38		0.41		0.42	

Mode Share (work and non-work person trips)

Preliminary draft - subject to refinement 4/12/23

AWD Trips by Mode - Region

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	3,780,051	44.3%	4,227,062	43.7%	4,185,101	43.2%	4,925,126	43.7%	4,824,465	42.8%
work	1,655,272	69.8%	1,795,513	69.2%	1,771,301	68.2%	2,098,064	68.6%	2,044,888	66.9%
non-work	2,124,779	34.5%	2,431,549	34.3%	2,413,800	34.1%	2,827,062	34.4%	2,779,577	33.8%
Shared Ride	3,324,315	39.0%	3,815,802	39.4%	3,839,466	39.7%	4,411,213	39.1%	4,426,773	39.3%
work	291,625	12.3%	322,686	12.4%	334,282	12.9%	379,502	12.4%	393,520	12.9%
non-work	3,032,690	49.2%	3,493,116	49.3%	3,505,184	49.5%	4,031,711	49.1%	4,033,253	49.1%
Transit	277,691	3.3%	340,740	3.5%	352,042	3.6%	427,295	3.8%	492,601	4.4%
work	143,681	6.1%	169,988	6.5%	177,799	6.8%	209,504	6.9%	241,782	7.9%
non-work	134,010	2.2%	170,752	2.4%	174,243	2.5%	217,792	2.7%	250,819	3.1%
Walk	610,182	7.2%	683,047	7.1%	686,687	7.1%	795,944	7.1%	816,932	7.2%
work	175,338	7.4%	188,571	7.3%	190,549	7.3%	222,488	7.3%	228,873	7.5%
non-work	434,844	7.1%	494,476	7.0%	496,139	7.0%	573,456	7.0%	588,059	7.2%
Bike	261,206	3.1%	295,132	3.0%	299,103	3.1%	352,915	3.1%	358,100	3.2%
work	106,970	4.5%	119,341	4.6%	122,193	4.7%	148,304	4.8%	148,781	4.9%
non-work	154,236	2.5%	175,791	2.5%	176,910	2.5%	204,611	2.5%	209,319	2.5%
School Bus	311,922	3.7%	353,849	3.7%	353,908	3.7%	399,401	3.5%	399,604	3.5%
Total Person Trips	8,531,494		9,677,219		9,677,316		11,270,650		11,270,675	
Total Work Trips	2,372,886		2,596,099		2,596,123		3,057,861		3,057,844	
Total Non-Work Trips	6,158,608		7,081,120		7,081,193		8,212,788		8,212,831	
Non-SOV trips*	4,473,394	**54.2%**	5,134,720	**54.8%**	5,177,298	**55.3%**	5,987,367	**54.9%**	6,094,405	**55.8%**
Bike + Walk + Transit*	1,149,079	**13.9%**	1,318,918	**14.1%**	1,337,832	**14.3%**	1,576,154	**14.4%**	1,667,632	**15.3%**
% PM-2hr Work Trips		**37.6%**		**36.4%**		**36.4%**		**36.8%**		**36.8%**
% PM-2hr Non-Work Trips		**62.4%**		**63.6%**		**63.6%**		**63.2%**		**63.2%**

*Does not include School Bus trips in calculations

AWD Trips by Mode - MPA

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	2,728,519	43.5%	2,989,337	42.7%	2,974,298	42.4%	3,433,532	42.4%	3,372,669	41.6%
work	1,180,317	67.4%	1,246,842	66.4%	1,241,207	65.8%	1,427,343	65.4%	1,400,442	64.0%
non-work	1,548,202	34.3%	1,742,495	34.0%	1,733,091	33.8%	2,006,189	33.9%	1,972,227	33.3%
Shared Ride	2,408,970	38.4%	2,723,887	38.9%	2,738,666	39.0%	3,122,629	38.6%	3,124,995	38.5%
work	205,673	11.7%	223,374	11.9%	228,135	12.1%	259,154	11.9%	263,870	12.1%
non-work	2,203,298	48.8%	2,500,513	48.8%	2,510,531	48.9%	2,863,475	48.4%	2,861,126	48.3%
Transit	255,159	4.1%	305,960	4.4%	313,925	4.5%	387,950	4.8%	440,270	5.4%
work	125,559	7.2%	146,874	7.8%	152,218	8.1%	183,353	8.4%	207,033	9.5%
non-work	129,601	2.9%	159,086	3.1%	161,707	3.2%	204,597	3.5%	233,237	3.9%
Walk	471,979	7.5%	525,511	7.5%	528,593	7.5%	615,643	7.6%	632,862	7.8%
work	145,235	8.3%	154,538	8.2%	156,150	8.3%	180,469	8.3%	186,009	8.5%
non-work	326,744	7.2%	370,973	7.2%	372,443	7.3%	435,174	7.4%	446,853	7.5%
Bike	232,420	3.7%	262,539	3.7%	265,267	3.8%	313,554	3.9%	317,282	3.9%
work	95,443	5.4%	106,080	5.6%	107,850	5.7%	131,222	6.0%	130,791	6.0%
non-work	136,977	3.0%	156,460	3.1%	157,418	3.1%	182,332	3.1%	186,491	3.1%
School Bus	202,825	3.2%	229,275	3.3%	229,338	3.3%	260,210	3.2%	260,415	3.2%
Total Person Trips	6,270,685		7,002,412		7,015,726		8,097,302		8,109,538	
Total Work Trips	1,752,226		1,877,707		1,885,560		2,181,541		2,188,145	
Total Non-Work Trips	4,518,459		5,124,705		5,130,166		5,915,761		5,921,394	
Non-SOV trips*	3,368,528	**55.2%**	3,817,897	**56.1%**	3,846,451	**56.4%**	4,439,776	**56.4%**	4,515,409	**57.2%**
Bike + Walk + Transit*	959,558	**15.7%**	1,094,010	**16.1%**	1,107,785	**16.2%**	1,317,147	**16.7%**	1,390,414	**17.6%**
% PM-2hr Work Trips		**37.7%**		**36.4%**		**36.5%**		**36.6%**		**36.6%**
% PM-2hr Non-Work Trips		**62.3%**		**63.6%**		**63.5%**		**63.4%**		**63.4%**

*Does not include School Bus trips in calculations

AWD Trips by Mode - City of Portland

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	831,044	37.7%	864,195	37.0%	864,565	36.9%	906,881	35.6%	893,809	35.0%
work	331,824	54.3%	332,878	53.2%	333,869	52.8%	345,363	50.1%	340,590	49.1%
non-work	499,220	31.4%	531,316	31.1%	530,696	31.0%	561,518	30.3%	553,219	29.8%
Shared Ride	779,389	35.4%	824,203	35.3%	827,953	35.3%	870,590	34.2%	865,808	33.9%
work	62,608	10.2%	64,359	10.3%	65,187	10.3%	68,942	10.0%	68,679	9.9%
non-work	716,781	45.1%	759,844	44.4%	762,765	44.5%	801,649	43.2%	797,129	42.9%
Transit	154,020	7.0%	173,908	7.4%	176,264	7.5%	225,630	8.9%	247,655	9.7%
work	67,597	11.1%	71,220	11.4%	72,992	11.6%	90,958	13.2%	99,781	14.4%
non-work	86,423	5.4%	102,687	6.0%	103,271	6.0%	134,671	7.3%	147,874	8.0%
Walk	256,207	11.6%	277,907	11.9%	280,285	11.9%	321,073	12.6%	325,726	12.8%
work	87,876	14.4%	92,096	14.7%	93,346	14.8%	107,029	15.5%	108,778	15.7%
non-work	168,331	10.6%	185,811	10.9%	186,938	10.9%	214,044	11.5%	216,948	11.7%
Bike	156,427	7.1%	171,385	7.3%	172,865	7.4%	198,224	7.8%	198,132	7.8%
work	61,239	10.0%	65,619	10.5%	66,416	10.5%	77,440	11.2%	76,330	11.0%
non-work	95,188	6.0%	105,766	6.2%	106,449	6.2%	120,784	6.5%	121,802	6.6%
School Bus	36,214	1.6%	36,236	1.6%	36,167	1.5%	36,048	1.4%	35,915	1.4%
Total Person Trips	2,202,047		2,336,043		2,346,157		2,545,551		2,553,603	
Total Work Trips	611,144		626,173		631,811		689,733		694,158	
Total Non-Work Trips	1,590,903		1,709,870		1,714,346		1,855,818		1,859,444	
Non-SOV trips*	1,346,043	**61.8%**	1,447,402	**62.6%**	1,457,366	**62.8%**	1,615,517	**64.0%**	1,637,321	**64.7%**
Bike + Walk + Transit*	566,654	**26.0%**	623,200	**27.0%**	629,413	**27.1%**	744,927	**29.5%**	771,513	**30.5%**
% PM-2hr Work Trips		**37.5%**		**36.4%**		**36.5%**		**36.7%**		**36.8%**
% PM-2hr Non-Work Trips		**62.5%**		**63.6%**		**63.5%**		**63.3%**		**63.2%**

*Does not include School Bus trips in calculations

Mode Share (work and non-work person trips)

AWD Trips by Mode - Urban Clackamas County

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	268,575	43.3%	302,943	42.3%	301,053	42.0%	411,028	42.3%	403,961	41.6%
work	101,705	74.0%	108,073	72.9%	107,607	72.4%	141,845	73.8%	139,604	72.5%
non-work	166,870	34.6%	194,870	34.3%	193,446	34.0%	269,183	34.5%	264,357	33.9%
Shared Ride	244,135	39.4%	286,775	40.0%	288,424	40.2%	392,207	40.4%	392,301	40.4%
work	15,843	11.5%	17,208	11.6%	17,674	11.9%	22,402	11.7%	23,086	12.0%
non-work	228,292	47.3%	269,567	47.4%	270,750	47.7%	369,805	47.4%	369,215	47.4%
Transit	4,492	0.7%	6,162	0.9%	6,251	0.9%	6,919	0.7%	8,481	0.9%
work	1,651	1.2%	2,448	1.7%	2,532	1.7%	2,593	1.3%	3,099	1.6%
non-work	2,841	0.6%	3,714	0.7%	3,719	0.7%	4,326	0.6%	5,382	0.7%
Walk	57,471	9.3%	67,793	9.5%	68,332	9.5%	86,975	8.9%	91,264	9.4%
work	14,323	10.4%	15,873	10.7%	16,079	10.8%	19,251	10.0%	20,249	10.5%
non-work	43,149	8.9%	51,920	9.1%	52,253	9.2%	67,723	8.7%	71,015	9.1%
Bike	11,028	1.8%	13,336	1.9%	13,602	1.9%	17,704	1.8%	18,769	1.9%
work	3,906	2.8%	4,545	3.1%	4,728	3.2%	6,067	3.2%	6,418	3.3%
non-work	7,122	1.5%	8,791	1.5%	8,875	1.6%	11,637	1.5%	12,351	1.6%
School Bus	37,862	6.1%	43,850	6.1%	43,622	6.1%	61,600	6.3%	61,284	6.3%
Total Person Trips	619,852		716,329		716,797		971,925		971,574	
Total Work Trips	137,428		148,148		148,621		192,158		192,456	
Total Non-Work Trips	482,424		568,181		568,176		779,768		779,117	
Non-SOV trips*	317,126	**54.1%**	374,067	**55.3%**	376,609	**55.6%**	503,805	**55.1%**	510,815	**55.8%**
Bike + Walk + Transit*	72,991	**12.5%**	87,291	**12.9%**	88,186	**13.0%**	111,597	**12.2%**	118,514	**13.0%**
% PM-2hr Work Trips		**30.8%**		**28.9%**		**29.0%**		**27.8%**		**27.8%**
% PM-2hr Non-Work Trips		**69.2%**		**71.1%**		**71.0%**		**72.2%**		**72.2%**

*Does not include School Bus trips in calculations

AWD Trips by Mode - Urban Washington County

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	764,161	45.4%	872,891	44.3%	874,566	44.3%	995,695	44.6%	984,717	44.2%
work	320,998	74.7%	351,838	73.4%	352,745	73.3%	407,037	73.4%	401,898	72.5%
non-work	443,164	35.4%	521,053	35.0%	521,821	34.9%	588,657	35.1%	582,819	34.8%
Shared Ride	658,958	39.2%	785,773	39.9%	787,785	39.9%	885,124	39.7%	882,259	39.6%
work	50,879	11.8%	57,406	12.0%	57,688	12.0%	66,924	12.1%	66,918	12.1%
non-work	608,079	48.6%	728,368	48.9%	730,096	48.9%	818,200	48.8%	815,341	48.7%
Transit	17,048	1.0%	31,466	1.6%	32,006	1.6%	36,437	1.6%	40,680	1.8%
work	7,574	1.8%	15,122	3.2%	15,649	3.2%	16,589	3.0%	18,614	3.4%
non-work	9,474	0.8%	16,344	1.1%	16,357	1.1%	19,848	1.2%	22,065	1.3%
Walk	126,360	7.5%	143,479	7.3%	143,587	7.3%	164,586	7.4%	171,425	7.7%
work	36,475	8.5%	39,108	8.2%	39,222	8.1%	45,121	8.1%	47,529	8.6%
non-work	89,886	7.2%	104,371	7.0%	104,365	7.0%	119,465	7.1%	123,896	7.4%
Bike	34,217	2.0%	40,788	2.1%	40,812	2.1%	47,807	2.1%	49,666	2.2%
work	14,063	3.3%	16,196	3.4%	16,214	3.4%	19,161	3.5%	19,519	3.5%
non-work	20,153	1.6%	24,592	1.6%	24,598	1.6%	28,645	1.7%	30,147	1.8%
School Bus	90,219	5.4%	106,990	5.4%	106,967	5.4%	113,273	5.1%	113,157	5.1%
Total Person Trips	1,682,347		1,970,360		1,974,590		2,231,626		2,229,609	
Total Work Trips	429,988		479,670		481,518		554,832		554,478	
Total Non-Work Trips	1,252,359		1,490,689		1,493,072		1,676,794		1,675,132	
Non-SOV trips*	836,583	**52.3%**	1,001,506	**53.4%**	1,004,189	**53.4%**	1,133,953	**53.2%**	1,144,029	**53.7%**
Bike + Walk + Transit*	177,625	**11.1%**	215,732	**11.5%**	216,405	**11.5%**	248,829	**11.7%**	261,770	**12.3%**
% PM-2hr Work Trips		**34.9%**		**33.5%**		**33.5%**		**34.1%**		**34.1%**
% PM-2hr Non-Work Trips		**65.1%**		**66.5%**		**66.5%**		**65.9%**		**65.9%**

*Does not include School Bus trips in calculations

AWD Trips by Mode - East Multnomah County

	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
	trips	share	trips	share	trips	share	trips	share	trips	share
Drive Alone	123,462	40.9%	137,984	40.6%	138,126	40.6%	165,322	41.5%	163,500	41.2%
work	39,762	73.1%	44,193	70.7%	44,396	70.8%	55,897	71.7%	55,413	71.1%
non-work	83,700	33.9%	93,791	33.8%	93,730	33.8%	109,425	34.1%	108,087	33.9%
Shared Ride	120,839	40.1%	138,305	40.6%	138,226	40.6%	160,807	40.3%	159,414	40.1%
work	6,075	11.2%	7,081	11.3%	7,126	11.4%	9,045	11.6%	9,021	11.6%
non-work	114,765	46.4%	131,224	47.2%	131,100	47.2%	151,761	47.3%	150,393	47.1%
Transit	3,345	1.1%	5,639	1.7%	5,504	1.6%	5,548	1.4%	6,299	1.6%
work	1,113	2.0%	2,617	4.2%	2,565	4.1%	2,342	3.0%	2,560	3.3%
non-work	2,232	0.9%	3,022	1.1%	2,938	1.1%	3,206	1.0%	3,739	1.2%
Walk	26,612	8.8%	30,292	8.9%	30,314	8.9%	35,255	8.8%	36,166	9.1%
work	5,228	9.6%	6,059	9.7%	6,085	9.7%	7,408	9.5%	7,638	9.8%
non-work	21,384	8.6%	24,233	8.7%	24,229	8.7%	27,847	8.7%	28,528	8.9%
Bike	8,150	2.7%	9,543	2.8%	9,550	2.8%	11,117	2.8%	11,415	2.9%
work	2,179	4.0%	2,561	4.1%	2,573	4.1%	3,229	4.1%	3,271	4.2%
non-work	5,971	2.4%	6,983	2.5%	6,978	2.5%	7,889	2.5%	8,144	2.6%
School Bus	20,485	6.8%	21,491	6.3%	21,405	6.3%	23,454	5.9%	23,337	5.9%
Total Person Trips	301,617		340,277		340,222		398,702		397,180	
Total Work Trips	54,357		62,512		62,746		77,920		77,903	
Total Non-Work Trips	247,259		277,765		277,477		320,782		319,278	
Non-SOV trips*	158,946	**56.3%**	183,780	**57.1%**	183,594	**57.1%**	212,726	**56.3%**	213,293	**56.6%**
Bike + Walk + Transit*	38,107	**13.5%**	45,475	**14.1%**	45,368	**14.1%**	51,920	**13.7%**	53,880	**14.3%**
% PM-2hr Work Trips		**25.6%**		**26.0%**		**26.1%**		**27.5%**		**27.6%**
% PM-2hr Non-Work Trips		**74.4%**		**74.0%**		**73.9%**		**72.5%**		**72.4%**

*Does not include School Bus trips in calculations

Preliminary draft - subject to refinement 4/12/23

Totals are for trips that begin and end within defined area

Region - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	45,090,743	51,448,246	51,198,532	60,069,320	60,127,883
Vehicle Miles Traveled (VMT)	31,259,654	35,365,580	34,506,383	41,079,158	39,868,064
Bicycle Miles Traveled (BMT)	852,085	987,529	1,020,384	1,271,793	1,295,897
Pedestrian Miles Traveled	342,232	382,573	384,569	442,461	454,437
Freight Miles Traveled	6,067,191	6,853,236	6,884,216	8,033,130	8,110,556
Transit Miles Traveled	1,922,302	2,316,600	2,481,834	2,922,604	3,529,649

MPA - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	29,272,160	32,985,175	32,959,395	38,704,987	38,874,972
Vehicle Miles Traveled (VMT)	19,749,327	22,037,188	21,679,951	25,629,428	25,004,277
Bicycle Miles Traveled (BMT)	732,112	850,771	869,750	1,097,199	1,108,464
Pedestrian Miles Traveled	270,171	300,689	302,390	349,134	359,001
Freight Miles Traveled	2,264,335	2,491,115	2,508,933	2,831,693	2,876,636
Transit Miles Traveled	1,668,051	1,962,112	2,066,577	2,498,880	2,951,572

City of Portland - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	6,827,437	7,186,642	7,210,966	7,760,824	7,806,922
Vehicle Miles Traveled (VMT)	4,086,772	4,243,113	4,220,755	4,428,009	4,351,391
Bicycle Miles Traveled (BMT)	410,208	447,694	453,168	523,153	520,171
Pedestrian Miles Traveled	147,177	160,115	161,380	185,647	188,216
Freight Miles Traveled	534,505	563,120	566,097	606,099	613,377
Transit Miles Traveled	656,126	723,441	744,759	920,818	1,037,667

Urban Clackamas County - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	1,873,179	2,172,167	2,152,168	3,078,772	3,070,785
Vehicle Miles Traveled (VMT)	1,326,787	1,522,173	1,483,470	2,162,897	2,106,190
Bicycle Miles Traveled (BMT)	27,332	33,880	35,595	48,587	53,332
Pedestrian Miles Traveled	28,938	34,162	34,473	42,781	45,096
Freight Miles Traveled	94,351	102,156	104,684	113,829	120,324
Transit Miles Traveled	21,815	27,420	29,036	32,038	41,451

Urban Washington County - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	5,549,276	6,726,366	6,749,636	7,758,766	7,789,251
Vehicle Miles Traveled (VMT)	3,935,608	4,708,346	4,716,570	5,447,245	5,422,206
Bicycle Miles Traveled (BMT)	94,982	118,106	118,210	143,648	149,424
Pedestrian Miles Traveled	71,648	81,013	81,078	91,185	95,025
Freight Miles Traveled	305,684	343,919	346,790	401,346	408,594
Transit Miles Traveled	95,848	156,501	162,677	181,663	212,822

East Multnomah County - Total

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	612,733	706,333	706,310	874,246	872,602
Vehicle Miles Traveled (VMT)	408,943	469,745	469,945	590,433	586,155
Bicycle Miles Traveled (BMT)	16,938	20,328	20,343	24,239	24,933
Pedestrian Miles Traveled	16,748	18,983	18,993	21,440	21,989
Freight Miles Traveled	15,995	20,704	20,678	27,766	27,690
Transit Miles Traveled	10,227	13,117	12,974	14,534	17,343

Totals are for trips that begin and end within defined area

Region - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	18.9	19.3	19.2	19.4	19.4
Vehicle Miles Traveled (VMT)	13.1	13.2	12.9	13.3	12.9
Bicycle Miles Traveled (BMT)	0.4	0.4	0.4	0.4	0.4
Pedestrian Miles Traveled	0.1	0.1	0.1	0.1	0.1
Freight Miles Traveled	2.5	2.6	2.6	2.6	2.6
Transit Miles Traveled	0.8	0.9	0.9	0.9	1.1

MPA - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	16.8	17.1	17.0	17.3	17.3
Vehicle Miles Traveled (VMT)	11.3	11.4	11.2	11.4	11.2
Bicycle Miles Traveled (BMT)	0.42	0.44	0.45	0.49	0.49
Pedestrian Miles Traveled	0.16	0.16	0.16	0.16	0.16
Freight Miles Traveled	1.3	1.3	1.3	1.3	1.3
Transit Miles Traveled	1.0	1.0	1.1	1.1	1.3

City of Portland - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	9.8	9.9	9.9	9.9	10.0
Vehicle Miles Traveled (VMT)	5.9	5.9	5.8	5.7	5.6
Bicycle Miles Traveled (BMT)	0.6	0.6	0.6	0.7	0.7
Pedestrian Miles Traveled	0.2	0.2	0.2	0.2	0.2
Freight Miles Traveled	0.8	0.8	0.8	0.8	0.8
Transit Miles Traveled	0.9	1.0	1.0	1.2	1.3

Urban Clackamas County - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	6.1	6.1	6.1	6.3	6.2
Vehicle Miles Traveled (VMT)	4.3	4.3	4.2	4.4	4.3
Bicycle Miles Traveled (BMT)	0.1	0.1	0.1	0.1	0.1
Pedestrian Miles Traveled	0.1	0.1	0.1	0.1	0.1
Freight Miles Traveled	0.3	0.3	0.3	0.2	0.2
Transit Miles Traveled	0.1	0.1	0.1	0.1	0.1

Urban Washington County - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	9.6	9.9	10.0	10.2	10.2
Vehicle Miles Traveled (VMT)	6.8	6.9	7.0	7.1	7.1
Bicycle Miles Traveled (BMT)	0.2	0.2	0.2	0.2	0.2
Pedestrian Miles Traveled	0.1	0.1	0.1	0.1	0.1
Freight Miles Traveled	0.5	0.5	0.5	0.5	0.5
Transit Miles Traveled	0.2	0.2	0.2	0.2	0.3

East Multnomah County - per Capita

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	4.0	4.4	4.4	4.8	4.8
Vehicle Miles Traveled (VMT)	2.7	2.9	2.9	3.2	3.2
Bicycle Miles Traveled (BMT)	0.1	0.1	0.1	0.1	0.1
Pedestrian Miles Traveled	0.1	0.1	0.1	0.1	0.1
Freight Miles Traveled	0.1	0.1	0.1	0.2	0.2
Transit Miles Traveled	0.1	0.1	0.1	0.1	0.1

Preliminary draft - subject to refinement 4/12/23

Totals are for trips that begin and end within defined area

Region - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	37.8	39.4	39.2	39.1	39.2
Vehicle Miles Traveled (VMT)	26.2	27.1	26.5	26.8	26.0
Bicycle Miles Traveled (BMT)	0.7	0.8	0.8	0.8	0.8
Pedestrian Miles Traveled	0.3	0.3	0.3	0.3	0.3
Freight Miles Traveled	5.1	5.3	5.3	5.2	5.3
Transit Miles Traveled	1.6	1.8	1.9	1.9	2.3

MPA - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	29.7	31.4	31.4	32.0	32.1
Vehicle Miles Traveled (VMT)	20.0	21.0	20.6	21.2	20.6
Bicycle Miles Traveled (BMT)	0.7	0.8	0.8	0.9	0.9
Pedestrian Miles Traveled	0.3	0.3	0.3	0.3	0.3
Freight Miles Traveled	2.3	2.4	2.4	2.3	2.4
Transit Miles Traveled	1.7	1.9	2.0	2.1	2.4

City of Portland - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	14.2	14.3	14.3	13.7	13.8
Vehicle Miles Traveled (VMT)	8.5	8.4	8.4	7.8	7.7
Bicycle Miles Traveled (BMT)	0.9	0.9	0.9	0.9	0.9
Pedestrian Miles Traveled	0.3	0.3	0.3	0.3	0.3
Freight Miles Traveled	1.1	1.1	1.1	1.1	1.1
Transit Miles Traveled	1.4	1.4	1.5	1.6	1.8

Urban Clackamas County - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	13.2	14.5	14.4	17.4	17.3
Vehicle Miles Traveled (VMT)	9.3	10.2	9.9	12.2	11.9
Bicycle Miles Traveled (BMT)	0.2	0.2	0.2	0.3	0.3
Pedestrian Miles Traveled	0.2	0.2	0.2	0.2	0.3
Freight Miles Traveled	0.7	0.7	0.7	0.6	0.7
Transit Miles Traveled	0.2	0.2	0.2	0.2	0.2

Urban Washington County - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	18.2	20.4	20.4	20.3	20.4
Vehicle Miles Traveled (VMT)	12.9	14.3	14.3	14.3	14.2
Bicycle Miles Traveled (BMT)	0.3	0.4	0.4	0.4	0.4
Pedestrian Miles Traveled	0.2	0.2	0.2	0.2	0.2
Freight Miles Traveled	1.0	1.0	1.1	1.1	1.1
Transit Miles Traveled	0.3	0.5	0.5	0.5	0.6

East Multnomah County - per Employee

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Miles Traveled (PMT)	11.3	11.0	11.0	10.8	10.8
Vehicle Miles Traveled (VMT)	7.5	7.3	7.3	7.3	7.2
Bicycle Miles Traveled (BMT)	0.3	0.3	0.3	0.3	0.3
Pedestrian Miles Traveled	0.3	0.3	0.3	0.3	0.3
Freight Miles Traveled	0.3	0.3	0.3	0.3	0.3
Transit Miles Traveled	0.2	0.2	0.2	0.2	0.2

Totals are for trips that begin and end within defined area

Region - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	5.3	5.3	5.3	5.3	5.3
Vehicle Average Trip Length	6.0	6.1	6.0	6.1	6.0
Bicycle Average Trip Length	3.3	3.3	3.4	3.6	3.6
Pedestrian Average Trip Length	0.6	0.6	0.6	0.6	0.6
Freight Average Trip Length	8.2	8.5	8.5	8.8	8.8
Transit Average Trip Length	6.9	6.8	7.0	6.8	7.2

MPA - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	4.7	4.7	4.7	4.8	4.8
Vehicle Average Trip Length	5.3	5.3	5.3	5.4	5.4
Bicycle Average Trip Length	3.1	3.2	3.3	3.5	3.5
Pedestrian Average Trip Length	0.6	0.6	0.6	0.6	0.6
Freight Average Trip Length	4.5	4.7	4.7	4.9	4.9
Transit Average Trip Length	6.5	6.4	6.6	6.4	6.7

City of Portland - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	3.1	3.1	3.1	3.0	3.1
Vehicle Average Trip Length	3.6	3.6	3.5	3.5	3.5
Bicycle Average Trip Length	2.6	2.6	2.6	2.6	2.6
Pedestrian Average Trip Length	0.6	0.6	0.6	0.6	0.6
Freight Average Trip Length	2.4	2.4	2.4	2.5	2.5
Transit Average Trip Length	4.3	4.2	4.2	4.1	4.2

Urban Clackamas County - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	3.0	3.0	3.0	3.2	3.2
Vehicle Average Trip Length	3.6	3.6	3.5	3.8	3.8
Bicycle Average Trip Length	2.5	2.5	2.6	2.7	2.8
Pedestrian Average Trip Length	0.5	0.5	0.5	0.5	0.5
Freight Average Trip Length	2.5	2.5	2.6	2.6	2.7
Transit Average Trip Length	4.9	4.4	4.6	4.6	4.9

Urban Washington County - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	3.3	3.4	3.4	3.5	3.5
Vehicle Average Trip Length	3.8	3.9	3.9	4.0	4.0
Bicycle Average Trip Length	2.8	2.9	2.9	3.0	3.0
Pedestrian Average Trip Length	0.6	0.6	0.6	0.6	0.6
Freight Average Trip Length	2.7	2.8	2.8	2.8	2.9
Transit Average Trip Length	5.6	5.0	5.1	5.0	5.2

East Multnomah County - Average Trip Length

	2020 Base	2030 No Build	2030 Constrained	2045 No Build	2045 Constrained
Person Average Trip Length	2.0	2.1	2.1	2.2	2.2
Vehicle Average Trip Length	2.4	2.4	2.4	2.6	2.6
Bicycle Average Trip Length	2.1	2.1	2.1	2.2	2.2
Pedestrian Average Trip Length	0.6	0.6	0.6	0.6	0.6
Freight Average Trip Length	1.7	1.7	1.8	1.8	1.8
Transit Average Trip Length	3.1	2.3	2.4	2.6	2.8

Exhibit A to Ordinance No. 23-1496

Auto Travel Times

Preliminary draft - subject to refinement 4/12/23

Mobility Corridor	Auto travel time (minutes) between locations (walk + in-vehicle time) Origin --> Destination	2020 Base			2030 No Build			2030 Constrained			2045 No Build			2045 Constrained		
		12-1pm	4-5pm	5-6pm	12-1pm	4-5pm	5-6pm	12-1pm	4-5pm	5-6pm	12-1pm	4-5pm	5-6pm	12-1pm	4-5pm	5-6pm
1	CBD to Vancouver CBD (SOV)	24.5	29.4	29.5	25.6	29.8	29.6	22.8	23.7	23.6	27.5	30.7	29.8	23.0	22.8	22.5
1	CBD to Vancouver CBD (HOV)	24.5	24.9	24.9	25.6	25.4	25.2	22.8	23.7	23.6	27.5	25.9	25.3	23.0	22.8	22.5
2	CBD to Tigard	25.0	26.6	26.7	25.8	28.6	28.6	25.2	31.3	31.4	27.1	29.8	29.1	25.7	31.3	30.8
2	Tigard to Tualatin	12.2	12.7	12.6	12.6	13.5	13.4	12.8	13.8	13.7	13.4	14.9	14.3	13.9	14.9	14.6
3	Tigard to Wilsonville	19.9	22.1	22.4	20.6	23.8	24.1	19.8	21.5	21.6	22.1	26.0	25.1	20.6	22.5	21.9
4	*no route specified*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	CBD to Gateway	21.5	24.1	24.3	21.8	24.4	24.4	22.0	24.5	24.4	22.5	24.7	24.3	22.5	24.4	24.2
6	Gateway to Gresham	19.3	19.9	20.0	19.5	20.1	20.2	19.5	20.0	20.1	19.7	20.7	20.9	19.7	20.4	20.5
6	Gateway to Troutdale	18.1	18.7	18.9	18.5	19.1	19.2	19.6	18.5	18.6	19.0	20.1	20.1	19.9	18.8	18.9
7	CBD to PDX	30.5	32.5	32.4	31.0	32.9	32.6	31.3	33.7	33.3	32.3	33.4	32.7	32.7	34.5	34.0
7	Gateway to Vancouver Mall	19.5	20.9	21.1	19.9	21.2	21.2	19.7	20.2	20.2	20.9	22.2	21.9	20.3	24.9	24.8
8	Gateway to Oregon City	23.1	25.5	26.0	24.2	27.9	28.3	22.8	25.8	25.7	26.1	31.3	31.0	24.1	26.5	26.3
9	Oregon City to Canby	16.3	16.5	16.5	16.3	16.8	17.0	16.3	17.8	18.0	16.5	17.4	17.4	16.4	18.0	17.9
10	Tualatin to Oregon City	18.5	22.8	23.6	19.5	24.1	24.8	17.7	19.7	20.1	21.5	26.3	26.1	18.4	21.4	21.6
11	Tigard to Sherwood	18.9	20.9	21.0	18.6	21.7	21.7	18.7	21.6	21.6	20.3	24.0	23.3	20.5	24.6	24.2
12	Beaverton to Washington Square	10.8	11.6	11.5	10.7	11.4	11.3	10.7	11.4	11.3	11.1	11.9	11.7	11.0	11.8	11.6
12	Washington Square to Tigard	8.7	8.9	8.7	8.9	9.2	9.1	8.9	9.1	9.0	9.1	9.5	9.3	9.0	9.1	9.0
12	Beaverton to Tigard	14.1	15.1	15.0	13.9	15.0	15.0	13.7	14.9	14.9	14.4	15.6	15.4	14.2	15.3	15.2
13	CBD to Beaverton	21.9	24.4	24.7	22.7	26.0	26.3	22.7	26.2	26.4	23.3	26.5	26.1	23.4	26.7	26.4
14	Beaverton to Hillsboro	22.2	23.6	23.9	23.0	24.9	25.2	22.9	24.7	24.9	23.7	25.6	25.6	23.2	25.0	25.1
14	Amberglen to Hillsboro	14.9	15.2	15.3	15.1	15.7	15.8	15.1	15.6	15.7	15.5	16.1	16.0	15.3	15.8	15.8
14	CBD to Hillsboro	36.0	38.9	39.4	37.1	41.4	41.8	37.0	41.3	41.7	38.6	42.7	42.2	38.3	42.3	42.0
15	Hillsboro to Forest Grove	16.3	16.6	16.7	16.4	17.0	17.2	16.4	17.0	17.1	16.6	17.7	17.8	16.6	17.6	17.7
16	CBD to Sauvie Island	28.3	28.6	28.4	28.6	29.0	28.8	28.5	29.0	28.7	29.3	30.1	29.6	29.1	30.2	29.5
17	*combined 17 & 18 to cover O-D pair*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Rivergate to I-205/Sandy	22.7	23.0	23.0	22.9	23.2	23.2	22.9	23.3	23.2	23.2	23.6	23.4	23.3	23.4	23.3
19	CBD to Lents	26.1	29.3	29.5	26.9	30.0	30.0	27.6	29.9	29.8	28.1	30.5	30.2	28.1	30.2	29.9
20	Lents to Gresham	22.6	23.3	23.5	22.9	23.7	23.9	22.9	23.6	23.7	23.3	24.6	24.7	23.2	24.0	24.1
21	CBD to Oregon City	34.7	38.4	39.0	35.8	40.8	41.4	36.0	41.8	42.4	37.3	43.5	43.0	37.9	44.9	44.4
22	Milwaukie to Clackamas Town Cente	12.0	12.7	12.7	12.3	13.0	13.0	12.3	13.0	13.0	12.6	13.4	13.3	12.7	13.5	13.3
23	Clackamas Town Center to Happy Va	12.0	12.8	13.0	12.3	13.8	14.0	12.4	13.6	13.8	12.9	14.6	14.8	12.4	13.3	13.4
24	Wood Village to Gresham	10.8	11.1	11.1	10.9	11.2	11.3	10.9	11.2	11.3	11.0	11.6	11.7	11.1	11.5	11.5
24	Gresham to Happy Valley	20.9	21.5	21.6	21.5	22.6	22.7	20.3	21.4	21.7	22.4	24.6	24.7	21.3	22.6	22.7
N/A	Tualatin to Hillsboro	37.8	41.2	41.4	39.1	43.4	43.7	39.0	42.2	42.5	41.1	45.3	44.8	40.7	44.7	44.5

Auto Travel Times

Mobility Corridor	Auto travel time (minutes) between locations (walk + in-vehicle time) Origin --> Destination	2020 Base 12-1pm	2020 Base 4-5pm	2020 Base 5-6pm	2030 No Build 12-1pm	2030 No Build 4-5pm	2030 No Build 5-6pm	2030 Constrained 12-1pm	2030 Constrained 4-5pm	2030 Constrained 5-6pm	2045 No Build 12-1pm	2045 No Build 4-5pm	2045 No Build 5-6pm	2045 Constrained 12-1pm	2045 Constrained 4-5pm	2045 Constrained 5-6pm
1	Vancouver CBD to CBD (SOV)	23.1	22.5	22.1	23.9	23.6	23.0	21.7	20.6	20.4	25.4	25.1	24.1	22.0	21.5	21.1
1	Vancouver CBD to CBD (HOV)	23.1	22.5	22.1	23.9	23.6	23.0	21.7	20.6	20.4	25.4	25.1	24.1	22.0	21.5	21.1
2	Tigard to CBD	24.5	25.8	25.8	25.2	26.4	26.3	24.5	29.2	29.0	26.2	27.4	26.8	25.4	30.2	29.7
2	Tualatin to Tigard	12.4	13.8	13.7	12.9	14.4	14.1	13.1	14.6	14.4	13.9	15.1	14.6	14.5	15.3	15.0
3	Wilsonville to Tigard	20.6	22.5	22.5	21.5	24.1	24.2	20.7	21.9	21.9	23.6	26.4	26.0	21.4	22.6	22.4
4	*no route specified*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	Gateway to CBD	21.7	21.8	21.6	22.1	22.4	22.2	21.8	22.5	22.3	22.8	23.1	22.7	22.0	22.4	22.1
6	Gresham to Gateway	19.4	19.6	19.6	19.6	19.8	19.8	19.6	19.9	19.9	19.9	20.3	20.2	19.9	20.2	20.2
6	Troutdale to Gateway	18.6	18.9	18.9	18.9	19.4	19.3	18.5	18.6	18.6	19.4	20.2	20.1	18.7	18.7	18.7
7	PDX to CBD	30.5	30.5	30.4	31.1	31.2	31.1	30.9	31.9	31.6	32.0	32.3	31.9	31.8	33.2	32.7
7	Vancouver Mall to Gateway	19.3	19.3	19.2	19.6	19.7	19.5	19.3	19.6	19.4	20.4	20.6	20.1	19.6	23.7	23.3
8	Oregon City to Gateway	22.7	24.5	24.6	23.5	25.5	25.5	22.7	24.3	24.1	25.3	27.3	26.9	23.3	25.4	25.1
9	Canby to Oregon City	16.3	16.5	16.5	16.3	16.6	16.7	16.4	17.6	17.6	16.5	17.1	17.1	16.6	18.2	18.1
10	Oregon City to Tualatin	18.6	19.8	20.0	19.6	21.4	21.6	18.2	19.2	19.3	21.8	24.2	23.8	18.8	20.3	20.2
11	Sherwood to Tigard	16.0	17.7	17.7	16.8	18.8	18.8	16.5	19.0	19.0	18.3	20.1	19.9	18.4	20.3	20.3
12	Washington Square to Beaverton	10.6	11.1	11.1	10.8	11.6	11.5	10.8	11.6	11.6	11.1	11.8	11.7	11.0	11.9	11.8
12	Tigard to Washington Square	8.4	8.4	8.3	8.3	8.4	8.3	8.4	8.3	8.3	8.5	8.5	8.5	8.5	8.4	8.4
12	Tigard to Beaverton	14.3	15.2	15.1	14.6	15.7	15.7	14.5	15.5	15.6	15.0	16.2	16.0	14.8	15.9	15.9
13	Beaverton to CBD	22.5	24.8	24.9	23.0	25.1	25.0	23.0	25.4	25.3	23.7	25.5	25.1	23.6	25.8	25.6
14	Hillsboro to Beaverton	22.1	22.9	23.0	22.7	24.2	24.3	22.7	24.0	24.1	23.3	25.3	25.3	22.9	24.6	24.7
14	Hillsboro to Amberglen	14.8	15.0	15.0	15.0	15.5	15.5	15.0	15.3	15.3	15.3	16.1	16.0	15.2	16.0	15.9
14	Hillsboro to CBD	37.2	39.7	40.0	38.2	41.2	41.4	38.1	41.0	41.2	39.8	43.1	42.8	39.2	42.4	42.2
15	Forest Grove to Hillsboro	17.2	17.4	17.4	17.4	17.6	17.6	17.4	17.6	17.6	17.6	17.8	17.8	17.5	17.8	17.8
16	Sauvie Island to CBD	27.5	27.7	27.6	27.7	28.1	27.9	27.6	27.9	27.7	28.2	28.7	28.5	28.1	28.5	28.3
17	*combined 17 & 18 to cover O-D pair i*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	I-205/Sandy to Rivergate	22.7	22.7	22.6	22.9	22.8	22.7	22.8	22.7	22.7	23.3	23.2	23.0	23.2	23.1	23.0
19	Lents to CBD	26.7	27.1	26.9	27.3	27.8	27.6	27.7	28.1	27.8	28.0	28.6	28.1	28.1	28.4	28.0
20	Gresham to Lents	22.2	23.0	23.0	22.9	23.4	23.5	22.8	23.4	23.4	23.3	24.1	24.1	23.2	23.8	23.8
21	Oregon City to CBD	34.4	35.2	35.1	35.3	36.6	36.4	35.7	38.5	38.2	37.0	38.6	38.0	37.5	39.8	39.2
22	Clackamas Town Center to Milwaukie	12.0	12.3	12.2	12.2	12.6	12.5	12.3	12.7	12.6	12.7	13.0	12.9	12.7	13.2	13.0
23	Happy Valley to Clackamas Town Cer	11.9	12.0	11.9	12.2	12.5	12.5	12.3	12.5	12.5	12.8	13.0	13.0	12.4	12.6	12.6
24	Gresham to Wood Village	10.9	11.0	11.0	11.0	11.1	11.1	11.0	11.1	11.1	11.2	11.2	11.2	11.2	11.2	11.1
24	Happy Valley to Gresham	20.9	21.7	21.8	21.6	22.5	22.7	20.5	21.2	21.3	22.6	24.3	24.4	21.4	22.5	22.5
N/A	Hillsboro to Tualatin	37.4	39.2	39.4	37.8	41.0	41.4	37.6	39.8	40.3	39.6	45.1	44.8	39.1	43.7	43.9

Transit Travel Times

Preliminary draft - subject to refinement 4/12/23

Mobility Corridor	Transit travel time (minutes) between locations (walk + wait + in-vehicle time) Origin --> Destination	2020 Base 12-1pm	2020 Base 4-6pm	2030 No Build 12-1pm	2030 No Build 4-6pm	2030 Constrained 12-1pm	2030 Constrained 4-6pm	2045 No Build 12-1pm	2045 No Build 4-6pm	2045 Constrained 12-1pm	2045 Constrained 4-6pm
1	CBD to Vancouver CBD	53.8	35.8	42.4	33.7	39.3	29.2	44.4	35.9	48.8	36.3
2	CBD to Tigard	45.5	34.6	47.9	53.4	48.5	53.4	49.1	54.1	45.1	42.0
2	CBD to Tualatin	51.4	44.9	72.9	64.1	75.3	64.1	75.2	64.1	59.2	63.8
2	Tigard to Tualatin	33.8	30.1	32.0	30.1	33.2	30.1	33.3	30.1	34.6	30.1
3	Tigard to Wilsonville	85.1	50.6	83.7	50.7	84.1	50.7	86.0	50.7	84.2	50.7
4	CBD to Rose Quarter	19.0	17.7	19.0	17.7	19.0	18.1	19.0	18.0	19.0	18.0
5	CBD to Gateway	34.4	33.7	34.4	33.7	34.4	33.7	34.4	33.7	34.4	33.7
6	Gateway to Gresham	35.5	35.5	35.5	33.0	35.5	33.0	35.5	33.0	35.5	33.0
6	Gateway to Troutdale	56.9	54.6	53.1	53.0	53.1	53.0	53.2	53.0	55.3	54.8
7	CBD to PDX	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
7	Gateway to Vancouver Mall	89.8	86.4	87.2	85.5	85.7	81.4	88.2	87.4	80.7	76.5
8	Gateway to Oregon City	70.6	71.7	69.7	71.4	69.7	71.6	70.6	73.8	68.8	72.0
8	Gateway to Clackamas Town Center	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
8	Clackamas Town Center to Oregon City	41.4	42.5	40.5	42.2	40.5	42.3	41.3	44.5	39.6	42.7
9	Oregon City to Canby	58.2	43.4	58.2	43.9	58.3	44.0	58.4	45.9	58.5	45.2
10	Tualatin to Oregon City	104.3	108.4	50.5	55.8	49.7	52.5	54.0	61.0	51.1	56.1
11	Tigard to Sherwood	35.3	35.7	45.3	47.3	45.5	47.3	46.5	50.3	41.7	44.9
11	Tualatin to Sherwood	69.6	47.2	59.1	61.5	58.7	60.9	60.4	64.2	59.6	63.2
12	Beaverton to Washington Square	25.4	25.9	23.7	24.3	23.6	24.2	24.0	25.0	23.2	24.0
12	Washington Square to Tigard	19.2	19.5	17.6	18.1	17.6	18.0	17.8	18.6	17.1	17.7
12	Beaverton to Tigard	32.1	30.4	30.1	30.2	30.0	30.2	30.7	30.4	29.7	30.2
13	CBD to Beaverton	29.4	28.0	29.4	28.7	29.4	28.7	29.4	28.7	29.4	28.7
14	Beaverton to Hillsboro	36.8	33.6	36.5	34.0	36.5	34.0	36.5	34.0	36.5	34.0
14	Amberglen to Hillsboro	41.2	38.0	37.0	37.1	37.0	37.1	37.5	37.5	35.3	35.7
14	CBD to Hillsboro	58.9	55.7	58.6	56.1	58.6	56.1	58.6	56.1	58.6	56.1
15	Hillsboro to Forest Grove	36.3	36.8	36.5	37.2	32.9	33.7	36.7	37.9	33.2	34.3
16	CBD to Sauvie Island	77.6	78.7	--	91.9	--	91.8	--	93.3	--	93.1
16	CBD to St Johns	59.7	58.1	54.9	55.9	55.1	55.8	55.4	56.4	53.8	54.4
17	*no route specified*	--	--	--	--	--	--	--	--	--	--
18	*no route specified*	--	--	--	--	--	--	--	--	--	--
19	CBD to Lents	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4
20	Lents to Gresham	53.0	53.0	53.0	50.5	53.0	50.3	53.0	50.5	53.0	50.3
21	CBD to Oregon City	71.9	65.3	72.8	73.8	72.6	73.9	73.1	76.7	71.3	75.0
22	Milwaukie to Clackamas Town Center	29.1	29.6	28.8	29.1	28.8	29.0	29.1	29.7	27.9	28.4
23	Clackamas Town Center to Happy Valley	38.2	39.2	38.6	40.3	38.7	40.2	39.2	41.3	38.8	39.7
24	Wood Village to Gresham	27.1	23.3	36.0	36.7	35.9	36.7	36.3	37.5	36.1	37.0
24	Gresham to Happy Valley	94.2	93.6	94.6	93.7	94.7	93.7	95.1	94.7	94.7	93.1
24	Gresham to Sandy	47.0	47.3	47.1	47.7	47.1	47.7	47.2	48.3	47.3	48.2

Transit Travel Times

Mobility Corridor	Transit travel time (minutes) between locations (walk + wait + in-vehicle time) Origin --> Destination	2020 Base		2030 No Build		2030 Constrained		2045 No Build		2045 Constrained	
		12-1pm	4-6pm	12-1pm	4-6pm	12-1pm	4-6pm	12-1pm	4-6pm	12-1pm	4-6pm
1	Vancouver CBD to CBD	53.3	35.3	51.5	31.7	48.7	29.3	53.5	34.1	47.6	34.9
2	Tigard to CBD	44.5	50.2	48.7	53.1	49.2	53.3	49.7	53.6	44.8	41.7
2	Tualatin to CBD	51.5	57.4	80.8	64.3	81.6	64.3	82.8	64.3	58.9	62.0
2	Tualatin to Tigard	40.0	30.0	31.8	30.1	32.6	30.1	33.2	30.0	33.9	30.0
3	Wilsonville to Tigard	91.3	56.3	84.4	56.3	84.4	56.3	87.0	56.4	84.7	56.3
4	Rose Quarter to CBD	17.4	16.2	17.3	16.7	17.3	16.7	17.3	16.7	17.2	16.4
5	Gateway to CBD	31.9	30.8	31.9	31.4	31.9	31.4	31.9	31.4	31.9	31.4
6	Gresham to Gateway	35.5	34.0	35.5	33.0	35.5	33.0	35.5	33.0	35.5	33.0
6	Troutdale to Gateway	56.2	55.4	54.7	54.5	54.7	54.5	54.7	54.4	54.7	54.5
7	PDX to CBD	49.2	46.7	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2
7	Vancouver Mall to Gateway	94.5	88.1	89.0	86.5	88.8	84.6	89.8	88.6	82.7	78.2
8	Oregon City to Gateway	70.8	71.3	69.7	70.5	69.8	70.6	70.3	71.5	68.8	70.2
8	Clackamas Town Center to Gateway	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
8	Oregon City to Clackamas Town Center	41.4	41.9	40.3	41.0	40.4	41.2	40.9	42.0	39.4	40.7
9	Canby to Oregon City	58.8	44.1	58.9	44.4	59.0	44.6	59.1	45.4	59.4	45.4
10	Oregon City to Tualatin	110.2	100.4	50.7	54.2	49.9	51.5	56.2	63.3	53.1	57.2
11	Sherwood to Tigard	45.9	47.7	46.8	49.3	46.6	49.0	48.6	51.3	48.8	51.2
11	Sherwood to Tualatin	77.3	43.3	57.4	58.3	57.3	58.1	58.1	59.1	57.7	58.7
12	Washington Square to Beaverton	24.0	24.5	22.9	23.7	22.9	23.7	23.2	24.2	22.5	23.5
12	Tigard to Washington Square	19.7	19.8	17.1	17.2	17.1	17.2	17.2	17.4	16.7	16.7
12	Tigard to Beaverton	32.1	29.7	29.8	29.7	29.7	29.7	30.2	29.7	29.5	29.7
13	Beaverton to CBD	31.0	29.8	30.0	29.2	30.0	29.2	30.0	29.2	30.0	29.2
14	Hillsboro to Beaverton	37.1	37.1	36.3	33.8	36.3	33.8	36.3	33.8	36.3	33.8
14	Hillsboro to Amberglen	41.7	41.9	36.5	35.5	36.5	35.5	36.8	35.8	34.8	35.0
14	Hillsboro to CBD	60.3	60.2	59.5	57.0	59.5	57.0	59.5	57.0	59.5	57.0
15	Forest Grove to Hillsboro	40.1	40.2	40.7	40.9	36.6	37.2	40.9	41.2	36.8	37.5
16	Sauvie Island to CBD	76.8	77.6	--	88.8	--	88.6	--	89.5	--	89.1
16	St Johns to CBD	58.2	58.0	56.8	56.5	57.0	57.1	57.9	58.1	56.1	53.8
17	*no route specified*	--	--	--	--	--	--	--	--	--	--
18	*no route specified*	--	--	--	--	--	--	--	--	--	--
19	Lents to CBD	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
20	Gresham to Lents	52.8	51.3	52.8	50.3	52.8	50.3	52.8	50.3	52.8	50.3
21	Oregon City to CBD	69.1	66.8	69.0	71.2	68.9	70.0	71.3	73.3	70.1	71.9
22	Clackamas Town Center to Milwaukie	28.9	29.2	28.3	28.1	28.4	28.1	28.7	28.6	27.5	27.7
23	Happy Valley to Clackamas Town Center	37.1	37.2	37.4	37.8	37.5	37.9	38.1	38.3	37.7	38.0
24	Gresham to Wood Village	27.2	24.7	35.8	35.9	35.7	35.8	36.0	36.2	35.9	36.1
24	Happy Valley to Gresham	93.5	93.5	93.8	91.6	93.9	91.8	94.4	92.2	94.0	91.8
24	Sandy to Gresham	45.7	45.8	45.9	45.9	45.8	45.9	46.0	46.1	46.0	46.1

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX J

2023 Regional Transportation Plan

Climate Smart Strategy implementation and monitoring

July 10, 2023

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Metro respects civil rights

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

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

Project website: **oregonmetro.gov/rtp**

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

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PURPOSE

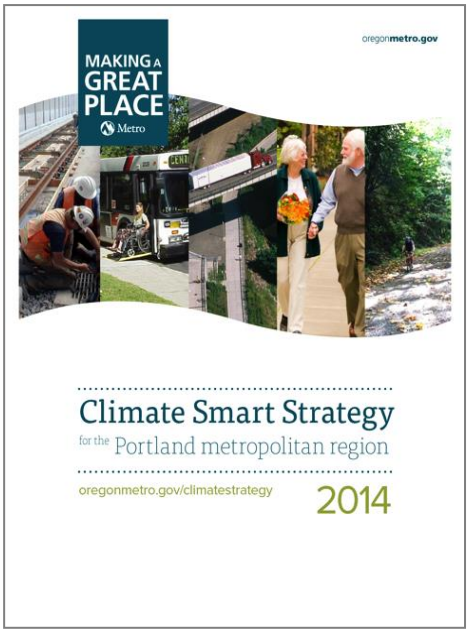
Climate change is the defining challenge of this century. Global climate change poses a growing threat to our communities, our environment and our economy, creating uncertainties for the agricultural, forestry and fishing industries as well as winter recreation. Documented effects include warmer temperatures and rising 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.

Recognizing the significant impact the transportation sector has on overall greenhouse gas emissions, there are a number of actions that can be pursued to lessen the carbon footprint of transportation. This appendix summarizes the key mitigation approaches adopted in the region's Climate Smart Strategy as well as implementation activities since 2014 and monitoring and analysis conducted through the 2023 Regional Transportation Plan update.

Climate Smart Strategy (2014)

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 (light-duty vehicles) by 2035 to meet state targets. Adopted by the Metro Council and JPACT 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 2023 Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy.

As part of the process, Metro, in partnership with the Oregon Department of Transportation, conducted a detailed modeling analysis of various greenhouse gas scenarios and identified the types of transportation-related mitigation strategies that would have the greatest potential for reducing greenhouse gas emissions in the long term. This informed the final strategy.

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 Oregon 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.

Climate Smart Strategies by level of impact

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

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

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.

CLIMATE SMART STRATEGY IMPLEMENTATION AND UPDATES

Strategy implementation

Responsibility for implementation of 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 actions that can be taken by the state, Metro, cities, counties and others to enable the region to monitor performance and report on progress in implementation. Since adoption in 2014, Metro has continued to work with partners to implement the Climate Smart Strategy as follows:

- **Updated the Regional Transportation Plan** (2021-2023), including:
    - Developed updated High Capacity Transit Strategy
    - Updated RTP climate goal, objectives, policies and investment priorities
    - Improved climate modeling tools and methods to align with state Target Rule evaluation methods OAR 660-044) and planning requirements (OAR 660-012)
    - Convened Climate and Transportation Expert Panel with JPACT and Metro Council to learn about national best practices and tools for climate analysis, build a shared understanding of state requirements and set the foundation for regional collaboration to reduce climate pollution through the RTP (June 2022)
- **Convened an internal Metro Climate Task Force** to create a framework to envision, develop, implement and coordinate regional climate justice and resilience strategies across Metro departments that will serve as a foundation for better coordinating and advancing climate action across Metro departments and position the agency to serve as a regional leader in developing a coordinated, regional climate justice and resilience strategy (Fall 2022-July 2023)
- **Sought leadership role and grant administration responsibilities for EPA's Climate Pollution Reduction Planning Grant** that will lead to development of a Priority Climate Action Plan (by March 2024) and Comprehensive Climate Action Plan (by July 2025) for the region; completion of the PCAP will establish eligibility of Metro and partners for federal implementation funding (Jan.-May 2023)
- **Adopted an updated Regional Transportation System Management and Operations (TSMO) Strategy** that further advances Climate Smart Strategy investments and related activities, including traffic signal timing, coordinated traffic incident response and traveler information and increased coordination of transportation operators and transportation assets to effectively and efficiently

manage the region's multimodal transportation networks, optimize operations for reliability and help people connect to more transportation options that are equitable, safe, reliable and climate-friendly (Jan. 2022)52015-2018

- **Adopted 2018 Regional Transportation Plan and supporting Regional Transit Strategy, Regional Transportation Safety Strategy, Regional Freight Strategy and Emerging Technology Strategy** that further advance Climate Smart Strategy investments and related policies and actions to reduce greenhouse gas emissions from all vehicles (Dec. 2018)
- **Initiated activities to support regional efforts to secure needed funding** to build planned transportation investments needed to serve our growing and changing region (2018-ongoing)
- **Adopted new Regional Travel Options Strategy** that further advances Climate Smart Strategy investments and related activities, including trip reduction services for commuters, vanpools and carpools, Safe Routes to Schools and tools to connect people to demand-responsive transit options (May 2018)
- **Prioritized funds allocated through the Regional Flexible Funds Allocation Process** toward more effective Climate Smart investments, including making the most of existing roads and transit, bike and pedestrian safety retrofits and complete street designs, and expanding high capacity transit and enhanced transit service through subsequent regional flexible fund allocation processes (2017-ngoing)
- **Expanded Regional Travel Options Grant Program** criteria and emphasis on funding climate smart investments and actions; the grant program implements the RTP, Climate Smart Strategy and the Regional Travel Options Strategy (2015-ongoing)
- **Advocated for increased funding** for transit operations, transportation investment, transition to cleaner, low-carbon fuels and more fuel-efficient vehicles, state-level carbon pollution reduction programs and other Climate Smart Strategy actions in state and federal legislative agendas (2015-ongoing)
- **Expanded 2040 Planning and Development Grant program** to include funding local efforts aimed at development of Climate Smart policies and actions in local plans (2015-ongoing)
- **Used the Transit Oriented Development Program** to provide funding to stimulate private construction of multi-unit and multi-family housing, affordable housing and mixed-use projects near transit to help implement the 2040 Growth Concept and Climate Smart Strategy (2015-ongoing)

The Climate Smart Strategy and the more recent update to the Regional Transportation Plan presented opportunities for the region to work together to demonstrate leadership

on reducing greenhouse gas emissions while addressing the need to identify funding to implement adopted local and regional plans. The Climate Smart Strategy adopted by JPACT and the Metro Council in 2014 included a set of 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. The Climate Smart Strategy highlighted the need for a diverse set of policies and investments to achieve the GHG emission target. The performance measures give Metro and its partners the ability to get a sense of progress toward the goals in a quick and comprehensive way. It also provides insight into what may be lagging in terms of responses to achieving the GHG target and where further action may be needed. See Table 4 for a full list of performance measures and targets.

Target rule updates

The Oregon state target rules require that Metro (as a federally designated metropolitan planning organization) must assess its GHG target, which is a reduction in per capita GHG emissions from light-duty vehicles within the Portland metropolitan area by 20 percent from 2005 levels by 2035 and 35 percent by 2050.[1] The Climate Smart Strategy was designed to achieve the 2035 target reduction.

The most recent updates to the state GHG target rules are Climate-Friendly and Equitable Communities (CFEC) land use and transportation planning rules that support implementation of the Climate Smart Strategy were adopted by the Land Conservation and Development Commission in July 2022.

The State, recognizing the role that regional transportation plans (RTPs) play in influencing transportation policies, projects, and outcomes, has relied on RTPs to help reduce transportation emissions. The State is responsible for allocating state and federal funds to reduce GHG emissions by making vehicles and fuels cleaner; it assigns regions targets that are designed to make up the gap between those State-led reductions and State goals.

The 2023 Regional Transportation Plan includes actions and strategies consistent with the Climate Smart Strategy to achieve the 2045 GHG target. The targets pertaining to the Portland region are:

[1] OAR Section 660-044-0020 specifically identifies the targets for the Portland Metro Area. 660-044-0000 & 660-044-0005. https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3093

- A 20 percent reduction in per capita greenhouse gas emissions by the year 2035 (the original Climate Smart Strategy)
- A 25 percent reduction by 2040
- A 30 percent reduction by 2045, the planning horizon for 2023 RTP.
- A 35 percent reduction by 2050, the planning horizon for the 2028 RTP.
- Targets for the years 2041-2049 steadily increase from 26 to 34 percent in order to maintain progress toward the 2050 target.[2]

These targets are relative to a 2005 base year. They are based on per capita emissions in order to control for population growth and focus on the impact of transportation policies, programs, and plans on GHG emissions. Regional targets only apply to certain types of emissions and reduction strategies:

- **Targets apply to household travel**, including light duty passenger vehicles (cars, pickup trucks and SUVs) and commercial trucks with a vehicle weight rating of 10,000 pounds or less. The light-duty household travel captures the average daily travel and transportation needs, whether physically traveled by the members of the household or deliveries and miscellaneous commercial travel to their home.[3]
- **Regional targets are focused on reducing vehicle miles traveled.** The State has the primary responsibility for regulating vehicles and fuels sold in Oregon and allocates almost all state and federal funding for clean vehicles and fuels spent in Oregon. As discussed above, the State estimates the impact of State-level vehicle- and fuel-based reductions and then sets regional greenhouse gas targets to fill the remaining gap needed to meet Oregon's emissions goals. The State requires regional GHG analyses to be consistent with the vehicle and fuel assumptions used by the State because it would be double-counting if regions also took credit for vehicle- and fuel-based reductions, which would lead agencies to overestimate progress toward Oregon's climate goals. Because of this, the state has clarified that the updated targets shown above are equivalent to VMT reduction targets, and now allows regions to demonstrate that they are meeting the targets based on forecasted VMT rather than requiring a full GHG analysis. The RTP's progress toward climate goals, and local/regional agencies are only able to count vehicle electrification strategies and other clean vehicle/fuel strategies toward meeting regional targets if those strategies are funded and implemented locally (i.e., above and beyond what is done at the state level).

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[2] 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
[3] *ODOT Scenario Planning Technical Guidelines*

2023 Regional Transportation Plan

The 2023 Regional Transportation Plan includes makes key investments and policy recommendations that continue to implement the Climate Smart Strategy actions. Progress toward these actions is measured by the performance measures identified in the Strategy and included in the regional transportation plans.

The performance monitoring targets are not policy targets, but instead reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation to monitor and assess whether key elements or actions that make up the strategy are being implemented.

The measures and performance monitoring targets are shown in Table 3 of this appendix. Table 3 documents progress implementing the strategy since 2014, using observed data sources to the extent possible for the 2020 Base Year, and expected progress that would be achieved if planned projects included in the 2023 Regional Transportation Plan financially constrained list are fully implemented by 2045.

Specifically, the Climate-Friendly and Equitable Communities target rule setting updated the GHG emission reduction target through a VMT per capita measure. This is the goal that is supported by actions measured in **Table 4.**

The 2023 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 cars and small trucks (light-duty vehicles) for 2045.

Key findings include:

1. **The RTP exceeds most Climate Smart Strategy performance monitoring targets as shown in Table 3.**
    - By 2045, the plan is expected to **exceed the target for transit service hours** resulting from significantly expanded coverage and frequency of transit service throughout the region.
    - By 2045, the plan is expected to **meet the target for households living in walkable mixed-use areas**.
    - By 2045, the plan is expected to **make progress towards the target for trips made biking** each day and **exceed the target for trips made walking** each day.
    - By 2045, the plan is expected to **make progress towards the target for miles of biking each day** per capita and **exceed the target for miles walking each day per capita.**

2. **The RTP makes progress toward the Climate Smart Strategy performance monitoring targets, and is expected to meet state-mandated targets for reductions in household per capita vehicle miles of travel, but not regional policy targets for mode share and completion of the active transportation network, as shown in Chapter 7 of the plan.**
   - By 2045, the plan is expected to **achieve a 36 percent reduction in daily vehicle miles traveled** (VMT) per person from 2005.
   - By 2045, the plan is expected to **complete 69 percent of the planned regional sidewalk network and 66 percent of the planned on-street regional bikeway network**. Significant gaps will remain within 2040 centers and on arterial roadways in the region.
   - By 2045, **the plan is not expected to achieve RTP policy targets to triple biking, walking and transit mode share region-wide.** However, use of these modes grows considerably; collectively the share of travelers using these three modes grows from 15 to 17 percent.
3. **The RTP supports state goals to reduce greenhouse gas emissions and is expected to meet state-mandated targets for reducing per capita greenhouse gas emissions from household light-duty vehicles by 2045.**
   - By 2045, the plan, together with advancements in fleet and technology, is expected to **reduce per capita annual greenhouse gas emissions from light-duty household vehicles by 80.1 percent** (compared to 2020 levels) and **reduce total greenhouse gas emissions from light-duty household vehicles by 76.7 percent** (compared to 2020 levels).
   - By 2045, the plan, together with advancements in fleet and technology, is expected to **reduce VMT per capita of light-duty household vehicles by 39 percent** (compared to 2005 levels) and by 31 percent from (compared to 2020 levels).

The above findings are all described in Chapter 7 of the 2023 RTP.

GREENHOUSE GAS EMISSION ANALYSIS IN THE RTP

Overview

The 2023 Regional Transportation Plan updates key actions and responds to the latest OAR and DLCD Target Rule setting, shifting the emphasis on VMT reduction in support of the GHG reduction targets. The RTP also summarizes progress toward meeting these goals with the monitoring report on the actions identified in the CSS.

History

The greenhouse gas emissions targets were set for the Portland metropolitan region using ODOT's GreenSTEP software tool. The Climate Smart Strategy performance measures and targets provided the preliminary set of actions and set a pathway to achieve the GHG reduction target for the region. The Climate Smart Strategy guides policies and actions that are included in the Regional Transportation Plan and the Urban Growth Report that, together, track existing land use and transportation policies and expected outcomes. The Climate Smart Strategy performance monitoring targets are not policy targets, but instead reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation of the adopted strategy using a metropolitan version of ODOT's GreenSTEP software package. The Climate Smart Strategy performance measures and monitoring targets were adopted with an acknowledgement that they will be reviewed during subsequent updates to the Regional Transportation Plan to account for new information, such as federal transportation performance-based planning rulemaking and changes to the OARs.

GreenSTEP has been replaced with a more robust and current version called VisionEval Regional Strategic Planning Model (VE-RSPM). This RTP updates the analysis by using VE-RSPM to calculate the VMT and GHG reductions for the various RTP scenarios.

MOVES air toxin emission modeling will continue to provide a direct emissions output from the network travel demand model accounting for greenhouse gas emissions and other air toxins. Metro has an agreement with ODEQ to produce a summary of these emissions for the regional transportation plan scenarios after the RTP is adopted.

It is acknowledged that the MOVES emissions are going to produce a different result compared to the greenhouse gas emissions from VE-RSPM. MOVES is based on the volume and speed distribution and estimated fleet composition on each roadway link in the network across each hour of the day while VE-RSPM accounts for the daily travel (and fuel consumption) for each vehicle in the network not tied to any specific network link. Each tool has a different vehicle choice model, uses a different geographic configuration,

and may have other variability in the fuels and energy consumption modeled for the vehicles on the network. For these reasons, a direct comparison between the emissions produced by the two tools is not feasible.

Modeling Tools

VisionEval is a transportation planning and policy analysis tool developed by the U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) for evaluating the transportation related impacts of land use, transportation, and policy decisions. It is an integrated model system that simulates the interactions between land use, transportation, and the environment. The model is designed to help transportation planners and policy makers understand the potential impacts of different transportation and land use scenarios on factors such as travel behavior, vehicle emissions, air quality, and energy consumption. It can be used to evaluate the potential impacts of a wide range of policy and investment decisions, such as the construction of new highways, the expansion of public transportation, or the implementation of land use regulations. It allows for the implementation of different policy scenarios and can be used to evaluate the potential impact of these scenarios on transportation performance, energy consumption, and emissions.

Metro primarily uses VisionEval to assess its regional GHG target in accordance with the state target rule guidance. Previously, the extent of GHG reduction and changes in per capita household VMT in the STS were evaluated using the statewide model GreenSTEP, an earlier form of a strategic model which eventually became the state model in the VisionEval platform (VE State). A regional version of the strategic travel model is called VisionEval Regional Strategic Planning Model (VERSPM). These types of tools account for average daily travel at the household level across a specific geographic region with a detailed accounting of the vehicles, fuels, and miles traveled to estimate the GHG's produced in the model region. Metro's Climate Smart Strategy (CSS) also used the GreenSTEP tool in 2014 to analyze and define the suite of state and regional policies to achieve the GHG reduction targets.

The VisionEval strategic travel model is the preferred tool for evaluating progress toward meeting the DLCD Target Rule GHG reductions.

MODELING THE TARGET RULE

Overview

The latest OAR regarding the GHG emission reduction targets, the Climate-Friendly Equitable Communities (CFEC) rulemaking was adopted in July 2022 and summarizes the extent of the reductions and the types of emissions covered by the rules. The DLCD rule making targets were set at a specific point in time under an agreed set of policy and investment assumptions. Assessing Metro's progress and plan for achieving the GHG targets during each RTP update requires using a consistent approach. That approach includes a consistent definition of the geographic area included and who is counted in that per capita values versus who are excluded from that analysis. The approach also includes the consideration of the state-led policies that were part of the original target rule reduction creation and included in the Oregon Statewide Transportation Strategy (STS).

The STS includes state-led pricing actions, in addition to implementation of clean vehicle and fuel programs and regulations at the state and federal level. The fleet and technology actions cover variables such as the share of zero-emission vehicles, the carbon intensity of fuels, the balance of cars and trucks in the passenger fleet, and vehicle turnover. The state-led pricing-actions in the STS assume that the state will implement extensive changes to how transportation revenues are collected in Oregon, both to replace the gas tax, which is not producing enough revenue to meet Oregon's transportation needs, and to reduce GHG emissions by managing demand for driving and encouraging the use of cleaner modes and vehicles. The STS includes policies such as Pay-As-You-Drive insurance. This isn't so much any new form of pricing, but it converts a fixed cost to a marginal one. Anytime such a change is made, some users financially benefit and some users may see a cost increase.[4]

New revenue mechanisms in the STS include a road user charge that levies per-mile fees on drivers, carbon taxes, and additional road pricing beyond what is currently included in the 2023 RTP. These changes are not reflected in the RTP because they are not yet adopted in state policies or regulations, but the climate analysis for the RTP is allowed to include them because these state-led pricing actions are identified in STS and were assumed when the state set the region's climate targets.[5] The State of Oregon has put

[4] Low mileage drivers typically pay more per mile driven for car insurance as compared to high mileage drivers (dividing the fixed car insurance cost over more miles).
[5] OAR 660-044-0030(4)(a): https://secure.sos.state.or.us/oard/viewSingleRule.action;JSESSIONID_OARD=Pk5WeLsr40n1ZMdFGJr943D9KeHyA

together this website, https://www.oregontransportationemissions.com/pricing to introduce the pricing concepts that are included in the STS.

Figure 1: State of Oregon progress toward implementing state-led pricing (ODOT, DEQ, ODOE, and DLCD)

Pricing, Funding and Markets	2025	2050
Road cost recovery	○	◒
Congestion pricing	◓	◓
Carbon pricing	◒	◓
Other true costs of driving	◒	◒

● meets or exceeds goals ◓ strong progress towards goals ◒ little or no progress towards goals ○ moves away from goals

* = not tracked

Geography

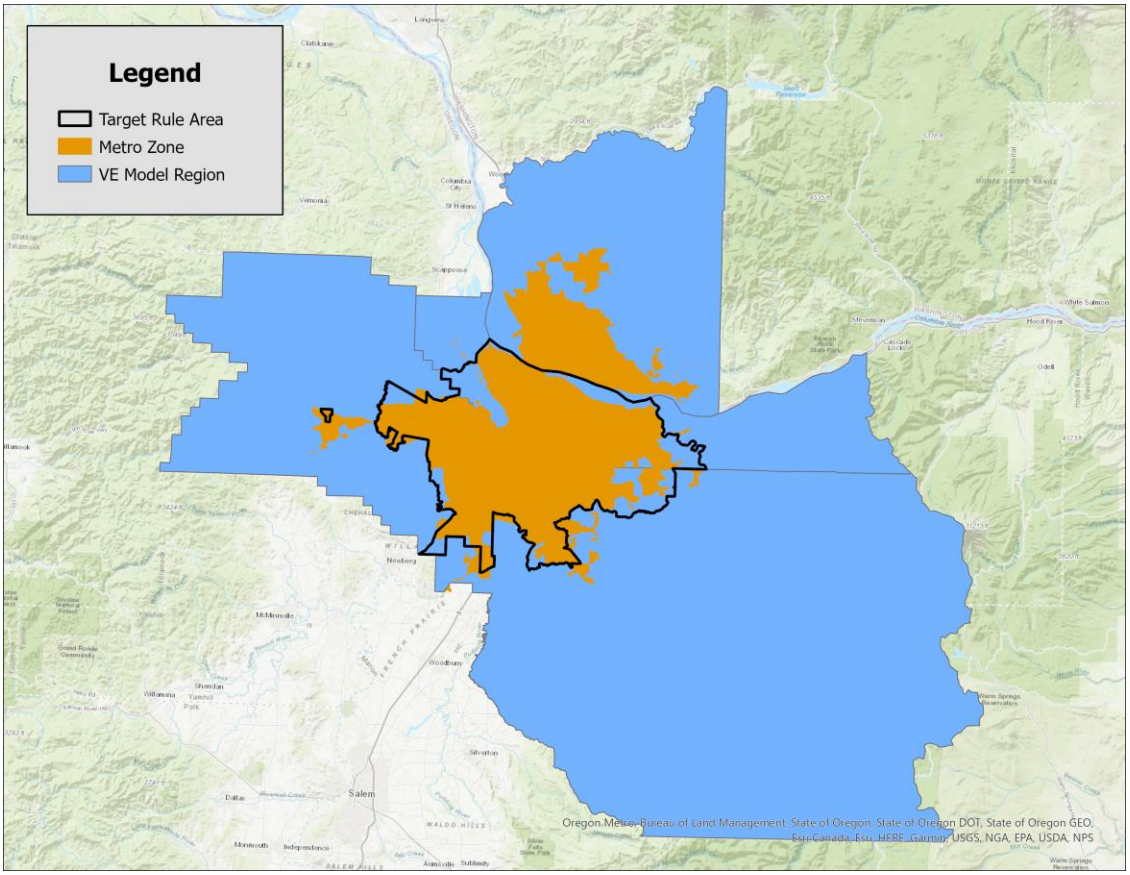
The VisionEval model, like the regional travel demand model (Kate v2.0), covers a wider region to account for regional interactions but the reporting is done only for the households within the reporting boundary shown. Note that the target rule area is intended to include the Urban Growth Boundary (UGB) within the Metropolitan Planning Area by excluding the area in Washington state.

The VisionEval model accounts for the daily travel for a household, regardless of where on the network their actual travel took place. The miles per vehicle are aggregated at the household level, and those households within the reporting area are aggregated. Note, the miles traveled for a household could occur outside of the physical reporting area. However, the GHG emissions and VMT for any household that is located outside of this reporting area (i.e., Vancouver, WA) is excluded from the Target Rule analysis. The VisionEval model accounts for all travel demand for all households in the model region but for the purposes of compliance with the OAR target rules, the travel associated with those households is excluded. This approach in VisionEval differs from the travel behavior accounted for in the Kate travel demand model, which uses on-road link by link aggregation of trips to account for the total GHG produced on a specific set of network links. There is no aggregation to the households or other land uses which are associated with those trips.

7LSgdLuG_bsnXZJvNrXnI8x!-286176765?ruleVrsnRsn=293065

The OAR target rule analysis is centered on the behaviors of households within the Target Rule Area shown in Figure 2.

Figure 2: Model boundaries used within the VisionEval model



While the light-duty vehicle emissions behind the state-mandated targets include local service and delivery vehicles, this type of vehicle activity is produced within VisionEval at the regional scale and is not currently accounted for in Metro's VisionEval target rule analysis and this is an acknowledged source of inconsistency. The analysis using the VisionEval model would require a consistent and valid way to prorate the regional scale of some results (i.e., commercial vehicles and transit vehicles) results down to the specific target rule area of analysis in Figure 2. Given that this limitation exists in both the base and future conditions, the idea is that the per capita changes in these vehicles closely approximate that of the household vehicles. This can be a future point to explore how the Metro VisionEval can produce a sub-regional output for light-duty commercial and transit vehicles.

VisionEval Models

The VisionEval platform supports several model versions, consisting of different sets of inputs and structures. The development of the VisionEval model suitable for the target rule analysis included:

- Updating a core module to improve the consideration of built-form factors including those produced by the national Smart Location Database (SLD) and would be more sensitive to changes in transit service. This update also included estimating the module using 2017 National Household Travel survey data rather than 2009 data. The current SLD inputs were translated for use within the Metro models.
- Introducing a teleworking module to account for future changes in teleworking, or working from home, in their daily travel. A review and analysis of the travel behaviors resulting from differing teleworking rates led to the final recommendation to adopt a future rate of teleworking, in the year 2045, similar to that of teleworking rates observed during the fall of 2022. Roughly 45 percent of full time commuters and about 15 percent full time teleworking, with the remaining 40 percent a hybrid of the two.
- Updating the inputs to reflect existing and planned future conditions in the Metro region. This included core input files such as roadway capacity and lane miles, transit revenue miles and transit service frequency, expected density and the share of households in mixed use areas, fuel taxes, travel demand management programs and participation rates, safety data and crash rates, and ITS and operations programs.
- The 2020 base year was modeled using the updated Metro inputs along with the current adopted state-led vehicles and fuel inputs. This model was compared to available empirical data produced by the Bureau of Transportation Statistics (BTS) Local Area Transportation Characteristics for Households (LATCH). The comparison provided confidence that the updated local model was closely approximating empirical daily household travel for the base 2020 year.

Table 1: VisionEval vs. LATCH validation results

	MIN	1Q	MEDIAN	3Q	MAX	MEAN
BTS LATCH 2017	14.9	34.2	39.3	46.1	57.9	40.0
Validation Model Run (Regional Base Model 2020)	7.5	34.0	41.9	49.9	66.7	41.5

This produced a model adequate for evaluating the conditions in the 2023 RTP in future years. Two versions of the future are created to represent different trajectories based on state-led policy and pricing actions as described above.

- An adopted-plans (AP) model that uses the Metro RTP fiscally constrained inputs, the adopted trajectory for state-led pricing, and the adopted-plan trajectoy for vehicles and fuels. The AP model provides a goal post that can demonstrate anticipated changes over time as a result of currently adopted actions, both at the region and the state level. This scenario is meant only to inform what a future would look like in the absence of changing policies and investments intended to reduce GHG and VMT.
- A target rule model that uses the Metro RTP fiscally constrained inputs, the STS state-led trajectory for state-led pricing, and the STS trajectory for vehicles and fuels. The Climate Smart Strategy and subsequent updates to RTPs, including the 2023 RTP, account for regional actions (investments and policies that can be done at the regional level) while also assessing the effects of the state-led actions. The combination of regional and state actions are what is assessed relative to the state target rule, and whether or not the region is complying with the OAR 660-044 (Targets Rule).

Table 2 outlines key inputs to the Metro Target Rule Model using the regional inputs and the STS state-led inputs.

Table 2: Key greenhouse gas emissions estimation assumptions and VE inputs

Measure and Description	Year	VisionEval RSPM – Metro Target Rule Model (RTP+STS Scenario)
Model version(s)	-	RSPM v3.0 "Next Gen"
Vehicle activity captured	-	VMT from households that live within the MPA boundary regardless of where driving occurs
GHG emissions captured	-	Vehicle operation using the carbon intensity of EV/PHEV electricity consumed in EV/PHEVs and carbon intensity of fossil fuels.

Measure and Description	Year	VisionEval RSPM – Metro Target Rule Model (RTP+STS Scenario)
Vehicles analyzed	-	Light-duty- vehicles only
Fleet mix Calculated from the following VE inputs: azone_lttrk_hh_prop: Proportion of household vehicles that are light trucks by Azone and specified model year. region_comsvc_lttrk_prop: Proportion of commercial service vehicles that are light trucks throughout the model region by model year.	2010	Household: 54.5% passenger car 45.5% light truck Commercial Service: 68.3% light truck 32.7% automobile
	2020	Household: 58% passenger car 42% light truck Commercial Service: 55% light truck 45% automobile
	2030	Household: 63% passenger car 37% light truck Commercial Service: 41% light truck 59% automobile
	2035	Household: 66% passenger car 34% light truck Commercial service: 35% light truck 65% automobile
	2040	Household: 69% passenger car 31% light truck Commercial Service: 35% light truck 65% automobile
	2045	Household: 72% passenger car 28% light truck Commercial Service: 35% light truck 65% automobile
Average vehicle age (Age distributions available upon request) Calculated from VE Outputs: Vehicle, “Age”	2010	8.1 years light-duty vehicle
	2020	7.7 years light-duty vehicle
	2030	7.1 years light-duty vehicle
	2035	6.8 years light-duty vehicle
	2040	6.6 years light-duty vehicle
	2045	6.3 years light-duty vehicle
Fuel mix Calculated from VE RSPM inputs: hh_fuel and comsvc_fuel.	2010	98% gas, 2% diesel
	2020	95% gas, 2% diesel, 3% CNG
	2030	88% gas, 2% diesel, 10% CNG
	2035	79% gas, 1% diesel, 20% CNG

Measure and Description	Year	VisionEval RSPM – Metro Target Rule Model (RTP+STS Scenario)
	2040	69% gas, 1% diesel, 30% CNG
	2045	49% gas, 1% diesel, 50% CNG
Average fuel economy (miles/gallon)	2010	22.2
	2020	32.2
	2030	53.0
Calculated from VE outputs: internal combustion, electric and hybrid engines from Vehicle, "average of MPG" and "MPGe."	2035	62.8
	2040	70.6
	2045	78.4
Fuel carbon intensity	2010	175.2
	2020	140.4
	2030	105.5
Calculated from VE outputs: grams CO2 Equivalent/Mj, from Vehicle, Electricity Carbon Intensity	2035	88.1
	2040	70.7
	2045	53.3
Average GHG emissions rate (Grams CO2 Equivalent/mile)	2010	524
	2020	357
	2030	180
Calculated from VE output: Daily CO2e/DVMT	2035	145
	2040	126
Rates are fleet-wide composites	2045	100

Source: Metro (VE Target Rule Model Results)

RTP AND TARGET RULE RESULTS

The two models, Adopted Plans and the Target Rule Model, are used to demonstrate how the region is meeting the DLCD Target Rule through a mixture of regional and state actions, as allowed in the target rule analysis process. The results indicate that if the region pursue the regional actions (policies and investments) alone with no further action from the state, the region will fail to meet the target rule VMT per capita reductions. On the other hand, the analysis shows that if the state were to fully implement the actions in the STS, the region would exceed the target rule VMT per capita reductions.

Figure 3 shows the VMT per capita values for the two models plus a model result that achieves the target VMT reduction. This target model demonstrates the extent to which state-led actions may be needed for Metro to achieve the target rule.

Figure 3: RTP target rule trajectories

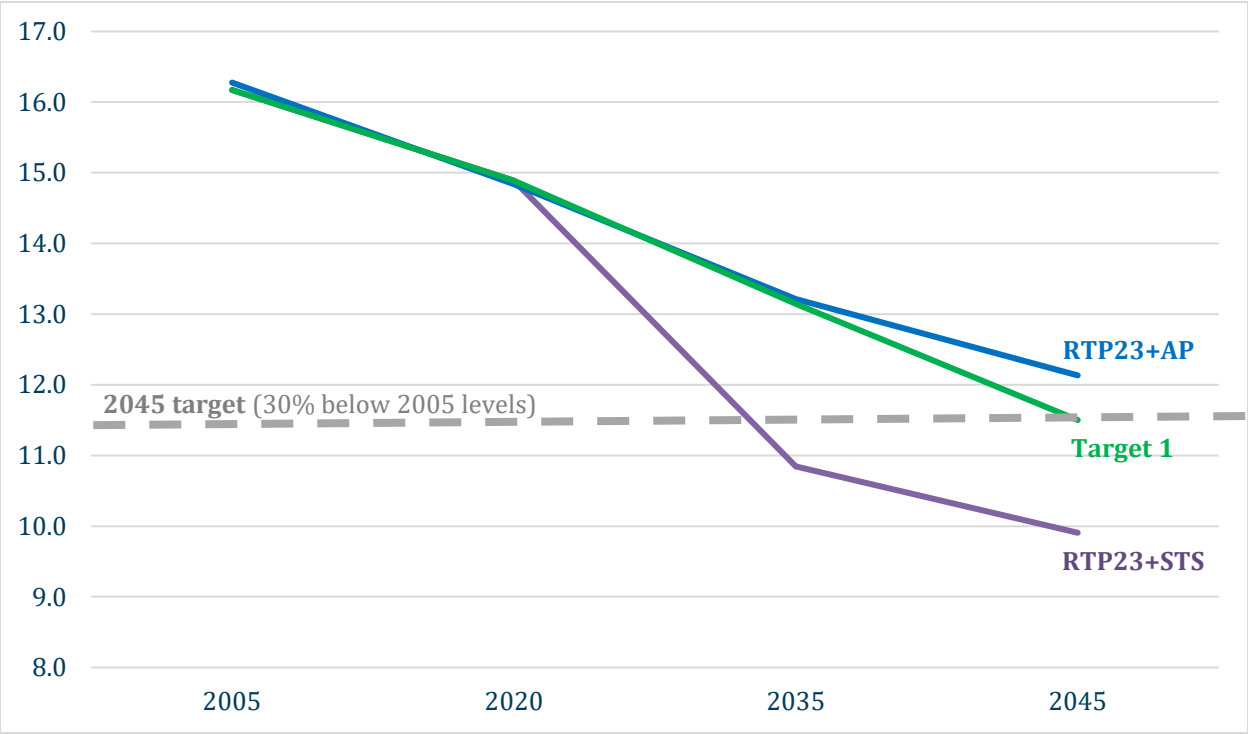


Table 3 shows the three VMT per capita trajectories and the extent to which state-led actions, namely pricing, help achieve the target rule.

- **The RTP23+AP Scenario** reflects minimal state-led actions, specifically only that associated with throughway congestion pricing in the Metro region. This scenario fails to achieve the target rule. This scenario not only has the least VMT per capita reductions, but also the highest GHG of the scenarios because of the current adopted

trajectory for the vehicles and fuels in this model (i.e., slower shift to an electrified transportation fleet).

- **The RTP23+STS Scenario** is the full extent of state-led actions in the target rule model summarized earlier. This model produces the largest reduction in both VMT and GHG per capita with the introduction of pricing and other policies, but also a more significant shift toward electrification of the vehicle fleet.
- **The Target 1 Scenario** summarizes the extent to which state-led pricing and policies are needed to achieve the 11.3 VMT per capita target.

The RTP23 will meet the DLCD VMT per capita target through the mix of regional policies and investments in concert with the state-led actions on pricing. While there is a minimum degree to which state-led actions are needed (i.e., Target 1 scenario), there is a buffer where if the state was not able to achieve the full suite of policies included in the STS, there is still room to achieve the DLCD VMT targets. These results demonstrate that there are multiple paths to meeting regional climate targets.

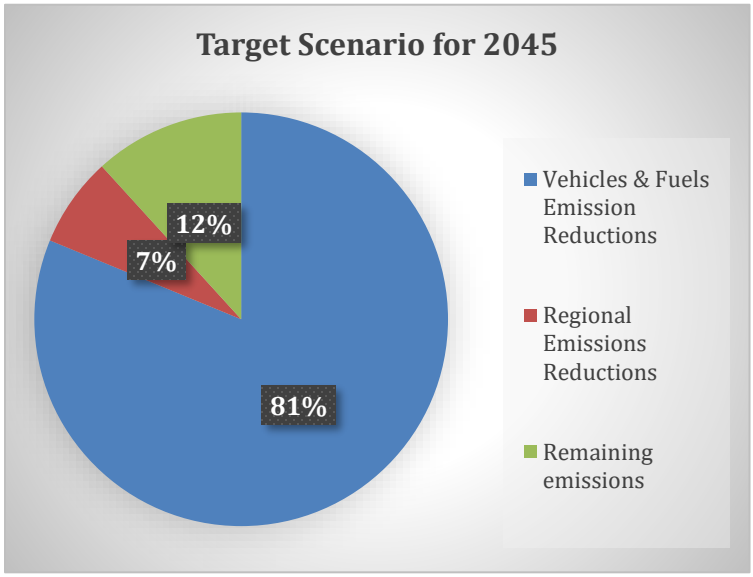
Table 3: Assumptions and results by scenario

	RTP23 + AP	RTP23 + STS scenario	Target 1
Throughway pricing	RTP pricing on portions of I-5 and I-205 averaging $0.11/mi.	STS pricing on the entire throughway and arterial network averaging $0.13/mi. ($0.17/mi. on throughways)	$0.09/mi. on the entire throughway network.
Per-mile fees	None	Maximum allowable STS levels, roughly $0.10/mi.	$0.06/mi.
Transit service	RTP levels of transit service	RTP levels of transit service	RTP levels of transit service
Per capita VMT reductions (vs. 2005 levels)	22%	40%	30%
Meets targets?	No	Yes (exceeds)	Yes (meets)

The RTP23+STS scenario exceeds the DLCD total GHG reduction target of 85.1 percent per capita. It is estimated that by 2045 the RTP23+STS would achieve a 88.1 percent reduction in per capita GHG emissions. Of that total, 81.2 percent are from vehicles and fuels and 7.3 percent from regional emission reductions.

The share of emissions in 2045 for the RTP23+STS scenario are shown in Figure 4.

Figure 4: Target GHG reductions in 2045



Climate Smart Strategy implementation monitoring

To monitor and assess implementation of the Climate Smart Strategy, Metro will continue to use observed data sources and existing regional performance monitoring and reporting processes to the extent possible. These processes include regularly scheduled updates to the Regional Transportation Plan and Urban Growth Report and reporting in response to ORS 197.301 and ORS 197.296. When observed data is not available, data from regional or state models may be reported.

If future assessments find 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.

In addition, Metro staff will monitor future changes to fleet and technology assumptions in collaboration with DLCD, DOE, DEQ and ODOT and continue to improve emissions analysis methods, data and tools through its air quality and climate change program.

Table 4 shows current implementation and performance monitoring results. Metro staff are still working to develop the ability to forecast certain results, and in some cases the table contains interim values based on initial analysis of the 2023 RTP or values that are yet to be determined. Metro staff will continue to consult with DLCD, DOE, DEQ and ODOT on the assumptions and methods used, performance monitoring and results as the 2023 RTP is finalized for adoption.

Table 4. Climate Smart Strategy implementation and performance monitoring

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
1. Implement the 2040 Growth Concept and local adopted land use and transportation plans				
a. Share of households living in a walkable mixed used development in the UGB	26%	37%	29%	37%
b. New residential units built through infill and redevelopment in the UGB[1]	58%	65%	TBD	75%
c. New residential units built on vacant land in the UGB[1]	42%	35%	TBD	25%
d. Acres of urban reserves[1]	Not applicable	12,000	Not applicable	TBD
e. Daily vehicle miles per capita	19	17	15	10
2. Make transit convenient, frequent, accessible and affordable				
a. Daily transit service revenue hours (excluding C-TRAN service hours)	4,900	9,400	7,390	10,192
b. Share of households within 1/4-mile all day frequent transit service	30%	37%	44%	41%
c. Share of low-income households within 1/4-mile all day frequent transit service	39%	49%	74%	82%
d. Share of employment within 1/4-mile all day frequent transit service	41%	52%	64%	67%
3. Make biking and walking safe and convenient				
a(1). Daily trips made walking	505,000	768,000	1,416,311	2,129,413
a(2). Daily trips made biking	179,000	280,000	91,000	121,552
b(1). Per capita biking miles per week	2.1	3.4	1.1	1.3
b(2). Per capita pedestrian miles per week	1.3	1.8	2.8	3.3
c(1 and 2). See 4a(2) and 4a(3) below	See 4a(2) and 4a(3) below			
d(1). New miles of bikeways[2]	623 existing miles	421	626 existing miles	76
d(2). New miles of sidewalks[2]	5072 existing miles	Data not available	TBD	59

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
d(3). New miles of regional trails[2]	229 existing miles	140	247 existing miles	80
4. Make streets and highways safe, reliable				
a(1). Fatal and severe injury crashes - motor vehicles[3]	398	199	433	No forecast data
a(2). Fatal and severe injuries – pedestrians[3]	63	32	78	No forecast data
a(3). Fatal and severe injuries - bicyclists[3]	35	17	26	No forecast data
b. Change in travel time and reliability in regional mobility corridors	Data not available	Not evaluated	Data not available	No forecast data
c. Share of freeway lanes blocking crashes cleared within 90 minutes	Data not available	100%	Data not available	No forecast data
5. Use technology to actively manage the transportation system				
a. Share of arterial delay reduced by traffic management strategies	10%	35%	Data not available	No forecast data
b. Share of regional transportation system covered with system management/TSMO	Data not available	Data not available	Data not available	No forecast data
6. Provide information and incentives to expand the use of travel options				
a. Share of households participating in individual marketing	9%	45%	0.3%	0.6%
b. Share of workforce participating in commuter programs	20%	30%	17%	14%
7. Manage parking to make efficient use of vehicle parking and land dedicated to parking				
a(1). Share of work trips occurring in areas with actively managed parking	13%	30%	TBD	TBD
a(2). Share of non-work trips occurring in areas with actively managed parking	8%	30%	TBD	TBD
8. Support transition to cleaner low carbon fuels, efficient fuels and pay-as-you-go insurance				
a(1). Share of registered passenger cars that are electric or plug-in-hybrid electric	1%	8%	3%	48%

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
a(2). Share of registered light trucks that are electric or plug-in-hybrid electric	1%	2%	2%	9%
b. Share of households using pay-as-you-go insurance	1%	40%	6%	91%
9. Secure adequate funding for transportation investments				
a. Address local, regional, and state transportation funding gap	Not evaluated		Regional funding discussions are ongoing	
10. Demonstrate leadership on climate change				
a. Region-wide annual tons per capita greenhouse gas emissions (MTCO2e) from household light-duty vehicles within the Target Rule area	Not evaluated		2.3	0.36
b. Region-wide annual tons per capita greenhouse gas emissions (MTCO2e) from all vehicles within the Target Rule area	Not evaluated		TBD	

Table Notes:

1. Data is derived from the 2018 Urban Growth Report adopted by the Metro Council in Dec. 2018.
2. Climate Smart Strategy target reflects number of miles of new bikeways, sidewalks and trails for projects in the 2014 RTP. 2023 RTP values reflect number of miles of new bikeways, sidewalks and trails for projects on planned regional networks in the 2023 RTP.
3. Climate Smart Strategy target reflects the 50 percent reduction target adopted in 2014 RTP. The 2023 RTP includes a target of zero fatal and severe injury crashes by 2035. The region does not currently have a safety predictive model to forecast this information, but will track progress toward the target through periodic RTP updates as required by federal transportation performance management requirements. Data shown for 2023 RTP Base Year (2020) reflects the annual average number of fatal and severe injury crashes reported by the Oregon Department of Transportation for the years 2016-2020.

MODEL DEVELOPMENT SUPPORTING DOCUMENTATION

Input re-calculations

Multiple inputs were re-calculated to align with forecasts from ODOT and future projections of land use changes.

Lane miles

The lane miles input was re-calculated to align with ODOT values. ODOT provided HPMS 2020 data. Links were filtered to those with AADT values and aligned with ODOT's own calculations. The 2020 values were adjusted to reflecting the addition of 35 lane miles on freeways by 2045 as reflected in the RTP financially constrained project list. All remaining values were interpolated.

Table 5: Updated lane-mile inputs

Geo	Year	Updated Freeway Lane Miles	Updated Arterial Lane Miles
Metro	2005	538	1867
Metro	2010	549	1934
Metro	2020	577	2090
Metro	2025	584	2114
Metro	2030	591	2138
Metro	2035	597	2154
Metro	2040	602	2171
Metro	2045	607	2188
Metro	2050	613	2205

Land use changes: mixed-use residential

The input showing proportion of households within mixed use zones was updated to reflect changes under the RTP 23 scenario. The proportion was calculated for projected years 2020, 2030, and 2045. Values for intermediate, past, and future years were interpolated from these data points.

Table 6: Updated mixed-use residential results

Year	June 23 Asserted Mixed Use (Average) for the Model Region	Target Rule Area
2005	18%	27%
2010	19%	28%
2020	20%	29%
2025	21%	31%
2030	22%	32%
2035	22%	33%
2040	23%	35%
2045	23%	35%
2050	28%	38%

Transit service

The transit service input uses a Smart Location Database (SLD) variable (D4C) to estimate transit services within one-quarter mile of a transit line. This was developed using transit frequency data provided by TriMet for the region and its transit lines. Historical and 2020 calculated values and then scaled using TriMet's previous estimates.

Table 7: Updated transit service inputs

	Initial Transit Frequency (D4C)	Interim Transit Frequency (D4C)	Updated Transit Frequency (D4C)
Average	251.9	10.2	34.3
Median	215.3	6.7	24.5
Standard Deviation	246.6	13.9	38.6
Min	0	0	0
Max	2566.2	118	302.5

Intersection Density

The intersection density input uses a SLD variable (D3bpo4) to estimate the density of four-leg pedestrian-oriented intersections per square mile. This input was updated using the latest SLD database and the spatial extent of the model.

Table 8: Updated intersection density results

	Original Intersection Density (D3bpo4)	Updated Intersection Density (D3bpo4)
Average	32.7	38.2
Median	17.0	18.3
Standard Deviation	38.5	52.4
Min	0.1	0.0
Max	174.7	347.2

Multimodal module

The multimodal module was originally developed by Portland State University to update the methodology for daily household VMT estimation and improve on the estimation of non-vehicular travel demand. The original module was estimated using the 2009 National Household Travel Survey (NHTS). The module was updated during the spring of 2022 by RSG for use in the Oregon Transportation Plan after evaluating the estimates of daily VMT and non-vehicular PMT relative to more recent travel surveys, namely the 2017 NHTS. The 2017 multimodal module includes new coefficient values for the two core models within the module. The module accounts for additional land use sensitivities in the calculation of daily household VMT including NHTS variables of life cycle and EPA Smart Location Database variables such as population density, mixed use neighborhoods, residential/job mix, worker density, intersection density, and transit accessibility. The module introduces new data to enable safety metrics to be produced as well as person

miles traveled and trip lengths for transit, biking, and walking trips. The multimodal module provides for greater insight into the behavior changes associated with specific network changes, land use changes, and improved sensitivity to the land use/transportation nexus.

Teleworking Module

The teleworking module used within the VisionEval model was originally developed for the Massachusetts Department of Transportation for a statewide scenario planning evaluation of how teleworking affects travel behavior. The module was later used in the Oregon VisionEval Statewide model for the Oregon Transportation Plan. The module has been adapted to work within the regional context of the Metro VisionEval VERSPM. The module asserts one of three 'teleworking categories' for each worker in the model by using available occupation data either from BLS, or in the case of Metro, the Oregon SWIM was used to determine a distribution of occupations at a sub-county resolution. Each worker in the VE model also has a commute distance along with other household characteristics (vehicle availability, etc.). A new probability of teleworking model was estimated based on explanatory variables including occupation (or more specifically the teleworking category), commute distance, and other household characteristics. A second model accounts for the change in daily household travel as a result of that probability of teleworking. This model is estimated on empirical rMove (smart phone based) survey data based on a statewide household travel survey of individuals teleworking part-time and full-time prior to the COVID-19 pandemic. Therefore, the change in VMT associated with teleworking is not linear and not only connected to the change in the commute trip, but accounts for the variety of travel needs that remain regardless of a physical commute.

Teleworking has been identified as important behavior in the Metro region that should be accounted for when estimating and forecasting GHG emissions in relation to the state target rule. This document describes existing research and model development examples regarding teleworking, which will inform the development of a teleworking module for the Metro VisionEval model. This work supports Task 3, which involves testing of various regional modeling approaches and a recommendation for a final modeling approach that estimates regional GHG emissions for the Metro region.

Overview

Teleworking has become ubiquitous for a sizeable share of the US workforce as a consequence and response to the COVID-19 pandemic. Before the pandemic, teleworking was largely considered a worthwhile travel demand management (TDM) action intended to reduce travel miles associated with commutes to a fixed place of work.

Accounting for teleworking in travel demand models, including the strategic demand model VisionEval, is challenging given the relationships between individual employee – employer dynamics, the household composition (represented as "life cycle" in National Household Travel Data), the occupation, distance and travel options to work, etc.

RSG has been studying teleworking behavior as part of household travel surveys conducted on the behalf of regions and states often as part of a travel demand model update. RSG expanded the survey program in May 2020 to create a longitudinal panel survey to monitor travel behavior changes during the significant upheaval associated with the COVID-19 pandemic. The following notable changes in travel behavior were observed in the data of survey responses[6]:

- Grocery pickup and delivery will likely continue to supplement in-store shopping, particularly among high-income and zero-vehicle households.
- Similarly, telehealth will likely continue to supplement in-person appointments, especially among adults in households with children.
- Income continues to significantly influence telework access, which in turn impacts telework access among Black and Hispanic residents.

RSG also initiated a study for the Massachusetts DOT for evaluating various future scenarios and the impact on travel behavior and investment decisions as a result of teleworking in the state. This remains an on-going study comprised of an extensive literature review on teleworking, defining the actions, setting the status quo, and creating a model to better understand who might be teleworking and what resulting travel behaviors may result. An important outcome of this study is the production of a VisionEval Teleworking module that has since been integrated into the VisionEval-State model for Oregon and is being tested for use within the VE-RSPM for Metro.

RSG used the Bureau of Labor Statistics (BLS) Standardized Occupational Codes (SOC) to classify the employed persons into the three categories associated with their propensity to telework. The categories were defined based on the literature review done in Massachusetts, the COVID-19 Survey, and an extensive analysis of a longitudinal household travel survey in Ohio using an rMove dataset made available to relate workers' occupation to travel behavior. Occupational data had a stronger relationship with

[6] The RSG COVID panel started in May 2020. It continued through Sept 2021 with nine waves. Additional surveys were later administered and added to the data sample. Each wave had over 3000 participants, and weighted to be statistically representative of the national population. See this survey summary for additional information: https://rsginc.com/wp-content/uploads/2022/01/How-COVID-19-Necessities-Have-and-Havent-Changed-the-Way-People-Travel.pdf

teleworking as compared to industry classification (i.e., NAICS), however, occupational data is less frequently sampled or available as industry data.

The teleworking category assigned to each of the 2-digit BLS SOC labels is shown in Table 9 along with the number of workers in each occupation per the 2021 BLS summary for the Portland MSA.

Table 9: Teleworking rate category by BLS SOC

BLS Occupations	SOC	Teleworking Category (RSG)	Number of Workers for the Portland MSA
Business and financial operations occupations	13-0000	remote	160,790
Computer and mathematical occupations	15-0000	remote	92,590
Architecture and engineering occupations	17-0000	remote	68,660
Arts, design, entertainment, sports, and media occupations	27-0000	remote	32,580
Office and administrative support occupations	43-0000	remote	287,870
Educational instruction and library occupations	25-0000	on-site	110,510
Healthcare practitioners and technical occupations	29-0000	on-site	119,410
Healthcare support occupations	31-0000	on-site	81,680
Food preparation and serving related occupations	35-0000	on-site	172,420
Building and grounds cleaning and maintenance occupations	37-0000	on-site	54,660
Personal care and service occupations	39-0000	on-site	40,990
Farming, fishing, and forestry occupations	45-0000	on-site	6,890
Construction and extraction occupations	47-0000	on-site	107,930
Installation, maintenance, and repair occupations	49-0000	on-site	77,150
Production occupations	51-0000	on-site	130,980
Transportation and material moving occupations	53-0000	on-site	199,080
Management occupations	11-0000	mixed	161,000
Life, physical, and social science occupations	19-0000	mixed	24,900
Community and social service occupations	21-0000	mixed	45,310
Legal occupations	23-0000	mixed	19,020
Protective service occupations	33-0000	mixed	35,190
Sales and related occupations	41-0000	mixed	194,930

Source: https://www.bls.gov/oes/current/oes_38900.htm

The share of workers in each teleworking category is used to understand the overall makeup of the worker fleet and the typical commuting patterns of each of the three categories.

Table 10 shows the share of workers by teleworking category. The data indicates that 50 percent of the workers across the MSA are in the on-site category, which has the lowest level of teleworking.

Table 10: Share of workers by teleworking category

Teleworking Category	Number of Employees	% of MPO Regional Employees
Remote	642,490	29%
Mixed	480,350	22%
On-site	1,101,700	50%

Source: BLS SOC for the MSA

The three teleworking categories are used in the VisionEval module to identify how travel behavior may change for workers within each group as a result of changes in the overall level of teleworking. The base data, aligning with national pre-COVID commute trends, for the three teleworking categories and the commute patterns is displayed in Table 11.

Table 11: Teleworking rates by teleworking category

	Days per week Teleworking	Raw Mode Shares (100% within each category)	Weighted Share of All MSA Workers
Remote	Commute only	63.0%	18.20%
	full time home	13.0%	3.8%
	1-2 days	10.0%	2.89%
	3-4 days	14.0%	4.04%
Mixed	Commute only	65.8%	14.2%
	full time home	12.0%	2.6%
	1-2 days	9.2%	2.0%
	3-4 days	12.9%	2.8%
On-Site	Commute only	79.5%	39.4%
	full time home	7.2%	3.6%
	1-2 days	5.5%	2.7%
	3-4 days	7.8%	3.8%

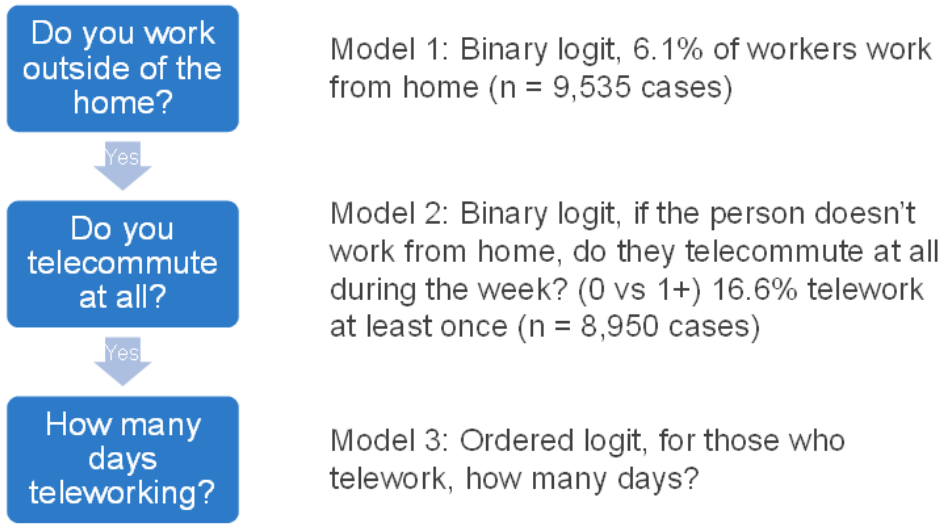
Source: RSG

Modeling Teleworking Travel Behavior

The VisionEval strategic travel model was enhanced as part of the on-going Massachusetts Teleworking Study to account for teleworking rates among the workers in the model. The VisionEval model estimates the average daily travel behavior for households with a specific sub-routine focused on employed members of the household. Important explanatory variables that affect teleworking rates and frequency include: occupation, commute distance, nearby land use, income, vehicle availability, age, and household composition (life cycle).

RSG used a robust multi-year rMove sample from a household travel survey to estimate the relationship between occupation, teleworking category, and average daily travel that Ohio DOT made available for this research purpose. The data informed a new Teleworking Module within the VisionEval models. The teleworking module includes three core models as shown in Figure 5.

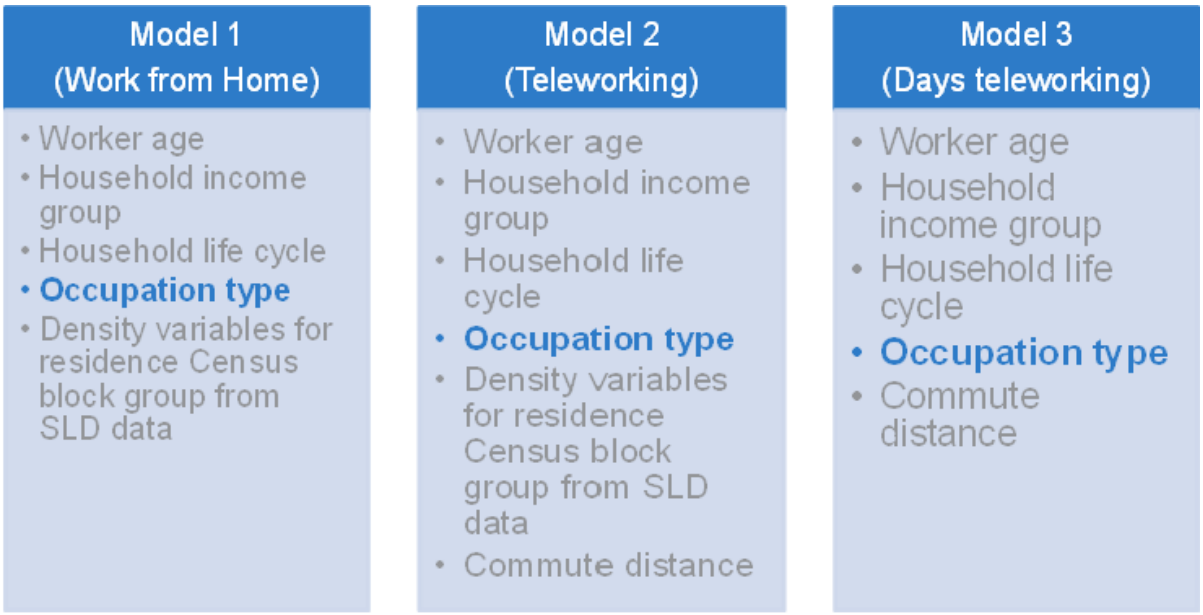
Figure 5: Teleworking model sequence



Source: RSG

Each of the three models uses a similar set of explanatory variables as shown below. The Occupation Type is the new assertion that needs to be added to the VisionEval model through a new model input.

Figure 6: Teleworking model components



Source: RSG

The models are included in the VisionEval Teleworking Module structure using an input file that estimates the percentage of workers within each of the three teleworking categories by the location type in the VisionEval model.

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APPENDIX K

2023 Regional Transportation Plan

Performance Targets

This appendix will be included in the final RTP Appendices. See Chapter 2 for information about performance measures and targets. See Chapter 7 for information performance of the draft plan.

July 10, 2023

Metro

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX L

2023 Regional Transportation Plan

Federal performance-based planning and congestion management process documentation

July 10, 2023

oregonmetro.gov/rtp

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

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

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

Project website: **oregonmetro.gov/rtp**

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PURPOSE

Federal law requires Metro to develop a comprehensive performance-based planning process for metropolitan transportation planning and programming purposes. Performance based planning means that the region develops goals and policies and then identifies strategies to help meet those goals and policies. The region's long history and commitment to performance-based planning processes is evident in region's long-range transportation plan, the Regional Transportation Plan (RTP), and its associated modal and topical plans and strategies. Together, the RTP and its supporting strategies guide transportation investments and decision-making in the region.

This appendix documents the region's approach to addressing the federal transportation performance-based planning and congestion management requirements contained in the Moving Ahead for Progress in the 21st Century Act (MAP-21) signed into law in 2012, and subsequent transportation reauthorizations, Fixing America's Surface Transportation (FAST) Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021. This appendix also constitutes the region's official Congestion Management Process (CMP).

The CMP network (see Figure 4) defines the scope for data collection, management and reporting purposes, focusing on multimodal transportation facilities and services located on the National Highway System (NHS) and the region's high capacity transit network. The NHS includes the region's interstates and some state-owned arterials, regional freight routes and frequent and enhanced transit corridors. The CMP also continues the region's transition to using observed data for performance monitoring consistent with federal requirements, and can be expanded in the future as data collection and resources allow.

Together, regional performance targets defined in Chapter 2 of the RTP, regional policies defined in Chapter 3 of the RTP and this appendix reflect a comprehensive and multimodal performance-based planning approach to manage congestion and provide safe, equitable, reliable, and climate-friendly mobility options for people, goods and services, while achieving a broader set of land use, economic, equity and environmental outcomes. This approach includes modeling tools, analysis and research combined with meaningful public engagement to help quantify and better understand the potential outcomes of policy decisions and investment actions. The framework also guides data collection, tool development and monitoring/reporting activities identified in Chapter 8 (Section 8.5) of the RTP.

This comprehensive performance-based planning process satisfies the requirements as described in federal regulations and will be re-evaluated as part of scheduled updates to the RTP to respond to new requirements, information learned through monitoring activities and changes in the availability of data and tools so that they can be refined as necessary.

INTRODUCTION

Our region's economic prosperity and quality of life depend on a transportation system that provides every person and business with access to safe, reliable, healthy and affordable ways to get around.

The Regional Transportation Plan provides a shared vision, goals, objectives, policies, and strategies that guide investments for all forms of travel to keep people connected and commerce moving throughout the region, while achieving a broader set of economic, equity and environmental outcomes. The plan is updated every five years to address trends and challenges facing the region and plan for future growth.

First developed in the 1990s, the greater Portland region's Congestion Management Process (CMP) is designed with these challenges in mind. It represents a new way of thinking about integrated transportation networks and land use to manage mobility of people and goods movement. Signed into law in 2012, the Moving Ahead for Progress in the 21st Century (MAP-21) created the most significant federal transportation policy shift since the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). MAP-21 established eleven national performance measures for MPOs, state departments of transportation, and transit agencies to assess and monitor the performance of the system. The following transportation reauthorizations, Fixing America's Surface Transportation (FAST) Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021 continued the implementation of MAP-21 performance measures.

As a result of MAP-21, MPOs, state DOTs, and transit agencies set performance targets associated with the eleven national performance measures in a cooperative and coordinated manner in 2018. Once performance targets were set MPOs, State DOT's, and transit agencies are expected to monitor and report on progress towards the performance targets for two and four year cycles depending on the performance metric.

The objective of the performance-based planning and programming framework is to ensure States and MPOs invest federal resources in projects that collectively make progress toward the achievement of seven national goals – safety, infrastructure condition, congestion, system reliability, freight reliability, environmental sustainability and project delivery.

This appendix lays out the framework of the region's CMP, which includes federal MAP-21 transportation performance measures and targets, and provides a road map for locating the elements of the CMP and federally required-performance measures and targets that have been woven into the RTP and supporting documents.

FEDERAL CONTEXT FOR PEFORMANCE-BASED PLANNING

Federal Transportation Performance Management (TPM) Program

Signed into law in 2012, MAP-21 established performance-based transportation planning and decision-making provisions. Subsequent transportation reauthorizations, Fixing America's Surface Transportation (FAST) Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021 continued the implementation of MAP-21 performance measures. **Table 1** lists the MAP-21 goal areas and defined performance measures that must be reported for the greater Portland area.

Table 1. National Goal Areas and Performance Measures for the Greater Portland area

National Goal Areas	Federal Performance Measure(s)
Safety	Fatalities (number and rate per 100 million vehicle miles traveled) Serious injuries (number and rate per 100 million vehicle miles traveled) Non-motorized fatalities and serious injuries (number)
Infrastructure condition	Condition of pavements on the Interstate System and on the non-Interstate National Highway System Condition of bridges on the National Highway System State of good repair for public transit assets for rolling stock, equipment, facilities and infrastructure
Congestion reduction	Percent of Non-Single Occupancy Vehicle (SOV) travel[1]
System reliability	Percent of reliable person-miles traveled[2] on Interstate System and on the non-Interstate National Highway System
Freight movement and economic vitality	Percent of Interstate System miles with reliable truck travel times[3]
Environmental sustainability	Total emissions reduction for CMAQ funded projects by applicable pollutants[4]

[1] A minimum option for measurement will be use of the American Community Survey (ACS) Journey to Work data from the U.S. Census Bureau. State DOTs and MPOs also may use localized survey or measurements. Finally, State DOTs and MPOs may use volume counts for each mode to determine the percent non-SOV travel, and will be encouraged to report any data not available in national sources today (such as bike counts) to FHWA. This measure may include travel avoided by teleworking.

[2] Reliable defined as the ratio of the 80th percentile travel time of a reporting segment to a "normal" travel time (50th percentile), using data from FHWA's free National Performance Management Research Data Set or equivalent. Data are collected in 15-minute segments during all time periods other than 8 p.m.-6 a.m. local time. The measures are the percent of person-miles traveled on the relevant NHS areas that are reliable

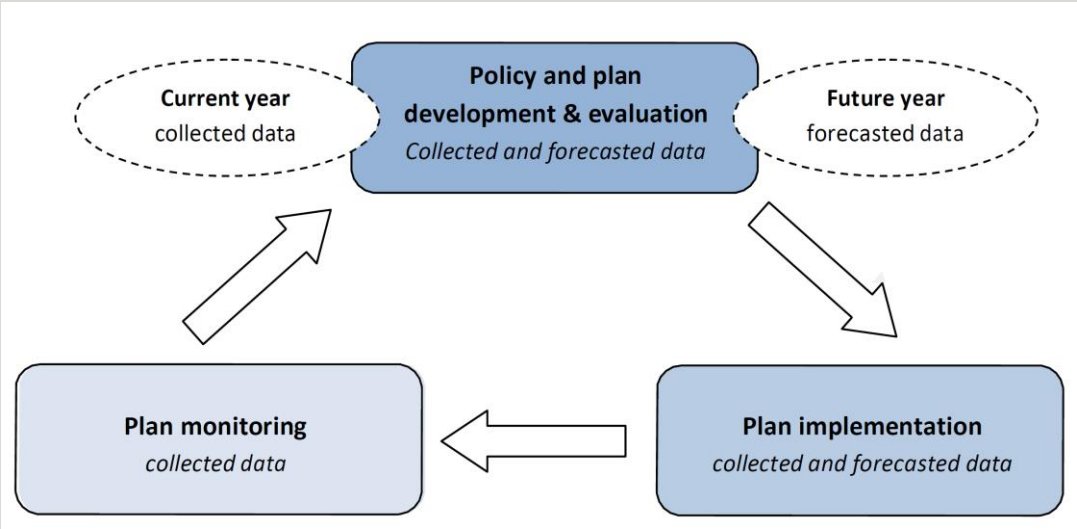
[3] The ratio will be generated by dividing the 95th percentile time by the normal time (50th percentile) for each segment. Then, the Index will be generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate. Reporting is divided into five periods: morning peak (6-10 a.m.), midday (10 a.m.-4 p.m.) and afternoon peak (4-8 p.m.) Mondays through Fridays; weekends (6 a.m.-8 p.m.); and overnights for all days (8 p.m.-6 a.m.)

[4] Applicable pollutants include: nitrogen oxide (NOx), volatile organic compounds (VOCs), carbon monoxide (CO), and particulate matter (PM10 and PM2.5)

The Portland metropolitan region developed its MAP-21 performance targets in 2018 and the targets were first adopted as part of the 2018 RTP. As part of the target development, the region collected data, established baselines for each measure, and coordinated with partners the Oregon Department of Transportation and the region's transit agencies – TriMet and SMART – to ensure targets were consistent and moving in the same direction. Monitoring of performance began for the suite of MAP-21 performance measures in 2019.[5] Through subsequent coordination processes organized by ODOT in 2022, new targets were established for 2024. The updated targets for 2024 are reflected in this appendix.

The MAP-21 performance targets differ from the system performance assessment conducted on the RTP investments to understand the performance of the region's transportation system. The MAP-21 federal performance measures require MPOs, state DOTs, and transit agencies to use observed and monitored data to measuring performance and set targets for the system. The observed data approach to performance differs from the system assessment approach which looks at projections of future impacts from investments.

Figure 1. RTP performance measurement system



[5] Due to the timing of when certain MAP-21 performance measures and targets were required to be set, monitoring for some performance targets, namely asset management and safety, began before 2019.

As the federally-designated metropolitan planning organization (MPO) for the greater Portland region, Metro is also required to maintain the region's congestion management process (CMP). A CMP has been a federal requirement since the passage of Safe Accountable Flexible Efficient Transportation Equity Act - A Legacy for the Users (SAFETEA-LU) in 2005. Subsequent federal transportation reauthorizations, including the MAP-21 in 2012, FAST Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021 continued the implementation of CMP requirements fully maintain the requirements of the CMP with additional strategies and options. The legislation and regulations are the basis for the federally required transportation performance targets and the CMP components that are incorporated in the RTP and supporting documents, including this appendix.

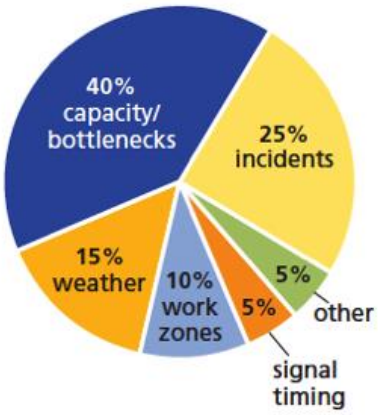
Typically, Metro reviews and updates the region's CMP, as needed, concurrent with updates to the RTP. This appendix incorporates updated performance targets necessary to meet federal performance-based planning requirements. Section 8.5 in Chapter 8 of the RTP describes data collection, tools and research activities necessary to support Metro's efforts to fulfill its transportation performance measurement and reporting responsibilities.

REGIONAL CONGESTION MANAGEMENT PROCESS (CMP)

Traffic congestion occurs when the number of users on a transportation facility exceeds or approaches the capacity of that facility. Congestion has many causes, but mostly results from too much vehicle traffic for the physical capacity of a road to handle (bottlenecks) or periodic events like crashes, vehicle breakdowns, road work zones, storms and special events (e.g., parades, major sporting events). For drivers, congestion falls into two buckets: routine congestion, which typically occurs daily, versus traffic incidents that are unexpected and difficult to predict. While many transportation agencies have traditionally only looked at roadway capacity, many agencies in larger metropolitan areas are now looking at the overall ability of a road to move people, whether in private vehicles, transit, or walking or biking, to better reflect the constrained nature of transportation in urban areas.

Did you know?

Causes of congestion in the greater Portland region



More than half of all congestion is caused by crashes, breakdowns and other causes that can be addressed using system management and operational strategies.

- 2021 FHWA Pooled Fund Study

It is also important to note that high traffic volumes that may result in congestion can also be a sign of growth and economic vitality, as is the case in the greater Portland region. Drivers can usually plan their day around routine congestion and the typical bottlenecks. Much of the throughway system (greater Portland's major highways and freeways) is routinely congested during the morning and evening rush hour, and drivers know their trip will be slower during this period. Transit service is also affected by congestion. Transit providers can adjust schedules, service frequencies and the number of buses available on a congested route to improve on-time performance. But the traffic incidents and other non-routine events are difficult to plan for, and make it more difficult for drivers to plan commutes, for businesses to plan shipments and for transit providers to plan for getting people to their destinations on time.

Focusing on system reliability

Efforts to address congestion in our growing region focus on improving reliability, or the degree to which congestion in a given travel corridor is affected by these non-routine events. Reliability is about predictability and dependability – and being able to count on knowing about how long it will take to get to school, work or activities. Improving reliability means that travelers don't have to budget as much extra time in order to arrive on time at their destinations, even when routine congestion exists on our major throughways.

While it is impossible to eliminate congestion, congestion needs to be actively managed in order to provide a reliable transportation system for users and better connect goods to market and support travel across the region. Because the addition of throughway and arterial capacity is constrained by financial resources as well as physical factors and environmental resources, strategies to manage capacity, such as travel demand reduction, increased transit access, making

it easy for people to walk or bike instead of drive, and operational management of the existing and future transportation system, should be prime strategies to increase the capacity of a roadway, as they are often more effective in the long-term, and often less expensive to implement.

The next section describes the federally-required Congestion Management Process that has been cooperatively developed and implemented by Metro and regional partners since the 2000 RTP to:

- monitor, measure and diagnose the causes of congestion on the regional transportation system;
- evaluate and recommend cost-effective strategies to manage regional congestion; and
- evaluate and monitor the performance of strategies implemented to manage congestion.

Overview of Federal Requirements and Regional CMP Process

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) required metropolitan planning organizations (MPO) to develop a congestion management system (CMS) to integrate congestion management into the regional transportation planning process. The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU), expanded the CMS requirements through the creation of the Congestion Management Process (CMP) in regions with more than 200,000 people. Subsequent federal transportation reauthorizations, including the MAP-21 in 2012, FAST Act in 2015 and the Bipartisan Infrastructure Law (BIL) in 2021 reaffirmed the congestion management process and expanded strategies for managing travel demand.

First developed in the 1990s, Metro has maintained the CMP for the greater Portland region as required by federal law. The CMP is "a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies to alleviate congestion and enhance the mobility of persons and goods to levels that meet state and local needs."[6]

Since the 2000 RTP, the region's CMP has been an integral component of the RTP, helping to inform the planning and investment decisions embedded in the plan and subsequent implementation of the plan through the Metropolitan Transportation Improvement Program (MTIP), local transportation system plans, regional corridor refinement planning and other implementation activities.

Federal regulation 23 CFR 450.320(c)2 identifies the required components for a CMP:

1. Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions and evaluate the effectiveness of implemented actions.

2. Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affect MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area.
3. Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area.
4. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combination of strategies, are some examples of what should be appropriately considered for each area:
    - land use and growth management strategies
    - demand management strategies
    - traffic operational improvements
    - public transportation improvements
    - active transportation improvements
    - ITS technologies as related to the regional ITS architecture
    - street network connectivity improvements
    - where necessary, strategic widening of existing roads and throughways to add system capacity.
5. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation.
6. Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision-makers and the public to provide guidance on selection of effective strategies for future implementation.

The CMP includes a performance monitoring system that informs needed capital investments, such as new or improved transit and road capacity as well as demand and system management strategies to actively manage and optimize performance of the existing infrastructure. The RTP calls for increasing street network connectivity, expanding travel options and using system and

demand management strategies to help improve reliability and better connect goods to market and support travel across the region, before moving to strategic widening of existing roads and throughways to address bottlenecks. This policy was implemented in recognition of limited financial resources, potential community and environmental impacts and research that demonstrated you cannot build your way out of congestion, as well as the expected ancillary benefits of supporting the region's land use, air quality, water quality, and greenhouse gas emissions goals.

In 23 CFR Part 450 Section 322(a) the Federal Highway Administration defines a CMP as:

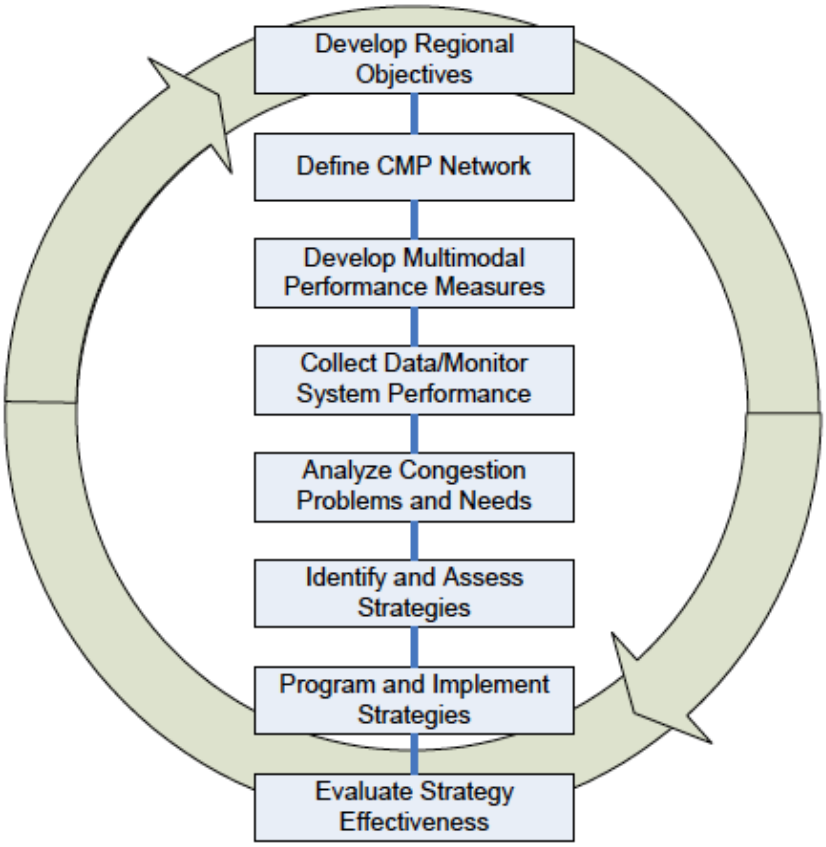
> *"…a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities…through the use of travel demand reduction (including intercity bus operators, employer-based commuting programs such as a carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), job access projects and operational management strategies."*

Further, 23 CFR Part 450 Section 322(h):

> *A MPO…may develop a [congestion management] plan that includes projects and strategies that will be considered in the TIP of such MPO.*
> *(1) Such plan shall: (i) Develop regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households; (ii) Identify existing public transportation services, employer based commuter programs, and other existing transportation services that support access to jobs in the region; and (iii) Identify proposed projects and programs to reduce congestion and increase job access opportunities.*
> *(2) In developing the congestion management plan, an MPO shall consult with employers, private and nonprofit providers of public transportation, transportation management organizations, and organizations that provide job access reverse commute projects or job-related services to low-income individuals.*

The framework shown in **Figure 1** illustrates the overall CMP process used by Metro and regional partners through the metropolitan transportation planning process.

Figure 1. Elements of the Region's Congestion Management Process



Source: FHWA Congestion Management Process: A Guidebook (2011).

The CMP process is not intended to be a step-by-step method, but is intended to convey the general approach that builds on the policy foundation of the RTP goals and objectives to monitor the system performance and identify, evaluate and implement strategies to manage congestion in the region.

In particular, Chapter 2 of the RTP establishes the vision, goals, objectives, performance measures and targets that define a comprehensive performance-based policy framework. The framework supports the region's ability to identify strategies and investment priorities to help people and products get where they need to go as congestion, safety, maintenance, air quality and other issues increasingly impact our daily lives. Chapter 3 of the RTP defines specific policies for planning and investing in the region's transportation system for all modes of travel as well as management and operations of the system. Chapter 6 describes the strategies (projects) recommended for implementation. Chapter 8 of the RTP defines how the plan will be implemented, including future planning and ongoing data collection and monitoring activities.

Table 2 documents where key elements of the region's CMP are addressed in the RTP and/or this appendix, followed by a discussion of each element.

Table 2. Key Elements of the Region's Congestion Management Process (CMP)

Regional Congestion Management Process	Associated RTP/MTIP Activities
Develop congestion management objectives and policies	RTP Goals and Objectives (Chapter 2), RTP Policies (Chapter 3)
Define geographic area and network of interest	RTP (Appendix L – Figures 3 and 4)
Establish multimodal performance measures	RTP Performance Measures and Targets (Chapter 2), RTP Federal Performance Measures and Targets (Appendix L)
Collect data and monitor system performance	RTP Existing Conditions (Chapter 4), ODOT Traffic Performance Report (2020),[7] Mobility Corridor Atlas (2015), Metro and ODOT Federal Performance Monitoring Reports (Baseline, 2-year and 4-year reports)
Analyze congestion problems and needs	RTP Existing Conditions (Chapter 4), ODOT Traffic Performance Report (2020), RTC CMP Monitoring Report (2022), RTP Performance Evaluation (Chapter 7)
Identify and evaluate effectiveness of strategies	RTP (Chapter 6), RTP (Chapter 7), RTP (Appendix F – Environmental Analysis and Potential Mitigation Strategies), RTP (Appendix J – Climate Smart Strategy Implementation and Monitoring), RTP (Chapter 8 refinement planning), area studies, local transportation system plans, ODOT facility plans
Implement selected strategies and manage transportation system	MTIP, Metro, local jurisdictions, ODOT, TriMet, SMART, TransPort, Regional Transportation Functional Plan, RTP (Chapter 8)
Monitor strategy effectiveness[8]	Scheduled RTP updates, CMAQ Performance Plan, RTP (Appendix J – Climate Smart Strategy Implementation and Monitoring), RTC CMP Monitoring Report (2022), Metro and ODOT Federal Performance Monitoring Reports (Baseline, 2-year and 4-year reports)

Develop Congestion Management Goals, Objectives and Policies

The 2023 RTP continues the region's outcomes- and performance-based approach to regional transportation planning and investment decisions. Chapter 2 of the 2023 RTP outlines this approach through a series of five goals, objectives, performance measures and performance targets that describe the overall vision of the plan and direct future planning and investment decisions. Chapter 3 defines specific policies for planning and investment in the region's transportation system for all modes of travel as well as management and operations of the system.

Together, the plan's goals, objectives and policies provide an overarching policy framework for transportation planning and investment and the region's CMP, while the performance measures

[7] ODOT, "Portland Region 2020 Traffic Performance Report." (December 2021). Available on-line at https://www.oregon.gov/odot/Projects/Project%20Documents/TPR-2020.pdf

[8] USDOT, "Guidebook on the Congestion Management Process in Metropolitan Transportation Planning." Pg. 1-1 (April 2011). Available on-line at https://www.fhwa.dot.gov/planning/congestion_management_process/cmp_guidebook/cmpguidebk.pdf

and targets in Chapter 2 of the RTP provide a method for expected performance of the plan in the long-term as shown in **Figure 2**. The measures and targets in this appendix will help track progress towards meeting the goals and objectives in the shorter-term, between and during scheduled updates to the RTP.

Figure 2. RTP Performance-Based Planning and Decision-making Framework

Source: Regional Transportation Plan (Chapter 2)

While all facets of regional transportation planning are covered in the RTP goals and objectives, the goals and objectives specific to the CMP are shown in **Table 3**.

Table 3. 2023 RTP Congestion Management Process Related Goals and Objectives

Goal 1. Mobility Options
○ **Objective 1.1 Travel Options** – Plan communities and design and manage the transportation system to increase the proportion of trips made by walking, bicycling, shared rides and use of transit, and reduce per capita vehicle miles traveled. ○ **Objective 1.2 System Completion** – Complete all gaps in planned regional networks. ○ **Objective 1.3 Access to Transit** – Increase household and job access to current and planned frequent transit service. ○ **Objective 1.4 Regional Mobility** – Maintain reliable person-trip and freight mobility for all modes in the region's mobility corridors, consistent with the designated modal functions of each facility and planned transit service within each corridor.
Goal 2. Safe System
○ **Objective 2.1 Vision Zero** – Eliminate fatal and severe injury crashes for all modes of travel by 2035.
Goal 3. Equitable Transportation
○ **Objective 3.1 Transportation Equity** – Eliminate disparities related to access, safety, affordability and health outcomes experienced by people of color and other marginalized communities. ○ **Objective 3.2 Barrier Free Transportation** – Eliminate barriers that people of color, low income people, youth, older adults, people with disabilities and other marginalized communities face to meeting their travel needs
Goal 4. Thriving Economy
○ **Objective 4.1 Connected Region** – Focus growth and transportation investment in designated 2040 growth areas to build an integrated system of throughways, arterial streets, freight routes and intermodal facilities, transit services and bicycle and pedestrian facilities, with efficient connections between modes and communities that provide access to jobs, markets and community places within and beyond the region. ○ **Objective 4.2 Access to Industry and Freight Intermodal Facilities** – Maintain access to industry and freight intermodal facilities by a reliable and seamless freight transportation system that includes air cargo, pipeline, trucking, rail, and marine services to facilitate efficient and competitive shipping choices for goods movement in, to and from the region. ○ **Objective 4.3 Access to Jobs and Talent** – Attract new businesses and family-wage jobs and retain those that are already located in the region while increasing the number and variety of jobs that households can reach within a reasonable travel time. ○ Objective 4.4 Transportation and Housing Affordability – Reduce the share of income that households in the region spend on transportation to lower overall household spending on transportation and housing.
Goal 5. Climate Action and Resilience
○ **Objective 5.1 Climate Change Mitigation** – Meet adopted targets for reducing transportation-related greenhouse gas emissions and vehicle miles traveled per capita in order to slow climate change. ○ **Objective 5.2 Climate-Friendly Communities** – Increase the share of jobs and households in walkable, mixed-use areas served by current and planned frequent transit service.

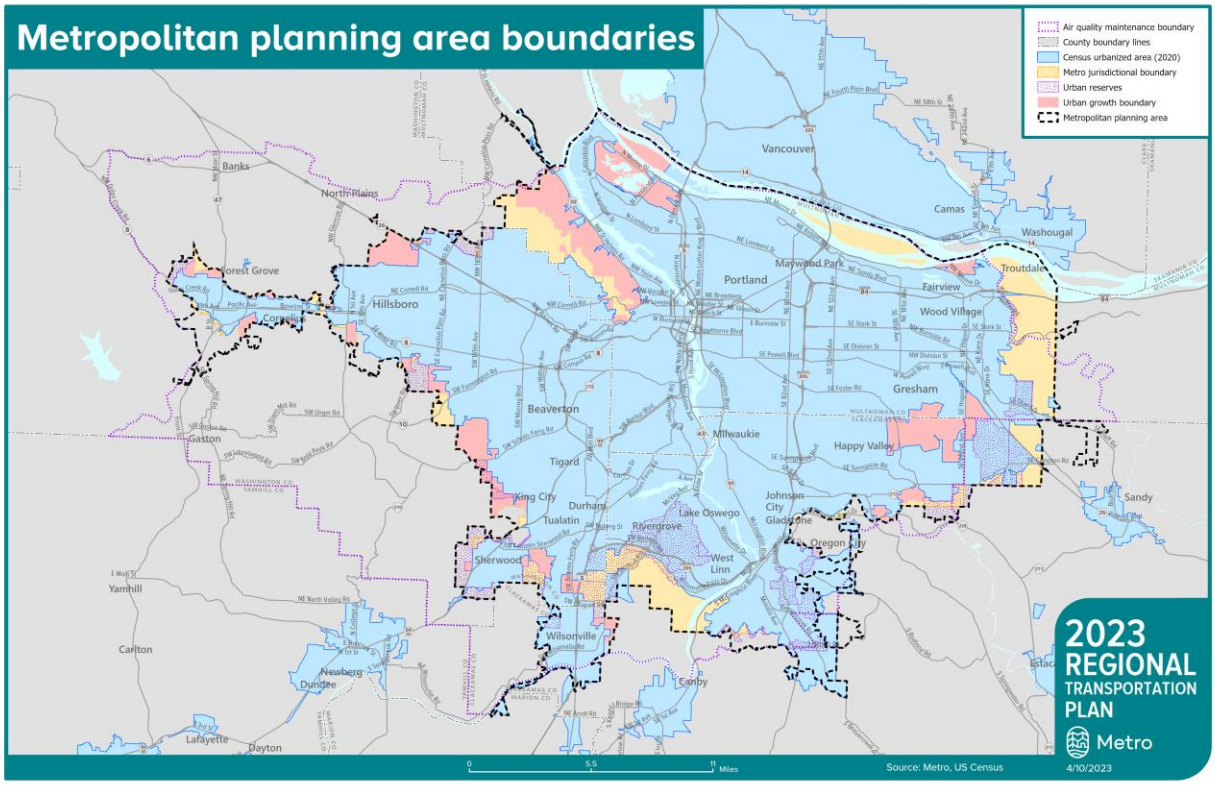
Source: 2023 Regional Transportation Plan (Chapter 2)

Identify Area of Application and Transportation Network of Interest

CMP Geographic Area of Application

The greater Portland region has several planning boundaries with different purposes. These boundaries are shown in **Figure 3**.

Figure 3. Metropolitan Planning Area boundary – the CMP Boundary



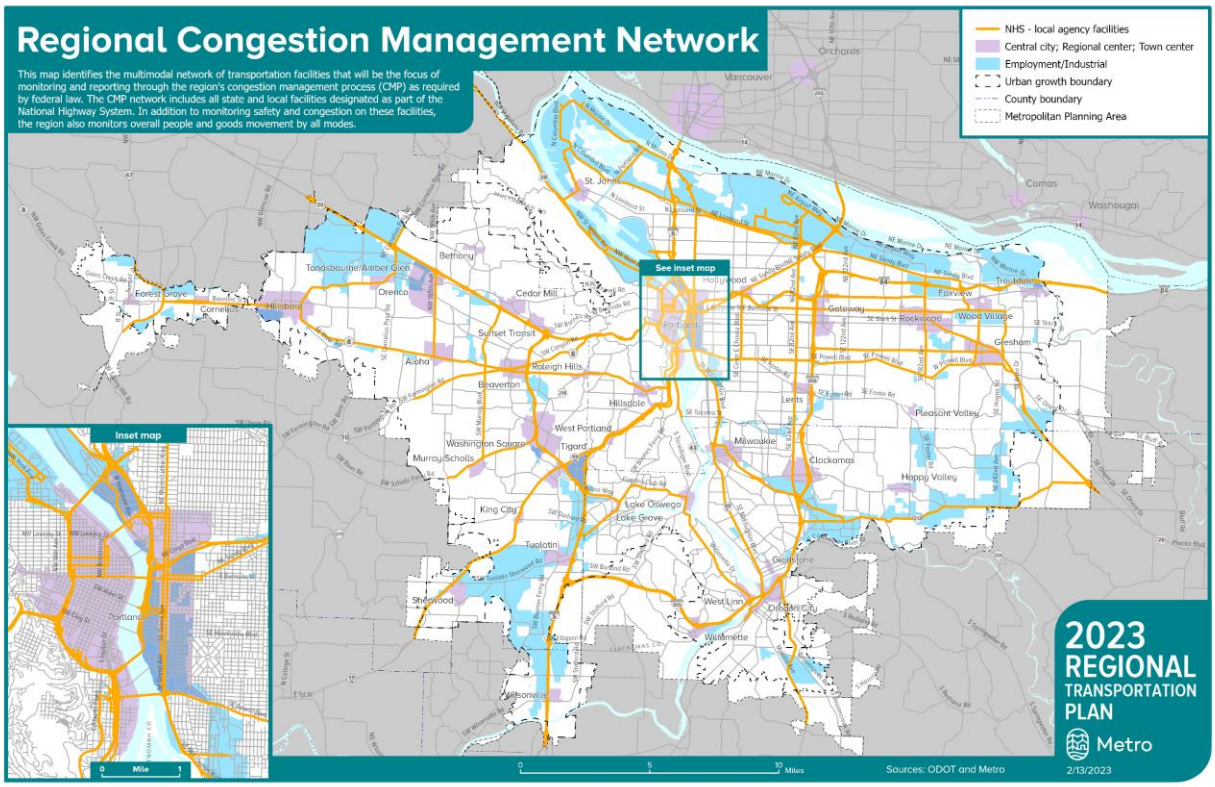
Source: 2023 Regional Transportation Plan (Chapter 1)

Metro's jurisdictional boundary encompasses the urban portions of Multnomah, Washington and Clackamas counties. Under Oregon law, each city or metropolitan area in the state has an urban growth boundary that separates urban land from rural land. In addition, there is the federal Urbanized Area Boundary (UAB), which delineates areas that are urban in nature distinct from those areas that are largely rural in nature, and the Metropolitan Planning Area (MPA) boundary, which marks the geographic area to be covered by MPO transportation planning activities. At a minimum, the MPA boundary must include the urbanized area, areas expected to be urbanized within the next twenty years and areas within the Air Quality Maintenance Area Boundary (AQMA) – a fifth boundary. The region's CMP applies to defined components of the regional transportation network located within the MPA boundary for the Oregon portion of the Portland-Vancouver, Washington urbanized area.

Congestion Management Network

Figure 4 identifies the multimodal network of transportation facilities that will be the focus of monitoring and reporting through the region's CMP. The congestion management network includes all state and local facilities designated as part of the National Highway System and the high capacity transit routes designated in the RTP. The designated NHS includes most regional freight routes.

Figure 4. **Congestion Management Network**



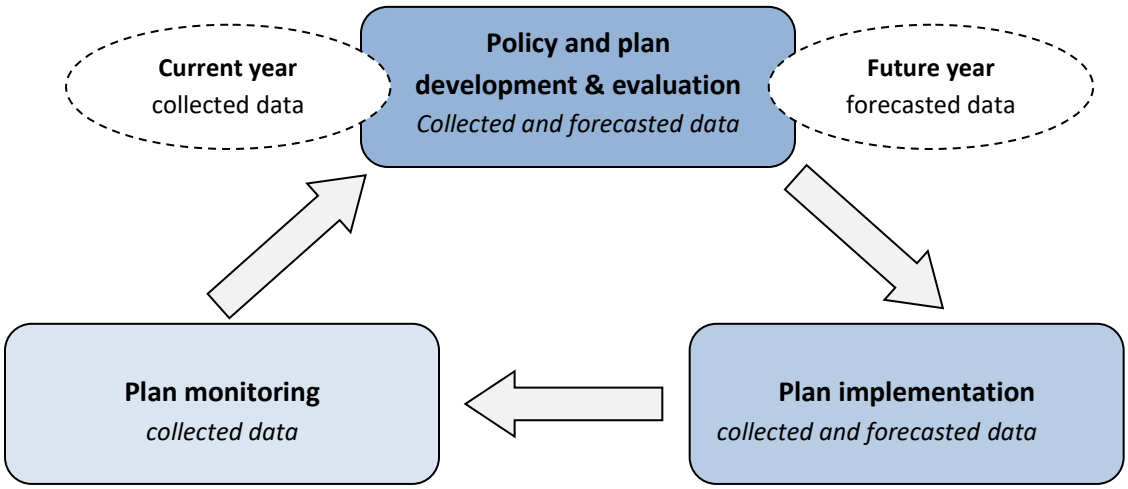
Source: Metro

Performance of the CMP network and individual transportation components is evaluated and monitored using observed data from a variety of sources, including ODOT, TriMet and the National Performance Management Research Data Set (NPMRDS). In addition to monitoring safety and congestion, the region also monitors overall people and goods movement by all modes on these facilities. This includes vehicles miles traveled, transit ridership, regional active transportation system completion, non-drive alone mode share and freight reliability. As a result, throughways, arterials, high capacity transit routes, enhanced transit and frequent transit routes and regional bicycle and pedestrian facilities are part of the data collection and monitoring for the region's CMP.

Establish Multimodal Performance Measures

First established in the 2010 RTP, the 2023 RTP continues to rely on the on-going performance evaluation and monitoring process shown in **Figure 5**. Performance measures serve as the dynamic link between RTP goals and plan implementation by formalizing the process of evaluation and monitoring to ensure investments and strategies in the RTP make adequate progress toward achievement of the region's mobility, safety, equity, economic and climate goals.

Figure 5. RTP Performance Measurement System



As noted previously, the CMP performance measures have been updated to incorporate the MAP-21/FAST Act measures and remove measures for which readily available observed data is currently lacking. The following multimodal performance measures provide Metro the ability to monitor transportation system performance specific to the CMP network using observed data. Data sources are identified. Federal MAP 21 measures are noted with an asterisk (*).

<u>System-wide performance monitoring measures</u> (MPA boundary, CMP network)

1. Vehicle miles traveled (total and per capita)
2. Fatal and serious injury crashes*
3. Person-miles traveled on the Interstate System and the non-Interstate NHS that are reliable*
4. Freight truck travel time reliability index*
5. Non-SOV mode share - Average daily shared ride, walking, bicycling, transit and carpool commute trips*
6. Transit ridership
7. Transit revenue hours and boarding rides per revenue hour
8. Regional active transportation network completion
9. Pavement and bridge condition*

Corridor-level performance monitoring measures (CMP network corridors)

10. Daily vehicle miles traveled (total)
11. Vehicle volumes, speeds, peak period travel times and throughway travel reliability
12. Fatal and serious injury crashes highlighting regional high injury corridors on the CMP network
13. Transit ridership
14. Household and job access to transit
15. Transit on-time performance
16. Regional active transportation network completion

Collect Data and Monitor System Performance

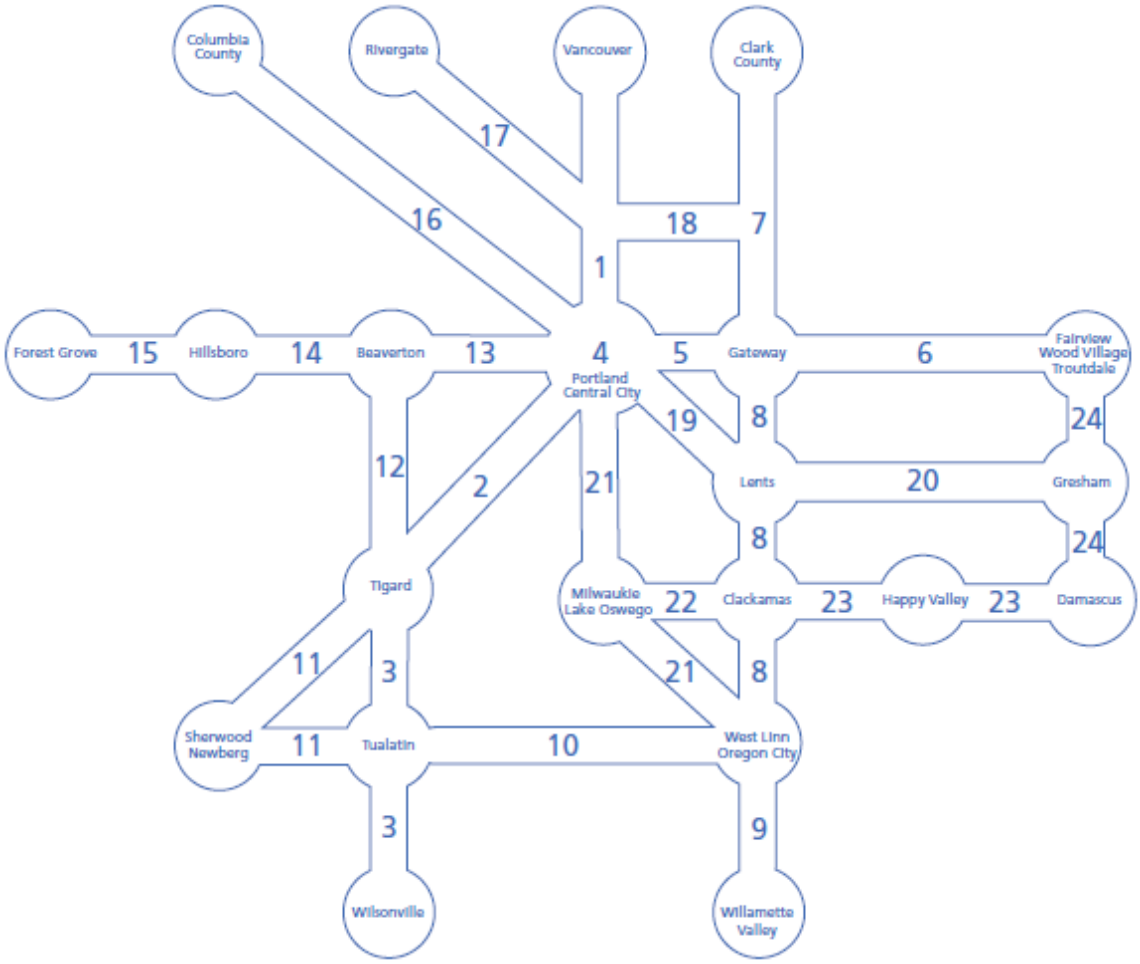
Reporting of data will be done using the regional mobility corridor framework defined in the RTP. The 24 regional mobility corridors identified in the RTP are overlapping subareas of the region. Each regional mobility corridor subarea includes existing and planned land uses and the existing and planned multimodal transportation system of arterial streets, throughways, high capacity transit, frequent bus routes, freight/passenger rail, and bicycle and pedestrian parkways.

The function of this network of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and, in some corridors, connecting the region with the rest of the state and beyond. The regional mobility corridor concept calls for consideration of multiple facilities, modes and land uses when identifying needs and the most effective mix of land use and transportation solutions to improve mobility within a specific corridor.

In April 2009, Metro published the first Mobility Corridors Atlas. The Atlas was conceived as a way to visualize current land use and multi-modal transportation data for each of the region's 24 mobility corridors in support of the region's CMP. For each corridor, the atlas presents a series of maps and charts showing demographic, land use and transportation network characteristics and "current" system performance, including gaps and deficiencies by travel mode. The information documents land use and transportation needs and help identify potential solutions for each corridor. The breadth of information is useful for understanding individual corridors on corridor-by-corridor basis as well as for making comparisons between corridors. The atlas is useful for identifying strategies and investment priorities, and provides a framework for tracking change over time. Recommended strategies and investment priorities are then documented in the RTP Regional Mobility Corridor Strategies Appendix. The atlas serves as a tool for monitoring system performance over time in support of the region's congestion management process and related performance-based planning efforts.

Figure 6 is a conceptual representation of the 24 mobility corridors and the locations they connect.

Figure 6. Regional Mobility Corridor Index Map



Source: 2023 Regional Transportation Plan (Chapter 3)

Both the 2009 Atlas of Mobility Corridors and an updated online Atlas of Mobility Corridors published on Metro's website in 2015 have relied primarily on model data given a lack of readily available observed data that is maintained and updated on a regular basis and challenges with establishing adequate data collection and management systems. As a result, an update to the Atlas and 2014 RTP Regional Mobility Corridor Strategies was not completed during the 2023RTP update. Instead, the Regional Mobility Corridor Strategies will be updated following adoption of the RTP as part of the next RTP update (due in 2028).

How we monitor performance

The CMP monitoring program will report out current conditions using observed data for the region, at a system-level, and as appropriate for each of the 24 mobility corridors. The system performance report will be part of the reporting that Metro, as the MPO, will do to meet federal transportation performance management requirements. A system performance report will be developed at least every two years, aligned closely to federal transportation performance

reporting and other MPO efforts, including the development of the metropolitan transportation improvement program and future updates to the RTP.

The report will also inform the existing conditions assessment that is prepared in advance of RTP updates to assess how the transportation system is performing and identify possible policy or strategy adjustments that may be needed.

Table 4 summarizes available transportation data to support ongoing CMP monitoring and reporting.

Table 4. Transportation Data to Support On-Going CMP Monitoring and Reporting

Measure	Data source(s)
Daily vehicle miles traveled	ODOT Highway Performance Monitoring System (HPMS)
System Reliability*	National Performance Management Research Data Set (NMPRDS)
Freight Reliability*	National Performance Management Research Data Set (NMPRDS)
Vehicle classification traffic count and speed data	ODOT Highway Performance Monitoring System (HPMS), PORTAL
Crash data*	ODOT Crash Data
Non-Single Occupancy Vehicle Mode Share*	American Community Survey Data on Journey to Work, Oregon Household Activity Survey (OHAS)
Transit ridership	TriMet, SMART and C-TRAN Transit Performance Reports
Transit revenue hours and boarding rides per revenue hour	TriMet, SMART and C-TRAN Transit Performance Reports
Household and job access to transit	Metro RLIS
Transit on-time performance	TriMet, SMART and C-TRAN Transit Performance Reports
Regional Bike and Pedestrian Network Completion	Metro RLIS
Pavement and Bridge Condition*	ODOT bridge and pavement programs
Transit assets State of Good Repair*	TriMet, SMART and C-TRAN Transit Asset Management Plans

* indicates a MAP-21/FAST Act required performance measure

Additionally, other system monitoring efforts and reporting undertaken by the region's partners including ODOT, Port of Portland, and transit agencies (TriMet, SMART and C-TRAN) will help support expansion of the region's performance monitoring to include more components of the regional transportation system as resources and data allow. For example, ODOT produced a Region 1 traffic performance report (2020) that provided key congestion related information for the Portland metropolitan region's freeways and state highways. The report informed ODOT's investment priorities for the 2023 RTP.

Metro's Research Center and Transportation System Management and Operations (TSMO) Program continue to evaluate new datasets that could allow for the expansion of future monitoring activities to include the arterial system. In addition, the Metro Research Center developed an agency-wide performance measurement system – called the Regional Barometer – that incorporated observed data from the NPMRDS and U.S. Census data for key CMP measures. Regular updates to this online system have proved challenging due to the COVID pandemic, staffing changes and limited resources.

Data Collection and Methodology

Metro's takes a coordinated approach to data collection to support regional transportation planning and analysis, including federal congestion management process analysis and performance based planning target setting and monitoring. The majority of Metro's data is maintained in Metro's Regional Land Information System (RLIS). This database is comprised of over 150 different (primarily geospatial) data sets. Nonetheless, the RLIS database is not comprehensive and requires coordination with various local governments and other regional partners in gathering different types of transportation data to monitor system performance.

The following agencies are principal partners in collecting and/or evaluating CMP data. These principal partners have developed data collection and management systems that Metro has utilized for the purposes of understanding current-day system performance. Other agencies are also involved in the system, with their efforts coordinated through various regional committees, including the Transportation Policy Alternatives Committee (TPAC) and TransPort, a sub-committee of TPAC that coordinates regional transportation system management and operations activities, including data collection.

- **Federal agencies** make available several transportation related data sources, including FHWA's National Performance Management Research Data Set (NPMRDS), Highway Performance Monitoring System data submitted by ODOT and other DOTs, and the U.S. Census and American Community Survey data.
- **ODOT** has installed a comprehensive data collection, management and monitoring system across the region and state. ODOT's Transportation Operations Center (TOC) collects ITS data using roadway sensors to conduct real-time management of the transportation system. The ongoing development of the system is overseen by TransPort, which monitors and updates the regional TSMO plan and ITS architecture. ODOT reports Highway Performance Monitoring System data to FHWA. ODOT makes use of FHWA's NPMRDS when reporting traffic performance on the region's state-owned facilities. ODOT also collects, geocodes and archives crash data that supports statewide, regional and local safety planning efforts and related monitoring and reporting activities.
- **Portland State University** collects, archives and visualizes transportation data for the Portland-Vancouver metropolitan area through PORTAL. Currently data available from PORTAL includes: travel time reliability, travel speeds, travel volume, vehicle length (primarily used to identify freight vehicles), arterial signals, weigh-in motion, transit on-board capacity, transit reliability, weather and incidents. PORTAL is

working to expand its capabilities to include data for more arterials, bicycles and pedestrians. Corridor ranking will be applied to highlight travel delay, providing input for discussion on areas of congestion.

- **TriMet** reports ridership and performance statistics on the agency's website and to the National Transit Database, including boardings and on-time performance for the high capacity transit network and other fixed-route transit service. TriMet also reports traffic operations data from its GPS-equipped bus fleet. TriMet is in the process of equipping light-rail vehicles with GPS.
- **Metro's Regional Travel Options (RTO) Program**, the region's demand management program, conducts and funds marketing, education, outreach and demand management services throughout the region, including ongoing evaluation of the program's effectiveness. In this role, Metro evaluates commute options survey data, neighborhood-based residential travel diary data and other data sources to estimate changes in non-SOV travel, summarizing outcomes for program activities in the region every two years.
- **Metro's Research Center** conducts household activity surveys, freight counts and other surveys to monitor and model the region's transportation performance for all modes. The Research Center serves as the region's clearinghouse for forecast data and other data collected by federal, state, local and academic sources. Work is underway to streamline current and future data collection, maintenance and reporting in support of the CMP and other Metro programs.
- The **Southwest Washington Regional Transportation Council** (Vancouver, WA MPO) maintains a CMP for the greater Vancouver area. Its efforts are coordinated with the Metro, using the same technical coordination that is employed in archiving data with PSU PORTAL, sharing travel forecasting and demographic data.

As noted previously, Metro's Research Center continues to evaluate new datasets and developed an agency-wide performance measurement system – called the Regional Barometer – that incorporated observed data from the NPMRDS and U.S. Census data for key CMP measures. Regular updates to this online system have proved challenging due to the COVID pandemic, staffing changes and limited resources.

Identify and Evaluate Strategies

Metro works collaboratively with partner agencies to identify and evaluate appropriate strategies for managing congestion. This section describes the toolbox of strategies used in the region.

Objectives of Strategies

Reducing congestion in the region will require accomplishing the following objectives:

- Preservation and maintenance of the existing system
- Maintaining a compact urban form and focusing growth in areas that can be served by multiple travel options
- Reducing person trips or vehicle miles traveled
- Shifting automobile trips to other modes or off-peak travel periods
- Shifting drive alone trips to shared trips
- Improving roadway and transit operations through system management and operations
- Adding vehicle capacity at key bottlenecks

The identification and selection of strategies for a particular segment or corridor should be tied to the specific congestion issue, the travel options available in that corridor and land uses served.

CMP Toolbox of Strategies

One component of Metro's Congestion Management Process is a toolbox of congestion management and mobility strategies as shown in **Table 5**. This toolbox identifies a suite of strategies to manage congestion and address mobility needs prior to utilizing traditional roadway widening and other capacity projects. Prior to adding single occupant vehicle (SOV) capacity, agencies and jurisdictions should give consideration to the various strategies identified in this section, consistent with FHWA direction and RTP and OTP policies. Usually, multiple strategies are applicable within a corridor, while other strategies are intended to be applied region wide.

The CMP toolbox strategies were assembled to provide a wide range of strategies that could be used to manage congestion region-wide or within congested mobility corridors. They are arranged so that the strategies are considered in order from first to last. Even with the addition of capacity, many of the strategies can be implemented with the project to ensure the long-term management of a capacity project.

The CMP Toolbox of Strategies shown in Table 5.

Table 5. Toolbox of Strategies to Address Congestion in the Region

1		**Community design strategies** • Walkable communities and job centers facilitated by compact land use in combination with walking, biking and transit connections • Mixed-used areas and transit-oriented development • Parking management and pricing
2		**Travel Information and Incentives strategies** • Commuter travel options programs • Household individualized marketing programs • Car-sharing and eco-driving techniques • Safe Routes to School programs • Ridesharing (carpool, vanpool) services
3		**System management and operations strategies** • Real-time 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 • Access management (e.g., turn restrictions, medians)
Emerging		**Pricing strategies** • Congestion pricing • Managed lanes • High occupancy toll (HOT) lanes
4		**Active Transportation strategies** • New biking and walking connections to schools, jobs, downtowns and other community places • Bicycle infrastructure (e.g., bicycle racks, lockers and other bicycle amenities at transit stations and other destinations) • Separated pathways and trails
5		**Transit strategies** • High capacity transit • Expanded transit coverage • Expanded frequency of service • Improvements in right-of-way to increase speed and reliability of buses and MAX • Community and job connector shuttles • Park-and-ride lots in combination with transit service
6		**Street and throughway capacity strategies** • Local and arterial street connectivity to spread out travel • Addition of turn lanes at intersections, driveway restrictions and other geometric designs such as roundabouts • Road widening to add new lane miles of capacity (e.g, adding auxiliary lanes, additional general purpose lanes); pricing is considered when adding new throughway capacity in the region

The intent of the CMP Toolbox follows FHWA's direction to consider all available solutions before recommending additional roadway capacity in transportation system planning, corridor refinement planning and subarea studies. This direction is reflected in the RTP goals and policies (Chapters 2 and 3) and Regional Transportation Functional Plan (Section 3.08.220). It is also

consistent with the Oregon Transportation Plan adopted in July 2023 and Oregon Highway Plan Major Improvements Policy 1G.

RTP Mobility Corridor Strategies

The 2014 RTP Mobility Corridors Strategies identified system needs, function(s) and solutions for improved mobility for regional transportation facilities within each of the 24 mobility corridors. It also identified investments to work towards over life of the RTP. Each mobility corridor contains investment strategies broken into two time horizons: near term (1-10 years) and long term (10-25 years). The process of developing each corridor strategy included:

- Scoping analysis that identifies current and planned land uses, pedestrian, bike, management and operations, freight, highway, road and transit needs and issues.
- Integrated statement of mobility function defined at a corridor area level.
- Potential land use and transportation solutions identified.

Jurisdictional partners updated the investment priorities as part of the 2023 RTP update to reflect Oregon Legislative priorities, adopted local plan priorities and regional policy priorities identified during the 2023 RTP update for mobility, safety, transportation equity, climate, and economic vitality. The updated investment priorities were evaluated using Metro's regional travel demand forecast model as documented in Chapter 7 of the 2023 RTP. CMP-related system-wide measures used to forecast potential effectiveness of the package of recommended investment strategies in 2045 are shown in Table 6.

Table 6. RTP Performance Measures Used to Forecast Potential Effectiveness of Strategies

RTP System-Level Performance Measures
Multi-modal travel (total and per capita) - vehicle miles traveled
Mode Share (total) - walking trips and mode share - biking trips and mode share - transit trips and mode share - shared ride trips and mode share - drive alone trips mode share
Transit and auto travel times (change from 2020 base year systemwide)
Transit ridership (total and by service type)
Transit revenue hours (total)
Household and job access to transit (total by frequency of service)
Regional Bike and Pedestrian Network Completion (miles and share completed)
Throughway reliability - percent and location of facilities not meeting the mobility policy threshold for throughways

Source: 2023 Regional Transportation Plan (Chapter 7)

Other CMP measures that cannot be forecasted at this time and, as a result, were not evaluated in the 2023 RTP system analysis, include:

- safety
- reliability
    - freight reliability
    - system reliability
    - transit on-time performance
- access to industry and freight intermodal facilities
- pavement and bridge condition
- transit assets state of good repair

As noted previously, the Atlas of Mobility Corridors could not be fully updated in 2015 due to a lack of readily available observed data and federal performance-based planning rulemaking that was not yet complete. While certain mobility corridors have seen a tremendous amount of work and progress towards implementation, others still need further analysis and investment. The region will continue efforts to transition to an online atlas, as resources allow, that provides up-to-date information to inform transportation planning and decision-making in the region.

Implement Selected Strategies

Metro's congestion management process provides an important tool for monitoring and addressing the region's traffic congestion. The congestion management process provides information to help guide the investment of transportation funding toward addressing congestion. Information developed through the congestion management process is applied through the regional transportation planning process.

In coordination with ODOT, TriMet, SMART and local agencies, Metro uses the congestion management process as one tool to help identify regional transportation system needs. This effort is supported by regional studies, including corridor refinement plans, development of local transportation system plans and capital improvement plans, regional transportation modeling, and other planning and engagement efforts which all feed into the development of the RTP.

Needs are developed based on a system-planning level analysis that considers how various strategies can address congestion prior to adding capacity consistent with the Regional Transportation Functional Plan and Oregon Highway Plan Major investment Policy 1G, which states "It is the policy of the State of Oregon to maintain highway performance and improve safety by improving system efficiency and management before adding capacity." ODOT works in partnership with regional and local governments to address highway performance and safety needs. Identified congestion needs are then incorporated into RTP recommendations. Project sponsors then must give consideration to the various strategies from the CMP Toolbox as projects are identified for inclusion in the RTP and move forward to implementation.

Many locally-funded priorities move forward to implementation through local processes. ODOT administers its own prioritization and funding allocation processes and those priorities selected for funding are programmed in the State Transportation Improvement Program and in the Metropolitan Transportation Improvement Program (MTIP) if the priority is in the metropolitan area.

Local and state project priorities are also submitted to Metro and selected through the Regional Flexible Fund Allocation (RFFA) process and incorporated in the MTIP. The RFFA process selects priority projects for implementation based on criteria that support RTP goals and objectives and the region's CMP in combination with public and jurisdictional input on priorities. The 2025-27 RFFA cycle, for example, included criteria for projects to receive additional points to help make the region's transportation system more equitable, safer, cleaner and more reliable, consistent with the 2018 RTP goals.

Monitor Strategy Effectiveness

FHWA identifies congestion monitoring as just one of the several aspects of transportation system performance that leads to more effective investment decisions for transportation improvements. Safety, infrastructure condition, environmental quality, economic development, quality of life, and customer satisfaction are among the aspects of performance that also require monitoring.

The metropolitan transportation planning process is required to have "a coordinated program for data collection and system performance monitoring to assess the extent of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions." In addition, it also indicates that "to the extent possible, this data collection program should be coordinated with existing data sources and coordinated with operations managers in the metropolitan area."

As a result, the goal of the Metro's CMP system monitoring plan is to develop an ongoing system of monitoring and reporting that relies primarily on data already collected or planned to be collected in the region. The components of the monitoring plan include roadways designated on the National Highway System. This includes throughways and arterial streets that also serve as regional freight and transit routes, and support bicycle and pedestrian travel.

- **Roadway performance** is monitored to collect traffic volumes, vehicle miles traveled, vehicle speed and other related data to identify extent of congestion and travel time reliability and safety issues.
- **Fatal and serious injury crashes** are monitored using ODOT crash data for all modes of travel to identify high injury corridors and potential areas of non-recurring congestion.
- **Freight truck travel time reliability** on regional freight routes that are on the Interstate System is evaluated to identify mobility needs of goods movement.
- **Transit performance** is monitored continuously by TriMet, SMART and C-TRAN through various operating and capital plans and federally-required reporting to the National Transit Database. This includes transit ridership as well as boarding rides per revenue hour to measure the efficiency and effectiveness of transit service.

- **Bicycle/pedestrian/trail facility inventory and count data** are monitored and updated in various databases (as resources are available). The regional trail inventory was updated in 2022. Updates to the regional bikeway and regional sidewalk inventories now occur quarterly as part of RLIS updates provided by cities and counties in the region. This information is monitored to measure progress completing gaps in the RTP regional bike and pedestrian networks.
- **Mode share** in the region is monitored using U.S. Census data and periodic household travel behavior surveys conducted jointly by Metro, ODOT and other partners. This information is monitored to identify the extent to which people are using available travel options in the region. Measuring this over time can reveal whether the region is successfully managing travel demand and the transportation system.

Implementation of the updated regional mobility policy as well as implementation of the federal transportation performance management program are anticipated to result in future updates to the region's CMP process and monitoring approach as part of the next RTP update (due in 2023). In order to meet federal performance management requirements, performance evaluations are expected to take place in two- and/or four-year cycles and be aligned closely with other key on-going MPO activities, including the development of future MTIPs and the next RTP update (due in 2028). The monitoring program will guide, inform, and help prioritize subsequent Metro funding allocations, including the Regional Flexible Fund Allocation process.

Metro is also in the process of looking or ways to streamline performance measure monitoring and reporting efforts agency-wide to improve transparency and support decision-making. This effort will also define longer-term measure ownership, collection standards, data maintenance and governance – key areas that will provide more clarity and certainty in support of Metro's CMP and performance-based planning efforts.

MAP-21 PERFORMANCE MEASURES AND TARGETS

Note: This section may be further updated pending consultation with FHWA and FTA and receipt of missing data from partner agencies.

This section establishes the region's federal MAP-21 performance measures and targets for:

- Safety
- National Highway System Asset Management
- National Highway System Performance
- National Freight Movement on the Interstate System
- Congestion Mitigation and Air Quality Program
- Transit Asset Management
- Transit Safety Performance

The information reported has been cooperatively developed by Metro, the Oregon Department of Transportation (ODOT), TriMet, South Metro Area Regional Transit (SMART), Portland Streetcar, Inc., Ride Connection, and C-TRAN and was submitted to ODOT as required for federal monitoring and reporting purposes in Fall 2022.

The performance targets in this appendix do not set regional policy for the RTP. Instead they are solely for the purpose of meeting federal requirements. This appendix provides useful system performance information to satisfy federal monitoring and reporting requirements and inform each update to the RTP (including the 2023 RTP update). First adopted in 2018, the targets were developed in coordination with the Transportation Policy Alternatives Committee (TPAC), the Oregon Department of Transportation (ODOT), TriMet, South Metro Area Regional Transit (SMART), C-TRAN and the SW Washington Regional Transportation Advisory Committee (RTAC). These measures and targets support the region's Congestion Management Process and are considered with a broader set of performance measures and targets contained in Chapter 2 of the 2023 RTP.

The safety measures and targets (see Table 1) are also contained in the 2018 Regional Transportation Safety Strategy developed as a component of the 2018 RTP. The National Highway System Performance, and Freight Movement on the Interstate System - Reliability measures and targets are contained in the 2018 Regional Freight Strategy, which is also a component of the 2018 RTP. The 2018 RTP was adopted in December 2018.

Four updates were made in the Mid Performance Report in 2020 which came after adoption of the baseline performance, targets and measures in the 2018 RTP:

- Adjusted the 2017 baseline numbers and some targets to reflect changes in data and federal guidance for use of the National Performance Management Research Dataset (NPMRDS) version 2.

- Adjusted the 2017 baseline numbers for Truck Travel Time Reliability (TTTR) to better reflect updated federal guidance.
- Expanded Transit Asset Management measures and targets to include Portland Streetcar Inc. and Ride Connection, which were not available in 2018.
- Added transit safety performance measures and targets as adopted by TriMet, Ride Connection, SMART, Portland Streetcar Inc., and C-TRAN in 2020.

On May 17, 2018, the Oregon Transportation Commission adopted performance measures and statewide targets for pavement and bridge condition and traffic congestion and on-road mobile source emissions for the Congestion Mitigation and Air Quality Program as an amendment to the Oregon Transportation Plan for federal monitoring and reporting purposes. The statewide targets were subsequently amended in 2022 to establish a new 2022 performance baseline and performance target for 2023 and 2025.[9] ODOT's performance measures and targets addressing safety statewide are contained in the Oregon Transportation Safety Action Plan. The transit asset management measures and targets are contained and reported in the TriMet Transit Asset Management (TAM) Plan, the C-TRAN TAM plan and Group TAM Plan prepared by ODOT on behalf of SMART.

Individual tables that follow (Tables 7- 14) further document the region's federal TPM measures, the most recent actual performance and targets within the Portland area metropolitan planning area boundary (MPA).

Safety Measures and Targets

Metro set ambitious targets for safety within the region's Metropolitan Planning Area (MPA) boundary in the 2018 RTP: a sixteen percent reduction in fatalities and serious injuries by 2020, a fifty percent reduction by 2025 and zero fatalities and serious injuries by 2035. . To be on track to meet these goals, fatalities and serious injuries needed to decline nearly 29 percent and 43 percent respectively from the base year 2015 to the federal performance target reporting years 2022 and 2024. However, fatalities increased 50 percent, and serious injuries increased 12 percent.

The greater Portland region did not meet any of the five safety targets the region set for the federal transportation performance measures or improve over the baseline from 2015. The only safety targets the region met are for number of serious bicycle injuries, and the rate of serious bicycle injuries per 100 thousand people and per 100 million vehicle miles traveled. Based on the results of the performance measures, the region is not on track for achieving its Vision Zero goal. See **Table 7**.

[9] https://www.oregon.gov/ODOT/Planning/Documents/OHP-Appendix-I-Amendment.pdf

Table 7. Safety Targets – Fatalities and Serious Injuries

Performance Measure	5-year rolling average			Target achieved?	Better than baseline?	On track to Vision Zero?
	2011-2015 Baseline	2016-2020 Target	2016-2020 Actual			
Number of fatalities	62	52	93	No	No	No
Fatalities per 100 million vehicle miles traveled	0.6	0.5	0.9	No	No	
Number of serious injuries	458	384	512	No	No	
Serious injuries per 100 million vehicle miles traveled	4.5	3.6	4.8	No	No	
Number of non-motorized fatalities and serious injuries	113	95	129	No	No	

The 2018 Regional Transportation Plan and 2018 Regional Transportation Safety Strategy set a target of zero traffic deaths and serious injuries by 2035. At the time, Metro developed annual targets to reach the 2035 target using the same methodology used by the Oregon Department of Transportation in the Oregon Transportation Safety Action Plan. These measures reflect people killed or seriously injured rather than fatal or serious injury crashes. Serious injuries do not include fatalities. The Vision Zero target is unchanged in the 2023 RTP.

Source: Oregon Department of Transportation.

While data trends continue to show that the region is moving in the opposite direction for the five MAP-21 safety performance measures, the public awareness and the number of fatalities resulting from crashes in the region has increased the urgency to do more to prevent these fatalities. The 2023 RTP reflects investments that look to address aspects of the roadway to reduce crashes, particularly severe crashes that lead to serious injuries and fatalities. These investments and proposed spending on safety is the described in Chapter 6 and Chapter 7 of the 2023 RTP.

Table 8. Asset Management – Pavement Condition Targets

Asset Management – Pavement Condition*							
Performance measure	**2018 Baseline**	**2020 Actual**	**2021 Actual**	**2022 Target**	**2024 Target**	**2024 Target achieved?**	**Better than baseline?**
Percent of pavement on the Interstate System in good condition	46.5%	50.9%	not available	35%	45%	yes	yes
Percent of pavement on the Interstate System in poor condition	0.8%	0.5%	not available	0.5%	0.5%	yes	yes
Percent of pavement on the non-Interstate NHS in good condition	17.5%**	13.4%**	not available	32%**	14 or 15%	no	no
Percent of pavement on the non-Interstate NHS in poor condition	10.4%**	11.8%**	not available	25%**	10.8%	no	no

Source: Oregon Department of Transportation
* ODOT changed the metrics for calculating percent of pavement on non-Interstate NHS in good and poor condition

The percentage of pavement on the Interstate Highway System in the Portland region classified in good condition increased from 46 percent in 2018 (new baseline) to 51 percent in 2020. The percentage of pavement on the Interstate Highway System in poor condition decreased slightly between 2018 and 2020 and remained less than one percent. For the new 2018 Baseline, ODOT changed the metrics for calculating percent of pavement the on non-Interstate NHS in good and poor condition, which reduced the percentage in good condition and increased the percentage in poor condition compared to the 2020 Mid-performance Report. The percentage of pavement on the non-Interstate National Highway System (NHS) in good condition decreased between 2018 and 2020, from 17.5 to 13.4 percent. The percentage of pavement on the non-Interstate National Highway System (NHS) in poor condition increased from 10.4 percent in 2018 to 11.8 percent in 2020.

Based on this data, two of the four pavement condition targets were achieved. The asset management performance targets achieved were the percent of pavement in good condition and in poor condition on the interstate system. The asset management performance targets for the percent of pavement in good condition and in poor condition on the non-interstate system were

not achieved. Since establishing the baseline and first performance target for 2018, the region has met or exceeded its target for percentage of pavement in good condition and poor condition on the interstate system for all subsequent years. The reasons for meeting the asset management performance targets for the interstate system can be attributed to several reasons. First and likely the most impactful is that ODOT and the Portland region have a long standing policy around preserving and maintaining the existing transportation system. The Oregon Transportation Commission reaffirmed the "fix-it first" policy direction through the approval of its strategic action plan which continues policy direction to maintain the existing system first. Another reason pavement asset management performance targets for the interstate system have been met is because of criteria which restrict funding for or favors the interstate system. Some federal funding programs, like the Interstate Maintenance program is restricted funding for preservation and maintenance activities, while some ODOT funding programs allocate funds based on criteria that favor the interstate system (e.g. high volumes). While this supports preservation and maintenance upkeep on the interstate system, it also creates disadvantages on the maintenance and preservation needs of the non-interstate highway system. Lastly, as it pertains to pavement asset management, ODOT elected to set targets that are less aggressive than those set for Oregon statewide. This is because in general, the Portland region's roadways and have a much higher usage than in the rest of the state and makes keeping up with the pavement conditions target very challenging when recognizing the myriad of competing transportation system needs, including the pavement asset management needs of the non-interstate system.

Nonetheless, the biggest driver towards the region's pavement asset management performance is due to the application of the "fix-it first" policy direction. That policy direction continues through 2024-2027 STIP revenue allocation strategy to funding programs which continues to provide the greatest amount of funding towards fixing existing assets. Funding for asset management was further bolstered by the infusion of funding from the Bipartisan Infrastructure Law (BIL). Additionally, the OTC also created new funding programs to support the comprehensive needs – including maintenance – of the state-owned district highways, which comprise the non-interstate highway system.

Table 9. Asset Management – Bridge Condition Targets

Asset Management – Bridge Condition							
Performance measure	**Regional 2017 Baseline**	**Regional 2020 Actual**	**Regional 2021 Actual**	**Regional 2022 Target**	**Regional 2024 Target**	**2024 Target achieved?**	**Better than baseline?**
Percent of NHS bridges classified in good condition	6%	6%	6%	5%	5%	yes	same
Percent of NHS bridges classified in poor condition	1%	1%	1%	5%	1%	yes	same

Source: Oregon Department of Transportation

Shown in **Table 9**, the percentage of NHS bridges in the Portland region classified in good condition remained at 6 percent in 2020 and 2021 (same as the 2017 baseline). The percentage of NHS bridges classified in poor condition remained at 1 percent in 2020 and 2021. The region achieved the 2022 and 2024 targets for both bridge condition performance measures (**see Table 9**).

Table 10. National Highway System Performance Targets

National Highway System Performance *							
Performance measure	**2017 Baseline***	**2018 Actual**	**2019 Actual**	**2020 Target**	**2022 Target**	**2020 Target achieved?**	**Better than baseline?**
Percent of person-miles traveled on the Interstate System that are reliable	46%	47%	49%	43%	43%	yes	yes
Percent of person-miles traveled on the non-Interstate NHS that are reliable	72%	75%	77%	66%	66%	yes	yes

Source: National Performance Management Research Dataset (NPMRDS)

Metro set 2020 and 2022 regional targets for National Highway System Performance within the region's MPO boundary in the 2018 RTP (**Table 10)**. The percentage of person-miles traveled on the Interstate System in the region that are reliable was 46 percent in 2017 (baseline). That percentage increased to 47 percent in 2018 and 49 percent in 2019 and achieved the 2020 and

2022 targets of 43 percent. The percentage of person-miles traveled on the non-Interstate NHS that are reliable was 72 percent in the 2017 baseline. That percentage increased to 75 percent in 2018 and 77 percent in 2019 and achieved the 2020 and 2022 targets of 66 percent. Not only are the percentage of person-miles traveled (on the Interstate and non-Interstate system) in the region that are reliable exceeding the 2020 and 2022 targets, but the trend from 2017 to 2019 shows an overall improvement in reliability.

The results of the monitoring data are not surprising, since the development of the 2017 baseline, the region has seen the opening of a couple of major roadway and transit capital investments, including the Interstate 5 south auxiliary lanes near Lower Boones Ferry Road, the Interstate 205 auxiliary lanes from Glen Jackson Bridge to Johnson Creek Boulevard, OR 217 auxiliary lanes from Beaverton-Hillsdale Highway and OR 99W, the Better Red project which extends the MAX red line to Hillsboro Airport and fixes a MAX bottleneck at the Gateway Transit Center, and the Division Transit frequent express bus project. These investments, included in previous MTIPs, were likely significant contributors to the percent of person-miles traveled on the interstate and non-interstate NHS that are reliable.

Table 11. Freight Movement on the Interstate System – Freight Reliability Targets

Freight Movement on the Interstate System – Freight Reliability Targets							
Performance measure	**2017 Baseline**	**2018 Actual**	**2019 Actual**	**2020 Target**	**2022 Target**	**2020 Target achieved?**	**Better than baseline?**
Truck Travel Time Reliability (TTTR) Index	2.93	2.88	2.84	3.10	3.10	yes	yes

Source: National Performance Management Research Dataset (NPMRDS)

Metro set 2020 and 2022 regional targets for freight reliability within the region's MPO boundary in the 2018 RTP (**Table 11**). The region continues to make progress towards truck time reliability. The Truck Travel Time Reliability (TTTR) Index was 2.93 within the region in the 2017 Baseline. This means that the amount of additional time that was needed for a truck trip to arrive on time 19 out of 20 times (buffer time) was almost 3 times as long as a truck trip that needed no additional time to arrive on time 95 percent of the time. The Truck Travel Time Reliability (TTTR) Index improves slightly to 2.88 in 2018 and 2.84 in 2019, , which achieves the 2020 and 2022 targets of 3.10. While slight, the progress shown in the monitoring data for 2018 and 2019 is notable, recognizing the region continues to grow in population and employment. The increase in people and jobs in the region, combined with the global pandemic shifting patterns of shopping to online are factors which the region may expect to see a decrease performance in TTTR and movement in the opposite direction. But the diverse array of transportation investments made previously have helped improve the TTTR index. Nonetheless, 2.84 continues to represent a significant amount of buffer time needed for freight reliability and presents a continuous opportunity to invest in an assortment of transportation management strategies and investments to support mobility for people and goods.

Congestion Mitigation and Air Quality (CMAQ) Measures and Targets

Metro set 2020 and 2022 regional targets for Congestion Mitigation and Air Quality (CMAQ) measures within the region's MPO boundary in the 2018 RTP. The Portland metropolitan region reached the end of its second ten-year maintenance plan for carbon monoxide on October 2, 2017. As a result, starting on October 3, 2017, the region is in attainment status for all national ambient air quality standards. Subsequently, the Federal Highway Administration (FHWA) determined in October 2019, the Portland metropolitan region is not subject to reporting on the Congestion Mitigation and Air Quality federal performance measures and targets as a result of its attainment status. Therefore, Metro is no longer required to report on the CMAQ Peak-Hour Excessive Delay and the Non-Single Occupancy Vehicle Mode Share performance targets.

Transit Asset Management Measures and Targets

Transit agencies that provide service in the Portland region report their Transit Asset Management (TAM) performance and targets to Metro and are included in reporting of the federal transportation performance management (TPM) requirements. Metro used this information to establish a 2018 baseline and set 2020 targets for TAM performance within the region's MPO boundary in the 2018 RTP.

The region's transit agencies continue to make progress towards their annual transit asset management (TAM) targets. Slightly different from the majority of the MAP-21 performance targets, the TAM performance targets are re-evaluated annually to determine and if necessary update or adjust their TAM targets.

In general, the region's transit agencies – TriMet, SMART, and City of Portland Streetcar – are making progress towards their TAM targets as shown in **Table 12**, but no single transit agency met all TAM targets set forth. As the largest transit service provider in the region, TriMet's performance on the TAM targets is vital because transit plays a significant role in the region's implementation strategy to achieve the Regional Transportation Plan goals. For previous TAM targets set for 2020, 2021 or 2022, TriMet has not been able to meet all the individual targets across the four major categories: rolling stock, equipment, facilities, and infrastructure. In most cases, TriMet met many of the individual targets, but with each year the actual performance does not meet one or two. There is not a consistent pattern of where underperformance of the TAM target occurs. One year it is the rolling stock TAM targets not met, then in another year it is infrastructure, and in another year it is the equipment. For 2023, TriMet's TAM targets are set to levels where TriMet views as likely achievable.

For the smaller transit providers, namely SMART and City of Portland Streetcar, TAM targets for 2020 are achieved by SMART, but missing performance data for 2021 and 2022 makes it difficult to determine at this time whether TAM targets have been met for subsequent years. The City of Portland Streetcar did not meet TAM performance targets set for rolling stock and equipment in 2020 and 2021, but the underperformance appears to be slight with an increase by 2-4 percent. Establishing TAM targets for 2022 and 2023 for the smaller transit providers do not appear to be applicable.

A summary of each transit provider follows.

TriMet's Rolling Stock performance measure is the percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of buses (which are revenue vehicles) that have met or exceeded their ULB was 15.3 percent. In 2019 the percent of buses that had met or exceeded their ULB was 16.2 percent, which is better than the 2020 target of 18 percent. In 2021 the percent of buses that had met or exceeded their ULB was 6.1 percent, which almost met the 2021 target of 5.9 percent. For 2022 the percent of buses that met or exceeded their ULB is 0 percent, which meets the 2022 target of 0 percent. For the 2018 Baseline, the percent of revenue vehicles that were cutaways (used for para-transit) that have met or exceeded their ULB was 9.0 percent. In 2019 the percent of revenue vehicles that were cutaways that had met or exceeded their ULB increased 16.2 percent. This represents a large increase but still meets the 2020 target of 45 percent. In 2020 and 2021 the percent of revenue vehicles that were cutaways that had met or exceeded their ULB was 45.2 percent, which matched the 2021 target of 45.2 percent. For 2022 the percent of revenue vehicles that are cutaways that met or exceeded their ULB is 52.2 percent, which does not meet the 2022 target of 43.2 percent. For both the 2018 Baseline and in 2019, no light rail vehicles had met or exceeded their ULB, surpassing the 2020 target of 18 percent. For both the 2020 and 2021 light rail vehicles that had met or exceeded their ULB was 17.6 percent, which met the 2020 and 2021 target of 17.6 percent. For 2022 light rail vehicles that had met or exceeded their ULB met the 2022 target of 17.7 percent (**see Table 12**).

TriMet's Equipment performance measure is the percent of non-revenue service vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of automobiles that have met or exceeded their ULB was 28.6 percent. In 2019 the percent of automobiles that had met or exceeded their ULB was also 28.6 percent. This represents a new categorization for the types of equipment that are considered automobiles, or trucks and other rubber tire vehicles, that was not used in TriMet's original 2018 Transit Asset Management performance measure for equipment. The 28.6 percent in 2019 does not meet the 2020 target of 17 percent. TriMet changed the 2021 target to 28.6 percent for automobiles in light of the new way of categorizing what is an auto; and the 2020 and 2021 percent of automobiles that had met or exceeded their ULB met that target. In 2022 the percent of automobiles that met or exceeded their ULB was 25 percent, which is better that the new target for 2022 of 40 percent. For the 2018 Baseline the percent of trucks and other rubber tire vehicles that have met or exceeded their ULB was 34.4 percent. In 2019 the percent of trucks and other rubber tire vehicles that had met or exceeded their ULB was 29.0 percent, which does not meet the 2020 target of 23 percent. In 2020 and 2021 the percent of trucks and other rubber tire vehicles that have met or exceeded their ULB was 24.3 percent; which met the 2021 target of 24.3 percent. For 2022, the percent of trucks and other rubber tire vehicles that have met or exceeded their ULB is 34.1 percent, which does not meet the 2022 target of 27.8 percent (**see Table 12**).

TriMet's Facilities performance measure is the percent of facilities rated below 3 on the Transit Economic Requirements Model (TERM) condition scale (1=Poor to 5=Excellent). For the 2018 Baseline, the percent of Passenger/Parking facilities rated below 3 on the condition scale was 1.03 percent. In 2019 the percent of Passenger/Parking facilities rated below 3 on the condition scale

was 1.22 percent. The 1.22 percent in 2019 does not meet the 2020 target of 1 percent. In 2020 and 2021 the percent of Passenger/Parking facilities rated below 3 on the condition scale was 0.9 percent. 2020 met the target of 1 percent, but 2021 did not meet the new 2021 target of 0.7 percent. For 2022, the percent of Passenger/Parking facilities rated below 3 on the condition scale is 0.6 percent, which meets the 2022 target (**see Table 12**).

TriMet's Infrastructure performance measure is the percent of track segments with performance restrictions. For the 2018 Baseline, the percent of TriMet's light rail track with performance restrictions was 4.7 percent. In 2019 the percent of light rail track with performance restrictions was 4.2 percent. This represents an improvement for this measure and nearly meets the 2020 target of 4.0 percent. In 2020 and 2021 the percent of light rail track with performance restrictions was 5.9 percent, and 7.6 percent respectively. Neither 2020 or 2021 performance met the 2020 and 2021 targets of 4.0 and 5.0 percent. For 2022, the percent of light rail track with performance restrictions is 7.3 percent, which does not meet the 2022 target of 5.0 percent. For the 2018 Baseline, the percent of TriMet's Hybrid rail track with performance restrictions was 3 percent. In 2019 the percent of Hybrid rail track with performance restrictions was only 0.4 percent. This represents a large improvement for this measure and meets the 2020 target of 3.0 percent. For 2020 the percent of TriMet's Hybrid rail track with performance restrictions was 1.6 percent; for 2021 it was 0.1%; and in 2022 it is 0 percent. The performance for all three of these years is far better than the 3.0 percent target in all three years (**see Table 12**).

Ride Connection's Rolling Stock performance measure is the percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of revenue vehicles that were cutaways that have met or exceeded their ULB was 19 percent. In 2019, the percent of revenue vehicles that were cutaways that had met or exceeded their ULB was also 19 percent, which meets the 2020 target of 20 percent. For 2020, the percent of revenue vehicles that were cutaways that had met or exceeded their ULB was 28 percent, which was better or exceeded the 2021 For the 2018 Baseline, the percent of revenue vehicles that were minivans that have met or exceeded their ULB was 26 percent. In 2019, the percent of revenue vehicles that were minivans that had met or exceeded their ULB increased to 33 percent. Neither the 2018 baseline nor 2019 performance met the target of 25 percent. For the 2018 Baseline, the percent of revenue vehicles that were automobiles that have met or exceeded their ULB was 20 percent. In 2019, the percent of revenue vehicles that were minivans that had met or exceeded their ULB increased to 40 percent, which still meets the target of 48 percent (**see Table 12**).

Ride Connection's Facilities performance measure is the percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent). For the 2018 Baseline and in 2019, the percent of all facilities rated below 3 on the condition scale was 0 percent or none, which meet the 2020 target of 0 percent.

SMART's Rolling Stock performance measure is the percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all revenue vehicles that have met or exceeded their ULB was 33 percent. In 2019 the percent of all revenue vehicles that had met or exceeded their ULB was 35 percent, which does not meet the 2020 target of 33 percent by a small margin. For 2020 the percent of all revenue vehicles that had met or

exceeded their ULB was 43 percent, a large increase that does not meet the 2020 target. For 2020 the percent of revenue vehicles that were cutaways that had met or exceeded their ULB was 47 percent. The 2021 and 2022 performance data was unavailable in Fall 2022 (**see Table 12**).

SMART's Equipment performance measure is the percent of service vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all service vehicles that have met or exceeded their ULB was 20 percent, which meets the 2020 target. In 2019 the percent of all service vehicles that had met or exceeded their ULB quickly rose to 38 percent, which far exceeds (does not meet) the 2020 target of 20 percent. For 2020 the percent of all service vehicles that had met or exceeded their ULB dropped to 10 percent, a large decrease that easily met the 2020 target. The 2021 and 2022 performance data was unavailable in Fall 2022 (**see Table 12**).

SMART's Facilities performance measure is the percent of parking and maintenance facilities rated below 3 on the condition scale (1=Poor to 5=Excellent). For the 2018 Baseline, the percent of all facilities rated below 3 on the condition scale was 0 percent or none. In 2019 there were also no facilities rated below 3 on the condition scale (0 percent), which met the 2020 target of 0 percent. For 2020 and 2021 the percent of parking facilities rated below 3 was 0 percent. For 2020 the percent of maintenance facilities rated below 3 was 3 percent; and in 2021 it was 0 percent (**see Table 12**).

C-TRAN's Rolling Stock performance measure is the percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all revenue vehicles that have met or exceeded their ULB was 14.5 percent. In 2019 the percent of all revenue vehicles that had met or exceeded their ULB was 18 percent, which was a slight increase but still meets the 2020 target of 20 percent. For 2020 the percent of all revenue vehicles that had met or exceeded their ULB was 19 percent, which met the 2020 target. For 2021 the percent of all revenue vehicles that had met or exceeded their ULB was 22 percent, which was slightly short of meeting the 2021 target of 20 percent. 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

C-TRAN's Equipment performance measure is the percent of non-revenue service vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all service vehicles that have met or exceeded their ULB was 17.1 percent. In 2019 the percent of all service vehicles that had met or exceeded their ULB was 25 percent, which was an increase but still meets the 2020 target of 30 percent. For 2021 the percent of all service vehicles that have met or exceeded their ULB was 43 percent, which does not meet the 2021 target of 30 percent. 2020 and 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

C-TRAN's Facilities performance measure is the percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent). For the 2018 Baseline, the percent of all facilities rated below 3 on the condition scale was 0 percent or none. In 2019, 2020, and 2021 there were also no facilities rated below 3 on the condition scale (0 percent), which met the 2020 and 2021 targets of 30 percent. 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

Portland Streetcar's Rolling Stock performance measure is the percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all revenue vehicles that have met or exceeded their ULB was 0 percent. In 2019 also 0 percent, which meets the 2020 target of 0 percent or none. In 2020 and 2021 the percent of revenue vehicles that are streetcars that had met or exceeded their ULB was 2 percent, slightly above the target of 0 percent. In 2020 and 2021 the percent of revenue vehicles that are bogies that had met or exceeded their ULB was 0 percent, which met the 2020 and 2021 targets. (see **Table 12**).

Portland Streetcar's Equipment performance measure is the percent of non-revenue service vehicles that have met or exceeded their useful life benchmark (ULB). For the 2018 Baseline, the percent of all service vehicles that have met or exceeded their ULB was 40 percent. In 2019 the percent of all service vehicles that had met or exceeded their ULB was 17 percent, which demonstrates a significant improvement, but does not meet the 2020 target of 0 percent or none. However, the one vehicle that had exceeded its ULB was replaced in 2020. In 2020 the percent of all service vehicles that had met or exceeded their ULB was 4 percent, which was another significant improvement, but does not meet the 2020 target of 0 percent. In 2021 the target of 0 percent was met. 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

Portland Streetcar's Facilities performance measure is the percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent). For the 2018 Baseline, the percent of all facilities rated below 3 on the condition scale was 0 percent or none. In 2019 the percent of all facilities rated below 3 on the condition scale was also 0 percent, which meets the 2020 target of 0 percent. For both 2020 and 2021 the targets of 0 percent were met. 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

Portland Streetcar's Infrastructure performance measure is the percent of track segments with performance restrictions. For the 2018 Baseline, no Portland Streetcar rail track had performance restrictions. In 2019 the percent of rail track with performance restrictions was 0 percent, which meets the 2020 target of less than 2.0 percent. For both 2020 and 2021 the targets of 0 percent were met. 2022 performance data was unavailable in Fall 2022. (**see Table 12**).

Table 12. Transit Asset Management Targets

Transit Asset Management Targets [1]									
Performance measure	**2018 Baseline Performance**	**2019 Performance**	**2020 Target**	**2020 Performance**	**2021 Target**	**2021 Performance**	**2022 Target**	**2022 Performance**	**2023 Target**
TriMet Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)									
BU – Bus	15.3%	16.2%	18%	0.0%	5.9%	**6.1%**	5.8%	0%	0%
CU – Cutaway (used for LIFT para-transit)	9.0%	16.6%	45%	45.2%	45.2%	45.2%	43.2%	52.2%	60%
LR – Light rail vehicles	0%	0%	18%	17.6%	17.6%	17.6%	17.6%	17.7%	17.7%
RP – Commuter rail passenger coach	0%	0%	0%	0%	0%	0%	0%	0%	0%
RS – Commuter rail self-propelled passenger car	0%	0%	0%	0%	0%	0%	0%	0%	0%
VN – Van (used for LIFT para-transit)	0%	0%	0%	0%	0%	0%	16.5%	23.8%	25.3%[3]
TriMet Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)									
Automobiles	28.6%	28.6%	17%	28.6%	28.6%	28.6%	40%	25%	25%
Trucks and other rubber tire vehicles	34.4%	29.0%	23%	24.3%	24.3%	24.3%	27.8%	34.1%	25.3%
Steel wheel vehicles	30%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TriMet Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)									
Passenger/Parking facilities	1.03%	1.22%	1%	0.9%	0.7%	**0.9%**	0.6%	0.6%	0.7%
Administrative/Maintenance facilities	0%	0%	0%	0%	0%	0%	0%	0%	0%

Transit Asset Management Targets [1]									
Performance measure	**2018 Baseline Performance**	**2019 Performance**	**2020 Target**	**2020 Performance**	**2021 Target**	**2021 Performance**	**2022 Target**	**2022 Performance**	**2023 Target**
TriMet Infrastructure – Percent of track segments with performance restrictions									
LR – light rail	4.7%	4.24%	4.0%	5.9%	5.0%	**7.6%**	5%	7.3%	7%
YR – Hybrid rail	3.0%	0.42%	3.0%	1.6%	3.0%	0.1%	3%	0%	3%
Ride Connection Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)									
CU – Cutaway Bus	19%	19%	20%	28%	32%[2]	N/A	38%[2]	N/A	N/A
MV – Minivan	26%	33%	25%	25%	32%[2]	N/A	34%[2]	N/A	N/A
AO – Automobiles	20%	40%	48%	33%	50%[2]	N/A	50%[2]	N/A	N/A
Ride Connection Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)									
Passenger/Parking	0%	0%	0%	0%	0%[2]	0%	0%[2]	N/A	N/A
Administrative/Maintenance	0%	0%	0%	0%	1.5%[2]	0%	1.5%[2]	N/A	N/A
SMART Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)									
BU – Bus	33%	35%	33%	43%	20%	N/A	25%[2]	N/A	N/A
CU – Cutaway Bus				47%	32%[2]	N/A	38%[2]	N/A	N/A
SMART Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)									
Automobiles	20%	38%	20%	10%	12%	N/A	8%[2]	N/A	N/A
Truck and other rubber tire vehicles					44%	N/A	45%[2]	N/A	N/A
SMART Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to									

Transit Asset Management Targets [1]									
Performance measure	**2018 Baseline Performance**	**2019 Performance**	**2020 Target**	**2020 Performance**	**2021 Target**	**2021 Performance**	**2022 Target**	**2022 Performance**	**2023 Target**
5=Excellent)									
Passenger/Parking	0%	0%	0%	0%	0%[2]	0%	0%[2]	N/A	N/A
Administrative/Maintenance	0%	0%	0%	3%	1.5%[2]	0%	1.5%[2]	N/A	N/A
C-TRAN Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)	14.5%	18%	20%	19%	20%	**22%**	20%	N/A	N/A
C-TRAN Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)	17.1%	25%	30%	N/A	30%	**43%**	30%	N/A	N/A
C-TRAN Facilities – Percent of facilities rated below 2.5 on the condition scale (1=Poor to 5=Excellent)	0%	0%	30%	0%	30%	0%	30%	N/A	N/A
Portland Streetcar Rolling Stock – Percent of revenue vehicles rated below 2.5 on the condition scale (1=Poor to 5=Excellent)									
Streetcars	0%	0%	0%	**2%**	0%	**2%**	0%	N/A	N/A
Bogies	0%	0%	0%	0%	0%	0%	0%	N/A	N/A
Portland Streetcar Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)	40%	17%	0%	**4%**	0%	0%	0%	N/A	N/A
Portland Streetcar Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)	0%	0%	0%	0%	0%	0%	0%	N/A	N/A
Portland Streetcar Infrastructure – Percent of track mileage operating below design speed	0%	0%	<2%	0%	0%	0%	0%	N/A	N/A

[1] Each transit provider must update State of Good Repair targets annually and the agency's Transit Asset Management (TAM) Plan must be updated at least every 4 years

Transit Asset Management Targets [1]									
Performance measure	**2018 Baseline Performance**	**2019 Performance**	**2020 Target**	**2020 Performance**	**2021 Target**	**2021 Performance**	**2022 Target**	**2022 Performance**	**2023 Target**
covering a horizon period of at least 4 years. Performance measures and targets are monitored and reported in agency TAM Plans adopted by TriMet, C-TRAN, Ride Connection, SMART and Portland Streetcar. [2] Ride Connection and SMART's performance measures and targets are monitored and reported in ODOT's Group TAM Plan – targets are statewide encompassing all small providers. [3] Additional vans will reach the useful life benchmark for the year covered by RY2023.									

Transit Safety Measures and Targets

Transit agencies that provide service in the Portland region reflect their Transit Safety performance and targets in their respective Public Transportation Agency Safety Plans (PTASPs) and provide them to Metro as part of meeting federal TPM requirements. Transit agencies are required to establish their targets and share them with their MPO and State by December 31, 2020. Transit safety measures from agencies' PTASPs are provided below, along with the 2019 baseline performance, and 2020 and 2021 performance where available. Metro used this information to establish a baseline and set initial targets for transit safety performance **(Table 13)**.

In areas applicable, Metro's regional safety performance target of Vision Zero is the established regional target. In categories which the region's Vision Zero safety target is not consistent with the public transit agency safety performance target, Metro accepted as the regional target the transit agencies safety performance targets.

The smaller transit providers, namely SMART and City of Portland Streetcar, appear to meet the safety performance targets established for 2020 and 2021. The trend for the City of Portland Streetcar is particularly interesting in recognizing the streetcar shares the right-of-way with motor vehicles and therefore presents more opportunities for conflicts and safety incidents. However, the rate of safety events and injuries are trending downwards. In the case of injuries, the total and rate is trending below the 2019 baseline performance levels.

The newly established public transit agency safety performance targets represent a wide breath of safety considerations for both the riders of public transit as well as the day-to-day operators. Safety events and injuries can interpreted as collisions (vehicles, person, object), derailment, hazardous materials spills, fire, "acts of god"/evacuations for safety, system security events, injury to the bus or train operator, or other events such as non-injury slips, trips, & falls when using bus or station stairs or mobility tie down malfunction, smoke or shock, power failure, maintenance issues.

Table 13. Transit Agency Safety Targets

Transit Agency Safety Targets								
Performance measure	**2019 Baseline Performance**		**2020 Performance**		**2021 Target**		**2021 Performance**	
	Total	**Rate**	**Total**	**Rate**	**Total**	**Rate**	**Total**	**Rate**
TriMet Fatalities – per 1 million VRM								
Commuter/Light Rail	1	0.1119	3	0.3384	0	0	7	**0.7897**
Deviated/Fixed Route Bus	1	0.0469	0	0	0	0	1	**0.0455**
Demand Response	0	0	0	0	0	0	0	**0**
TriMet Injuries – per 1 million VRM								
Commuter/Light Rail	113	12.6505	97	10.9429	--[1]	<1.9	66	**7.4457**
Deviated/Fixed Route Bus	111	5.2045	152	6.9198	--[1]	<1.9	120	**5.4630**
Demand Response	13	1.8189	5	0.9055	--[1]	<1.9	6	1.0865
TriMet Safety Events – per 1 million VRM								
Commuter/Light Rail	114	12.7625	111	12.5222	--[2]	*<1.3*	98	**11.0557**
Deviated/Fixed Route Bus	112	5.2514	164	7.4661	--[2]	*<2.6*	141	**6.4190**
Demand Response	11	1.5391	4	0.7244	--[2]	--[2]	5	0.9055
TriMet System Reliability – rate of in-service vehicle failures (miles)***								
Commuter/Light Rail	*N/A*	120,234	*N/A*	27,905	*N/A*	>10,000	*N/A*	28,054
Deviated/Fixed Route Bus	*(rate*	31,000	*(rate*	8,912	*(rate*	>15,000	*(rate*	10,698
Demand Response	*only)*	22,840	*only)*	4,973	*only)*	>15,000	*only)*	2,435
Ride Connection Fatalities – per 100k VRM**								
Deviated Fixed Route Bus								
Demand Response/NEMT	0	0	0	0	0	0	0	0
Travel Training	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
Ride Connection Injuries[3] – per 100k VRM**								
Deviated Fixed Route Bus	0	0	0	0	0	0	0	0
Demand Response/NEMT	0	0	0	0	0	0	0	0
Travel Training	0	0	0	0	0	0	0	0
Ride Connection Safety Events[4] – per 100k VRM**								
Deviated Fixed Route Bus								
Demand Response/NEMT	0	0	0	0	<5.25	--[6]	1	0.2802
	0	0	0	0	<15.75[5]	--[6]	0	0

Transit Agency Safety Targets								
Performance measure	**2019 Baseline Performance**		**2020 Performance**		**2021 Target**		**2021 Performance**	
	Total	**Rate**	**Total**	**Rate**	**Total**	**Rate**	**Total**	**Rate**
Ride Connection System Reliability[7] – rate of in-service vehicle failures (miles)***								
Deviated Fixed Route Bus	*N/A (rate only)*	N/A[7]	*N/A (rate only)*		*N/A (rate only)*	16,500	*N/A (rate only)*	
Demand Response/NEMT		N/A[5]				28,500[5]		
SMART Fatalities – per 100k VRM**								
Deviated Fixed/Fixed Route Bus	0	0	0	0	0	0	0	0
Demand Response	0	0	0	0	0	0	0	0
SMART Injuries – per 100k VRM								
Deviated Fixed/Fixed Route Bus	0	0	0	0	0	0	0	0
Demand Response	0	0	0	0	0	0	0	0
SMART Safety Events – per 100k VRM**								
Deviated Fixed/Fixed Route Bus	0	0	0	0	0	0	0	0
Demand Response	0	0	0	0	0	0	0	0
SMART System Reliability – rate of in-service vehicle failures (miles)***								
Deviated Fixed/Fixed Route Bus	*N/A (rate only)*	21,324[8]	*N/A (rate only)*		*N/A (rate only)*	21,324	*N/A (rate only)*	
Demand Response		14,206[8]				14,206		
C-TRAN Fatalities[9] – per 1 million VRM*								
Deviated/Fixed Route Bus	0	0	0	0	0	0	0	0
Demand Response	0	0	0	0	0	0	0	0
Vanpool	0	0	0	0	0	0	0	0
C-TRAN Injuries[9] – per 1 million VRM*								
Deviated/Fixed Route Bus	27	6.9308	11	0.29	<25.7	<6.5842	10	0.27
Demand Response	8	5.1572	2	0.00	<7.6	<4.8993	0	0
Vanpool	0	0	0	0	0	0	0	0
C-TRAN Safety Events[9] – per 1 million VRM*								
Deviated/Fixed Route Bus	30	7.7009	39	1.03	<28.5	<7.3159	18	0.48
Demand Response	0	0	4	0.51	0	0	0	0
Vanpool	0	0	0	0	0	0	0	0
C-TRAN System Reliability – rate of in-service								

Transit Agency Safety Targets								
Performance measure	**2019 Baseline Performance**		**2020 Performance**		**2021 Target**		**2021 Performance**	
	Total	**Rate**	**Total**	**Rate**	**Total**	**Rate**	**Total**	**Rate**
vehicle failures (miles)** Deviated/Fixed Route Bus Demand Response Vanpool	*N/A (rate only)*		*N/A (rate only)*	0.2073 7.8785 0.0693	*N/A (rate only)*	>0.2177 >8.2724 >0.0728	*N/A (rate only)*	0.2226 1.1685 0.1149
Portland Streetcar Fatalities – per 100k VRM* (Rail)	0	0	0	0	0	0	0	0
Portland Streetcar Injuries – per 100k VRM* (Rail)	14	3.27	14	3.27	12	3.05	8	2.04
Portland Streetcar Safety Events – per 100k VRM* (Rail)	14	3.27	14	3.27	19	4.83	17	4.34
Portland Streetcar System Reliability – rate of in-service vehicle failures (miles)** (Rail)	*N/A (rate only)*	0.2933	*N/A (rate only)*	*0.2933*	*N/A (rate only)*	0.2933	*N/A (rate only)*	0.2361

[1]TriMet did not adopt performance targets for total injuries in its PTASP, but did adopt a target of less than 200 OSHA recordable injuries for employees.
[2]TriMet did not adopt performance targets for total safety events in its PTASP. Instead the agency adopted target of less than 1.3 for light rail and less than 2.6 for bus per 100,00 miles. TriMet also adopted performance targets of less than 5.4 lost time employee injuries per 200,000 hours worked.
[3]Ride Connection also sets a boarding and alighting injury target of less than 2.25.
[4]Ride Connection also set workers' compensation claim targets of 0 for deviated fixed route bus and less than 1.5 for demand response service.
[5]NEMT is a new program as of March 2020 with no historical data from the previous brokerage and only a few months of actual data that is heavily skewed by COVID-19. Ride Connection will adopt specific NEMT targets once adequate data has been compiled. In the interim, the NEMT targets are the same as those for demand response.
[6]Instead of a safety event rate target, Ride Connection adopted a preventable collision rate of less than 1.2334 per 100,000 vehicle revenue miles for deviated fixed route bus and less than 0.9000 per 100,000 vehicle revenue miles for demand response service.
[7]Ride Connection does not have historical system reliability data available.
[8]SMART used FY 2018 data as a baseline for system reliability performance setting.
[9]C-TRAN adopted the performance targets of achieving a 5 percent reduction from the 2019 baseline. The values included as 2021 targets in this table are those estimated values based on 2019 data reported to the National Transit Database.
* VRM stands for Vehicle Revenue Miles.
** System reliability is defined by FTA as the mean distance between major mechanical failures—measured as revenue miles operated divided by the number of major mechanical failures.

IMPLEMENTATION STRATEGIES IN SUPPORT OF PERFORMANCE-BASED PLANNING

This section summarizes key regional implementation policies, programs and strategies that support Metro's performance-based planning and congestion management processes.

Policy

Land Use

2040 Growth Concept – In 1995, the Portland region adopted the 2040 Growth Concept, the long-range plan for managing growth that integrates land use and transportation planning to reinforce the objectives of both. The unifying theme of the 2040 Growth Concept is to preserve the region's economic health and livability and plan for growth in the region in an equitable, environmentally-sound and fiscally-responsible manner. The RTP is a key tool for implementing the 2040 Growth Concept with an approach that views transportation as an integrated and interconnected system that must be completed over time to support planned land uses. The plan shifts the emphasis from moving vehicles to moving people and goods and connecting people and places. This integrated system provides for the movement of people by private vehicle, public transit, ridesharing, walking and biking as well as the movement of goods and services by roads, air, water and rail.

Urban Growth Boundary – Metro is responsible for managing the Portland metropolitan region's urban growth boundary required by Oregon state law. The boundary controls urban expansion onto farms and forests. Land inside the urban growth boundary supports urban services such as roads, water and sewer systems, parks, schools and fire and police protection that create thriving places to live, work and play. Metro is required by state law to have a 20-year supply of land for future residential development inside the boundary. Every five years, the Metro Council is required to conduct a review of the land supply and, if necessary, expand the boundary to meet that requirement.

Urban and Rural Reserves – In 2007, the Oregon Legislature approved Senate Bill 1011. This legislation enabled Metro to identify and designate areas outside the current urban growth boundary as urban and rural reserves. Urban reserves are lands currently outside the urban growth boundary that are suitable for accommodating urban development over the next 50 years. Rural reserves are lands outside the current urban growth boundary that are high value working farms and forests or have important natural features like rivers, wetlands, buttes and floodplains. These areas will be protected from urbanization for the next 50 years.

Transportation

2023 Regional Transportation Plan – Metro is responsible for updating and maintaining the region's long-range transportation plan under federal and state law. In addition, Metro maintains several supporting mode and topic plans, which, together with the RTP, guide transportation planning, investments and decision-making. The RTP establishes goals, policies and strategies that address the key challenges and opportunities facing the region. The goals, policies and strategies of the RTP guide transportation decision making across the region and set the stage for performance management to occur in the specific mode and topic plans and programs associated with the RTP. The mode and topic plans associated with the RTP include:

- Transit Oriented Development Program Strategic Plan (2023)
- Regional Transportation System Management and Operations (TSMO) Plan (2022)
- Regional Travel Options Strategy (2018)
- Regional Transportation Safety Strategy (2018)
- Regional Transit Strategy (2018)
- Regional Freight Strategy (2018)
- Emerging Technology Strategy (2018)
- Climate Smart Strategy (2014)
- Regional Active Transportation Plan (2014)

In addition, TriMet leads periodic updates to the Coordinated Transportation Plan for Seniors and People with Disabilities. Last updated in 2020, the next update is due in 2024.

Infrastructure and programs

Regional Active Transportation Program

The Regional Active Transportation Program manages updates to and implementation of pedestrian, bicycle and access to transit in the Regional Transportation Plan (RTP) and the Regional Active Transportation Plan. The program provides guidance to jurisdictions in planning for safe, efficient and comfortable active transportation access and mobility on the regional transportation system (including regional trails and multi-use paths). The program is closely coordinated with other regional transportation programs and region-wide planning activities, and with Metro's Parks and Nature Department. Additionally, the program supports coordination with local, regional, state, and federal plans to ensure consistency in approach to active travel needs and issues across the region. The program ensures that prioritized regional bicycle and pedestrian projects are competitively considered within federal, state, and regional funding programs. Ongoing data collection, analysis, education, and stakeholder coordination are also key elements of Metro's active transportation program.

Regional Transit Program

The Regional Transit Program conducts long-range transit planning for the Portland Metro region, managing updates to and implementation of the transit elements in the Regional Transportation Plan (RTP) and supporting Regional Transit Strategy and its components like the High-Capacity Transit Strategy. Together, these provide the roadmap for making transit investments over time in collaboration with our transit providers and local government partners in the region and ensure that prioritized transit projects are competitively considered within federal, state, and regional funding programs. The Regional Transit Strategy will need to be amended to reflect the High Capacity Transit Strategy adopted in 2023 and the Connecting First and Last Mile Study anticipated to be complete in 2025.

Program work includes ongoing coordination with transit providers, cities and counties to ensure implementation of these strategies through plans and capital projects, periodic support for major transit planning activities in the region and coordination with state transit planning officials. Ongoing data collection, analysis, education, and stakeholder coordination are also key elements of Metro's transit program. The program is closely coordinated with other regional transportation programs and region-wide planning activities.

Additionally, Metro and TriMet will be developing a Bus Rapid Transit (BRT) Strategic Plan as part of regional transit planning efforts. The Plan will further advance work in the High-Capacity Transit Plan and will outline a vision for how Frequent Express (FX) investments can enhance existing and future frequent bus service corridors to serve our region's goals. It will identify a network of BRT routes, prioritize routes for implementation, and identify potential regional funding strategies.

Better Bus Program

The Better Bus program is a joint Metro and TriMet endeavor that identifies transit priority and access treatments to improve the speed, reliability, and capacity of TriMet frequent service bus lines or streetcar lines, building on the previous Enhanced Transit Concepts (ETC) Program. Better Bus treatments are relatively low-cost to construct, context-sensitive, and can be implemented quickly to improve transit service in congested corridors. The program develops partnerships with local jurisdictions and transit agencies to design and implement Better Bus capital and operational investments.

Transportation System Management and Operations (TSMO) Program

With the intent of supporting broad Transportation System Management and Operations (TSMO) investment and activity in the greater Portland metropolitan region, the TSMO program encompasses regional strategy development, implementation, grant management, project management and system performance monitoring (includes support to the region's Congestion Management Process). The program facilitates a variety of approaches to reliable, equitable, accessible, safe transportation related to TSMO. These include intelligent transportation systems (ITS), Mobility on Demand (MOD) and related mobility, freight technologies and operations.

The program maintains and periodically updates the regional TSMO Strategy. Strategy updates incorporate RTP policy and develops actions and work plans for implementation. Implementation involves convening operations leaders, engineers and technical experts to share procedures and protocols such as the regional Intelligent Transportation System (ITS) Architecture. ITS Architecture is needed to comply with the FHWA rule for federally funded transportation projects and their compliance with the National ITS Architecture. The program also guides implementation of the region's ITS data communications assets and networks, representing coordination of shared digital infrastructure. The regional role for program implementation supports opportunities for inclusion, research, education, and training on TSMO.

The program manages the sub-allocation of 2021-24 and 2025-27 Regional Flexible Funding for TSMO. These projects are prioritized through criteria that is consistent with the adopted Regional TSMO Strategy. The TSMO program will provide support for regional ITS projects by helping to apply systems engineering, ITS Architecture, standards and procedures.

The program supports system performance monitoring including the federal mandates to maintain a Congestion Management Process (CMP). The program implements actions identified in the Arterial Performance Management Regional Concept of Traffic Operations (RCTO) to advance the region's performance measurement capabilities on arterial streets. CMP performance monitoring will continue in order to support development of the RTP, local Transportation System Plans and MTIP programming. The program partners with PORTAL, a regional archived data user service managed by Portland State University. PORTAL will continue to expand the collection, visualization and uses of multimodal performance data in a way that will enhance the region's ability to diagnose and address mobility and support multimodal operations consistent with the region's CMP.

The TSMO program is closely coordinated with other regional transportation programs and region-wide planning activities

Regional Travel Options (RTO) and Safe Routes to Schools Programs and Regional Travel Options Strategy

The Regional Travel Options Program implements RTP policies and the Regional Travel Options Strategy to reduce drive-alone auto trips and personal vehicle miles of travel and to increase use of travel options. The program improves mobility and reduces greenhouse gas emissions and air pollution by carrying out the transportation demand management components of the RTP through three primary program areas: Commute trip reduction, Community-based travel options, and Safe Routes to School. Each RTO program area works to advance RTP goals through the following strategies:

- Regional policy development
    - The RTO program advances travel options policy through policies in the RTP and developing the Regional Travel Options Strategy; as well as supporting local and state policy development and implementation.
- Funding local program implementation
    - The RTO program provides ongoing funding to local programs and partners to deliver critical TDM services across the region and seeks out new partnerships to ensure the travel needs of all residents are prioritized.
- Technical assistance & regional program administration
    - The RTO program provides technical assistance to program providers through trainings, resource development and peer networking and learning. In addition, the RTO program administers regional programming to advance the goals of the RTP and RTO strategy in collaboration with local partners.

The program maximizes investments in the transportation system and eases traffic congestion by managing travel demand, particularly during peak commute hours. Specific RTO activities include promoting transit, shared trips, bicycling, walking, telecommuting and the Regional Safe Routes to School Program. The program is closely coordinated with other regional transportation programs and region-wide planning activities.

Regional Safe Streets for All Program and Regional Transportation Safety Strategy

Metro's regional Safe Streets for All program activities support advancing the Safe System approach to achieve regional safety goals, policies and targets, including zero serious crashes by 2035. Program activities are consistent with strategies and actions in the 2018 Regional Transportation Safety Strategy, the Regional Safe Routes to School Program, and local and state safety plans. Following adoption of the 2023 RTP, Metro will coordinate with regional partners and communities to implement the regional Safe Streets for All Federal grant. The grant supports development of the regional safety program and local Transportation Safety Action Plans. Efforts will focus on managing speeds for safety, increasing pedestrian safety, and eliminating disparities

for Black, Hispanic, Native American, people with low income, and other populations disproportionately impacted by serious traffic crashes.

Program activities include periodic updates on the state of safety to the Metro Council, Metro technical and policy advisory committees and other interested parties; technical assistance and coordination with local, regional, state, and federal partners in planning and project development; support for the development and updates to local and regional safety plans and policies; updates to safety data and analysis; updates to safety plans and policies; safety data collection, maintenance, analysis and interpretation; encouraging best practices in transportation safety and roadway design with funding and programmatic support identifying legislative priorities, and collaborating on efforts to highlight safety in materials, messaging and campaigns. The program will be closely coordinated with other regional transportation programs and region-wide planning activities.

Regional Freight Program and Regional Freight Strategy

The Regional Freight Program manages updates to and implementation of multimodal freight elements in the Regional Transportation Plan (RTP) and supporting Regional Freight Strategy. The program provides guidance to jurisdictions in planning for freight movement on the regional transportation system. The program supports coordination with local, regional, state, and federal plans to ensure consistency in approach to freight-related needs and issues across the region. Metro's coordination activities include ongoing participation in the Oregon Freight Advisory Committee (OFAC), and Portland Freight Committee (PFC). The program ensures that prioritized freight projects are competitively considered within federal, state, and regional funding programs. Ongoing freight data collection, analysis, education, and stakeholder coordination are also key elements of Metro's freight program. The program is closely coordinated with other regional transportation programs and region-wide planning activities.

Investment Areas Program

Metro's Investment Areas program helps communities build their downtowns, main streets and corridors and leverage public and private investments that implement the region's 2040 Growth Concept. Projects include supporting compact, transit oriented development in the region's mixed use areas, evaluating high capacity transit and other transportation improvements that cross city and county lines, and integrating freight and active transportation projects into multimodal corridors.

Major public infrastructure investments do not stop at city or county lines. Our transportation system connects the communities within greater Portland with the rest of the state and the rest of the world. When our region spends billions of dollars on expanding our road, transit and highway system to keep up with the continued population and employment growth, those public investments can both benefit and burden nearby communities. Over time, the region has become more strategic at linking together our transportation, housing, economic, racial equity and environmental goals, policies, and investments so that we can intentionally preserve and create great places that serve all people throughout the region, even as change and growth occurs.

The Investment Areas program completes system planning and develops multimodal projects in transportation corridor refinement plans identified in the Regional Transportation Plan. It also works on finance plans to align public investments in areas that support the region's growth economy. It includes ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.

Metro's Investment Areas program has been connecting planning for major transportation projects with the community's broader goals and needs. While each area's conditions and needs are different, the approach of bringing together government, community, and business partners provides a framework to produce a shared plan of action to guide the investments and decisions of multiple agencies. Including a broader set of stakeholders in a collaborative decision making process allows for decisions that once seemed unclear or unfair to stakeholders to be more transparent. This approach improves our ability to involve and include those who are affected by these decisions and investments.

Investment areas can set the stage for a range of major capital investments beyond high capacity transit. Other Metro investment areas have focused on freight routes connecting major highways through small communities, redevelopment of brownfields in employment areas, and leveraging the opportunities of a regionally significant riverfront destination. The program is closely coordinated with other regional transportation programs and region-wide planning activities, including corridor refinement planning activities.

Regional Transit-Oriented Development Program

Since 2001, Metro's Transit-Oriented Development (TOD) program has had a unique and critical role in implementing the 2040 Growth Concept vision for vibrant, walkable centers and station areas linked by transit. The program invests in compact mixed-use projects near light rail stations, along frequent service bus corridors and in regional and town centers throughout the region increasing opportunities for people live, work and shop in neighborhoods with easy access to high-quality transit. The program provides financial incentives for TOD projects to increase transit ridership, stimulate private development of mixed-use buildings that would otherwise not proceed, and increase affordable housing opportunities near transit in high cost and gentrifying neighborhoods through land acquisition and project investments. With an increased focus on affordable housing, the program supports construction of housing near transit and services that is more affordable for older adults and lower- income households compared to what would otherwise be built on a property. Related program activities include opportunity site acquisition, investment in urban living infrastructure, and technical assistance to communities and developers.

Regional Congestion Pricing Program

The Regional Congestion Pricing Program ensures coordination and alignment between the RTP and state and federal pricing policies and regulations, including the Oregon Transportation Plan, the Oregon Highway Plan, the federal Value Pricing Pilot Program, Section 129 of Title 23 of the U.S. Code, and ODOT's future low-income tolling program. The program includes application of the

findings and recommendations from the 2021 Metro Regional Congestion Pricing Study in the RTP and the MTIP. The program also:

- Coordinates tolling with regional planning efforts and corridor development work, including ODOT's Regional Toll Advisory Committee, Statewide Toll Rulemaking Advisory Committee, and Equity and Mobility Advisory Committee
- Tracks, participates in, and/or advises on pricing programs and projects such as ODOT's Regional Mobility Pricing Project or City of Portland's Pricing Options for Equitable Mobility Task Force
- And monitors changes in federal and state rulemaking that may impact regional or local pricing policies or programs.

Performance Measurement and Monitoring

In order to monitor and evaluate the regional transportation system, Metro is working with regional partners to refine and implement future performance measurement systems. Expanded data collection is a critical part of this effort.

As noted previously, Metro's Research Center and Transportation System Management and Operations (TSMO) Program continue to evaluate new datasets that could allow for the expansion of future monitoring activities to include the arterial system. In addition, the Metro Research Center developed an agency-wide performance measurement system – called the Regional Barometer – that incorporated observed data from the NPMRDS and U.S. Census data for key CMP measures. Regular updates to this online system have proved challenging due to the COVID pandemic, staffing changes and limited resources.

Other work is happening to expand PORTAL, arterial data collection and the region ITS network to support the region's CMP.

PORTAL

PORTAL is a traffic information system developed by Portland State University's ITS Lab. The purpose of the system is to implement the U.S. National ITS Architecture's Archived Data User Service (ADUS) for the Portland Metro area. PORTAL shares U.S. Department of Transportation's vision to improve transportation decisions through the archiving and sharing of ITS generated data. As the regional traffic information data warehouse for the Portland Metro area, PORTAL requires continuous support, maintenance and upgrades. Currently PORTAL is integrated with Google maps and provides facility specific information on:

- Real time traffic speeds
- 15-minute average speeds of last five weekdays
- Live camera images
- Locations of incidents
- Total vehicle miles traveled

- Total vehicle hours traveled
- Average travel time
- Average traffic speed
- 95th percentile travel time
- 95th percentile traffic speed

The next stage in PORTAL development is to link GIS data with PORTAL to increase its capabilities. Future plans call for PORTAL reporting levels of congestion, travel time index, and additional freight, transit, and non-motorized data.

Arterial Performance Measurement

A substantial portion of the region's congestion is experienced on the regional arterial network. However, many of the region's arterials lack the traffic detection and communications infrastructure to adequately measure arterial system performance. As a result, Metro has made it a high priority goal to expand traffic monitoring and transportation system condition data collection capabilities on arterials throughout the region. Arterial performance measurement in the form of travel times, travel speeds, mode use, and potentially origin-destination data will support engineering and planning decision-makers, enabling more efficient investments of limited funds. Provision of this data in real-time or near real-time makes the data even more useful for transportation professionals and the traveling public.

Today, TSMO partners around the region make use of media access control (MAC) address reading technology at strategic locations to cover major arterials region wide. This data is stored and used in PORTAL. The arterial performance data, such as real-time speeds, is made available to the public. The data will be used to help predict travel times under recurring or non-recurring events.

Expanding ITS network to include Washington State

In a bi-state partnership effort, the regional ITS network includes Clark County, Washington DOT and soon will include C-Tran. The TSMO program funded a portion of a larger bi-state travel time signage project for investment on I-84 as it makes and east-west connection for travelers going north-south on I-205 and I-5. This bi-state travel time project allows cars and freight vehicles to increase travel time reliability for changing conditions as they navigate from Wilsonville, Oregon to Vancouver, Washington and back. Metro will continue to work in close partnership with agencies in Washington State to create additional strategic connections with ITS networks across the Columbia River. Current discussions have included representatives from state DOT's; transit agencies; and local, county, & regional governments from Oregon and Washington. As the Portland region is a part of the larger Portland-Vancouver Metropolitan area, this bi-state coordination will allow for more fluid management and assessment of the regional transportation system.

More activities that Metro is doing or will do to ensure that the region has the resources to fulfill its transportation performance measurement and reporting responsibilities are described in Chapter 8 of the RTP (see Section 8.5).

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

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Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX M

2023 Regional Transportation Plan

Regional analysis documentation

July 10, 2023

oregonmetro.gov/rtp

Metro respects civil rights

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

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

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

Project website: **oregonmetro.gov/rtp**

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

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Attachments

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PURPOSE

This appendix documents the key modeling assumptions and analysis tools and methods used for the 2023 Regional Transportation Plan (RTP).

RTP Investment Scenarios and Analysis Geographies

RTP Investment Scenarios

Metro evaluated the performance of the transportation system for six different investment scenarios. The base year of the analysis is 2020 and the future years are 2030 and 2045.

- **2020 Base Year** – This scenario uses 2020 population and employment numbers. All transportation projects completed by 2020 are included in the Base Year to represent an "existing conditions" transportation system against which the other scenarios are compared.
- **2030 No Build** – This scenario assumes only projects with committed funding are built by 2030. This scenario uses 2030 population and employment projections. The 2030 No Build assumed no new projects are built that do not currently have funds to complete construction as identified in the 2021-2024 Metropolitan Transportation Improvement Program (MTIP) and 2021-2024 Oregon State Transportation Improvement Program (STIP).
- **2030 Constrained** – This scenario reflects a network of projects expected to be completed by 2030. This scenario uses 2030 population and employment projections.
- **2045 No Build** – This scenario assumes only projects with committed funding are built by 2045. This scenario uses 2045 population and employment projections. The 2045 No Build assumed no new projects are built that do not currently have funds to complete construction as identified in the 2021-2024 Metropolitan Transportation Improvement Program (MTIP) and 2021-2024 Oregon Statewide Transportation Improvement Program (STIP).
- **2045 Constrained** – This scenario assumes that all projects and programs identified in the Constrained 2030 list are completed by 2030 and the remaining projects on the full Constrained list are completed by the year 2045. This scenario uses 2045 population and employment projections, and serves as the basis for meeting federal and state planning requirements, including consistency with the Statewide Planning Goal 12, the Oregon Transportation Planning Rule and the Oregon Transportation Plan and its components.
- **2045 Strategic** – This scenario assumes that all projects on the full Constrained list and all the projects on the full Strategic list are completed by 2045 if new or expanded

revenue sources are secured. This scenario uses 2045 population and employment projections. Funding has not been identified for projects on the Strategic list.

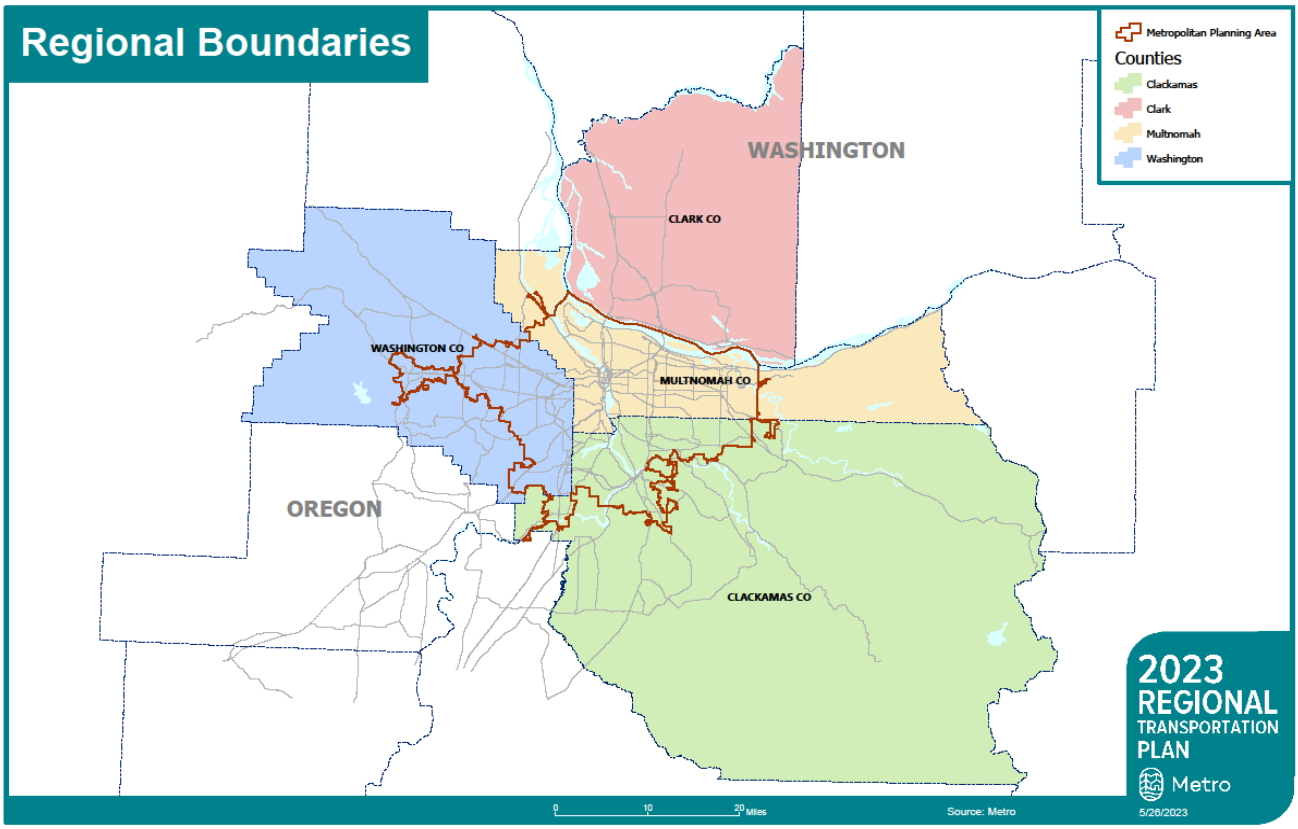
The 2030 Constrained and 2045 Constrained (also known as the Financially Constrained (FC) System) represents a network of projects based on revenue sources that can reasonably be expected to be available for transportation investments during the plan period and serves as the basis for complying with federal and state planning requirements. The 2030 No Build and 2045 No Build roadway and transit networks are exactly the same. The RTP focuses on evaluating and presenting results of the constrained scenarios because those represent the region's planned future; results for the no build and strategic scenarios are used to illustrate key aspects of the RTP's performance.

Chapter 5 of the RTP provides information on the transportation revenue forecast. **Chapter 6** of the RTP provides additional information about projects and programs included in the RTP investment scenarios. Findings from the performance evaluation are reported in **Chapter 7** of the RTP. Details about the environmental analysis are provided in **Appendix F**. Details about the greenhouse gas emissions analysis prepared to monitor implementation of the Climate Smart Strategy are provided in **Appendix J**.

RTP Analysis Geographies

Metro evaluated the performance of the transportation system for the: 4-county region and metropolitan planning area. Within the metropolitan planning area (MPA), some measures were also evaluated in equity focus areas, sub-regions, regional centers and mobility corridors.

Figure 1. Regional analysis boundaries

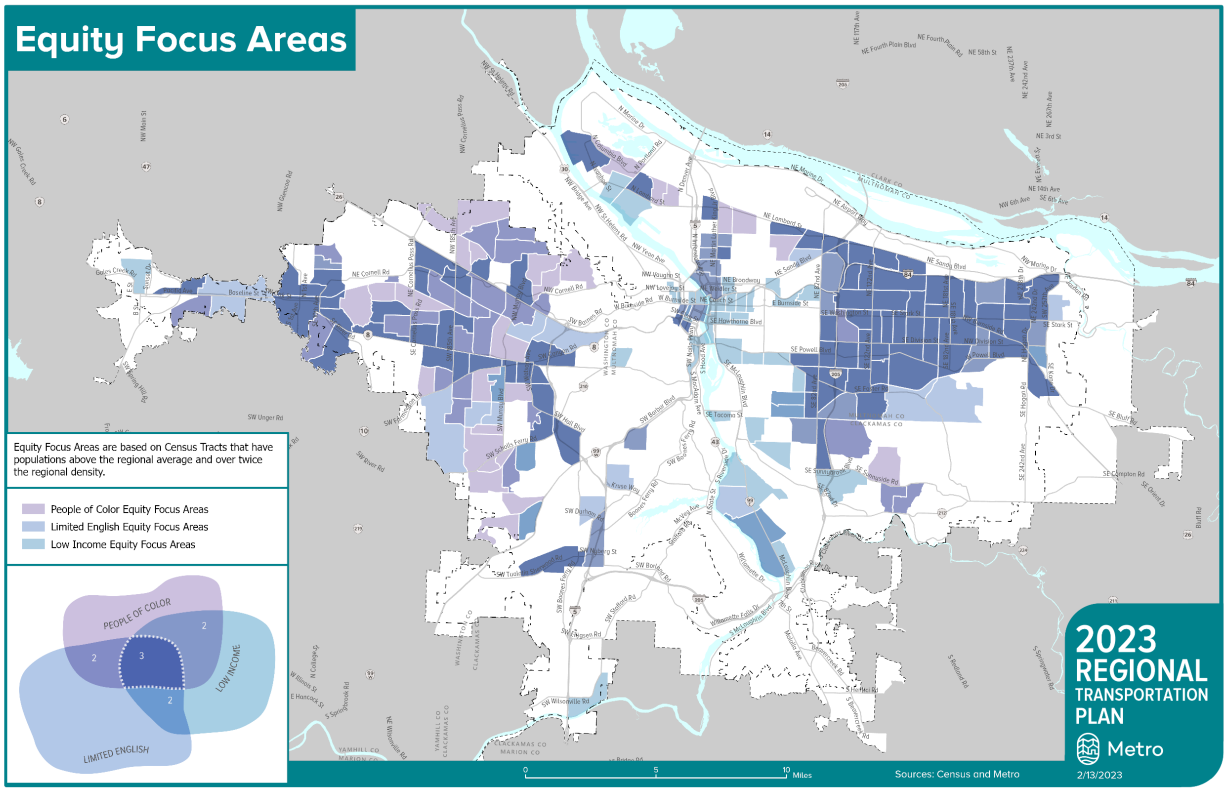


Source: Metro

4-County Region This area includes all of Clackamas, Multnomah, Washington and Clark Counties.

Metropolitan Planning Area (MPA) Boundary The primary geographic area for the RTP system evaluation, this is the geographic area determined by agreement between the Metropolitan Planning Organization (MPO) – Metro – and the Governor, in which the metropolitan transportation planning process is carried out by the MPO. Refer to **Chapter 1** of the RTP for more information about the MPA boundary and Metro's MPO responsibilities.

Figure 2. RTP Equity Focus Areas (2020)



Source: Metro Research Center

RTP Equity Focus Areas Shown in **Figure 2**, these areas are census tracts with higher than regional average concentrations and double the density of one or more of the following populations: people of color, people with low income and people with limited English proficiency (LEP). Most of these areas also include higher than regional average concentrations of other marginalized communities, including youth, older adults and people living with disabilities. The threshold rates for each population are identified in **Table 1**.

Table 1. RTP Equity Focus Areas definitions and thresholds

Community	Definition	Geography threshold	Data source
People of color	Persons who identify as Hispanic or Latino, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, or Some Other Race. .	The census tracts which are above the regional rate (34%) for people of color AND the census tract has twice (2x) the population density of the regional average (regional average is .69 person per acre).	2020 Decennial Census
People with low incomes	Households with incomes equal to or less than 200% of the Federal Poverty Level (2016); adjusted for household size.	The census tracts which are above the regional rate (23.6%) for households with low‑income AND the census tract has twice (2x) the population density of the regional average (regional average is .47 person per acre).	American Community Survey, 2016-2020
People with limited English proficiency	Persons who identify as unable "to speak English very well."	The census tracts which are above the regional rate (7.4%) for people with limited English proficiency (all languages combined) AND the census tract has twice (2x) the population density of the regional average (regional average is .14 person per acre).	American Community Survey, 2016-2020

Source: Metro Research Center

ANALYSIS TOOLS USED

This section provides a summary of the analysis tools used to inform development and analysis of performance of the 2023 Regional Transportation Plan (RTP).

MetroScope

The 2020-45 Distributed Forecast of households and jobs was the land use assumption used for the RTP.[1] Adopted by the Metro Council in 2021 (Ordinance No. 21-1457) after extensive consultation with and review by local governments, the Metro Technical Advisory Committee (MTAC) and the Metro Policy Advisory Committee (MPAC), the land use assumptions were based on the LCDC-acknowledged 2040 Growth Concept and the seven-county 2045 Regional Forecast previously adopted by the Metro Council in 2018 (Ordinance No. 18-1427) in fulfillment of Metro's coordination responsibility under ORS 195.036.

Metro prepared the Distributed Forecast from information produced by the regional econometric model (REM) and the land use model – MetroScope.[1] The regional forecast, allocation referenced census data and demographic information from published state and local sources; zoning and land characteristics from RLIS (a regional GIS database); city and county zoning and assessment databases; and economic factors, including jobs and population forecasts. Information on accessibility from the regional travel demand model was also used to estimate the relative attractiveness of areas within the region to project where future households and employment are willing to locate. The number of households and employees projected were allocated to analysis zones by the land use model, but additional refinement and local knowledge were used to finalize the draft allocations.

Base year 2020 population and employment were estimated from census data for households prior to the Census Bureau's release of data from the 2020 Decennial Census and Bureau of Labors Statistics (BLS) employment data prior to the onset of the COVID-19 pandemic.[2] Future year population and employment statistics extended out to the year

[1] The Regional Forecast covers the 7-county MSA (Portland-Hillsboro-Vancouver, OR-WA, MSA) and the basis for the regional macroeconomic assumptions for the land use allocation. The region includes the following counties: Clackamas, Columbia, Multnomah, Washington, Yamhill (in Oregon); and Clark and Skamania (in Washington state). The MetroScope land use model is then used to spatially disaggregate region-wide growth estimates to TAZ level estimates that are reflected in the Distribution Forecast used for the RTP.

[2] BLS data is partially suppressed to protect the identity of individual employers and any other identifiable information in disaggregate data like TAZ. However, totals of higher-level aggregations include the partially suppressed data.

2045. This socio-economic data was assigned to each TAZ by the MetroScope land use model and a GIS mapping procedure for the regional travel demand model.

Table 2 shows the 2020 base year estimates and future year projections of household, population and employment used in the analysis for the four-county region, including Clark County in southwest Washington.

Table 2. Base year and future year household, population and employment (four county region)

	Households	Population	Employment
2020	930,121	2,384,703	1,192,694
2030	1,074,364	2,669,698	1,304,460
2045	1,282,760	3,093,854	1,535,571
Growth (2020 to 2045)	+352,639	+709,151	+342,877
Percentage growth from 2020 to 2045	38%	30%	29%

Source: Metro Research Center Regional Travel Demand Model

Table 3 shows the 2020 base year estimates and future year projections of household, population and employment used in the analysis for the metropolitan planning area boundary (MPA).

Table 3. Base year and future year household, population and employment (metropolitan planning area boundary)

	Households	Population	Employment
2020	639,123	1,740,943	985,260
2030	794,613	1,933,475	1,050,958
2045	950,634	2,242,128	1,210,997
Growth (2020 to 2045)	+257,511	+501,185	+225,737
Percentage growth from 2020 to 2045	37%	29%	23%

Source: Metro Research Center Regional Travel Demand Model

This distribution forecast estimated a modest expansion of the regional urban growth boundary over the planning period consistent with state law and the region's designation of urban and rural reserves. The forecast followed basic legal and policy direction that results in future urban growth boundary (UGB) expansions on designated urban reserves.

Documentation of specific features and assumptions used to develop the land use forecast used in the RTP analysis is available on Metro's 2045 Distributed Forecast website at: https://www.oregonmetro.gov/2045-distributed-forecast. Documentation of the MetroScope model and is available on Metro's website at: https://www.oregonmetro.gov/forecasting-models- and-model-documentation.

Regional Travel Demand Model

The Metro regional travel demand model is used as a tool to analyze existing and future transportation system performance for the greater Portland region. It is specifically used to forecast future trips on the regional transportation system for all forms of travel – walking, biking, driving, transit, shared ride – and freight trucks.

The regional travel demand model includes auto, transit, freight, and bicycle networks that explicitly represent travel conditions based on specified packages of projects, fuel costs3 as well as projected household and employment growth and policies related to land use, parking charges and transit fares to predict:

- Where and how much people travel
- How trips are made (by mode)

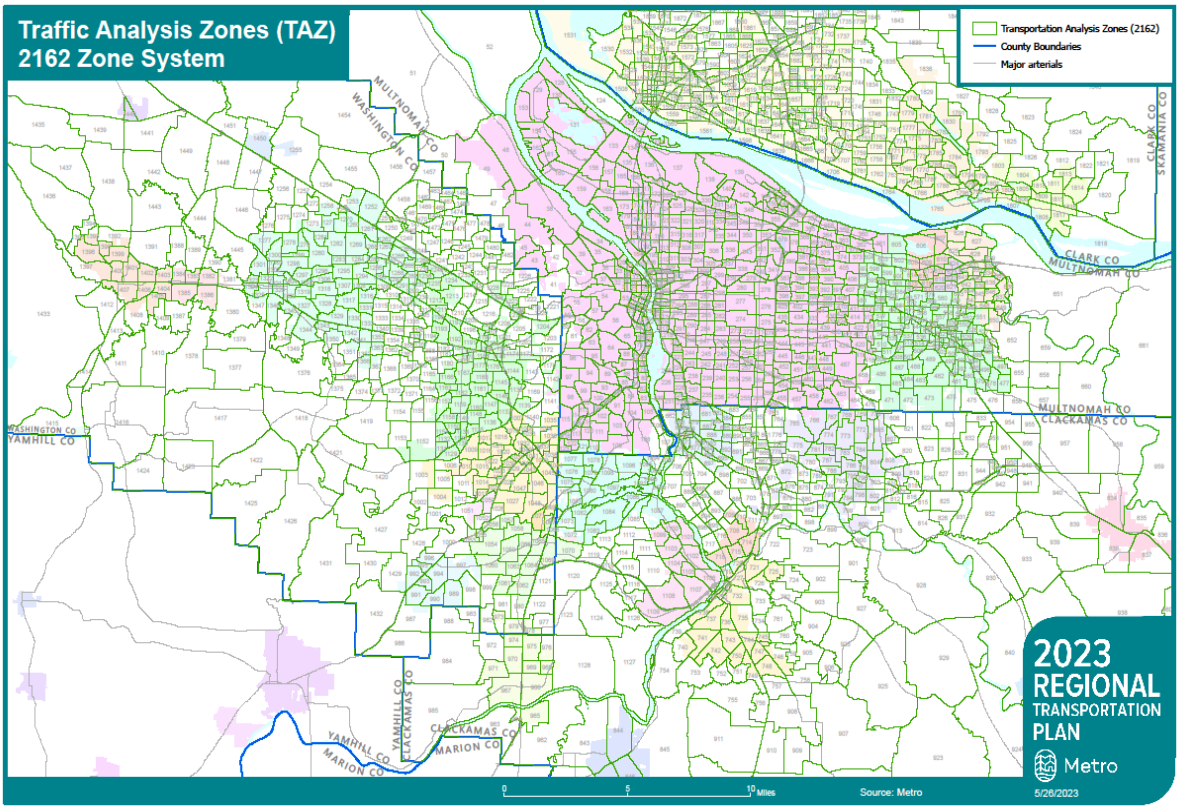
[3] Fuel costs within the model are considered as part of auto operating cost, which consists of gasoline, oil, tires and general maintenance costs on a per mile basis. This cost is $0.21 per mile in 2010 dollars, as derived from AAA reporting. For future year forecasts (i.e., 2030 and 2045), the model assumes that this auto operating cost per mile will rise with inflation.

- How far people travel and how long it takes to get there

The model takes into consideration the trip-making choices made by residents in the region. This information is collected from periodic rigorous travel surveys. Metro's last survey – the 2011 Household Travel Behavior Study – tracked nearly 6,500 households to understand how factors such as age, income, children, car ownership and transportation infrastructure characteristics affect travel choices.[4]

Within the model, the four-county region is divided into 2,162 discrete geographic areas called transportation analysis zones (TAZs), shown in **Figure 3**.[5]

Figure 3. Transportation Analysis Zones (TAZ) Map



Source: Metro Research Center

[4] Metro Research Center staff is leading coordination efforts for the next regional travel behavior survey as part of the Oregon Travel Study from Spring 2023 to Spring 2024.

[5] The TAZ is the geographic unit that serves as the building block of Metro's primary forecasting tools (the travel demand model and MetroScope). These small subdivisions improve the accuracy of the travel demand model as well as all other aspects of transportation planning. The TAZ-level data also assists land use planners in updating comprehensive plans and zoning, and conducting other types of land use analysis, including neighborhood level analysis.

A variety of data is incorporated into the travel model for each TAZ, including:

- 2040 design type land use characteristics consistent with locally-adopted comprehensive plans (see **Attachment 1**)
- level of street connectivity are also assigned to each TAZ (see **Attachment 1**)
- transit fare discounts (see **Attachment 1**)
- planned roadway, transit and bike projects (see **RTP Appendices A and B, and Attachment 2** for transit service enhancements)
- regionally-coordinated household and employment assumptions, both existing and forecasted future, in a manner that is consistent with locally-adopted comprehensive plans (see **Attachment 3**)

Based on all of these factors, the travel demand model estimates the number of trips that will be made, the distribution patterns of the trips and travel activity levels throughout the region by time of day. All of the trips generated at the TAZ level are aggregated and analyzed at the TAZ level.

Traffic volume projections from these simulations are then used to assess transportation system performance. Due to the macroscopic nature of the regional model, the model does not analyze walking or local street traffic volumes at detailed analysis levels. The model does not currently account for autonomous vehicles or shared mobility options, such as ride-hailing services.

Model validation

The Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and U.S. Environmental Protection Agency (EPA) require that project analysis be carried out using methods and modeling tools that meet certain guidelines. Metro's travel demand model is regularly reviewed by the appropriate federal agencies and expert panels to ensure that they meet federal guidelines and meet or exceed the standard practices of other travel demand models used throughout the country. The base year transportation networks are validated using industry best practices that meet or exceed Federal guidelines for large, regional transportation models. Prior to any modeling for an RTP update, Metro's partner agencies undertake a jurisdictional review of the base year auto and truck networks and provide Metro staff with any corrections or suggested edits to facility speed, capacity, and number of lanes.

Modeled results on regional networks are compared against observable data to ensure that assigned traffic flows on major facilities and between sub-regions closely match

empirical data and that regional mode shares are consistent with regional travel survey sources.

Standard model validation metrics for an RTP level assessment include comparing assigned network volumes across corridor cutlines against collected vehicle counts, model-derived travel times and speeds along major facilities against third-party GPS data sources (e.g., Inrix, HERE, NPMRDS), and modeled regional mode shares against mode shares derived from household activity surveys and U.S. Census (LEHD) data.

The RTP 2020 Base Year network has been compared against all of the above mentioned data sources and has been determined by Metro staff to be reasonably validated for the purposes of regional and corridor-level analyses. As is true with any large regional network, there may be locations on some facilities – particularly those where travel patterns tend to be localized rather than regional – where the regional model does not accurately reflect local traffic characteristics. In these instances, Metro staff encourages the jurisdictions to work with Metro to identify possible solutions to improve the model results in these locations while still maintaining the model's overall regional-level validation.

Documentation of specific features and assumptions for various components of the regional travel model are available on the Metro's Transportation Modeling Services website: www.oregonmetro.gov/modeling-services.

Motor Vehicle Emissions Simulator (MOVES)

The Motor Vehicle Emissions Simulator (MOVES) model is a state-of-the-science emission modeling system that estimates emissions for on-road vehicle sources for criteria air pollutants, greenhouse gases, and air toxics. The emissions reported are for vehicle travel occurring within the federally- designated metropolitan planning area boundary (MPA) regardless of where trips begin or end.

The on-road vehicle emissions estimates published in association with the 2023 RTP update were produced within a software framework that combines the regional travel model with the most recent version of EPA's MOVES model, MOVES3. Metro's current implementation of MOVES was developed in accordance with all pertinent EPA guidance included in the document, "MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity" (November 2020).

See **2023 RTP Appendix J** for more information regarding the regional on-road vehicle fleet and emissions characteristics assumed in the 2023 RTP on-road vehicle greenhouse gas emissions analysis. In particular, the fleet mix and vehicle age distributions do not

change over time, hybrid and/or electric vehicles are not currently accounted for and assumptions regarding average fuel economy are limited to standards and policies set forth in existing federal and state legislation.

Metro staff will monitor future changes to fleet and technology assumptions in collaboration with DLCD, DOE, DEQ and ODOT and continue to improve emissions analysis methods, data and tools through its air quality and climate change programs.

Geographic Information Systems (GIS)

Geographic Information Systems (GIS) uses spatial data to determine relationships between different data elements and map-based data, including Metro's Regional Land Information System (RLIS). An on-line **RTP Resource Guide** provided information to support project sponsors throughout the RTP update.

For the 2023 RTP evaluation, the transportation investments were mapped to assess the spatial relationships between the RTP investments and different datasets. In particular, transportation equity, safety, system completion and access to jobs, transit and active transportation options were assessed using ArcGIS, made by ESRI. Documentation of the data and methodologies used are provided in this appendix.

For more information on Metro's RLIS data layers and tools, visit the RLIS Live website.

VisionEval (VE-RSPM) and TMIP-EMAT

The VisionEval framework is built on the following "GreenSTEP family" of models:

- **The GreenSTEP model** was the first model in the strategic planning family, developed by the Oregon Department of Transportation (ODOT). ODOT developed the model to assist in the development of plans to reduce greenhouse gas (GHG) emissions from light-duty vehicles, to meet Oregon State statutory goals.
- **The RSPM (Regional Strategic Planning Model)** was developed by ODOT as an offshoot of the GreenSTEP model to support the preparation of metropolitan area scenario plans. The name reflects a broadening of the policies, beyond state statutory requirements.
- **VisionEval** was used in combination with TMIP-EMAT (Travel Model Improvement Program Exploratory Modeling and Analysis Tool).
- **TMIP-EMAT** is a methodological approach and software code base to exploratory modeling and analysis. It provides a window to rigorous analytical methods for handling uncertainty and making well informed decisions using travel forecasting models of all types. It is designed to integrate with an existing transportation model or tool to perform exploratory analysis of a range of possible scenarios.

These tools were used in combination to test various policy scenarios for the 2023 RTP to determine if they meet our state mandated greenhouse gas reduction targets. Details about the greenhouse gas emissions analysis prepared to monitor implementation of the Climate Smart Strategy are provided in **Appendix J**.

RTP Project Hub

An on-line project database (called the RTP Project Hub) was created to store information for projects adopted in the 2023 RTP as well as projects from previous plans. Project sponsors reviewed and submitted new or updated project information, including modeling assumptions for bike and roadway projects.

REGIONAL TRAVEL MODEL ASSUMPTIONS

The RTP project lists provided in **Appendices A and B** are priority projects from local, regional or state planning efforts that provided opportunities for public input. Projects in the 2030 and 2045 Constrained RTP investment scenarios are eligible for federal or state transportation funding.

It is important to note that major projects that included preliminary engineering (PE) and right-of- way acquisition (ROW) were included as fully built in the travel demand model for the year of the construction for that project. The major projects are in various stages of project development and planning at this time. In some cases, locally preferred alternatives (LPAs) have yet been determined, therefore, the assumptions used only represent potential alignments or facility type determinations and are subject to refinement.

Table 4 identifies the major throughway projects in each future year RTP network.

Table 4. Summary of major planned throughway network investments

	2030 Constrained	2045 Constrained *(2030 Constrained, plus)*	2045 Strategic *(2045 Constrained, plus)*
Through way	• I-5 IBR, pre-construction tolling *(10866)* • I-5/Rose Quarter Improvement Project *(10867, 11176)* • I-205/Abernethy Bridge *(11969, under construction)* • I-205 widening and I-205 Toll Project *(11586, 11904, 12099)* • I-5 and I-205: Regional Mobility Pricing Project *(12304)* • OR 212/224 Sunrise Project Ph. 2 (PE, RW) *(10890)* • OR 224 WB widening *(11350)* • I-5 Boone Bridge and Seismic Improvement Project (PE, RW) *(12305)*	• I-5/Interstate Bridge Replacement Program *(10866)* • OR 212/224 Sunrise Project Ph. 2 (CON) *(11301)* • I-5 Boone Bridge and Seismic Improvement Project (CON) *(11990)* • I-5 NB braided ramps *(11989)* • I-5 NB auxiliary lane extension Ph. 2 *(11402)* • I-5 SB truck climbing lane *(11984)* • OR 217 SB braided ramps *(11988)* • US 26/185th Avenue on-ramp widening *(12148)*	• Sunrise Project Ph. 3 *(12020)* • I-5 NB auxiliary lane extension Ph. 3 *(11583)* • I-5/OR 217 Interchange Ph. 2 *(11302)* • OR 217 capacity improvements *(11582)* • OR 217 NB auxiliary lane extension *(11976)* • US 26 widening *(11393)*

Projects shown in blue text have completed NEPA work (or NEPA work is underway). RTP IDs are shown in italics. See Chapter 8 (Section 8.3) for a summary of completed and current major project development activities in the region.

For the Interstate Bridge Replacement program, the 2045 Constrained and Strategic networks assumed the Modified Locally Preferred Alternative (LPA) as defined in as defined in the Draft Environmental Impact Statement. Key components of this alternative include a new I-5 Columbia River crossing with three through-lanes, safety shoulders, and one auxiliary lane in each direction; a 1.9-mile extension of the MAX Yellow Line, including three new stations, from the existing Expo Center Station to a terminus near Evergreen Boulevard in Vancouver; a new arterial bridge for local traffic with a shared use path for pedestrians and bicyclists; improvements to seven interchanges, as well as wider shoulders to accommodate express bus-on-shoulder service, along I-5 between Victory Boulevard in Portland and State Route 500 in Vancouver; and variable-rate tolling for motorists using the river crossing as a demand-management and financing tool. The 2030 Constrained network assumed pre-completion tolling based on the same toll schedule as the Modified LPA.

I-5 Rose Quarter Improvement Project as described in the September 2, 2022 Environmental Assessment.

The Project, or Revised Build Alternative, would include the following elements related to both the highway and local street system. It would extend the existing auxiliary lane on I-5 southbound (SB) and adding a new 11 auxiliary lane on I-5 northbound (NB) between I-84 and I-405. The project adds 12-foot-wide outside shoulders on I-5 between I-84 and I-405 in the NB 13 direction only and adds 12-foot-wide outside shoulders on I-5 between I-84 and I-405; (SB from 15 Broadway exit to the I-84 exit and NB from I-84 entrance to I-405 exit). It removes existing overcrossing structures at N/NE Broadway, N/NE Weidler, N 17 Williams Avenue, N Flint Avenue, and N Vancouver Avenue (including the 18 columns that support the structures) and replaces it with a single highway cover 19 structure over I-5 that incorporates these streets. The project relocates the existing I-5 SB off-ramp at the N Vancouver/Broadway intersection to a new location south of N Broadway where N Williams, N Ramsay 22 Way, NE Wheeler Avenue, and the I-5 SB on-ramp currently come together, altering the cross section on N Williams between N Ramsay and N/NE Weidler to accommodate traffic exiting from SB I-5. It modifies the I-5 NB off-ramp to include an additional right-turn lane to NE Weidler, increasing route options for pedestrian and bicycle routes through a new crossing at N/NE Hancock, bike lanes on N/NE Broadway and N/NE Weidler, and improved bicycle and pedestrian facilities on N Vancouver and N Broadway. It constructs a new roadway crossing to extend N/NE Hancock west across and over I-5. It adds new widened and well-lit sidewalks, Americans with Disabilities Act 33 (ADA)-accessible ramps, high-visibility and marked crosswalks, and widened and improved bicycle facilities, as well as, implementing stormwater management on the streets connected to the 36 Broadway/Weidler interchange.

Table 5. Overview of 2023 RTP Projects with Tolling

Project	Elements captured in the RTP
I-5 Interstate Bridge Replacement (IBR) Program	• Variable rate tolls for drivers crossing the river ranging from $2.05 - $3.15 between 5 AM and 11PM, with a minimum overnight toll of $1.50 • A new I-5 Columbia River crossing with three through lanes, safety shoulders, and one auxiliary lane in each direction • A 1.9-mile extension of the MAX Yellow Line, including three new stations, from the existing Expo Center Station to a terminus near Evergreen Boulevard in Vancouver • A new arterial bridge for local traffic with a shared use path for pedestrians and bicyclists • Improvements to seven interchanges • Wider shoulders to accommodate express bus-on-shoulder service along I-5 between Victory Boulevard in Portland and State Route 500 in Vancouver
I-205 Toll Project	• Toll rate assumptions for the I-205 Toll Project Draft Environmental Assessment[6] include variable rate tolls for drivers crossing the Tualatin River and Abernethy bridges ranging from $0.55 - $2.20 (per bridge) between 5 AM and 11PM, with a minimum overnight toll of $0.55 (per bridge) • Addition of a third through lane in both directions of I-205 between the Stafford Road exit and OR 43 • A northbound auxiliary lane between OR 99E and OR 213 • Seismic bridge upgrades along I-205; replacement of the Tualatin River Bridges
I-5 and I-205 Regional Mobility Pricing Project	• Preliminary modeling assumptions for the Regional Mobility Pricing Project include variable rate tolls for drivers on I-205 between the Columbia River (north) and the intersection of I-5 (south). Tolls vary by location, direction of travel, congestion levels, and time of day; no tolls are assumed overnight • Consideration of toll rate schedules will be part of the environmental review process, as well as the traffic and revenue analysis, both of which will occur in 2023-24

Network Assumptions

Roadway Network Assumptions

[6] I-205 Toll Project Draft Environmental Assessment

The on-line RTP Resource Guide {under development] contains the roadway speed, number of travel lanes and capacity assumed for the 2020, 2030 No Build, 2030 Constrained, 2045 No Build, 2045 Constrained and 2045 Strategic roadway networks. The 2030 No Build and 2045 No Build roadway and transit networks are exactly the same.

2020 Roadway Network

The 2020 Roadway Network consists of throughways, arterials, and collectors from the year 2020. This roadway network is used as the base year for the RTP update. All projects in the region completed by fall 2020 were incorporated into the 2020 network.

2030 and 2045 No Build Roadway Network

Roadway projects included in the 2030 No Build network includes the 2020 Network and projects identified by project sponsors that have been completed (or have received committed funding) as of 2020.

2030 Constrained Roadway Network

Roadway projects included in the 2030 Constrained network includes projects submitted by ODOT and local agencies as part of the 2023 RTP call for projects in January of 2023. Major throughway capital investments are summarized in **Table 4**.

2045 Constrained Roadway Network

Roadway projects included in the 2045 Constrained network includes projects submitted by ODOT and local agencies as part of the 2023 RTP call for projects in in January of 2023. Major throughway capital investments are summarized in **Table 4**.

2045 Strategic Roadway Network

Major roadway projects included in the 2045 Strategic network include all of the 2045 Constrained projects plus additional investments identified by project sponsors as part of the 2023 RTP call for projects in January of 2023. Major throughway capital investments are summarized in **Table 4**. Modeling of this network has not yet been conducted.

Transit Network Assumptions

In general, the RTP transit networks include an extensive mix of high capacity, regional and community service transit service. **Attachment 2** contains a list of all of the bus and MAX lines and their respective service headways for the 2020 Base Year and future year transit networks.

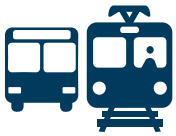
The 2020 Transit Base Network consists of current service and existing (2020) MAX lines and frequent service bus lines as well as existing service for other transit districts, including C-TRAN, (SMART), Canby Area Transit (CAT), Sandy Transit (SAM), local and county run shuttles, and South Clackamas Transit District (SCTD).

The 2030 No Build and 2045 No Build transit networks are exactly the same and include:

- Forward Together Concept changes to the TriMet network and short term planned improvements to C-TRAN and local shuttles.
- Existing service routes for SMART, CAT, SAM and SCTD.

Table 6 identifies the planned high capacity transit projects in each future year RTP network.

Table 6. Summary of planned high capacity transit network investments

	2030 Constrained	2045 Constrained *(2030 Constrained, plus)*	2045 Strategic *(2045 Constrained, plus)*
High Capacity Transit 	• MAX Red Line Improvements *(10922, under construction)* • Southwest Corridor (PD) *(12322, 12301)* • 82nd Avenue Transit Project *(12029)* • Tualatin Valley Highway Transit Project *11589)* • Montgomery Park Streetcar *(11319)*	• I-5/Interstate Bridge Replacement Program *(10866)* • Southwest Corridor (PD, PE, RW) *(12292, 12300)* • Steel Bridge Transit Bottleneck (PD) *(12050)*	• Southwest Corridor (CON) *(11587)* • Steel Bridge Transit Bottleneck (CON) *(10921)* • Beaverton-Hillsdale Highway Corridor HCT *(12290)* • Burnside/Stark Corridor HCT *(12286)* • Lombard/Cesar Chavez Corridor HCT *(12288)* • Martin Luther King Jr. Corridor HCT *(12287)* • SW 185th Corridor HCT *(12289)* • Sunset Highway Corridor HCT *(11912)* • Forest Grove HCT *(10771)* • AmberGlen/N. Hillsboro Streetcar (*11278, 11573)* • Johns Landing Streetcar *(11639)* • WES expansion to Salem *(11751)*

Projects shown in blue text have completed NEPA work (or NEPA work is underway). *RTP IDs are shown in italics.* See Chapter 8 (Section 8.3) for a summary of completed and current major project development activities in the region.

Table 7 identifies the planned enhanced transit projects in each future year RTP network.

Table 7. Summary of planned enhanced transit network investments.

	2030 Constrained	**2045 Constrained** ***(2030 Constrained, plus)***	**2045 Strategic** ***(2045 Constrained, plus)***
Better Bus	• East Burnside/SE Stark Enhanced Transit Project *(12030)* • Lombard/Cesar Chavez Enhanced Transit Project *(12034)* • NE MLK Jr Blvd Enhanced Transit Project *(12027)* • NE Sandy Blvd Enhanced Transit Project *(12028)* • SE Belmont Enhanced Transit Project *(12033)* • SE Hawthorne/Foster Ave Enhanced Transit Project *(11834)* • Portland Central City Portals Enhanced Transit *(11761)* • SE Powell Blvd Enhanced Transit Project *(12035)* • SW Beaverton-Hillsdale Hwy Enhanced Transit Project *(12032)* • 122nd Avenue Corridor Transit Improvements *(11868)* • Additional transit supportive projects region-wide *(including 10779 and 11440)*	• Cornell/Barnes/ Line 48 Enhanced Transit Project *(12063)* • 185th and Farmington/Line 52 Enhanced Transit Project *(12064)* • Inner North Portland (Vancouver/Williams/ Mississippi/Albina) Enhanced Transit Project *(11833)* • ETC/Rose Lanes Transit Improvement Fund *(12232)* • Additional transit supportive projects region-wide *(including 11441, 10805 and 10846)*	• 99W Enhanced Transit Project *(12176)* • Additional transit supportive projects region-wide

Projects shown in blue text have completed NEPA work (or NEPA work is underway). *RTP IDs are shown in italics.* See Chapter 8 (Section 8.3) for a summary of completed and current major project development activities in the region.

Modeling of the strategic network has not yet been conducted.

For the RTP modeling, bus speed and dwell were modified to reflect planned Better Bus (enhanced transit) improvements. Typically, buses run at 90 percent of auto speed and dwell for 2 minutes per mile in Portland between I-5 and I-205 and 1.5 minutes per mile in the rest of the region. For Better Bus corridors throughout the region, bus speed is modeled at 93 percent of auto speed and 1.2 minutes of dwell per mile.

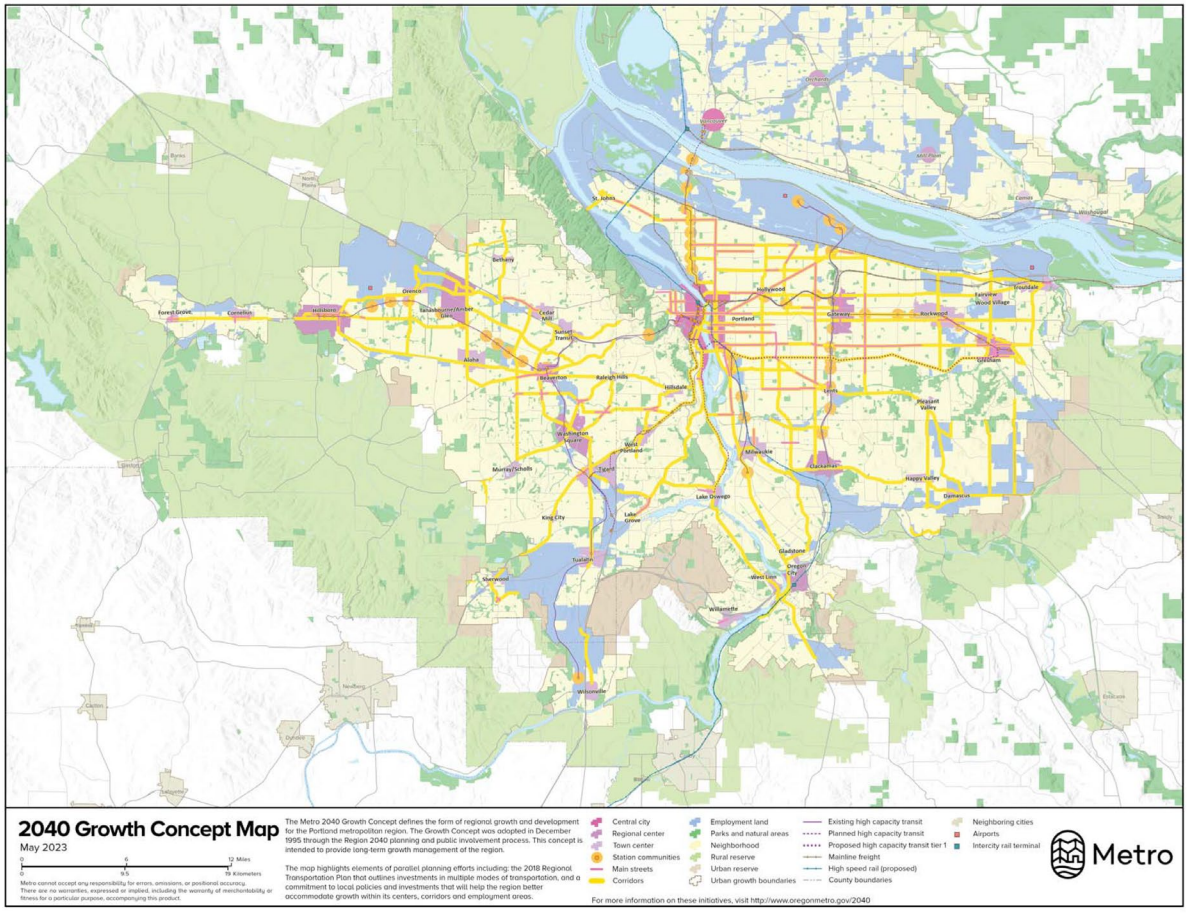
Assumptions for Clark County and the City of Vancouver

The Constrained and Strategic road and transit networks were coordinated with the Southwest Washington Regional Transportation Council (RTC) and C-TRAN. Households and employment data was provided by RTC in agreement with their county growth projections.

Regional Travel Model Traffic Analysis Zone (TAZ) Assumptions

This section identifies specific modeling assumptions by transportation analysis zone (TAZ) that are intended to mirror the expected improvements proposed in the RTP and their impact on mode choice.

Figure 4. 2040 Growth Concept – an integrated land use and transportation vision



Application of TAZ assumptions

To simplify the modeling assumptions, the 2040 design types have been grouped according to shared land use and transportation characteristics. **Attachment 1** to this appendix summarizes the 2045 land use assumptions for specified transportation modeling factors. These groupings define each set of TAZs in the modeling process. TAZs were assigned to each grouping. **Attachment 3** to this appendix displays the household and employment assumptions and the 2040 design type assigned to each TAZ.

Intersection Density

The intersection density input, which impacts travel choices for all modes, particularly pedestrians, is a measure of street connectivity and represents the expected number of street intersections per mile for each 2045 grouping.

The 2010 intersection density was generated in GIS using the RLIS streets data layer to establish intersection density for the 2020 Base Year network. The 2045 assumptions for the constrained and strategic scenarios were derived by applying minimum density values based on the TAZ's 2045 design type. The 2030 No Build and 2045 No Build use 2020 intersection densities assumed in the 2020 Base Year network.

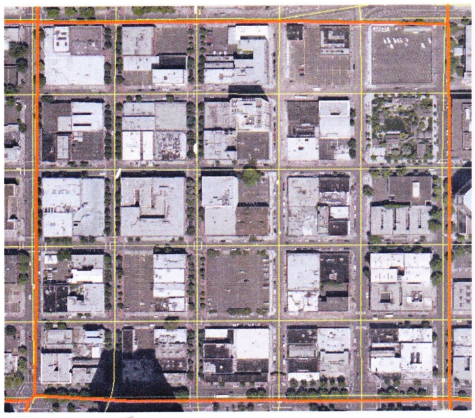
The intersection densities across the 2045 design types are tiered, reflecting differences in urbanization and development patterns across the region. Areas that currently have or are planned to have greater street connectivity and pedestrian improvements (e.g., the central city, regional and town centers and station communities) are assumed to have higher intersection densities. Work continues to enhance the regional model's capability of forecasting pedestrian travel.

2020 Base Year network

The intersection densities across the 2045 design types are tiered, reflecting differences in urbanization and development patterns across the region. Areas that currently have or are planned to have greater street connectivity and pedestrian improvements (e.g., the central city, regional and town centers and station communities) are assumed to have higher intersection densities. Work continues to enhance the regional model's capability of forecasting pedestrian travel.

Figure 5. Examples of Street Intersection Density (14 to 20 connections per mile)

Example of 20 connections per mile



Example of 18 connections per mile

Example of 16 connections per mile

Example of 14 connections per mile

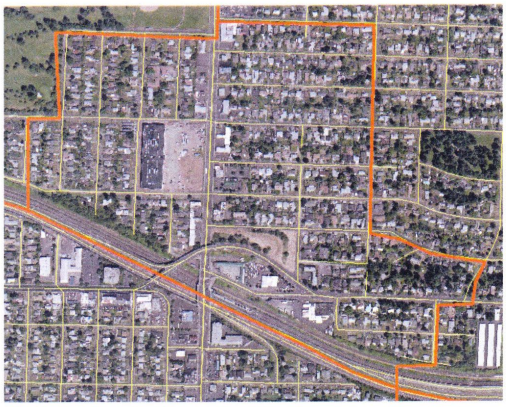
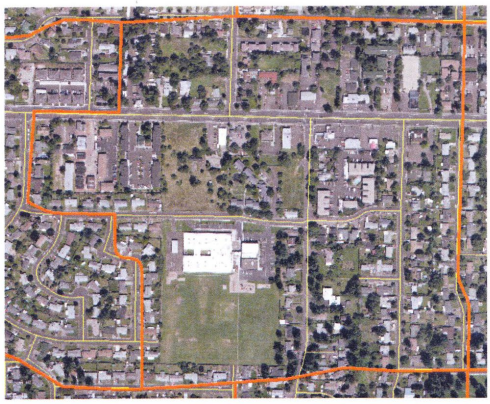


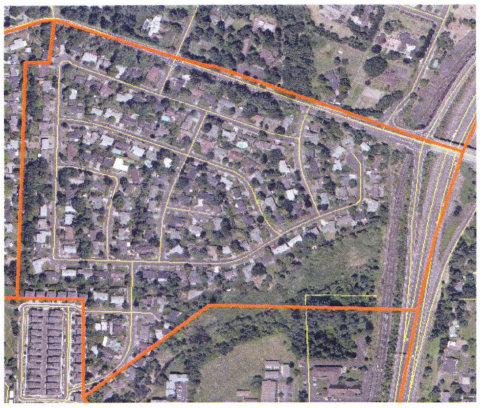
Figure 6. Examples of Street Intersection Density (6 to 12 connections per mile)

Example of 12 connections per mile



Example of 10 connections per mile

Example of 8 connections per mile



Example of 6 connections per mile

Parking Factors

Before the pandemic the parking factors input was based on the most recent City of Portland's Comprehensive Plan and Central City Plan assumptions. The plans assume a minimum increase of 1.5 percent above the inflation annual growth rate. Parking factors for the regional centers, station communities and town centers are scaled from these costs. No parking factors are assumed for main streets, corridors, neighborhoods, employment areas, industrial areas, greenspaces and rural reserves. The parking costs are intended to represent both direct, out-of- pocket expense, time limited (managed) parking as well as the difficulty in finding a parking space and walking to your destination. For 2020, parking factors were based on current pre-pandemic parking charges. As a rule of thumb, all day parking is roughly 7x the meter rate.

For future year parking factors post-pandemic, it was decided by Metro and City of Portland staff that parking charges for the Central City should be held constant until the year 2030. City staff is in the process of determining how Central City prices should change in the future but had not reached a conclusion in time for those changes to incorporated into this RTP. The parking factors for 2040 Growth Concept development areas were incorporated into the 2030 and 2045 networks at a slightly higher rate (+3%) than previously to reflect the increased focus on parking management in the new Climate Friendly and Equitable Communities (CFEC) Program and administrative rules that direct cities and counties.

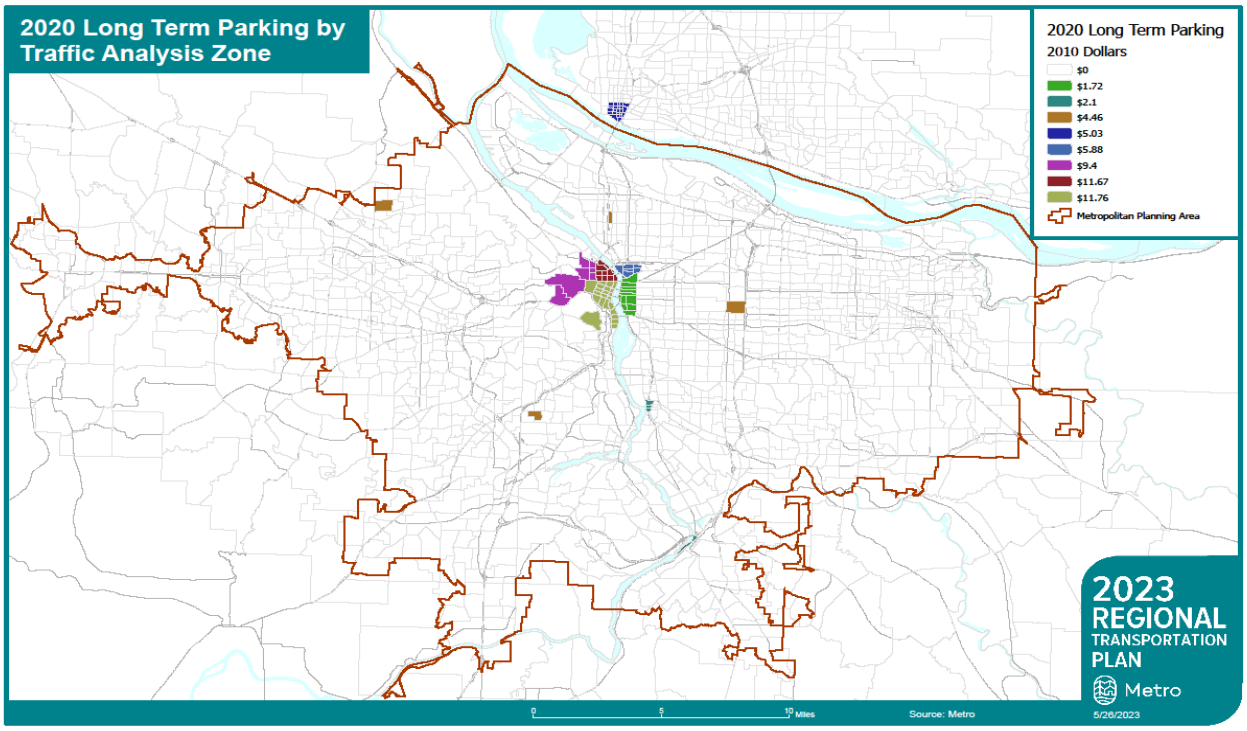
Table 8. 2020 Base Year Parking Factors (in 2010 dollars)

Location	Long-term parking factor	Description
CC-1 (S of Burnside) & OHSU	$11.67	Based on collected data
CC-2 (Lloyd District)	$5.88	Based on collected data
CC-3 (CEID)	$1.72	Based on collected data
CC-4 (River District - N of Burnside)	$11.67	Based on collected data
CC-5 (South Waterfront)	$11.67	Based on collected data
Vancouver CBD	$5.03	Based on collected data
Goose Hollow	$11.67	Based on collected data
NW Portland	$9.40	Based on collected data
Oregon Zoo and Washington Park	$9.40	Based on collected data
Milwaukie and Oregon City	$2.10	Based on collected data
PCC campuses	$4.46	2023 cost in 2010 dollars

Source: Metro Research Center

Figure 7 shows the locations where a parking factor is assigned for 2020.

Figure 7. 2020 Long Term Parking Factors (in 2010 dollars)



Source: Metro Research Center

For the 2030 Financial Constrained and No Build Networks, the central city costs were held constant, but the 2040 centers were given a percentage of the central city costs to reflect parking management strategies.

Table 9. 2030 Constrained and 2030 No Build Parking Factors (in 2010 dollars)

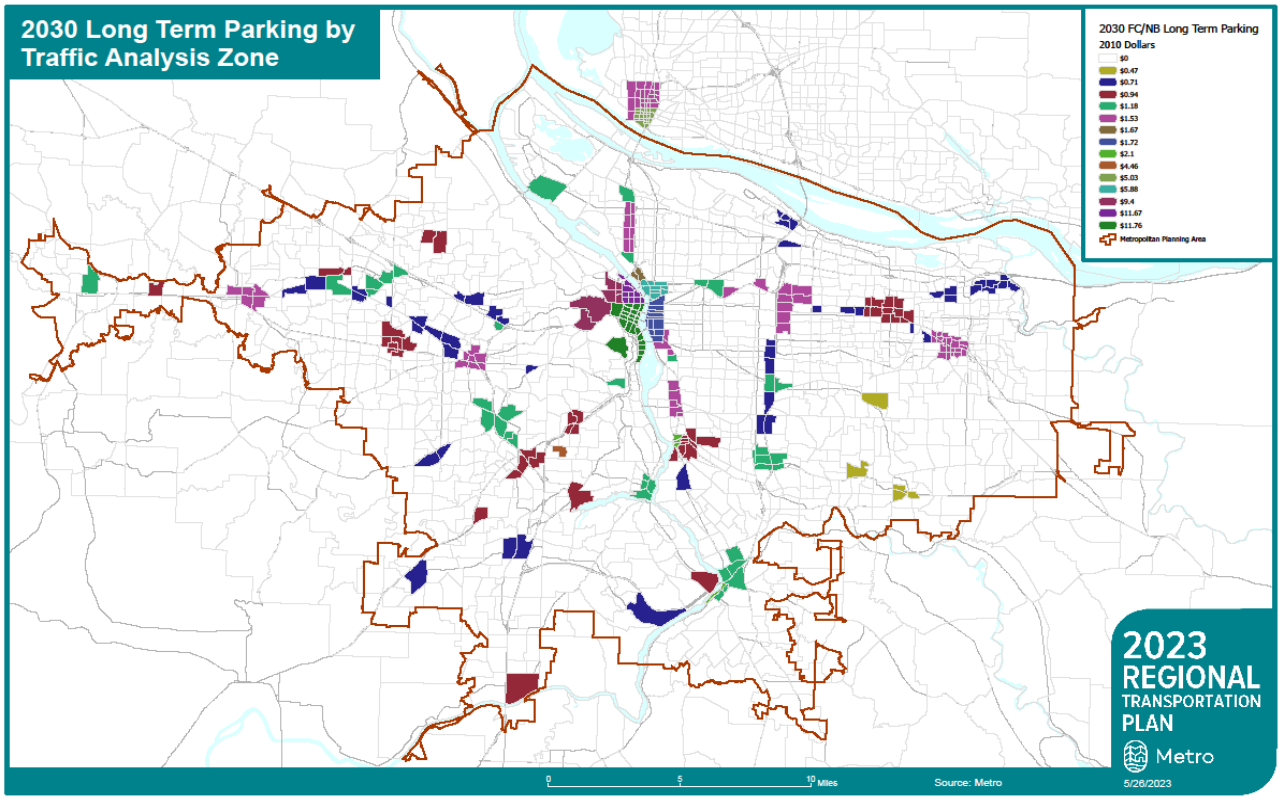
Location	Long-term parking factor	Description
CC-1 (S of Burnside) & OHSU	$11.67	Based on collected data
CC-2 (Lloyd District)	$5.88	Based on collected data
CC-3 (CEID)	$1.72	Based on collected data
CC-4 (River District - N of Burnside)	$11.67	Based on collected data
CC-5 (South Waterfront)	$11.67	Based on collected data
Vancouver CBD	$5.03	Based on collected data
Goose Hollow	$11.67	Based on collected data
NW Portland	$9.40	Based on collected data
Oregon Zoo and Washington Park	$9.40	Based on collected data

Location	Long-term parking factor	Description
Milwaukie and Oregon City	$2.10	Based on collected data
PCC campuses	$4.46	2023 cost in 2010 dollars
Regional Center - Tier 1	$1.52	13% of Portland CBD (CC-1)
Regional Center - Tier 2	$1.18	10% of Portland CBD (CC-1)
Station Community - Tier 1	$1.52	13% of Portland CBD (CC-1)
Station Community - Tier 2	$1.18	10% of Portland CBD (CC-1)
Station Community - Tier 3	$0.71	6% of Portland CBD (CC-1)
Town Center - Tier 1	$1.18	10% of Portland CBD (CC-1)
Town Center - Tier 2	$0.94	8% of Portland CBD (CC-1)
Town Center - Tier 3	$0.71	6% of Portland CBD (CC-1)
Town Center - Tier 4	$0.47	4% of Portland CBD (CC-1)

Source: Metro Research Center

Figure 8 shows the locations where a parking factor is assigned for the 2030 No Build and Financially Constrained scenarios.

Figure 8. 2030 Constrained and 2030 No Build Parking Factors (in 2010 dollars)



Source: Metro Research Center

For the 2023 RTP, the 2045 Constrained and 2045 No Build parking factors are the same with exception of the new station communities added with light rail service to Vancouver and SW corridor.

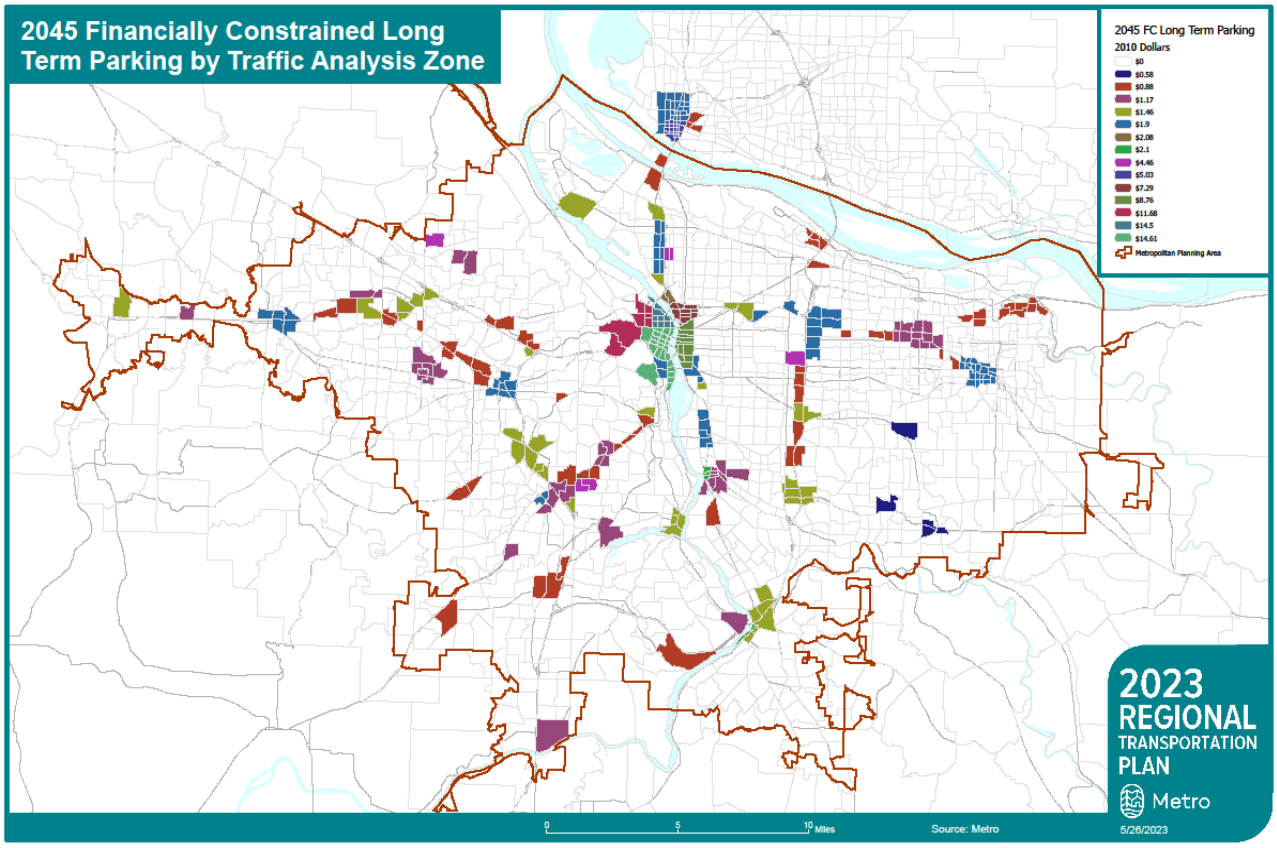
Table 10 lists the general areas with a parking factor assigned (in 2010 dollars) for both the 2045 Constrained and the 2045 No Build scenarios. **Figure 9** shows the locations where a parking factor is assigned for the 2045 Constrained and Figure 10 shows the parking factors for the 2045 No Build scenario.

Table 10. 2045 Constrained and 2045 No Build Parking Factors (in 2010 dollars)

Location	Long-term parking factor	Description
CC-1 (S of Burnside) & OHSU	$14.61	Based on 2016 City of Portland Input
CC-2 (Lloyd District)	$7.29	Based on 2016 City of Portland Input
CC-3 (CEID)	$8.76	Based on 2016 City of Portland Input
CC-4 (River District - N of Burnside)	$14.50	Based on 2016 City of Portland Input
CC-5 (South Waterfront)	$14.61	Based on 2016 City of Portland Input
NW Portland	$11.67	Based on 2016 City of Portland Input
Goose Hollow	$14.61	Based on 2016 City of Portland Input
Vancouver CBD	$5.03	Grows with inflation
Oregon Zoo and Washington Park	$11.67	Grows with inflation
Milwaukie and Oregon City	$2.10	Grows with inflation
PCC campuses	$4.46	Grows with inflation
Lower Albina	$2.07	14% of Portland CBD (CC-1)
Regional Center - Tier 1	$1.89	13% of Portland CBD (CC-1)
Regional Center - Tier 2	$1.46	10% of Portland CBD (CC-1)
Station Community - Tier 1	$1.89	13% of Portland CBD (CC-1)
Station Community - Tier 2	$1.46	10% of Portland CBD (CC-1)
Station Community - Tier 3	$0.88	6% of Portland CBD (CC-1)
Town Center - Tier 1	$1.46	10% of Portland CBD (CC-1)
Town Center - Tier 2	$1.17	8% of Portland CBD (CC-1)
Town Center - Tier 3	$0.88	6% of Portland CBD (CC-1)
Town Center - Tier 4	$0.58	4% of Portland CBD (CC-1)

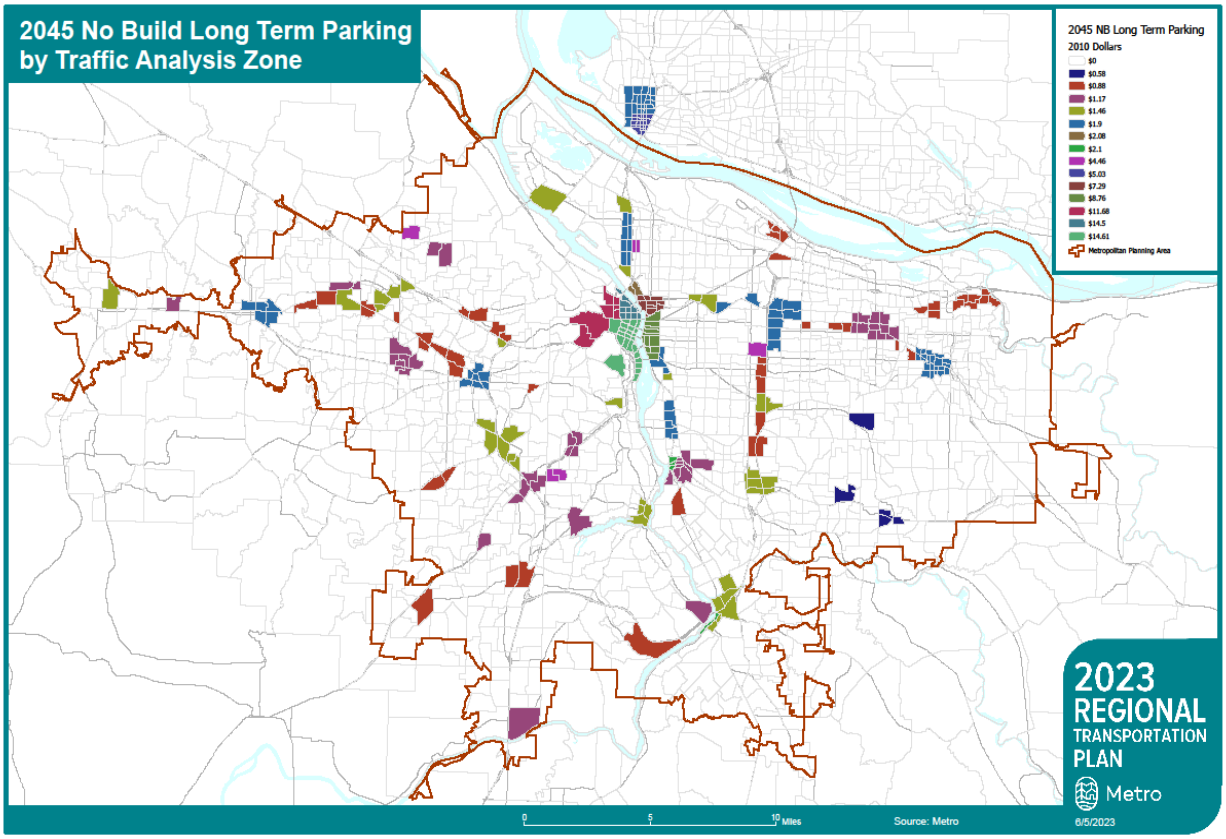
Source: Metro Research Center

Figure 9. 2045 Constrained Long Term Parking Factors (in 2010 dollars)



Source: Metro Research Center

Figure 10. 2045 No Build Long Term Parking Factors (in 2010 dollars)



Transit Pass Factor and Reduced Fare Program

Transit ridership is highly dependent on convenient, affordable, frequent service. Making transit more affordable helps increase transit use, which in turn helps reduce vehicle miles traveled per capita and related air pollution and greenhouse gas emissions. It is also a critical part of providing economic mobility, financial security and independence for many residents.

The RTP modeling assumes a substantial increase in transit service and improvements to enhance bicycle and pedestrian access to transit and to and to improve speed and reliability of transit service in enhanced transit corridors. In addition, the modeling assumes reduced fare programs for all trips destined to the central city, regional centers and other areas to reflect the presence of a transportation management association (TMA) and/or the implementation of a transportation demand management program through which employers reduce the cost of transit available to their employees. To

reflect the reduced fare programs, the transit pass factor input is assumed as a proportion of the full transit fare that transit riders traveling to each 2040 design type will pay.

In addition to the transit pass factor applied to each 2040 design type, assumptions in the model were further adjusted to reflect implementation of reduced fare programs by TriMet and C-TRAN for people with low-income, older adults, youth and people living with a disability. For modeling purposes, transit fares were 50 percent less for households with an income below $25,000 per year.

DOCUMENTATION OF DATA AND METHODS USED IN THE RTP SYSTEM EVALUATION

This section provides describes the data and methodologies used in the performance evaluation conducted for the 2023 Regional Transportation Plan (RTP).

Table 11. List of 2023 RTP System Evaluation Measures

1. Multimodal travel
2. Mode share
3. Access to travel options – system completeness
4. Access to jobs and community places
5. Access to transit
6. Multimodal travel time
7. Reliability of throughways
8. Transit service and ridership
9. Carbon emissions
10. Clean air
11. Potential environmental impact assessment

Affordability – Metro does not currently have the tools to forecast affordability. Evaluation measure(s) and tools will be developed and tested in the next update of the RTP if available. This measure will be monitored using observed data.

Safety – Metro does not currently have the tools to forecast crashes. Evaluation measure(s) and tools will be developed and tested in the next update of the RTP if available. This measure will be monitored using observed data.

Reliability – Metro does not currently have the tools to forecast system and freight reliability. Evaluation measure(s) and tools will be developed and tested in the next update of the RTP if available. This measure will be monitored using observed data.

Findings from the performance evaluation are reported in **Chapter 7** of the RTP. Details about the environmental analysis are provided in **Appendix F**. Details about the greenhouse gas emissions analysis prepared to monitor implementation of the Climate Smart Strategy are provided in **Appendix J**.

1. Multimodal travel

Purpose: To identify whether the package of future transportation investments will increase different forms of travel including auto, bicycle, pedestrian, freight and overall travel (person miles traveled).

Question(s) to Be Addressed:

The **Multimodal travel** performance measures look to assess the following questions for the region's transportation system:

1. How much travel is happening in the region and within each sub-region? (Portland, urban Washington County, urban Clackamas County, East Multnomah County)
2. By what modes are people traveling?

Methodology Description: Miles traveled is a direct output of the regional travel model. For each trip, the trip distance is calculated between the origin and destination. For per capita and per employee calculations these trip distances are divided by the regional population, or number of employees, respectively.

Output Units: Miles traveled (total, per capita, and per employee) by mode

Key Assumptions to Method:

Dataset Used:

Dataset	Type of Data
Miles traveled for each mode	Forecasted

Tools Used for Analysis: Metro Travel Demand Model

Other assumptions: For analysis by sub-regional geography, staff included all TAZs within the sub- region. Any TAZ crossing sub-regional boundaries has been assigned to the sub-region for which the majority of the area of the TAZ is located.

2. Mode Share

Purpose: To identify whether the package of future transportation investments will increase non-drive alone mode share at all geographic levels.

A. Walking, Bicycling, Transit and Shared Ride usage (total and share):
   - Region-wide (within the MPA boundary)

- Sub-regions (Portland, urban Washington County, urban Clackamas County, East Multnomah County)

B. Walking, Bicycling and Transit usage (total and share):

- Mobility corridors

Question(s) to Be Addressed:

The **Mode Share** performance measure look to assess the following questions for the region's transportation system:

1. What is the share of travel utilizing non-driving modes across the region and within various sub-geographies?

Methodology Description: Mode share is a direct output of the regional travel model. Modal accessibility functions were estimated as an input to the mode choice modes. For each trip purpose, they measure the utility of choosing one of seven discrete modes: Drive alone, Drive with passenger, Transit by walk access, Transit by park-and-ride access, Bike and Walk. Probabilities are applied to distributed trips to determine the number of trips by each mode. The data is categorized by 'trips to, from within.'

Output Units: % share of travel by a given mode.

Key Assumptions to Method:

Dataset Used:

Dataset	Type of Data
Share of travel by mode	Forecasted

Tools Used for Analysis: Metro Travel Demand Model

Other assumptions: For analysis by sub-regional geography, staff included all TAZs within the sub- region. Any TAZ crossing sub-regional boundaries has been assigned to the sub-region for which the majority of the area of the TAZ is located.

3. Access to Travel Options – System Completeness

Purpose: Evaluate completeness of the planned region pedestrian, bicycle, and trail networks and access to transit within the metropolitan planning area, and in equity focus areas.[6]

Question(s) to Be Addressed:

The **Access to Travel Options – System Completeness** performance measure will assess the following questions for the region's transportation system within the metropolitan planning area, in equity focus areas and in non-equity focus areas:

1. Regional networks completeness: How many miles and what percentage of the planned regional pedestrian, bicycle and trail networks are completed? How many miles are left to complete?
2. Arterial roadways: How many miles and what percentage of existing arterials have sidewalks and bikeways?
3. 2040 geographies: How many miles and what percentage of all streets in centers, station communities, mixed-use communities, and employment/industrial lands have sidewalks and bikeways?
4. Access to transit: What percentage of bikeways and sidewalks are completed, on all streets, within a 1/2-mile from existing and planned light rail stops, 1/3 mile from existing and planned streetcar stops, and 1/4- mile from existing and planned bus stops?

Methodology:

1. Regional network completeness: Use a geospatial analysis to determine how much of the planned regional pedestrian, bike and trail networks are completed in the 2023 RTP. Determine results for the following geographies: within the MPA and in equity focus areas.[7] Determine results for the base year (2020) and each of the 2023 RTP future year investment packages.
    a) Calculate the **miles** of existing sidewalks, bikeways and trails on the RTP regional bicycle and pedestrian networks for the base year (2020).
    b) Calculate **miles** of sidewalks, bikeways and trails in proposed projects for the future year investment packages that help complete the networks.
    c) Calculate the **percent** completeness for sidewalks, bikeways and trails, both in the base year (2020) and future year investment packages.
2. Arterial roadways: Use a geospatial analysis to determine how much of the planned regional pedestrian and bike networks are completed along existing arterial roadways

[7] Census tracts with higher than regional average concentrations and double the density of one or more of the following: people of color, people with limited English proficiency, and/or people with lower income. Most of these areas also include higher than regional average concentrations of other historically marginalized communities, including young people, older adults and people living with disabilities.

in the 2023 RTP. This follows the same methodology of (1) regional network completeness, subset to only streets with the RTP motor vehicle functional classification of arterial.

3. 2040 Geographies: Use a geospatial analysis to determine how much of the planned regional pedestrian and bike networks are completed within 2040 analysis centers, station communities, mixed-use communities, and employment/industrial lands in the 2023 RTP. [8]This follows the same methodology of (1) Regional network completeness, subset to 2045 analysis centers, station communities, mixed-use communities, and employment/industrial lands.
4. Access to transit: Use a geospatial analysis to determine how much of the planned regional pedestrian and bike networks are completed within a walking distance to transit in the 2023 RTP. This follows the same methodology of (1) Regional system completeness, subset to the area within 1/2-mile from light rail stops, 1/3-mile from streetcar stops, and 1/4-mile from bus stops for existing and planned stops.

Output Units: Miles and percentage (%) of bikeways, sidewalks, and trails, region-wide within MPA and in equity focus areas.

Key Assumptions to Method:

Dataset Used:

Dataset	Type of Data
Line features in GIS for projects proposed for the 2023 RTP - sidewalk, bikeways and trail and new street projects	GIS project data provided by jurisdictions and agencies
Line features in GIS for existing (constructed) sidewalks (as of 2022), bikeways (as of 2022), trails (as of 2022)	RLIS GIS data
Line features in GIS for the planned regional bicycle, pedestrian, and motor vehicle networks Polygon features in GIS for equity focus areas, 2045 analysis centers and station communities, mixed-use zoning, employment/industrial lands, and buffered transit stops as defined above	Regional Transportation Plan GIS data RLIS and Regional Transportation Plan GIS data

Tools Used for Analysis: ArcGIS

Geospatial Analysis Steps:

Entire system completeness analysis (both (1) regional completion and (2) arterial, center, station community, mixed-use zoning, employment/industrial lands, and transit

[8] Analysis centers and station communities have specific geographic boundaries. Many 2045 maps show centers and station communities as concepts (bubbles) and do not show specific, adopted boundaries.

subsets) performed with the following script - methodology outlined below: M:\plan\drc\projects\22047_RTP_2023\performance_measures\system_completeness\rtp_system_completeness_2023.py

1. Select the study area - census tracts clipped to the MPA boundary
    - Copy to new location - this will be the final data output where summary stats by census tract are stored – to allow for summing across the region and for breakdowns by EFAs.
2. For each network (streets, on-street bike, on-street pedestrian, trail), do the following:
    - Clip (intersect) the network to the study area
    - Loop through each subset geography (region-wide, along arterials, in centers, in station communities, in mixed-use zoning, in employment/industrial lands, near transit) and do the following:
        - Clip (intersect) to the subset geography
        - Calculate network mileage and join mileage summary stats by tract to the study area feature class (total planned mileage within the subset geography)
        - Buffer clipped network by 40 feet (40 works well as selection distance, 50 is too much and grabs neighboring features, less than 40 isn't enough to allow for imprecise alignment)
        - Intersect the existing features with the network buffer to get what exists on- network, within the subset geography. Buffer these existing features.
        - For each of (Interim 2030, Constrained 2045, Strategic 2045), do the following:
            - Select relevant projects by the RTP Investment Category and project features and design elements
            - Intersect relevant projects with the network buffer
            - Erase existing features, this leaves only gap-filling projects
            - Buffer these gap-filling projects and append to the existing buffer
        - Intersect the network line with the existing/project buffer and calculate mileage. Summarize by census tract, this gives existing and gap-filled mileage summaries by project phase by census tract for the subset geography to join to the study area feature class.
            - 5 new attributes joined to the output study area feature class for each subset geography looped through, in the format of:

- bike_arterials_network_miles
- bike_arterials_existing_miles
- bike_arterials_2030_miles
- bike_arterials_2045_fc_miles
- bike_arterials_2045_st_miles

3. Finally, summarize the study area feature class - which at this point has all census tracts features within the MPA boundary populated with mileage calculations for all 5 attributes (arterials example above) repeated for all subset geographies needed in this analysis (entire-region, along arterials, in centers, in station communities, in mixed-use zoning, in employment/industrial lands, and near transit).
    - First summarize for all features giving final total mileages for all these estimates.
    - Then repeat the process for only EFA census tracts and then vice versa for only non-EFA census tracts.

4. Access to Jobs and Community Places

Purpose: To evaluate percent change in the percent of regional jobs that people can reach via typical driving and transit commute times under the RTP, as well as examine potential inequities in access to different types of destinations for different types of communities.

Question(s) to Be Addressed:

The RTP examines **access to jobs and community places** through a variety of lenses that are related to both the region's mobility and equity goals:

1. Is overall access to jobs increasing? To answer this question, the RTP compares change over time in the percentage of the region's jobs that can be reached within typical driving and transit commute times between the base year and constrained scenarios.
2. How does access to jobs via transit compare to access to jobs via driving? To answer this question, the RTP compares the percentage of the region's jobs that can be reached within typical commute times between auto and transit modes for each analysis scenario.
3. Is there equitable access to jobs? To answer this question, the RTP compares the percentage of the region's jobs that can be reached within typical driving and transit commute times between equity focus areas and other communities for each analysis scenario.

4. How does access to destinations that are important to members of marginalized communities (low/middle wage jobs and community places) compare to access to jobs? Equity outreach conducted by Metro has revealed that these are key destinations for people of color and people with lower incomes, and the RTP explores the same three questions that are asked above regarding access to jobs with respect to these destinations. However, past analysis has revealed that low/middle wage jobs and community places are often distributed similarly to jobs in general, and that the results for access to these destinations are very similar to the results for access to jobs in general. When this is the case, reporting access to low/middle wage jobs and community places in the RTP results in a significant, and potentially confusing, amount of additional information that duplicates the conclusions of the access to jobs analysis. Metro analyses results to all three types of destinations using the methodology described below and compares results in order to make a determination about what to report in the RTP. If the results differ, the RTP reports on access to all three destination types. If the results are similar, the RTP reports on access to jobs and qualitatively describes how results for access low/middle-income jobs and community places mirror the results of access to all jobs. Metro found that the distribution of all three destination types was similar in the analysis for the 2023 RTP, so the RTP takes the latter approach to reporting results for this measure.

Access to jobs is calculated by using forecasted data from MetroScope to identify and geographically distribute jobs throughout the region, including categorized low-wage and middle-wage jobs (defined in assumptions). The analysis determines the weighted average number of jobs, with emphasis on low and middle-wage jobs, reached using the existing transportation system by travel mode (automobile, transit, bicycle, and walking) in a given travel time window for the entire region, equity focus areas, and non-equity focus areas to determine base year conditions. The next step is to conduct the same assessment under no-build conditions to determine the weighted average number of jobs as a result of employment growth. Then, using the 2030 and 2045 constrained investment strategies, determine the weighted average accessibility to forecasted jobs, including more focused look at low and middle-wage jobs, by mode for the entire region and in equity focus areas. Lastly, the measure will look at the change in the accessibility to jobs between the no-build and the 2030 and 2045 constrained investments, but with a particularly emphasis on the change in access to low and middle- wage jobs in equity focus areas and non-equity focus areas.

The Access to Community Places performance measure is calculated by using existing data from the U.S. Bureau of Labor Statistics to identify the existing community places that provide key services and/or daily needs (defined in assumptions) for people in the region. The analysis determines the weighted average of community places reached using

existing transportation system by different travel mode (automobile, transit, bicycle, and walking) in a given travel time window for the entire region, equity focus areas, and non-equity focus areas to determine base year conditions. The same assessment is conducted for no-build conditions to determine the weighted average number of community places accessible without investment. Then, using the 2030 and 2045 constrained investment strategies, determine the weighted average accessibility to determine the investments impact on accessibility to community places by mode for the entire region, equity focus areas, and non-equity focus areas. Lastly, the measure looks at the change in the accessibility to these existing community places between the no- build and future year with added transportation investments, with an emphasis in looking at the change in equity focus areas relative to non-equity focus areas and the region. The report out for this measure shows the number and percent change in access to community places by mode for each package.

Output Units: Weighted average of community places, jobs, both total and by wage profile, accessed by mode (Auto and transit)

Dataset Used: Geospatial project information for proposed transportation projects provided by project sponsors; forecasted employment/jobs; U.S. Bureau of Labor Statistics – Quarterly Census of Employment and Wages (2013) and North American Industry Classification System (NAICS) codes (for identification of community places).

Tools Used for Analysis: Metro Travel Demand Model, Metro MetroScope Model, and ArcGIS

Key Assumptions to Method:

- **Definition of Low-Wage Jobs:** Jobs which pay an annual salary between $0 - $39,999.
- **Definitions of Middle-Wage Jobs:** Jobs which pay an annual salary between $40,000 –$65,000.

Methods for Defining and Identifying All Jobs: The projections (total jobs) and geographic distribution of employment is based on underlying U.S. Bureau of Labor Statistics data and assumptions regarding growth for the employment industries in MetroScope. (See MetroScope documentation regarding employment forecast.)

Methods for Defining and Identifying Low and Middle-Wage Jobs: The annual salary band was based on the average household size of three (3) and a combination of different income, program eligibility, and self-sufficiency definitions (HUD median income, University of Washington self-sufficiency index, federal poverty level, and uniform relocation assistance and real property acquisition act) The definition of low and middle-

wage jobs is not taking into consideration employer benefits provided as part of the identification of wages.

Distribution of Low and Middle-Wage Jobs Assumptions: The distribution of low and middle-wage jobs is based on underlying U.S. Bureau of Labor Statistics data and assumptions regarding growth for the employment industries in MetroScope. (See MetroScope documentation regarding employment industry forecast assumptions.) The low and middle-wage band will not change according to inflation. Low and middle-wage jobs were determined by the wage profile of each MetroScope industry, looking at the percentage of jobs, which paid within the annual salary range. This range was applied to the employment forecast for the future year to determine the distribution.

Distribution of community places: These places are identified using North American Industry Classification System (NAICS) codes. Codes include those used as part of TriMet's Transit Equity Index with select additions based on consultation with 2018 RTP work groups, TPAC, and Metro Planning and Development Department and Diversity, Equity, and Inclusion staff. The table below provides the full list of NAICS codes.

NAICS Codes for Community Places

Category	NAICS Code	Geography
Civic	491110	Postal Service Libraries and Archives
	519120	Elementary and Secondary Schools Junior/Community
	611110	Colleges
	611210	Colleges, Universities, and Professional Schools Child and
	611310	Youth Services
	624110	Services for the Elderly and Persons with Disabilities Other
	624120	Individual and Family Services
	624190	Community Food Services
	624210	Other Community Housing Services Emergency and Other
	624229	Relief Services Vocational Rehabilitation Services Child Day
	624230	Care Services
	624310	Temporary Shelters
	624410	Religious Organizations
	624221	
	813110	

Category	NAICS Code	Geography
Essential Retail	444130 446110 452111 452990 812111 812112 812310 812320	Hardware Stores Pharmacies and Drug Stores Department Stores All Other General Merchandise Stores Barber Shops Beauty Salons Coin-Op Laundry Dry Cleaning and Laundry Service
Financial/Retail	522110 522120 522130	Commercial Banking Savings Institutions Credit Unions
Food	445110	Supermarkets and Other Grocery (except convenience) Stores
Medical	621111 621112 621210 621310 621320 621330 621340 621391	Offices of Physicians (except Mental Health Specialists) Office of Physicians, Mental Health Specialists Offices of Dentists Offices of Chiropractors Offices of Optometrists Offices of Mental Health Practitioners (except Physicians) Offices of Physical, Occupational, and Speech Therapists and Audiologists
Category	NAICS Code	Geography
	621399 621410 621420 621491 621492 621498 621512 622110 622210 622310	Offices of Podiatrists Offices of All Other Miscellaneous Health Practitioners Family Planning Centers Outpatient Mental Health and Substance Abuse Centers HMO Medical Centers Kidney Dialysis Centers All Other Outpatient Care Centers Diagnostic Imaging Centers General Medical and Surgical Hospitals Psychiatric and Substance Abuse Hospitals Specialty (except Psychiatric and Substance Abuse) Hospitals

Source: U.S. Census Bureau, North American Industry Classification System

Travel Time Windows by Mode:

- Automobile – 30 minutes*
- Transit – 45 minutes*

*Includes access and egress times. In order to avoid cliff-effects of having strict travel time thresholds, results are the averages of travel times +/- 5 minutes of the above travel time windows by mode listed above.

Travel Time Assumptions: Travel time windows by mode were developed with information from the Oregon Household Activity Survey (OHAS) and research from around the country on travel time by different modes for different types of trips. Additionally, internal Metro staff consultation was conducted and work groups were provided the opportunity to give input. Auto travel times were provided for the peak and off-peak period. The peak and off-peak period are the same timeframes (e.g 4-6pm) as the transit service networks.

Transit Service Networks Used:

- Peak – Represented as transit service running from 4pm – 6pm
- Off-Peak – Represented as transit service running from 12pm – 1pm

Transferring Equity Data from Tract to Transportation Analysis Zone

Three equity variables that constitute the identification of tracts as having a significant percentage of historically marginalized communities were converted to transportation analysis zones based on a simple majority-area rule, such that transportation analysis zones were flagged if greater than 50% of their area overlapped with tracts that exceeded HMC thresholds.

Each equity variable[9] was evaluated independently, in order to enable the evaluation of combinations of equity variables across transportation analysis zones. The two combinations of interest were the overlap of People of Color with limited English proficiency and the overlap of all three variables (including low income).

5. Access to Transit

Purpose: To identify whether the package of future transportation investments will increase the number and percent of all households, low-income households, households within equity focus areas and jobs with access to transit by service type.

[9] People of color, people with limited English proficiency, and people with low incomes.

Questions to Be Addressed:

The **Access to Transit** performance measure looks to assess the following questions for the region's transportation system:

1. What is the number and share of households, low-income households and jobs within at least 1/4- mile of all-day frequent service transit (15-minutes or better service)?

More specifically from a transportation equity perspective, the **Access to Transit** performance measures looks to further assess the additional question:

1. How many of the households, low-income households and jobs within at least 1/4-mile of all-day frequent service transit are within equity focus areas?[10]
2. Are there differences in access to high-capacity transit or frequent service transit for low-income households and all households in the region? Are there differences access to high-capacity transit or frequent service transit in equity focus areas compared to rest of the region?
3. Are there significant differences between low-income households and totals households in the region once transportation investments are added? Are there significant (or lack of differences) between equity focus areas and the rest of the region in share of access to high-capacity or frequent service transit once transportation investments are added? To what extent do these investments mitigate any pre-existing differences?

Methodology Description:

The **Access to Transit** performance measure is calculated by using geospatial analysis to assess the number and percentage of all households, low-income households and jobs in the metropolitan planning area boundary (MPA) that are within a 1/4-mile of a frequent bus service stop, 1/3-mile of a streetcar stop, and/or 1/2-mile of a high capacity transit station. The geospatial analysis also assesses how many of those households and jobs are located within equity focus areas. These analyses are conducted for a base year (2020) as well as five additional investment scenarios to allow for comparison (2030 No Build, 2030 Constrained, 2045 No Build, 2045 Constrained, 2045 Strategic).

[10] Equity focus areas are census tracts with higher than regional average concentrations and double the density of one or more of the following groups: people of color, people with limited English proficiency, and/or people with lower income. Most of these areas also include higher than regional average concentrations of other marginalized communities, including young people, older adults and people living with disabilities.

For each of the specific output measures, the following information is gathered:

1. Households – Number and share of households within 1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit, within the MPA and in equity focus areas.
2. Low-Income Households – Number and share of low-income households within 1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit, within the MPA and in equity focus areas. Due to a lack of individual household data, the percent of low-income households were assigned evenly to all households at the census tract level.
3. Jobs – Number and share of jobs within 1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit, within the MPA and in equity focus areas.

Output Units:

1. Number and share of households with access (1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit) to 15-minute or better service during rush hour and off- peak hours.
2. Number and share of low-income households with access (1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit) to 15-minute or better service during rush hour and off-peak hours.
3. Number and share of jobs with access (1/4-mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit) to 15-minute or better service during rush hour and off-peak hours.
4. Number and share of low-income households located within equity focus areas with access (1/4- mile of frequent bus, 1/3-mile from streetcar and 1/2-mile of high capacity transit_ to 15-minute or better service during rush hour and off-peak hours.
5. Number and share of all households, low-income households and jobs within a 1/4-mile all day frequent service.

Key Assumptions to Method:

Dataset Used	Type of Data
MetroScope household and jobs data prepared by Metro	Forecasted
Geospatial transit service information for existing and proposed transit capital projects and service enhancements provided by TriMet and SMART	GIS
Geospatial equity focus areas data	2020 U.S. Census data

Tools Used for Analysis: ArcGIS, Metro travel forecast model

Definitions:

High Capacity Transit – Defining characteristics of High Capacity Transit (HCT) include the ability to bypass traffic and avoid delay by operating in exclusive or semi-exclusive right of way; faster overall travel speeds due to wide station spacing; frequent service; transit priority street and signal treatments; and premium station and passenger amenities. Transit modes include light rail transit; bus rapid transit or enhanced bus service; streetcar or commuter rail trains. [11]

Frequent Transit Service – Frequent transit service is defined a transit service operating at headways of less than or equal to 15 minutes all day.

Other Assumptions:

- Staff is assuming equal spatial distribution of households with each census tract. Additionally, since we do not have access to individual household income data, we are required to assume that low- income households are evenly distributed within each census tract.
- GIS analysis will utilize a specified 'buffer' distance as opposed to a network analysis from each transit stop included in this performance measure.

6. Multimodal Travel Times

Purpose: To identify whether the package of future transportation investments will change the travel times between key origin-destinations for the 1-hour mid-day and 2-hour PM peak periods.

Question(s) to be addressed: The **Multimodal travel times** performance measure looks to assess the following questions for the region's transportation system:

- How long does it take to travel between key origins and destinations across the region by auto and transit?
- How do the package of investments in the RTP impact these travel times?

Methodology Description: Evaluates the time spent traveling between key regional origin-destination pairs by auto and transit. These origin-destination pairs are designated based the 24 designated regional mobility corridors that were developed to represent

[11] All HCT services operate in exclusive or semi-exclusive right-of-way by definition. One exception includes Commuter Rail service which is permitted to be non-exclusive service alongside freight.

corridors that connect the region's centers.[12] Metro staff selected an origin-destination pair that corresponded with the ends of each corridor and was within a reasonable distance (i.e., roughly ¼ mi.) from a transit station to that these pairs correspond to locations with access to transit and result in representative travel times for transit. Metro staff use the travel model to evaluate travel times between each of these origin-destination pairs. The RTP reports non-weighted average travel times across all pairs for PM peak and midday times and for auto and transit modes. For PM peak travel times, averages are based on the peak travel direction between each pair. For midday travel times, averages are based on bidirectional travel times between each pair. The RTP presents the percentage change in average travel times under the constrained scenarios compared to the base year.

Output Units: Minutes of travel time.

Key Assumptions to Method: Auto and transit travel times are for the one hour mid-day and one hour PM peak travel times and are based on a zone-to-zone analysis. (eliot adds text on post-processing)

Dataset Used:

Dataset	Type of data
Travel times by mode for identified origins and destinations	Forecasted

Tools Used for Analysis: Metro Travel Demand Model

Other assumptions: Includes "in vehicle" travel times, not the amount of time to get to and from the automobile, bicycle or transit vehicle. When a tour-based model is available in the future, this measure will include the full travel time for each mode.

[12] https://www.oregonmetro.gov/mobility-corridors-atlas; 2 of the 24 corridors were not included in this analysis because they overlap with other corridors or currently include limited transit service.

7. Reliability of Throughways

Purpose: Development of the draft regional mobility policy has been underway since 2019, through a joint effort of Metro and the Oregon Department of Transportation (ODOT). In late 2022, JPACT and the Metro Council accepted the draft mobility policies and directed further development of the accompanying performance measures as part of completing the 2023 RTP. The draft regional mobility policy for the 2023 RTP identifies travel speed on throughways as one of three mobility performance measures.

The throughway performance measure and thresholds aim to identify future transportation needs on region's throughways using travel speed as a proxy for reliability. The draft policy proposes a minimum throughway performance threshold of no more than four hours per weekday with travel speeds below 35 miles per hour on controlled access freeways (e.g., I-5, I-84, I-205, I-405, US 26 and OR 217) or 20 miles per hour on non-freeways with traffic signals (e.g., OR 99E, US 30, OR 212). If average speeds fall below the relevant speed threshold for more than a total of four hours in a day, it indicates the system is failing at that location and a transportation need exists.

Question(s) to be addressed:

- Do the region's throughways meet the new mobility policy?
- How do the region's controlled-access throughways and throughways with traffic signals perform under the package of investments included in the RTP? How does this change over time?

Background: The Regional Mobility Policy is a policy in the RTP as well as the Oregon Highway Plan (OHP). It applies to transportation system planning and plan amendment processes within the Portland metropolitan area. The policy is used to identify transportation needs and solutions during updates to the RTP and local transportation system plans (TSPs), and to evaluate the potential impacts of local comprehensive plan amendments and zoning changes. More information about the regional mobility policy update, including research that informed the draft travel speed targets for throughways can be found at:

- Draft-2023-RTP-Regional-mobility-policy-overview-Jan2023.pdf (oregonmetro.gov)
- https://www.oregonmetro.gov/sites/default/files/2023/03/01/Regional-Mobility-Policy-Update-Reliability-Research-Process_0.pdf

In addition, the Regional Freight and Commodity Movement Study is exploring how the global pandemic has caused disruptions to the movement of vital commodities, the supply chain, and retail shopping. The study identified regional mobility corridors that are carrying the highest volume and highest value of commodities, and how groups of certain

types of commodities like food and electronics flow through the transportation system in the region. The study is exploring how e-commerce is impacting and benefiting the transportation system and regional economy, and how unreliability and mobility on the regional transportation system impacts commodity movement. Both the draft regional mobility policy and the regional commodities movement study include travel speed-based performance metrics to identify transportation needs. Observed and modeled speed data will be used separately in each planning effort. This methodology describes only observed data to document existing performance of the facilities evaluated.

Data: The methods and data used build on Metro's existing, ongoing work to calculate and report on National Highway System (NHS) and freight reliability performance metrics as required by the Moving Ahead for Progress in the 21st Century (MAP-21). Speed data from the Metro travel demand model, peak spread assignments was used. In general, the analysis was limited to "mainline" (non-ramp) TMC links falling mostly inside the Metropolitan Planning Area (MPA).

Dataset	Type of data
Travel speeds on links	Forecasted

Methods: Methods were then developed to summarize 1-hour speed data into facility-based segments for each corridor. The draft regional mobility policy proposes a target of no more than four hours per weekday with average travel speeds below 35 miles per hour (controlled access freeways) or 20 miles per hour (non-freeways with traffic signals). An initial metric was created to capture that performance target. If average speeds fall below 35 mph for more than four hours in a day, it indicates the system is failing at that location and a transportation need exists.

8. Transit service and ridership

Purpose: To highlight how transit service and ridership changes under the RTP. RTP policies establish transit as the background of the region's transportation system, and continuing to invest in transit is critical to meeting regional climate, mobility, and equity goals. At the same time, transit can be more costly and complicated to invest in than other modes, because it requires coordinating changes to land use and investments in complementary travel options, as well as setting aside resources to operate transit. This measure highlights how the transit system performs given these opportunities and challenges, in a way that accounts for both the impact of transit service and non-transit projects such as tolling and bicycle and pedestrian infrastructure at stations on transit ridership. This measure looks at whether the package of future transportation investments will increase average weekday transit boardings and revenue hours.

Question(s) to be addressed:

This performance measures look to assess the following questions for the region's transportation system:

- How do transit boardings and revenue hours change under the package of investments included in the RTP?

Methodology Description: This measure is assessed using the Metro Travel Model for a base year (2020) as well as five additional investment scenarios to allow for comparison (2030 No Build, 2030 Constrained, 2045 No Build, 2045 Constrained, 2045 Strategic).

Regional transit agencies' assumptions) for all transit service providers – TriMet, SMART, C-TRAN and Portland Streetcar, Inc., including line frequency for bus and transit, are coded into the travel model and analyzed to produce the following outputs:

a) Revenue hours

b) Total boardings

Key Assumptions to Method:

Dataset Used:

Dataset	Type of Data
Transit provider service frequency data and networks by mode	Forecasted

Tools Used for Analysis: Metro Travel Demand Model

Definitions:

Enhanced Transit – Enhanced transit corridors are transit and/or transit supportive investments to increase capacity and reliability in a low cost/context sensitive manner. Enhanced transit is a higher level of transit service beyond our frequent service but not as extensive as light rail or larger bus rapid transit.

Frequent Service Bus – Frequent Service Bus is defined a transit service operating at headways of less than or equal to 15 minutes all day.

9. Carbon emissions

Purpose: To identify how the package of future transportation investments will affect the greenhouse gas emissions per capita from transportation sources and determine whether the region is making progress towards its state-mandated targets for light-duty vehicles.

Questions to Be Addressed: The Climate Change performance measure looks to assess the following questions for the region's transportation system:

- How many tons of greenhouse gas emissions does the 2023 RTP investment strategy produce? Do the tons of greenhouse gas emissions change, relative to a baseline and no-build scenario, with the 2023 RTP investment strategy? What are the differences?
- What is the per capita greenhouse gas emissions with the 2023 RTP investment strategy? Are the per capita of greenhouse gas emissions increasing, decreasing, or holding steady with the investments strategy? What is the per capita greenhouse gas emissions change in proportion to population growth?
- How does the proposed set of transportation investments get the region towards its regional greenhouse gas target?

Methodology Description

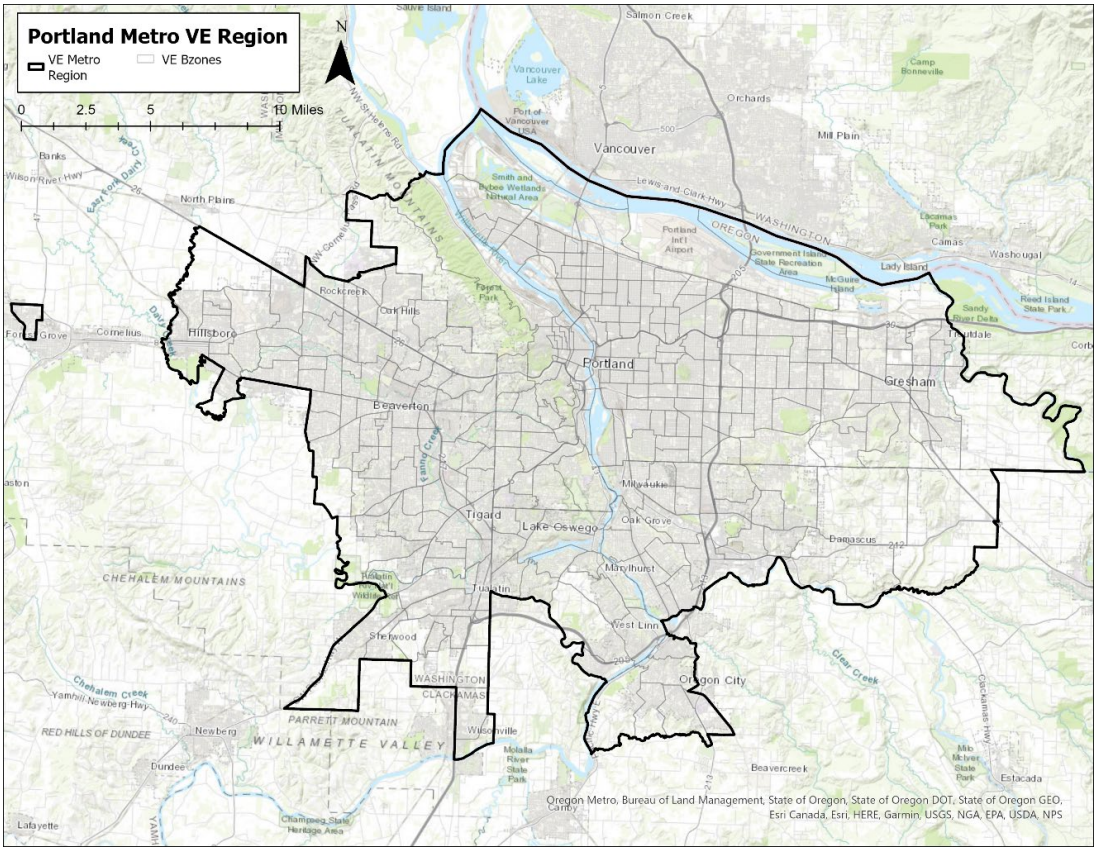
The VisionEval modeling system estimates greenhouse gas (GHG) emissions from transportation by forecasting travel demand for each vehicle in the model region. The demand for travel is the result of simulating the interactions between land use and the built environment, the supply of transit, road miles, and multimodal transportation options, and socio-demographic characteristics of the population. The model accounts for the vehicle types, ages, vehicle powertrain technology, emissions control equipment, and fuel properties to estimate emissions of carbon dioxide (CO2) and other GHG emissions from transportation. The VisionEval model forecasts the miles per vehicle along with average speeds for different vehicles and roadway facility types. The fuel type by vehicle informs the VisionEval estimates of CO2e per mile of travel for the various vehicle types in the model. Overall, VisionEval provides a comprehensive analysis of the transportation and land use system, which can be used to evaluate the impacts of different policy and investment decisions on a wide range of outcomes that can affect vehicle miles and speed of travel and the resulting changes in GHG emissions.

Key Assumptions to this Method

Appendix J of the 2023 RTP documents key technical assumptions used to produce the forecast and also services to monitor the implementation of the Climate Smart Strategy. The Strategy was set using a similar but older and less sophisticated tool (GreenStep) compared to what is currently being used in the 2023 RTP Target Rule analysis (VisionEval). The OAR target rule analysis is centered on the behaviors of households within the Metropolitan Planning Area shown in **Error! Reference source not found.**. The VisionEval model, like the regional travel demand model (Kate), covers a wider

region to account for regional interactions but GHG is only reported for the households within the reporting boundary shown.

Figure 11: Target Rule reporting boundary (VisionEval Zones)



Source: RSG

The VisionEval model accounts for the daily travel for a household, regardless of where on the network their actual travel took place. The miles per vehicle are aggregated at the household level, and those households within the reporting area are aggregated. Note, the miles traveled for a household could occur outside of the physical reporting area. However, the GHG emissions and VMT for any household that is located outside of this reporting area (i.e., Vancouver, WA) would be excluded from the Target Rule analysis. The VisionEval model physically models this demand for travel and accounts for this travel in the network congestion modeling, but for the purposes of compliance with the OAR target rules, the travel associated with those households is excluded. This approach in VisionEval differs from the travel behavior accounted for in the Kate travel demand model, which uses on-road link by link aggregation of trips to account for the total GHG produced on a specific set of network links. There is no aggregation to the households or other land uses which are associated with those trips.

Light-duty vehicle emissions in the state-mandated targets include local service and delivery vehicles. While this type of vehicle activity is produced within VisionEval at the regional scale, it is not currently accounted for in Metro's VisionEval target rule analysis. This is an acknowledged source of inconsistency. The model would need to find a valid way to prorate the regional scale results down to the specific area of analysis in **Error! Reference source not found.**. Given that this limitation exists in both the base and future conditions, the per capita changes in these vehicles closely approximate that of the household vehicles. This can be a future point to explore in how the Metro VisionEval model can produce a sub-regional output for light-duty commercial and transit vehicles.

Tools Used for Analysis: FHWA 3.0 ("Next Gen") VisionEval core platform enhanced with the 2017 NHTS multimodal model and the custom teleworking module. The VisionEval model is the preferred tool to explore a wide range of pricing, policy, and investments that account for VMT and GHG emissions at the household level.

Output Units: Metric tons per capita greenhouse gas emissions and percent (%) reduction from 2005 levels.

10. Clean air

Purpose: To identify how the 2023 RTP investment strategy will affect air pollutants emitted from motor vehicles. Emphasis is placed on the following air pollutants: ozone (as represented by its precursors), fine particulates, coarse particulates, and transportation generated air toxics (defined in definitions).

Questions to Be Addressed:

The **Clean Air** performance measure looks to assess the following questions for the region's transportation system:

1. How many tons or pounds of air pollutant emissions does proposed set of transportation investments produce?
2. Do the tons or pounds of air pollutant emissions change, relative to a baseline and no build scenario, with the proposed set of transportation investments?
3. Are the tons of air pollutant emissions increasing, decreasing, or holding steady with the proposed set of transportation investments? If the tons of air pollutant emissions is increasing or decreasing, is the change in proportion to population growth?

Methodology Description: The **Clean Air** performance measure is calculated using Metro's established mobile source emissions estimation methodology, which combines vehicle activity data from the regional transportation model with emission rates from EPA's MOVES model. Multi-modal network alternatives are developed within the regional

transportation model based on existing networks and proposed projects and policies, and the model estimates average weekday regional travel activity for each alternative. The proposed projects represent the 2023 RTP investment strategies (e.g. first 10-years of investments represented for years 2023-2030, 2023-2030 constrained, and strategic) For the purposes of this performance measure, the key output from the regional transportation model is daily vehicle miles traveled (VMT) occurring within the federally-designated metropolitan planning area (MPA) boundary regardless of where trips begin or end. These VMT are broken out by road type, average speed, and vehicle type.

The emission rates used in the 2023 RTP update were produced by MOVES3. MOVES is configured in accordance with EPA conformity guidance, which requires detailed inputs characterizing local fleet composition, fuels, vehicle ages, and inspection/maintenance programs. In addition, Oregon's adoption of the California low-emission vehicle (LEV) standards and zero-emission vehicle (ZEV) program is accounted for in Metro's MOVES implementation.

In combining the VMT from the regional transportation model with the emission rates from MOVES, the analysis determines the amount of daily combined passenger and freight vehicle emissions for each air pollutant of interest in each RTP investment strategy.

The analysis estimates the tons of transportation emissions per identified air pollutant for the entire region for base year conditions (2020), no build conditions (2030 and 2045), and future year conditions (2030 and 2045). The no build conditions includes only those transportation investments that are fully funded as of October 2023 to determine the future year tons of pollutant emissions produced for the entire region. The future year conditions includes the proposed package of transportation investments in the long-range regional transportation plan as the input to determine the future year tons of air pollutant emissions produced for the entire region.

Output Units: Tons of emissions by air pollutant listed below.

List of Air Pollutants Reported

Criteria Pollutants
NOx – Nitrogen Oxide
VOC – Volatile Organic Compounds
PM2.5 – Fine Particulates
PM10 – Coarse Particulates
Air Toxics (See Definitions)
Acrolein
Arsenic
Benzene

1,3-Butadiene
Chromium 6
Diesel Particulate Matter plus Diesel Exhaust Organic Gases (Diesel PM)
Formaldehyde
Naphthalene
Polycyclic Organic Matter

Key Assumptions to Method:

Dataset Used:

Dataset	Type of Data
Emissions per air pollutant	Forecasted

Tools Used for Analysis: Metro Travel Demand Model and EPA-Approved Emissions Model – MOVES3

Definitions:

Transportation Generated Air Toxics: Of the 188 air toxics identified and regulated through the Environmental Protection Agency (EPA), seven have been identified with significant contributions from mobile sources (i.e. transportation sources) that pose national and regional-scale public health risk.

Additionally, consultation with Oregon Department of Environmental Quality (DEQ) staff identified two more air toxics of particular interest to the region because they have been closely associated with transportation facilities in the Portland Air Toxics Study (PATS).

11. Potential environmental impact assessment

Purpose

Using the best available environmental data, identify which capital projects (those that result in construction or reconstruction of a transportation facility) in the 2023 RTP that are in proximity to and/or intersect environmental resource areas, designated historic resources, and/or federally recognized tribal lands.

Question Addressed

What percentage of the region's 2023 RTP capital transportation projects are in proximity to and may have a potential conflict with the region's resource areas, designated historic resources, and/or federally recognized tribal lands, and therefore requires further

assessment of environmental considerations as the project goes through more detailed planning, project development and implementation?

Methodology Description

In accordance with federal regulations 23 CFR 450.320, the 2023 RTP habitat impact analysis included consultation with resource agencies and federally recognized tribes. The assessment identified vegetation, aquatic and terrestrial wildlife species and habitat, wetlands, floodplains, and other biological resources
that intersect with and may be affected by projects in the 2023 RTP using ArcGIS.

1. Consulted with Federal, State, and Tribal land management, wildlife, and regulatory agencies, and Metro Parks and Nature staff, in the RTP planning process to review the RTP update work plan, develop the data, methods, and approach used in the RTP environmental assessment and to review and refine identified mitigation activities.
2. Assembled datasets listed in Table 12.[13]
3. Added a 100' buffer from the center of the line or point in either direction (200' diameter) for all capital projects in the RTP project list. A 100' buffer is used because most of the projects are represented as centerlines so using a 50' buffer on each side would, in some cases, barely place the buffer outside the right-of-way; this is especially true for highways and throughways. Additionally, many of the environmental layers are mapped with limited precision, for example streams and wetlands may move over time, so a wider buffer helps account for these variations. The downside of this approach is a wider buffer ends up being applied to regional trails and other projects with a relatively narrow right-of-way. Polygon projects with areas less than 138,208,177 sq ft are included in the analysis but not buffered. Typically, there are very few polygons that met the area criteria, so the bulk of the analysis is for projects with point and line geometry. For this analysis, only 3 polygons met that size criteria.
4. Used Geographic Information System (GIS) mapping software to intersect capital projects in the RTP financially constrained list with the environmental and historical places data listed in Table 12.
5. For each data, found the number and percent of projects intersecting the environmental and historical places data.
6. Identified the number by type of projects by 2023 RTP investment category[14] intersecting with environmental and historical places data. Only capital projects were

[13] Metro and many partners from the Intertwine Alliance are actively working to improve regional prioritization data. Coordination with Metro staff is the best way to ensure the most current data are used in project planning.

included in the analysis. A capital project is a project to construct either new facilities or make significant, long-term renewal improvements in programs or to existing facilities. A total of 655 capital projects in the 2023 RTP financially constrained list of projects were included in the analysis.

Output Units

The analysis results in a high level "flagging" of projects. Inclusion on this list does not necessarily mean that the project will negatively impact a given environmental, tribal, cultural, or historical resource. Conversely, just because a project is not identified on the list does not mean that there are not potential environmental impacts. Results of the environmental impact assessment analysis are reported in the 2023 RTP Appendix F: Environmental Assessment and Mitigation Activities.

1. Tables showing the number and percent (%) of transportation projects intersecting identified resource habitats within a 100' buffer of the project point or line in GIS (listed below) by type of project investment category.
2. List of projects in Excel and indication (1=yes, 2=no, 3=not evaluated) if the project intersects at any point with one or more of the environmental areas of concern listed in the table below
3. Maps of the resource areas listed in Appendix F showing the overlap with capital projects.

Key Assumptions to Method

Projects analyzed are represented by points, lines, and polygons in GIS. Alignments for some projects are conceptual and may change with additional planning and project development.

Metro used readily available and best available published environmental inventories for the Regional Transportation Plan environmental analysis to identify protected resources, including vegetation and wildlife habitats, fishery resources, wetlands, floodplains, and historical resources. A 100' buffer is used because most of the projects are represented as centerlines so using a 50' buffer on each side would, in some cases, barely place the buffer outside the right-of-way; this is especially true for highways and throughways. Additionally, many of the environmental layers are mapped with limited precision, for example streams and wetlands may move over time, so a wider buffer helps account for

[14] The investment categories included in the analysis are: Mega Project, Active Transportation: Pedestrian, Active Transportation: Bicycle, Active Transportation: Pedestrian & Bicycle, Freight, Roadways (Capital), Bridge (Capital), Throughways, Transit: High Capacity, Transit: Better Bus, Transit-Oriented Development (TOD). While TOD projects were included in the analysis, the 4 TOD projects were in GIS as large polygons, so no projects in this category were actually included in the analysis.

these variations. The downside of this approach is a wider buffer ends up being applied to regional trails and other projects with a relatively narrow right-of-way.

Table 12. Data and Sources

Dataset	Type and Source of Data
Geospatial project information for proposed transportation projects	GIS data provided by transportation agencies
Regional Conservation Strategy High Value Habitat (top 25% scoring) Areas Inventory (2013)15	GIS data The Intertwine Regional Conservation Strategy http://www.regionalconservationstrategy.org/page/home
Metro Title 13 Habitat Conservation Areas Layer (2005)16	GIS data Metro Data Resource Center, OregonMetro.RLIS https://rlis-discovery-drcmetro.hub.arcgis.com/
White Oak: presence of Oregon white oak trees (Quercus garryana), and whether the Oak Prairie Work Group has identified the oak area as a high priority	GIS data The Intertwine and Oak Prairie Work Group (https://www.theintertwine.org/projects/oak-prairie-work-group) https://databasin.org/maps/06b9e1ffb404403fa6d0079c69989289/active/ Oak data viewer: https://drcmetro.maps.arcgis.com/apps/MapSeries/index.html?appid=c79f386100d340e2999ea7ec6e1dc0d4 Access data locally at T:\zNAPP_GIS\mData\habitat\Oak2022\OakOPWG_2020_2022.gdbOakWoodlandPatches
Habitat Connectivity Omniscape modeled	GIS data from The Intertwine: Regional Habitat Connectivity Working Group
ODFW Conservation Opportunity Areas (2016)[17]	GIS data Oregon Department of Fish and Wildlife, the

[15] Regional Conservation Strategy high value habitat areas are those areas with the top 25% modeled score of high value habitat or riparian quality. Habitat quality took into account factors such as habitat interior, influence of roads, total patch area, relative patch area, habitat friction, wetlands, and hydric soils. The riparian areas took into account criteria of floodplains, distance from streams, and distance from wetlands. The analysis and modeled scoring was conducted for the entire Portland-Vancouver region and conducted through a collaborative effort with partners across the region and topic area experts through the development in the Resource Conservation Strategy process. More detail about the high value habitats can be found at www.regionalconservationstrategy.org

[16] Information on the date in which data was created or updated is available in the Metro "RLIS Metadata Viewer" under the data "time period of content" date listed.

[17] Multiple data sets were used to identify the boundaries of the Conservation Opportunity Areas:

- Wildlife (Amphibians, Birds, Mammals, Reptiles) (multiple data sources)
- Fish (ODFW Crucial Habitat Assessment: Aquatic Species of Concern)
- Habitats (multiple data sources)
- Climate Change (TNC Topo-Climate Diversity Model and Willamette River Cold Water Sources)
- Floodplains (FEMA 100-year flood zones)

Dataset	Type and Source of Data
Conservation Opportunity Areas data, maps and information can be found in the Oregon Conservation Strategy , here: http://oregonconservationstrategy.org/conservation-opportunity-areas/	Oregon Conservation Strategy https://databasin.org/datasets/9f79ce2035b7402fb60ef70e63c72142
Oregon Fish Habitat Distribution Data (fish-bearing streams, including essential salmon habitat and lamprey)	GIS data Oregon Department of Fish and Wildlife https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=1167.xml Lamprey https://maps.dsl.state.or.us/esh/
Oregon Fish Passage Barriers (2020) [18]	GIS data from the Oregon Department of Fish and Wildlife Available at: https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=44.xml https://www.dfw.state.or.us/fish/passage/inventories.asp Metro included the following types of fish passage barriers in the analysis: Bridge, Culvert, Other and Unknown. Within these types, those with the status of Blocked and Partial, Passable and Unknown and UnkAnad ("unknown passage within the range of anadromy") were included in the analysis. Passable barriers were included to flag projects that would need to preserve passage or make improvements.
National Wetlands Inventory (NWI), Local Wetlands Inventory (LWIs) and RLIS wetlands inventory. (SWI (Statewide Wetlands Inventory) (includes the NWI and LWI and DSL approved delineations, subsets of the National Hydrography Dataset (NHD) and subsets of the NRCS combined SSURGO/STATSGO dataset for Oregon[19] may be used in future analysis.	GIS data from the Oregon Department of State Lands https://www.oregon.gov/dsl/WW/Pages/SWI.aspx Local inventory: https://www.oregon.gov/dsl/WW/Pages/Inventories.aspx There are no GIS data for the DSL approved delineations documents, however, DSL does

- Barriers to Animal Movement (TNC Resistance Model and Species Permeability Model)
- U.S. Geological Survey (USGS) Protected Areas Database

[18] The following types of fish passage barriers were included in the analysis: Bridge, Culvert, Other and Unknown. Of those fish passage barrier types, those with the status of Blocked and Partial, Passable and Unknown and UnkAnad ("unknown passage within the range of anadromy") were included in the analysis. Passable barriers were included to flag projects that would need to preserve passage and possibly make improvements.

Dataset	Type and Source of Data
	provide cities and counties with the approved mapping with their copy of the approval letter. Some local governments with the capacity to do so have digitized this mapping. The datasets that make up the SWI may either be brought into local GIS using DSL's services or may be downloaded and configured to match the SWI rendering using the directions in the "How to Configure" document found at the bottom of the SWI web page.
Title 3 Land (2006) delineates places protected by the Stream and Floodplain Protection Plan	GIS data Metro Data Resource Center, OregonMetro.RLIS https://rlis-discovery-drcmetro.hub.arcgis.com/ https://rlisdiscovery.oregonmetro.gov/datasets/drcMetro::title-3-land-1/about
FEMA flood hazard areas and floodplains (multiple years): 100-year Flood Plains (FEMA, January 2023) This is an export of FEMA's National Flood Hazard Layer that shows the following categories (regulatory floodway, 1% annual chance flood event, the 0.2% annual chance flood event, and areas of minimal flood risk, areas with reduced flood risk due to levee).	GIS data from FEMA Available at https://rlis-discovery-drcmetro.hub.arcgis.com/datasets/bce509afe2b046bca63888feae7d48ad/about This is a copy of the National Flood Hazard Layer clipped to the region republished by Metro.
Wildlife Collisions (Animal Incident) Data on ODOT highways (2009-2022)	ODOT (Metro requested the data from ODOT; provided to Matthew Hampton 03/03/23) Metadata: https://geoportalprod-ordot.msappproxy.net/geoportal/catalog/search/resource/details.page?uuid=%7B1138484E-89A5-4456-9E24-44E5F2369CB2%7D
2020 Urban Heat Index as derived from LandSat Data – Sorted by quantile classification with 5 classes, and select the top fifth quantile, areas with the greatest difference between their surface temperature and the regional average.	Satellite acquired difference in surface temperature from the regional average. Source: Landsat, LIDAR, Metro's Data Resource Center. Available at the Regional Barometer: https://regionalbarometer.oregonmetro.gov/pages/climate-adaptation

[19] For the purposes of planning/scoping level of work the SWI provides better information than the NWI alone both for waters, as represented by the NHD subsets, and representing wetlands that are likely unmapped on the NWI including small, forested, seasonal and farmed wetlands. These areas are captured by the "SWI soils subsets" as a "flag" showing where these unmapped wetlands might exist. In all cases and by rule (141-086-) within their study areas the approved LWI mapping replaces the NWI as the LWIs are the approved and adopted Goal 5 documents and are more accurate than the above listed SWI datasets, including the NWI (other than approved delineations).

Dataset	Type and Source of Data
	Metro data: \\alex\work\plan\drc\projects\22036_UHI_2020\C_Data
Historic properties data from the National Register of Historic Places	GIS data from the National Register of Historic Places Database. Available at: https://www.nps.gov/subjects/nationalregister/database-research.htm
Bureau of Indian Affairs Federal Indian Land Area Representation (LAR) Dataset The LAR dataset depicts the exterior extent of a Federal Indian land area. Not all Federally- recognized Tribes have a designated land area; therefore, they may not have an associated land area represented in the land area dataset. There are currently no Federally recognized Tribal lands in the metropolitan planning area.	GIS data from U.S. Department of the Interior Indian Affairs; branch of geospatial support https://www.bia.gov/bia/ots/dris/bogs https://bia-geospatial-internal.geoplatform.gov/indianlands/

Attachment 1. Transportation Analysis Zone Assumptions

2040 Design Type grouping	**Characteristics of grouping**	**Intersection Density** *(Connections per mile)*			**Transit Pass Factor** *(% of full fare)*		
		2020	**FC**	**S**	**2020**	**FC**	**S**
Central City 1 Downtown Business District	Highest planned employment and housing density in the region, with highest level of access by all modes. HCT exists and current land uses reflect planned mix and densities.	20	20	20	60%	60%	60%
Central City 2 Lloyd District	Highest planned employment and housing density in the region, with highest level of access by all modes. HCT exists and current land uses reflect planned mix and densities.	20	20	20	60%	60%	60%
Central City 3 Central Eastside Industrial District	Planned high employment and housing density, with highest level of access by all modes. HCT exists and current land uses do not reflect planned mix and densities.	20	20	20	65%	65%	65%
Central City 4 River District	Planned high employment and housing density, with highest level of access by all modes. HCT exists and current land uses approach planned mix and densities.	20	20	20	65%	65%	65%

Central City 5 South Waterfront District	Planned high employment and housing density, with highest level of access by all modes. HCT exists and current land uses do not reflect planned mix and densities.	18	18	18	65%	65%	65%
Regional Centers - Tier 1 Gresham Gateway Beaverton Hillsboro	Planned high employment and housing density, with highest level of access by all modes. HCT exists and current land uses approach planned mix and densities.	>16	>16	>14	70%	75%	80%
Regional Centers - Tier 2 Washington Square Clackamas Oregon City Tannasbourne	Planned high employment and housing density, with highest level of access by all modes; planned HCT. Current land uses do not reflect planned mix and densities.	>12	>12	>10	85%	90%	95%
Station Communities Tier 1 Banfield Corridor Westside Corridor	High housing density mixed with commercial services; highest level of access for transit, bike and walk; existing LRT.	>16	>14	>12	70%	75%	80%
Station Communities Tier 2 Interstate Corridor 99E/McLoughlin Corridor	Planned high housing density mixed with commercial services, with high level of transit, bike and walk; planned HCT. Current land uses do not reflect planned mix and densities.	>12	>12	>10	85%	90%	95%

Station Communities Tier 3	Planned high housing density mixed with commercial services, with high level of transit, bike and walk; planned HCT. Current land uses do not reflect planned mix and densities.	>12	>12	>10	85%	90%	95%
Town Centers - Tier 1 St. Johns Hollywood Lents Rockwood Milwaukie Lake Oswego Tualatin Forest Grove	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>16	>16	>16	75%	80%	85%
Town Centers - Tier 2 West Portland Raleigh Hills Hillsdale Gladstone West Linn Sherwood Sunset Wilsonville Cornelius Orenco	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderately connected street system and some transit. Topography or physical barriers may limit bike and pedestrian travel.	>12	>12	>10	90%	95%	100%
Town Centers - Tier 3 Fairview/Wood Village Troutdale Happy Valley Lake Grove Farmington Cedar Mill	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, poorly connected street system and poor transit. Existing topography or physical barriers may	>10	>10	>8	100%	100%	100%

	limit bike and pedestrian travel.						
Town Centers - Tier 4 Pleasant Valley Bethany Murrayhill	Moderate housing and employment density planned, with high level of access by all modes. Currently undeveloped or developing urban uses, with skeletal street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	>8	>8	100%	100%	100%
Mainstreets and Corridors Full Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, moderate connectivity and some transit.	>10	>10	>10	100%	100%	100%
Industrial Areas Full region	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has somewhat connected street system and some transit.	>10	>10	>10	100%	100%	100%

Employment Areas Full Region	Low density employment planned, with moderate level of access by all modes. Currently has poorly connected street system and limited transit.	>8	>8	>8	100%	100%	100%
Neighborhoods Full Region	Low density housing planned, with moderate level of access by all modes. Currently has moderate connectivity and some transit.	>10	>10	>10	100%	100%	100%
Urban Reserves	Low density housing planned, with moderate level of access by all modes. Currently has skeletal street system and no transit.	>6	>6	>6	100%	100%	100%
Rural Reserves	Urban uses are not planned in the foreseeable future. Currently has skeletal, rural street system and no transit.	>6	>6	>6	100%	100%	100%
Greenspaces	Recreational uses are planned, with moderate level of access by all modes	>6	>6	>6	100%	100%	100%

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Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
Tri-Met Service			
01 -Max Blue Line	15	15	15
01 -Max Blue Line	30		30
01 -Max Blue Line	30		30
01 -Max Blue Line	12	15	15
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Max Green Line	15	15	15
01 -Max Green Line	15	15	15
01 -Max Orange Line	60		60
01 -Max Orange Line	60		120
01 -Max Red Line	15	15	15
01 -Max Red Line			30
01 -Max Red Line	30		60
01 -Max Red Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
02 -Divison/145th			30
02 -Division	7.5	15	12
02 -Division	12	15	10
02 -Vermont	30		30
02 -Vermont	30		30
04 -Fessenden	10	15	12
04 -Fessenden	12	15	10
06 -Martin Luther King Jr Blvd	12	15	12
06 -Martin Luther King Jr Blvd	12	15	12
08 -Jackson Park/CBD	30		20
08 -Jackson Park/15th Av	7.5	15	15
08 -Jackson Park/15th Av	15	12	7.5
09 -Powell to 98th	30		60
09 -Powell to 98th			20
09 -Powell Blvd	10	15	12
09 -Powell Blvd	12	15	12
10 -Harold St	15	20	20
10 -Harold St	15	20	12
11 -Rivergate/Marine Dr	60		60
11 -Rivergate/Marine Dr	60		120

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
12 -Sandy to CBD	20		
12 -Sandy to CBD			30
12 -Barbur/Sandy	12	15	12
12 -Barbur/Sandy	15	15	12
14 -Hawthorne	7.5	15	15
14 -Hawthorne	10	15	7.5
14 -Hawthorne Express	60		
15 -Belmont 92nd/CBD	20		20
15 -Belmont 92nd/CBD			12
15 -Belmont Thurman/Gateway	60	30	20
15 -Belmont Thurman/Gateway	30	30	60
15 -Belmont Yeon/Gateway	15	30	30
15 -Belmont Yeon/Gateway	20	30	30
16 -Front Av/St Helens Rd	30	30	30
16 -Front Av/St Helens Rd	30	30	30
17 -Holgate/Broadway	15	20	12
17 -Holgate/Broadway	15	20	15
17 -Holgate/CBD	60		
18 -Hillside	120		120
19 -Woodstock/Glisan 92nd	60		30
19 -Woodstock/Glisan Flavel	60		
19 -Woodstock/Glisan	20	15	20
19 -Woodstock/Glisan	15	15	12
20 -Burnside/Stark	12	15	15
20 -Burnside/Stark	15	15	15
21 -Sandy Blvd/223nd	12	20	15
21 -Sandy Blvd/223nd	15	20	15
22 -Parkrose	30	30	30
22 -Parkrose	30	30	30
23 -San Rafael	60	60	60
23 -San Rafael	60	60	60
24 -Fremont/18th	20	30	20
24 -Fremont/18th	20	30	20
25 -Glisan/Rockwood	60	60	60
25 -Glisan/Rockwood	60	60	60
29 -Lake/Webster Rd	120	60	60
29 -Lake/Webster Rd	60	120	60
30 -Estacada	30	60	30
30 -Estacada	60	60	30

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
30 -Estacada AM Exp			120
30 -Estacada PM Exp	120		
31 -Webster Rd	30	30	30
31 -Webster Rd	30	30	30
32 -Oatfield	20	60	30
32 -Oatfield	30	60	30
33 -McLoughlin/King Rd	15	15	15
33 -McLoughlin/King Rd	15	15	15
34 -Linwood/River Rd	30	30	30
34 -Linwood/River Rd	30	30	30
35 -Macadam/CBD	30		
35 -Macadam/Greeley	20	30	20
35 -Macadam/Greeley	20	30	20
35 -Greeley/CBD	30		
35 -Greeley/CBD			20
36 -South Shore/CBD			60
36 -South Shore/CBD	60		
36 -South Shore LO/Tual	120	60	120
36 -South Shore LO/Tual	120	30	120
37 -Lake Grove	120	60	60
37 -Lake Grove	120	60	120
38 -Boones Ferry Rd	60		30
38 -Boones Ferry Rd	30		60
39 -Lewis & Clark	60	30	60
39 -Lewis & Clark	60	30	30
42 -Denny Rd	30	30	30
42 -Denny Rd	30	30	30
43 -Taylors Ferry Rd	60	60	60
43 -Taylors Ferry Rd	60	60	60
44 -Capital Hwy/PCC			30
44 -Capital Hwy/Mocks Crest	15	20	20
44 -Capital Hwy/PCC	30		
44 -Capital Hwy/Mocks Crest	20	20	15
45 -Garden Home	30	60	20
45 -Garden Home	30	60	30
46 -North Hillsboro	60	60	60
46 -North Hillsboro	60	60	60
47 -Main/Evergreen	30	30	30
47 -Main/Evergreen	30	30	30

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
47 -Main/Evergreen -Orenco	30		30
47 -Main/Evergreen -Orenco	60		30
48 -Cornell Amberglen	30		60
48 -Cornell Amberglen	30		30
48 -Cornell	30	30	30
48 -Cornell	30	30	30
50 -Cedar Mills			30
50 -Cedar Mills	60		
51 -Vista	30		20
51 -Vista	30		30
52 -Farmington/185th	15	15	20
52 -Farmington/185th	15	15	20
52 -Willow Creek/185th			20
53 -Arctic/Allen			30
53 -Arctic/Allen	30		
54 -Beaverton-Hillsdale Hwy	30	30	20
54 -Beaverton-Hillsdale Hwy	30	30	20
55 -Hamilton			60
55 -Hamilton	60		
56 -Scholls Ferry Rd	20	30	20
56 -Scholls Ferry Rd	20	30	20
57 -TV Hwy/Forest Grove	15	15	15
57 -TV Hwy/Forest Grove	15	15	15
58 -Canyon Rd	20	30	20
58 -Canyon Rd	20	30	20
59 -Walker/Park Way	60		60
59 -Walker/Park Way	60		60
61 -Marquam Hill/Beaverton			20
61 -Marquam Hill/Beaverton	20		
62 -Murray Blvd	30	30	30
62 -Murray Blvd	30	30	30
63 -Washington Park/SW 6th	60	60	60
63 -Washington Park/SW 6th	60	60	60
64 -Marquam Hill/Tigard			30
64 -Marquam Hill/Tigard	30		
65 -Marquam Hill/Barbur Blvd			60
65 -Marquam Hill/Barbur Blvd	30		
66 -Marquam Hill/Hollywood			30
66 -Marquam Hill/Hollywood	30		

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
67 -Bethany/158th	20	30	30
67 -Bethany/158th	30	30	20
68 -Marquam Hill/Collins Circle			20
68 -Marquam Hill/Collins Circle	15		
70 -12th/NE 33Rd Av -13th	30	30	30
70 -12th/NE 33Rd Av -13th	30	30	30
70 -12th/NE 33Rd Av -17th	30	30	30
70 -12th/NE 33Rd Av -17th	30	30	30
71 -60th Ave	20	20	12
71 -60th Ave	20	20	15
72 -Killingsworth/82nd	7.5	12	10
72 -Killingsworth/82nd	12	12	10
72 -Cully/82nd	12		60
73 -122nd Av	12	15	15
73 -122nd Av	15	15	12
74 -162nd Av	20	30	20
74 -162nd Av	20	30	20
75 -Cesar Chavez/Lombard	12	15	15
75 -Cesar Chavez/Lombard	15	15	12
76 -Hall/Greenburg	30	30	30
76 -Hall/Greenburg	30	30	30
77 -Broadway/Halsey	15	20	15
77 -Broadway/Halsey	15	20	15
78 -Denny/Kerr Pkwy	30	30	30
78 -Denny/Kerr Pkwy - PCC			30
78 -Denny/Kerr Pkwy	30	30	30
79 -Clackamas/Oregon City	30	30	20
79 -Clackamas/Oregon City	30	30	20
80 -Kane/Troutdale Rd	60	60	60
80 -Kane/Troutdale Rd	60	60	60
81 -Kane/257th	30	60	30
81 -Kane/257th	30	60	30
82 -South Gresham	60	30	30
82 -South Gresham	30	30	30
84 -Powell Valley/Orient Dr			60
84 -Powell Valley/Orient Dr	30		
85 -Swan Island	30	60	30
85 -Swan Island	30	60	30
87 -Airport Way/181st	30	30	30

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
87 -Airport Way/181st	30	30	30
88 -Hart/198th	30	30	30
88 -Hart/198th	30	30	30
92 -South Beaverton EXP			20
92 -South Beaverton EXP	30		
93 -Tigard/Sherwood	20	30	30
93 -Tigard/Sherwood	30	30	30
94 -Pacific Hwy/Sherwood - BTC			30
94 -Pacific Hwy/Sherwood	60	30	12
94 -Pacific Hwy/Sherwood	7.5	60	60
96 -Tualatin/I-5 -Comm Cir	30		30
96 -Tualatin/I-5 -Comm Cir	15		30
96 -Tualatin/I-5-Mohawk		30	20
96 -Tualatin/I-5-Mohawk	60	30	60
97 -Tualatin-Sherwood Rd	30		30
97 -Tualatin-Sherwood Rd	30		30
99 -Macadam/McLoughlin	30		30
99 -Macadam/McLoughlin	15		30
152 -Milwaukie	30	30	30
152 -Milwaukie	30	30	30
154 -Willamette/Clackamas Heights	60	60	60
155 -Sunnyside	30	30	30
155 -Sunnyside	30	30	30
156 -Mather Rd	60	60	60
156 -Mather Rd	60	60	60
Portland Streetcar Loop	12	15	15
Portland Streetcar N/S	15	15	15
Portland Streetcar N/S	15	15	15
OHSU Tram	5	5	5
OHSU Tram	5	5	5
C-Tran Service			
C01V -Vine/Van Mall	10	10	10
C01V -Vine/Van Mall	10	10	10
C02 -Lincoln NB	60	60	60
C02 -Lincoln SB	60	60	60
C06 -Fruit Valley/Grand EB	30	30	30
C06 -Fruit Valley/Grand WB	30	30	30
C07 -Battel Ground NB	30	30	30
C07 -Battel Ground SB	30	30	30

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
C09 -Felida NB	60	60	60
C09 -Felida SB	60	60	60
C105 -I-5 Express AM			20
C105 -I-5 Express PM	20	55	
C134 -Salmon Creek Express			15
C134 -Salmon Creek Express	15		
C157 -Lloyd center			30
C157 -Lloyd center	30		
C164 -Fisher's Landing NB			30
C164 -Fisher's Landing NB	12		
C164 -Fisher's Landing SB			10
C177 -Evergreen Express			30
C177 -Evergreen Express	45		
C19 -Salmon Creek from Washington State Univerity	30	60	30
C19 -Salmon Creek to Washington State Univerity	30	60	30
C190 -Marquam Hill Express			15
C190 -Marquam Hill Express	22.5		
C199 -99th Avenue Express			20
C199 -99th Avenue Express	15		
C25 -St Johns NB	30	30	30
C25 -St Johns SB	30	30	30
C30 -Burton EB	30	30	30
C30 -Butron WB	30	30	30
C31 -Hazel Dell NB	30	30	30
C31 -Hazel Dell SB	30	30	30
C32 -Evergreen/Andresen EB	30	30	30
C32 -Evergreen/Andresen WB	30	30	30
C37 -Mill Plain/Fisher's 164th	30		30
C37 -Mill Plain/Fisher's 192nd	30	30	30
C37 -Mill Plain/Fisher's 164th	30		30
C37 -Mill Plain/Fisher's 192nd	30	30	30
C41 -SR 14/ Fisher's			30
C41 -SR 14/ Fisher's	35		
C47 -Battel Ground/ Yacolt	120	120	120
C47 -Battel Ground/ Yacolt	120	120	120
C60 -Delta Parkrose Regional			15
C60 -Delta Parkrose Regional	15	15	
C60 -Delta Parkrose Regional			15

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
C60 -Delta Parkrose Regional	15	20	
C65 -Parkrose Regional	15	30	15
C71 -Highway 99	15	30	15
C71 -Highway 99	15	30	15
C72 -Orchards	30	60	30
C74 -East Fourth Plain	60	60	60
C74 -East Fourth Plain	60	60	60
C78 -78th St WB	30	60	30
C78 -78th St WB	30	60	30
C80 -Van Mall/Fishers NB	30	30	30
C80 -Van Mall/Fishers NB	30	30	30
C92 -Camas/Washougal	30	30	30
C92 -Camas/Washougal	30	30	30
SMART Service			
SM2 -Smart Tualatin	30	60	30
SM2 -Smart Tualatin	30	60	30
SM3 -Smart Canby	60	120	60
SM3 -Smart Canby	60	120	60
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd Peak	30		30
SM4 -Smart Wilsonville Rd Peak	30		30
SM5 -Smart 95th Av	30		20
SM5 -Smart 95th Av	30		30
SM6 -Smart Canyon	30		30
SM6 -Smart Canyon	30		30
SM7 -Smart Villebois	30		30
SM7 -Smart Villebois	30		30
SMM -Smart Medical Shuttle		60	60
SMM -Smart Medical Shuttle		60	60
SMS -Smart Shopping		60	
SMS -Smart Shopping		60	
Canby Area Transit, Sandy Transit, South Clackamas Transit District, Mount Hood Express and Local Shuttle Providers			
Sandy/Estacada SAM	90	120	120
Sandy/Estacada SAM	90	120	120
Sandy/Gresham SAM	30	30	30
Sandy/Gresham SAM	30	30	30
Mt Hood Express	120	120	120

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2020 Base Year

Line	PM Headway	MD Headway	AM Headway
Mt Hood Express	120	120	120
SCTD Molalla/Canby	90	90	90
SCTD Molalla/CCC	30	30	30
SCTD Molalla/CCC	30	30	30
Access Shuttle	60		60
Access Shuttle	60		60
Canby/Oregon City Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Clackamas Industrial Shuttle	60	60	60
Clackamas Industrial Shuttle	60	60	60
Grove Link Shuttle	30	60	30
Grove Link Shuttle - Employment			20
Grove Link Shuttle - Employment	120		
King City Shuttle	120	120	120
North Hillsboro Shuttle	30	30	30
North Hillsboro Shuttle	30	30	30
Tualatin Blue Shuttle	60		60
Tualatin Red Shuttle	40		40
Westlink Shuttle	120	120	120
Westlink Shuttle	120	120	120

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
Tri-Met Service			
01 -Max Blue Line	10	15	10
01 -Max Blue Line	10	15	10
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Max Green Line	15	15	15
01 -Max Green Line	15	15	15
01 -Max Red Line	15	15	15
01 -Max Red Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
02 -Division FC	12	12	12
02 -Division FC	12	12	12
04 -Fessenden/Woodstock	15	15	15

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
04 -Fessenden/Woodstock	15	15	15
06 -Martin Luther King Jr Blvd	12	12	12
06 -Martin Luther King Jr Blvd	12	12	12
07 -Swan Island/Tacoma	30	30	30
07 -Swan Island/Tacoma	30	30	30
08 -Jackson Park/15th Av	15	15	15
08 -Jackson Park/15th Av	15	15	15
09 -Powell Blvd	15	15	15
09 -Powell Blvd	15	15	15
10 -Harold/Steele	30	30	30
10 -Harold/Steele	30	30	30
11 -Rivergate/Marine Dr	60	60	60
11 -Rivergate/Marine Dr	60	60	60
12 -Barbur/Sandy	15	15	15
12 -Barbur/Sandy	15	15	15
14 -Hawthorne	12	12	12
14 -Hawthorne	12	12	12
15 -Belmont 92nd/11th			10
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont Vaughn/Gateway	15	15	15
15 -Belmont Vaughn/Gateway	15	15	15
16 -Front Av/St Helens	52	52	52
16 -Front Av/St Helens	52	52	52
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway Tripper		60	
17 -Holgate/Broadway Tripper		60	
18 -Hillside	60		60
19 -Beaverton/Glisan	30	30	30
19 -Beaverton/Glisan	30	30	30
20 -Burnside/Stark	15	15	15
20 -Burnside/Stark	15	15	15
22 -Parkrose	30	30	30
22 -Parkrose	30	30	30
24 -Freemont/NW 18th	30	30	30
24 -Freemont/NW 18th	30	30	30

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
26 -Thurman/NW 18th	60		60
26 -Thurman/NW 18th	60		60
29 -Lake/Webster Rd	60	60	60
29 -Lake/Webster Rd	60	60	60
30 -Estacada	40	60	30
30 -Estacada	40	60	30
31 -Webster Rd	30	30	30
31 -Webster Rd	30	30	30
33 -McLoughlin/King Rd	15	15	15
33 -McLoughlin/King Rd	15	15	15
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley Terwilliger	30	30	30
35 -Macadam/Greeley Terwilliger	30	30	30
42 -Vermont	60	60	60
42 -Vermont	60	60	60
43 -Taylors Ferry Rd	30	30	30
43 -Taylors Ferry Rd	30	30	30
44 -Capital Hwy/Mocks Crest Wilsonville	60	60	60
44 -Capital Hwy/Mocks Crest Wilsonville	60	60	60
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
45 -Garden Home/BTC	60		60
45 -Garden Home/BTC	60		60
48 -Cornell	15	15	15
48 -Cornell	15	15	15
51 -Council Crest	60		60
51 -Council Crest	60		60
51 -Dosch	65		65
51 -Dosch	120		120
52 -Farmington/185th	15	15	15
52 -Farmington/185th	15	15	15
54 -Beaverton-Hillsdale Hwy	15	15	15
54 -Beaverton-Hillsdale Hwy	15	15	15
56 -Scholls Ferry Rd	30	30	30
56 -Scholls Ferry Rd	30	20	20
57 -TV Hwy/Forest Grove	15	15	15

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
59 -Walker/Park Way	60	60	60
59 -Walker/Park Way	60	60	60
62 -Murray Blvd	30	30	30
62 -Murray Blvd	30	30	30
63 -Washington Park/SW 6th	30	30	60
63 -Washington Park/SW 6th	30	30	60
67 -Bethany/158th	30	30	30
67 -Bethany/158th	30	30	30
70 -12th/NE 33Rd Av -17th	20	20	20
70 -12th/NE 33Rd Av -17th	20	20	20
71 -60th Ave	15	15	15
71 -60th Ave	15	15	15
72 -Killingsworth/82nd	12	12	12
72 -Killingsworth/82nd	12	10	12
73 -122nd Av	12	12	12
73 -122nd Av	12	12	12
74 -162nd Av	20	30	20
74 -162nd Av	20	30	20
75 -Cesar Chavez/Lombard	15	15	15
75 -Cesar Chavez/Lombard	15	15	15
76 -Hall/Oregon City	30	30	30
76 -Hall/Oregon City	30	30	30
76 -Hall/Tualatin	15	15	15
76 -Hall/Tualatin	15	15	15
77 -Broadway/Halsey	15	15	15
77 -Broadway/Halsey	15	15	15
78 -Denny/Kerr Pkwy	30	30	30
78 -Denny/Kerr Pkwy	30	30	30
79 -Clackamas/Oregon City	30	30	30
79 -Clackamas/Oregon City	30	30	30
80 -Kane/Troutdale Rd	30	30	30
80 -Kane/Troutdale Rd	30	30	30
82 -South Gresham	60	60	60
82 -South Gresham	60	60	60
84 -Powell Valley Loop	60	60	60
87 -Airport Way/181st	15	15	15
87 -Airport Way/181st	15	15	15
91 -112th Ave	30	30	30
91 -112th Ave	30	30	30

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
95 -148th Ave	30	30	30
95 -148th Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
111 -Hart/198th	15	15	15
111 -Hart/198th	15	15	15
113 -Cornelius Pass	30	30	30
113 -Cornelius Pass	30	30	30
115 -Century Blvd	30	30	30
115 -Century Blvd	30	30	30
120 -Main/Baseline	30	30	30
120 -Main/Baseline	30	30	30
130 -Pacific Hwy	30	30	30
130 -Pacific Hwy	30	30	30
131 -Tualatin-Sherwood Rd	60	60	60
131 -Tualatin-Sherwood Rd	60	60	60
144 -River/Oatfield	30	30	30
144 -River/Oatfield	30	30	30
145 -Jennings	60	60	60
145 -Jennings	60	60	60
150 -Mt Scott	60	60	60
150 -Mt Scott	60	60	60
152 -Milwaukie	30	60	30
152 -Milwaukie	30	60	30
155 -Sunnyside	30	30	30
155 -Sunnyside	30	30	30
190 -Columbia Blvd	30	30	30
190 -Columbia Blvd	30	30	30
Portland Streetcar Loop	15	15	20
Portland Streetcar N/S	15	15	15
Portland Streetcar N/S	15	15	15
OHSU Tram	5	5	5
OHSU Tram	5	5	5
C-Tran Service			
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C02 -Lincoln NB	60	60	60
C02 -Lincoln SB	60	60	60
C06 -Fruit Valley/Grand EB	30	30	30

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
C06 -Fruit Valley/Grand WB	30	30	30
C07 -Battel Ground NB	30	30	30
C07 -Battel Ground SB	30	30	30
C09 -Felida NB	60	60	60
C09 -Felida SB	60	60	60
C101 -I-5 Express VCBD	15	30	15
C105 -I-5 Express AM			10
C105 -I-5 Express PM	10		
C12 -Van Mall/Fishers	30	30	30
C12 -Van Mall/Fishers	30	30	30
C164 -Fisher's Landing NB		30	10
C164 -Fisher's Landing NB	10		
C164 -Fisher's Landing SB		10	10
C19 -Orchards/119th	60	60	60
C19 -Orchards/119th	60	60	60
C190 -Marquam Hill Express			10
C190 -Marquam Hill Express	10		
C20 -Fair Grounds/20th	60	60	60
C20 -Fair Grounds/20th	60	60	60
C25 -St Johns NB	30	30	30
C25 -St Johns SB	30	30	30
C30 -Burton EB	30	30	30
C30 -Butron WB	30	30	30
C31 -Hazel Dell NB	20	20	20
C31 -Hazel Dell SB	20	20	20
C32 -Evergreen/Andresen EB	30	30	30
C32 -Evergreen/Andresen WB	30	30	30
C34 -FLTC to MPTC 192 EB	30	30	30
C34 -FLTC to MPTC 192 WB	30	30	30
C35 -FLTC to MPTC 164 EB	30	30	30
C35 -FLTC to MPTC 164 WB	30	30	30
C41 -SR-14	60		30
C47 -Battel Ground/ Yacolt	120	120	120
C47 -Battel Ground/ Yacolt	120	120	120
C48 -La Center	120	120	120
C48 -La Center	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C60 -Delta Parkrose Janz Beach			15

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
C60 -Delta Parkrose Janz Beach	15	15	
C60 -Delta Parkrose Regional	15	15	
C60 -Delta Parkrose Regional			15
C65 -Parkrose Regional	15	15	15
C67 -PDX Regional	45	60	60
C76 -Orchards	30	30	30
C76 -Orchards	30	30	30
C80 -Van Mall/MPTC	30	30	30
C80 -Van Mall/MPTC	30	30	30
C88 -88th St	30	30	30
C88 -88th St	30	30	30
C92 -Camas/Washougal	30	30	30
C92 -Camas/Washougal	30	30	30
C99 -Highway 99 BRT	10	10	10
C99 -Highway 99 BRT	10	10	10
SMART Service			
SM -Smart Medical Shuttle		60	60
SM -Smart Medical Shuttle		60	60
SM -Smart Shopping		60	
SM -Smart Shopping		60	
SM2 -Smart Tualatin	30	60	30
SM2 -Smart Tualatin	30	60	30
SM3 -Smart Canby	60	120	60
SM3 -Smart Canby	60	120	60
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd Peak	30		30
SM4 -Smart Wilsonville Rd Peak	30		30
SM5 -Smart 95th Av	30		20
SM5 -Smart 95th Av	30		30
SM6 -Smart Canyon	30		30
SM6 -Smart Canyon	30		30
SM7 -Smart Villebois	30		30
SM7 -Smart Villebois	30		30
Canby Area Transit, Sandy Transit, South Clackamas Transit District, Mount Hood Express and Local Shuttle Providers			
Sandy/Estacada SAM	90	120	120
Sandy/Estacada SAM	90	120	120
Sandy/Gresham SAM	30	30	30

2030 and 2045 No Build

Line	PM Headway	MD Headway	AM Headway
Sandy/Gresham SAM	30	30	30
Mt Hood Express	120	120	120
Mt Hood Express	120	120	120
SCTD Molalla/Canby	90	90	90
SCTD Molalla/CCC	30	30	30
SCTD Molalla/CCC	30	30	30
Access Shuttle	60		60
Access Shuttle	60		60
Bethany/Cedar Mill Shuttle	30	60	30
Bethany/Cedar Mill Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Clackamas Industrial Shuttle	60	60	60
Clackamas Industrial Shuttle	60	60	60
Grove Link Cornelius Shuttle	30	60	
Grove Link Shuttle	30	60	30
King City Shuttle	120	120	120
King City/Durham Shuttle	30	60	30
King City/Durham Shuttle	30	60	30
North Hillsboro Shuttle	15	40	15
North Hillsboro Shuttle	15	40	15
Tualatin Blue Shuttle	40		40
Tualatin Green Shuttle	40		40
Tualatin Green Shuttle	40		40
Tualatin Red Shuttle	40		40
Westlink Shuttle	120	120	120
Westlink Shuttle	120	120	120

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
Tri-Met Service			
01 -Max Blue Line	10	15	10
01 -Max Blue Line	10	15	10
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Commuter Rail Willsonville/Beaverton	30		30
01 -Max Green Line	15	15	15
01 -Max Green Line	15	15	15
01 -Max Red Line	15	15	15
01 -Max Red Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
01 -Max Yellow/Orange Line	15	15	15
02 -Division FC	12	12	12
02 -Division FC	12	12	12
04 -Fessenden/Woodstock	15	15	15
04 -Fessenden/Woodstock	15	15	15
06 -Martin Luther King Jr Blvd	12	12	12
06 -Martin Luther King Jr Blvd	12	12	12
07 -Swan Island/Tacoma	30	30	30
07 -Swan Island/Tacoma	30	30	30
08 -Jackson Park/15th Av	15	15	15
08 -Jackson Park/15th Av	15	15	15
09 -Powell Blvd	15	15	15
09 -Powell Blvd	15	15	15
10 -Harold/Steele	30	30	30
10 -Harold/Steele	30	30	30
11 -Rivergate/Marine Dr	60	60	60
11 -Rivergate/Marine Dr	60	60	60
12 -Barbur/Sandy	15	15	15
12 -Barbur/Sandy	15	15	15
14 -Hawthorne	12	12	12
14 -Hawthorne	12	12	12
15 -Belmont 92nd/11th			10
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont Vaughn/Gateway	15	15	15
15 -Belmont Vaughn/Gateway	15	15	15
16 -Front Av/St Helens	52	52	52

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
16 -Front Av/St Helens	52	52	52
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway Tripper		60	
17 -Holgate/Broadway Tripper		60	
18 -Hillside	60		60
19 -Beaverton/Glisan	30	30	30
19 -Beaverton/Glisan	30	30	30
20 -Burnside/Stark	15	15	15
20 -Burnside/Stark	15	15	15
22 -Parkrose	30	30	30
22 -Parkrose	30	30	30
24 -Freemont/NW 18th	30	30	30
24 -Freemont/NW 18th	30	30	30
26 -Thurman/NW 18th	60		60
26 -Thurman/NW 18th	60		60
29 -Lake/Webster Rd	60	60	60
29 -Lake/Webster Rd	60	60	60
30 -Estacada	40	60	30
30 -Estacada	40	60	30
31 -Webster Rd	30	30	30
31 -Webster Rd	30	30	30
33 -McLoughlin/King Rd	15	15	15
33 -McLoughlin/King Rd	15	15	15
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
42 -Vermont	60	60	60
42 -Vermont	60	60	60
43 -Taylors Ferry Rd	30	30	30
43 -Taylors Ferry Rd	30	30	30
44 -Capital Hwy/Mocks Crest Wilsonville	60	60	60
44 -Capital Hwy/Mocks Crest Wilsonville	60	60	60
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
45 -Garden Home/BTC	60		60

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
45 -Garden Home/BTC	60		60
48 -Cornell	15	15	15
48 -Cornell	15	15	15
51 -Council Crest	60		60
51 -Council Crest	60		60
51 -Dosch	65		65
51 -Dosch	120		120
52 -Farmington/185th	15	15	15
52 -Farmington/185th	15	15	15
54 -Beaverton-Hillsdale Hwy	15	15	15
54 -Beaverton-Hillsdale Hwy	15	15	15
56 -Scholls Ferry Rd	30	30	30
56 -Scholls Ferry Rd	30	30	30
59 -Walker/Park Way	60	60	60
59 -Walker/Park Way	60	60	60
62 -Murray Blvd	30	30	30
62 -Murray Blvd	30	30	30
63 -Washington Park/SW 6th	30	30	60
63 -Washington Park/SW 6th	30	30	60
67 -Bethany/158th	30	30	30
67 -Bethany/158th	30	30	30
70 -12th/NE 33Rd Av -17th	20	20	20
70 -12th/NE 33Rd Av -17th	20	20	20
71 -60th Ave	15	15	15
71 -60th Ave	15	15	15
72 -Killingsworth/Parkrose	12	12	12
72 -Killingsworth/Parkrose	12	12	12
73 -122nd Av	12	12	12
73 -122nd Av	12	12	12
74 -162nd Av	20	30	20
74 -162nd Av	20	30	20
75 -Cesar Chavez/Lombard	15	15	15
75 -Cesar Chavez/Lombard	15	15	15
76 -Hall/Oregon City	30	30	30
76 -Hall/Oregon City	30	30	30
76 -Hall/Tualatin	15	15	15
76 -Hall/Tualatin	15	15	15
77 -Broadway/Halsey	15	15	15
77 -Broadway/Halsey	15	15	15

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
78 -Denny/Kerr Pkwy	30	30	30
78 -Denny/Kerr Pkwy	30	30	30
79 -Clackamas/Oregon City	30	30	30
79 -Clackamas/Oregon City	30	30	30
80 -Kane/Troutdale Rd	30	30	30
80 -Kane/Troutdale Rd	30	30	30
82 -South Gresham	60	60	60
82 -South Gresham	60	60	60
84 -Powell Valley Loop	60	60	60
87 -Airport Way/181st	15	15	15
87 -Airport Way/181st	15	15	15
91 -112th Ave	30	30	30
91 -112th Ave	30	30	30
95 -148th Ave	30	30	30
95 -148th Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
111 -Hart/198th	15	15	15
111 -Hart/198th	15	15	15
113 -Cornelius Pass	30	30	30
113 -Cornelius Pass	30	30	30
115 -Century Blvd	30	30	30
115 -Century Blvd	30	30	30
120 -Main/Baseline	30	30	30
120 -Main/Baseline	30	30	30
130 -Pacific Hwy	30	30	30
130 -Pacific Hwy	30	30	30
131 -Tualatin-Sherwood Rd	60	60	60
131 -Tualatin-Sherwood Rd	60	60	60
144 -River/Oatfield	30	30	30
144 -River/Oatfield	30	30	30
145 -Jennings	60	60	60
145 -Jennings	60	60	60
150 -Mt Scott	60	60	60
150 -Mt Scott	60	60	60
152 -Milwaukie	30	60	30
152 -Milwaukie	30	60	30
155 -Sunnyside	30	30	30
155 -Sunnyside	30	30	30

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
190 -Columbia Blvd	30	30	30
190 -Columbia Blvd	30	30	30
57 TV Highway BRT	15	15	15
72B -82nd Ave BRT	12	12	12
72B -82nd Ave BRT	12	12	12
Portland Streetcar Loop	15	15	20
Portland Streetcar N/S Mont. Park	15	15	15
Portland Streetcar N/S Mont. Park	15	15	15
OHSU Tram	5	5	5
OHSU Tram	5	5	5
C-Tran Service			
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C02 -Lincoln NB	60	60	60
C02 -Lincoln SB	60	60	60
C06 -Fruit Valley/Grand EB	30	30	30
C06 -Fruit Valley/Grand WB	30	30	30
C07 -Battel Ground NB	30	30	30
C07 -Battel Ground SB	30	30	30
C09 -Felida NB	60	60	60
C09 -Felida SB	60	60	60
C101 -I-5 Express VCBD	15	30	15
C105 -I-5 Express AM			10
C105 -I-5 Express PM	10		
C12 -Van Mall/Fishers	30	30	30
C12 -Van Mall/Fishers	30	30	30
C164 -Fisher's Landing NB		30	10
C164 -Fisher's Landing NB	10		
C164 -Fisher's Landing SB		10	10
C19 -Orchards/119th	60	60	60
C19 -Orchards/119th	60	60	60
C190 -Marquam Hill Express			10
C190 -Marquam Hill Express	10		
C20 -Fair Grounds/20th	60	60	60
C20 -Fair Grounds/20th	60	60	60
C25 -St Johns NB	30	30	30
C25 -St Johns SB	30	30	30
C30 -Burton EB	30	30	30
C30 -Butron WB	30	30	30

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
C31 -Hazel Dell NB	20	20	20
C31 -Hazel Dell SB	20	20	20
C32 -Evergreen/Andresen EB	30	30	30
C32 -Evergreen/Andresen WB	30	30	30
C34 -FLTC to MPTC 192 EB	30	30	30
C34 -FLTC to MPTC 192 WB	30	30	30
C35 -FLTC to MPTC 164 EB	30	30	30
C35 -FLTC to MPTC 164 WB	30	30	30
C41 -SR-14	60		30
C47 -Battel Ground/ Yacolt	120	120	120
C47 -Battel Ground/ Yacolt	120	120	120
C48 -La Center	120	120	120
C48 -La Center	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C60 -Delta Parkrose Janz Beach			15
C60 -Delta Parkrose Janz Beach	15	15	
C60 -Delta Parkrose Regional	15	15	
C60 -Delta Parkrose Regional			15
C65 -Parkrose Regional	15	15	15
C67 -PDX Regional	45	60	60
C76 -Orchards	30	30	30
C76 -Orchards	30	30	30
C80 -Van Mall/MPTC	30	30	30
C80 -Van Mall/MPTC	30	30	30
C88 -88th St	30	30	30
C88 -88th St	30	30	30
C92 -Camas/Washougal	30	30	30
C92 -Camas/Washougal	30	30	30
C99 -Highway 99 BRT	10	10	10
C99 -Highway 99 BRT	10	10	10
SMART Service			
SM -Smart Medical Shuttle		60	60
SM -Smart Medical Shuttle		60	60
SM -Smart Shopping		60	
SM -Smart Shopping		60	
SM2 -Smart Tualatin	30	60	30
SM2 -Smart Tualatin	30	60	30
SM3 -Smart Canby	60	120	60

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
SM3 -Smart Canby	60	120	60
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd Peak	30		30
SM4 -Smart Wilsonville Rd Peak	30		30
SM5 -Smart 95th Av	30		20
SM5 -Smart 95th Av	30		30
SM6 -Smart Canyon	30		30
SM6 -Smart Canyon	30		30
SM7 -Smart Villebois	30		30
SM7 -Smart Villebois	30		30
Canby Area Transit, Sandy Transit, South Clackamas Transit District, Mount Hood Express and Local Shuttle Providers			
Sandy/Estacada SAM	90	120	120
Sandy/Estacada SAM	90	120	120
Sandy/Gresham SAM	30	30	30
Sandy/Gresham SAM	30	30	30
Mt Hood Express	120	120	120
Mt Hood Express	120	120	120
SCTD Molalla/Canby	90	90	90
SCTD Molalla/CCC	30	30	30
SCTD Molalla/CCC	30	30	30
Access Shuttle	60		60
Access Shuttle	60		60
Beaverton/Cooper Shuttle	30	60	30
Beaverton/Cooper Shuttle	30	60	30
Bethany/Cedar Mill Shuttle	30	60	30
Bethany/Cedar Mill Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Clackamas Industrial Shuttle	60	60	60
Clackamas Industrial Shuttle	60	60	60
Grove Link Cornelius Shuttle	30	60	
Grove Link Shuttle	30	60	30
King City Shuttle	120	120	120
King City/Durham Shuttle	30	60	30
King City/Durham Shuttle	30	60	30
North Hillsboro Shuttle	30	60	30
North Hillsboro Shuttle	30	60	30

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2030 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
Tualatin Blue Shuttle	30	60	30
Tualatin Green Shuttle	30	60	30
Tualatin Green Shuttle	30	60	30
Tualatin Red Shuttle	30	60	30
Westlink Shuttle	120	120	120
Westlink Shuttle	120	120	120

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
Tri-Met Service			
01 -Commuter Rail Wilsonville/Beaverton	30		30
01 -Commuter Rail Wilsonville/Beaverton	30		30
01 -Green/Purple Max CTC to Bridgeport	15	15	15
01 -Green/Purple Max CTC to Bridgeport	15	15	15
01 -Green/Purple Max CTC to Tigard	15		15
01 -Green/Purple Max CTC to Tigard	15		15
01 -Max Blue Line	10	15	10
01 -Max Blue Line	10	15	10
01 -Max Red Line	15	15	15
01 -Max Red Line	15	15	15
01 -Max Yellow/Orange Line IBR	15	15	15
01 -Max Yellow/Orange Line IBR	15	15	15
01 -Yellow Line Max IBR	12		12
01 -Yellow Line Max IBR	12		12
02 -Division FC	10	10	10
02 -Division FC	10	10	10
04 -Fessenden/Woodstock	12	12	12
04 -Fessenden/Woodstock	12	12	12
06 -Martin Luther King Jr Blvd	12	12	12
06 -Martin Luther King Jr Blvd	12	12	12
07 -Swan Island/Tacoma	20	20	20
07 -Swan Island/Tacoma	20	20	20
08 -Jackson Park/15th Av	12	12	12
08 -Jackson Park/15th Av	12	12	12
09 -Powell Blvd	12	12	12
09 -Powell Blvd	12	12	12
10 -Harold/Steele	20	20	20

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
10 -Harold/Steele	20	20	20
11 -Rivergate/Marine Dr	60	60	60
11 -Rivergate/Marine Dr	60	60	60
12 -Barbur/Sandy	12	12	12
12 -Barbur/Sandy	12	12	12
14 -Hawthorne	12	12	12
14 -Hawthorne	12	12	12
15 -Belmont 92nd/11th			10
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont Sauvie/Gateway	60		60
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont St Johns/Gateway	30	30	30
15 -Belmont Vaughn/Gateway	12	12	12
15 -Belmont Vaughn/Gateway	12	12	12
16 -Front Av/St Helens	52	52	52
16 -Front Av/St Helens	52	52	52
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway	15	20	15
17 -Holgate/Broadway Tripper		60	
17 -Holgate/Broadway Tripper		60	
18 -Hillside	60		60
19 -Beaverton/Glisan	30	30	30
19 -Beaverton/Glisan	30	30	30
20 -Burnside/Stark	12	12	12
20 -Burnside/Stark	12	12	12
22 -Parkrose	30	30	30
22 -Parkrose	30	30	30
24 -Freemont/NW 18th	30	30	30
24 -Freemont/NW 18th	30	30	30
26 -Thurman/NW 18th	60		60
26 -Thurman/NW 18th	60		60
29 -Lake/Webster Rd	60	60	60
29 -Lake/Webster Rd	60	60	60
30 -Estacada	40	60	30
30 -Estacada	40	60	30
31 -Webster Rd	30	30	30
31 -Webster Rd	30	30	30
33 -McLoughlin/King Rd	12	12	12
33 -McLoughlin/King Rd	12	12	12

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
35 -Macadam/Greeley	30	30	30
42 -Vermont	30	30	30
42 -Vermont	30	30	30
43 -Taylors Ferry Rd	20	20	20
43 -Taylors Ferry Rd	20	20	20
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest	15	15	15
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
44 -Capital Hwy/Mocks Crest Tigard	60	60	60
44 -Capital Hwy/Mocks Crest Wilsonville	30	30	30
44 -Capital Hwy/Mocks Crest Wilsonville	30	30	30
45 -Garden Home/BTC	60		60
45 -Garden Home/BTC	60		60
48 -Cornell	15	15	15
48 -Cornell	15	15	15
51 -Council Crest	60		60
51 -Council Crest	60		60
51 -Dosch	65		65
51 -Dosch	120		120
52 -Farmington/185th	15	15	15
52 -Farmington/185th	15	15	15
54 -Beaverton-Hillsdale Hwy	12	12	12
54 -Beaverton-Hillsdale Hwy	12	12	12
56 -Scholls Ferry Rd	20	20	20
56 -Scholls Ferry Rd	20	20	20
59 -Walker/Park Way	60	60	60
59 -Walker/Park Way	60	60	60
62 -Murray Blvd	30	30	30
62 -Murray Blvd	30	30	30
63 -Washington Park/SW 6th	30	30	60
63 -Washington Park/SW 6th	30	30	60
67 -Bethany/158th	30	30	30
67 -Bethany/158th	30	30	30
70 -12th/NE 33Rd Av -17th	20	20	20
70 -12th/NE 33Rd Av -17th	20	20	20
71 -60th Ave	15	15	15

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
71 -60th Ave	15	15	15
72 -Killingsworth/Parkrose	12	12	12
72 -Killingsworth/Parkrose	12	12	12
73 -122nd Av	12	12	12
73 -122nd Av	12	12	12
74 -162nd Av	20	30	20
74 -162nd Av	20	30	20
75 -Cesar Chavez/Lombard	12	12	12
75 -Cesar Chavez/Lombard	12	12	12
76 -Hall/Oregon City	30	30	30
76 -Hall/Oregon City	30	30	30
76 -Hall/Tualatin	12	12	12
76 -Hall/Tualatin	12	12	12
77 -Broadway/Halsey	15	15	15
77 -Broadway/Halsey	15	15	15
78 -Denny/Kerr Pkwy	20	20	20
78 -Denny/Kerr Pkwy	20	20	20
79 -Clackamas/Oregon City	20	20	20
79 -Clackamas/Oregon City	20	20	20
80 -Kane/Troutdale Rd	20	20	20
80 -Kane/Troutdale Rd	20	20	20
82 -South Gresham	60	60	60
82 -South Gresham	60	60	60
84 -Powell Valley Loop	60	60	60
87 -Airport Way/181st	15	15	15
87 -Airport Way/181st	15	15	15
91 -112th Ave	30	30	30
91 -112th Ave	30	30	30
95 -148th Ave	30	30	30
95 -148th Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
98 -202nd/232rd Ave	30	30	30
111 -Hart/198th	15	15	15
111 -Hart/198th	15	15	15
113 -Cornelius Pass	30	30	30
113 -Cornelius Pass	30	30	30
115 -Century Blvd	30	30	30
115 -Century Blvd	30	30	30
120 -Main/Baseline	30	30	30

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
120 -Main/Baseline	30	30	30
130 -Pacific Hwy	30	30	30
130 -Pacific Hwy	30	30	30
131 -Tualatin-Sherwood Rd	60	60	60
131 -Tualatin-Sherwood Rd	60	60	60
144 -River/Oatfield	30	30	30
144 -River/Oatfield	30	30	30
145 -Jennings	60	60	60
145 -Jennings	60	60	60
150 -Mt Scott	60	60	60
150 -Mt Scott	60	60	60
152 -Milwaukie	30	60	30
152 -Milwaukie	30	60	30
155 -Sunnyside	30	30	30
155 -Sunnyside	30	30	30
190 -Columbia Blvd	30	30	30
190 -Columbia Blvd	30	30	30
57 -TV Highway BRT	15	15	15
72B -82nd Ave BRT	12	12	12
72B -82nd Ave BRT	12	12	12
Portland Streetcar Loop	15	15	20
Portland Streetcar N/S Mont. Park	15	15	15
Portland Streetcar N/S Mont. Park	15	15	15
OHSU Tram	5	5	5
OHSU Tram	5	5	5
C-Tran Service			
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C01 -Fourth Plain/Mill Plain VINE	10	10	10
C02 -Lincoln NB	60	60	60
C02 -Lincoln SB	60	60	60
C06 -Fruit Valley/Grand EB	30	30	30
C06 -Fruit Valley/Grand WB	30	30	30
C07 -Battel Ground NB	30	30	30
C07 -Battel Ground SB	30	30	30
C09 -Felida NB	60	60	60
C09 -Felida SB	60	60	60
C101 -I-5 Express VCBD	15	30	15
C105 -I-5 Express AM			10
C105 -I-5 Express PM	10		

Attachment 2. 2023 RTP Transit Service Frequency Assumptions

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
C12 -Van Mall/Fishers	30	30	30
C12 -Van Mall/Fishers	30	30	30
C164 -Fisher's Landing NB		30	10
C164 -Fisher's Landing NB	10		
C164 -Fisher's Landing SB		10	10
C19 -Orchards/119th	60	60	60
C19 -Orchards/119th	60	60	60
C190 -Marquam Hill Express			10
C190 -Marquam Hill Express	10		
C20 -Fair Grounds/20th	60	60	60
C20 -Fair Grounds/20th	60	60	60
C25 -St Johns NB	30	30	30
C25 -St Johns SB	30	30	30
C30 -Burton EB	30	30	30
C30 -Butron WB	30	30	30
C31 -Hazel Dell NB	20	20	20
C31 -Hazel Dell SB	20	20	20
C32 -Evergreen/Andresen EB	30	30	30
C32 -Evergreen/Andresen WB	30	30	30
C34 -FLTC to MPTC 192 EB	30	30	30
C34 -FLTC to MPTC 192 WB	30	30	30
C35 -FLTC to MPTC 164 EB	30	30	30
C35 -FLTC to MPTC 164 WB	30	30	30
C41 -SR-14	60		30
C47 -Battel Ground/ Yacolt	120	120	120
C47 -Battel Ground/ Yacolt	120	120	120
C48 -La Center	120	120	120
C48 -La Center	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C49 -Battleground/Ridgefield	120	120	120
C65 -Parkrose Regional	15	15	15
C67 -PDX Regional	45	60	60
C76 -Orchards	30	30	30
C76 -Orchards	30	30	30
C80 -Van Mall/MPTC	30	30	30
C80 -Van Mall/MPTC	30	30	30
C88 -88th St	30	30	30
C88 -88th St	30	30	30
C92 -Camas/Washougal	30	30	30

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
C92 -Camas/Washougal	30	30	30
C99 -Highway 99 BRT	10	10	10
C99 -Highway 99 BRT	10	10	10
Smart Service			
SM -Smart Medical Shuttle		60	60
SM -Smart Medical Shuttle		60	60
SM -Smart Shopping		60	
SM -Smart Shopping		60	
SM2 -Smart Tualatin	30	60	30
SM2 -Smart Tualatin	30	60	30
SM3 -Smart Canby	60	120	60
SM3 -Smart Canby	60	120	60
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd		30	
SM4 -Smart Wilsonville Rd Peak	30		30
SM4 -Smart Wilsonville Rd Peak	30		30
SM5 -Smart 95th Av	30		20
SM5 -Smart 95th Av	30		30
SM6 -Smart Canyon	30		30
SM6 -Smart Canyon	30		30
SM7 -Smart Villebois	30		30
SM7 -Smart Villebois	30		30
Canby Area Transit, Sandy Transit, South Clackamas Transit District, Mount Hood Express and Local Shuttle Providers			
Sandy/Estacada SAM	90	120	120
Sandy/Estacada SAM	90	120	120
Sandy/Gresham SAM	30	30	30
Sandy/Gresham SAM	30	30	30
Mt Hood Express	120	120	120
Mt Hood Express	120	120	120
SCTD Molalla/Canby	90	90	90
SCTD Molalla/CCC	30	30	30
SCTD Molalla/CCC	30	30	30
Access Shuttle	60		60
Access Shuttle	60		60
Beaverton/Cooper Shuttle	30	60	30
Beaverton/Cooper Shuttle	30	60	30
Bethany/Cedar Mill Shuttle	30	60	30
Bethany/Cedar Mill Shuttle	30	60	30

2045 Financially Constrained

Line	PM Headway	MD Headway	AM Headway
Canby/Oregon City Shuttle	30	60	30
Canby/Oregon City Shuttle	30	60	30
Clackamas Industrial Shuttle	60	60	60
Clackamas Industrial Shuttle	60	60	60
Grove Link Cornelius Shuttle	30	60	
Grove Link Shuttle	30	60	30
King City Shuttle	120	120	120
King City/Durham Shuttle	30	60	30
King City/Durham Shuttle	30	60	30
North Hillsboro Shuttle	30	60	30
North Hillsboro Shuttle	30	60	30
Tualatin Blue Shuttle	30	60	30
Tualatin Green Shuttle	30	60	30
Tualatin Green Shuttle	30	60	30
Tualatin Red Shuttle	30	60	30
Westlink Shuttle	120	120	120
Westlink Shuttle	120	120	120
Witch Haz/Orenco Shuttle	30	60	30
Witch Haz/Orenco Shuttle	30	60	30

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Attachment 3. Households, Employment and 2045 Design Type by TAZ[20]

TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1	10,388	10,280	11,040	0	0	124	Central City 1 (CBD)
2	15,620	15,757	16,863	503	547	729	Central City 1 (CBD)
3	3,447	3,434	4,109	8	156	207	Central City 1 (CBD)
4	6,491	6,527	6,982	664	724	959	Central City 1 (CBD)
5	5,740	6,296	6,788	1,006	1,101	1,404	Central City 1 (CBD)
6	4,083	4,070	4,327	0	0	0	Central City 1 (CBD)
7	1,771	2,023	2,248	1,217	1,474	1,958	Central City 1 (CBD)
8	10,524	10,283	11,075	46	51	67	Central City 1 (CBD)
9	1,441	1,483	1,577	0	0	0	Central City 1 (CBD)
10	580	713	832	1,850	2,050	2,253	Central City 1 (CBD)
11	5,624	5,621	5,968	314	381	530	Central City 1 (CBD)
12	3,340	3,425	3,630	178	178	178	Central City 1 (CBD)
13	753	758	848	996	996	1,190	Central City 1 (CBD)
14	7,117	7,426	7,762	1,904	1,743	2,337	Central City 1 (CBD)
15	4,307	4,475	4,979	443	661	1,030	Central City 1 (CBD)
16	717	768	849	780	780	980	Central City 1 (CBD)
17	3,434	3,461	3,745	3,275	3,275	3,900	Central City 4 (River)
18	1,047	887	1,425	1,027	1,659	1,851	Central City 4 (River)
19	2,432	2,462	2,678	1,002	1,068	1,209	Central City 4 (River)
20	1,882	2,108	3,163	651	793	985	Central City 4 (River)
21	335	450	587	691	842	1,044	Central City 4 (River)
22	56	56	59	258	258	258	Central City 4 (River)
23	4,868	4,890	5,098	700	875	1,016	Central City 4 (River)
24	3,481	3,613	4,028	1,046	1,070	1,252	Central City 4 (River)
25	2,598	3,084	3,518	1,292	1,573	1,953	Central City 4 (River)
26	2,999	2,851	3,090	110	122	138	Central City 4 (River)
27	221	183	303	969	1,121	1,280	Central City 4 (River)
28	2,257	2,380	2,537	19	19	40	Industrial Area
29	1,383	1,273	1,596	824	911	1,006	NW 23rd
30	2,757	2,644	2,879	810	853	972	NW 23rd
31	845	862	980	1,392	1,471	1,685	NW 23rd
32	5,824	5,546	6,448	3,741	3,966	4,339	NW 23rd
33	4,509	4,682	5,479	1,996	2,329	2,500	NW 23rd

[20] Adopted by the Metro Council in 2021 (ord. no. 21-1457) after extensive consultation with and review by local governments. An asterisk means * data is suppressed for confidentiality.

Attachment 3. 2023 RTP Transportation Analysis Zone Assumptions

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
34	3,330	3,406	3,435	0	0	0	Industrial Area
35	5,989	5,949	6,079	0	0	0	Industrial Area
36	4,818	5,989	4,992	2,008	1,642	2,132	Main St / Corr
37	101	116	102	489	489	551	Neighborhoods
38	1,377	1,192	2,018	45	84	84	Industrial Area
39	441	469	513	77	99	139	Parks
40	60	63	65	29	30	33	Neighborhoods
41	39	54	64	244	255	277	Neighborhoods
42	43	55	73	93	98	106	Rural Reserve
43	254	254	262	1,236	1,236	1,270	Neighborhoods
44	81	90	82	117	229	256	Neighborhoods
45	115	115	116	916	916	976	Neighborhoods
46	27	37	40	149	149	149	Rural Reserve
47	18	21	22	68	74	78	Rural Reserve
48	341	328	583	299	410	410	Neighborhoods
49	61	61	64	308	345	388	Neighborhoods
50	28	50	55	107	107	107	Rural Reserve
51	313	296	331	876	884	884	Rural Reserve
52	454	458	559	387	386	386	Rural Reserve
53	4,641	5,381	5,916	2,601	3,305	3,850	Goose Hollow
54	1,574	1,653	1,781	2,322	2,322	2,650	Neighborhoods
55	946	974	1,051	469	551	580	Neighborhoods
56	530	561	650	2,329	2,497	2,583	Neighborhoods
57	811	811	820	30	35	37	Zoo
58	18	18	20	117	139	146	Neighborhoods
59	222	229	239	131	154	192	Neighborhoods
60	109	117	122	188	213	226	Neighborhoods
61	41	44	48	530	585	627	Neighborhoods
62	56	54	53	324	366	385	Neighborhoods
63	171	166	174	484	512	541	Neighborhoods
64	311	319	331	1,130	1,235	1,319	Neighborhoods
65	*	*	*	841	1,030	1,089	OHSU
66	2,781	2,195	3,197	509	720	940	Station Com - Tier 1
67	31	713	3,176	0	0	0	Central City 5 (SoWa)
68	361	394	378	565	565	810	Station Com - Tier 1
69	82	147	467	109	370	572	Central City 5 (SoWa)
70	3,608	4,072	4,381	907	1,015	1,474	Central City 5 (SoWa)
71	566	532	644	663	608	820	Main St / Corr
72	413	599	845	1,479	1,479	2,100	Central City 5 (SoWa)

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
73	1,581	1,839	2,042	12	265	427	Central City 5 (SoWa)
74	2,604	2,504	2,726	684	684	869	Main St / Corr
75	14	14	15	343	343	369	Main St / Corr
76	1,340	1,399	1,396	282	282	385	Main St / Corr
77	*	*	*	17	19	25	Main St / Corr
78	442	442	457	379	379	515	Main St / Corr
79	*	*	*	43	47	53	Main St / Corr
80	2,009	1,963	2,158	407	404	619	Main St / Corr
81	41	42	44	222	222	278	Main St / Corr
82	186	186	189	293	293	436	Main St / Corr
83	*	*	*	0	0	11	Main St / Corr
84	221	234	229	605	605	626	Main St / Corr
85	487	464	534	503	503	615	Station Com - Tier 3
86	490	558	680	246	333	375	Town Center - Tier 1
87	438	446	514	507	559	601	Main St / Corr
88	11	11	11	51	57	61	Neighborhoods
89	1,006	1,033	1,076	1,981	2,106	2,305	Main St / Corr
90	251	267	293	213	419	873	Station Com - Tier 3
91	184	183	197	721	749	737	Neighborhoods
92	688	853	855	430	530	432	Station Com - Tier 3
93	1,178	1,227	1,374	1,395	1,112	1,550	Main St / Corr
94	688	747	705	1,031	1,122	1,280	Neighborhoods
95	119	123	130	687	687	718	Main St / Corr
96	1,181	1,219	1,310	1,921	2,075	2,297	Main St / Corr
97	91	96	101	893	933	1,010	Neighborhoods
98	380	380	383	995	1,048	1,063	Main St / Corr
99	295	295	319	845	919	968	Main St / Corr
100	172	172	185	928	967	1,031	Main St / Corr
101	1,055	1,137	1,217	141	203	346	Station Com - Tier 3
102	71	76	79	724	743	752	Neighborhoods
103	127	127	128	429	454	477	Neighborhoods
104	91	170	172	558	596	643	Main St / Corr
105	0	0	0	0	0	0	Main St / Corr
106	26	28	29	103	103	117	Main St / Corr
107	101	106	111	151	151	178	Main St / Corr
108	1,175	1,260	1,714	703	769	776	Neighborhoods
109	537	537	541	924	1,054	1,061	Main St / Corr
110	41	41	42	505	505	514	Neighborhoods
111	164	168	176	570	570	616	Neighborhoods

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
112	517	553	632	425	492	618	Town Center - Tier 2
113	57	60	65	168	168	198	Town Center - Tier 2
114	16	16	16	388	388	398	Neighborhoods
115	132	142	154	935	935	975	Neighborhoods
116	93	252	270	181	191	240	Station Com - Tier 3
117	152	288	315	448	481	577	Station Com - Tier 3
118	558	653	705	317	447	707	Town Center - Tier 2
119	131	140	159	401	424	454	Town Center - Tier 2
120	33	35	37	509	532	546	Neighborhoods
121	180	190	181	581	610	625	Neighborhoods
122	*	*	*	14	18	16	Station Com - Tier 3
123	31	32	34	233	238	235	Neighborhoods
124	16	168	611	0	0	0	Industrial Area
125	749	796	857	421	421	631	Industrial Area
126	1,254	1,325	1,398	149	239	383	Station Com - Tier 3
127	762	762	914	776	776	1,012	Neighborhoods
128	182	190	203	0	0	0	Industrial Area
129	2,575	2,903	3,076	0	0	0	Industrial Area
130	1,292	1,317	1,438	0	0	0	Industrial Area
131	7	7	7	0	0	0	Parks
132	754	803	963	29	29	29	Industrial Area
133	429	441	475	9	9	9	Industrial Area
134	124	124	124	9	9	9	Station Com - Tier 3
135	41	47	55	0	0	0	Industrial Area
136	2,254	2,444	3,000	574	574	641	Industrial Area
137	3,494	4,613	5,450	1,208	1,208	1,459	Industrial Area
138	997	1,401	2,361	0	0	0	Industrial Area
139	9,854	10,140	10,423	1	1	1	PDX
140	1,065	1,156	1,165	0	0	0	Industrial Area
141	580	630	726	19	20	22	Industrial Area
142	479	490	702	0	0	0	Industrial Area
143	1,018	1,018	1,228	0	0	0	Employment Area
144	1,145	1,234	1,410	0	0	0	Employment Area
145	819	879	995	0	0	0	Industrial Area
146	0	0	0	0	0	0	Industrial Area
147	595	630	704	0	0	0	Station Com - Tier 3
148	946	943	1,023	0	0	0	Station Com - Tier 3
149	709	709	750	0	0	0	Station Com - Tier 3
150	0	116	585	0	0	0	Industrial Area

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
151	425	425	479	0	0	0	Station Com - Tier 3
152	0	0	2	0	0	0	Employment Area
153	1,330	1,397	1,543	0	0	0	Industrial Area
154	751	757	963	0	0	0	Industrial Area
155	1,089	1,147	1,501	2,800	2,923	3,104	Industrial Area
156	572	613	62	2,164	2,219	2,315	Industrial Area
157	424	426	456	964	986	1,007	Industrial Area
158	168	168	190	914	940	970	Main St / Corr
159	2,305	2,818	3,813	2,550	2,604	2,673	Main St / Corr
160	2,650	2,809	3,139	3,114	3,379	3,752	Town Center - Tier 1
161	247	266	326	1,344	1,440	1,587	Neighborhoods
162	598	598	686	78	79	79	Industrial Area
163	15,713	15,713	16,066	39	43	49	Industrial Area
164	74	101	127	0	0	0	Industrial Area
165	634	702	759	1,033	1,064	1,107	Industrial Area
166	1,131	1,187	1,323	537	795	986	Station Com - Tier 2
167	995	1,057	1,137	14	20	29	Industrial Area
168	624	703	781	1,469	1,553	1,736	Main St / Corr
169	486	531	587	445	490	607	Station Com - Tier 1
170	364	396	470	224	485	612	Station Com - Tier 1
171	251	269	308	632	682	814	Main St / Corr
172	593	612	684	715	733	790	Industrial Area
173	246	276	291	1,050	1,115	1,263	Neighborhoods
174	153	176	226	868	1,235	1,473	Station Com - Tier 1
175	248	280	360	243	675	845	Station Com - Tier 1
176	23	25	29	346	381	470	Main St / Corr
177	78	91	100	330	339	366	Neighborhoods
178	101	107	112	668	687	741	Neighborhoods
179	273	315	368	785	847	877	Neighborhoods
180	259	297	367	626	845	975	Station Com - Tier 1
181	183	213	329	487	860	1,053	Station Com - Tier 1
182	92	168	209	444	482	562	Main St / Corr
183	1,276	1,396	1,688	322	340	377	Main St / Corr
184	634	687	739	917	989	1,123	Main St / Corr
185	15	16	17	295	322	366	Neighborhoods
186	123	123	161	508	660	754	Station Com - Tier 1
187	234	254	400	486	898	1,050	Station Com - Tier 1
188	465	504	568	384	475	550	Main St / Corr
189	225	238	315	539	592	679	Main St / Corr

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190	429	446	474	1,336	1,429	1,581	Main St / Corr
191	1,492	1,492	1,910	297	326	450	Station Com - Tier 2
192	406	444	509	677	704	743	Main St / Corr
193	697	710	799	655	708	787	Industrial Area
194	826	854	926	799	915	1,056	Neighborhoods
195	5,849	5,849	6,581	1,249	1,468	1,889	Main St / Corr
196	1,473	1,539	1,746	80	215	312	Lower Albina
197	1,380	1,431	1,505	0	0	0	Lower Albina
198	2,683	2,860	3,550	233	388	726	Central City 2 (Lloyd)
199	729	729	1,141	15	245	498	Central City 2 (Lloyd)
200	1,180	1,459	1,981	157	615	1,060	Central City 2 (Lloyd)
201	1,312	1,310	1,468	0	0	0	Central City 2 (Lloyd)
202	7,051	7,475	8,458	848	1,415	2,409	Central City 2 (Lloyd)
203	2,080	2,107	2,241	0	0	107	Central City 2 (Lloyd)
204	2,069	2,811	3,024	914	944	1,630	Central City 2 (Lloyd)
205	1,754	1,795	2,492	0	200	408	Central City 2 (Lloyd)
206	2,306	2,388	2,598	0	375	838	Central City 2 (Lloyd)
207	4,081	4,223	5,017	902	1,431	2,180	Central City 3 (CEID)
208	2,860	2,957	3,504	214	507	963	Central City 3 (CEID)
209	1,635	1,702	1,948	128	315	445	Central City 3 (CEID)
210	2,101	2,182	3,114	925	1,465	1,858	Central City 3 (CEID)
211	1,544	1,591	1,898	180	365	508	Central City 3 (CEID)
212	942	1,013	1,147	0	0	57	Central City 3 (CEID)
213	3,088	3,257	3,521	22	145	215	Central City 3 (CEID)
214	3,374	3,444	3,995	101	450	550	Central City 3 (CEID)
215	441	495	716	0	107	232	Central City 3 (CEID)
216	1,788	1,878	2,036	169	181	201	Central City 3 (CEID)
217	1,350	1,487	1,664	0	0	192	Central City 3 (CEID)
218	631	678	848	620	659	779	Station Com - Tier 1
219	2,238	2,415	2,743	215	229	253	Industrial Area
220	1,006	1,091	1,218	796	815	900	Main St / Corr
221	317	330	347	77	82	91	Station Com - Tier 1
222	*	*	*	96	102	113	Station Com - Tier 2
223	965	1,007	1,091	244	244	265	Industrial Area
224	189	208	231	737	815	961	Main St / Corr
225	212	237	269	92	92	122	Main St / Corr
226	942	1,022	1,026	1,026	1,065	1,135	Main St / Corr
227	326	326	349	774	795	801	Station Com - Tier 1
228	104	116	134	563	570	575	Station Com - Tier 1

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229	52	58	68	418	418	482	Station Com - Tier 1
230	423	423	467	849	849	925	Main St / Corr
231	1,524	1,619	1,804	1,766	1,795	1,944	Main St / Corr
232	302	302	350	718	718	795	Station Com - Tier 1
233	241	241	252	81	88	110	Neighborhoods
234	53	53	53	56	55	58	Neighborhoods
235	200	210	223	863	879	914	Neighborhoods
236	1,555	1,423	1,581	891	934	971	Main St / Corr
237	153	153	154	657	661	670	Neighborhoods
238	*	*	*	391	391	400	Neighborhoods
239	793	865	988	958	985	1,155	Main St / Corr
240	634	634	697	1,115	1,135	1,250	Main St / Corr
241	164	164	165	527	547	582	Main St / Corr
242	40	44	48	617	617	647	Main St / Corr
243	643	669	695	1,066	1,087	1,126	Industrial Area
244	1,188	1,188	1,220	941	1,056	1,259	Main St / Corr
245	310	326	360	1,670	1,796	2,059	Main St / Corr
246	890	908	1,052	965	1,033	1,147	Main St / Corr
247	1,688	1,795	2,034	1,701	2,112	2,438	Main St / Corr
248	200	196	213	1,095	1,142	1,254	Main St / Corr
249	869	889	1,077	872	935	1,111	Main St / Corr
250	232	242	270	816	868	974	Main St / Corr
251	414	442	521	927	1,035	1,145	Main St / Corr
252	179	179	170	641	677	718	Neighborhoods
253	244	244	250	993	1,028	1,067	Main St / Corr
254	124	139	151	1,035	1,099	1,092	Neighborhoods
255	212	212	217	1,085	1,223	1,367	Neighborhoods
256	146	157	179	1,578	1,665	1,798	Main St / Corr
257	450	450	511	636	697	791	Main St / Corr
258	310	351	422	815	965	1,105	Main St / Corr
259	108	121	137	773	819	908	Neighborhoods
260	270	273	304	923	988	1,115	Main St / Corr
261	606	653	773	846	1,065	1,263	Main St / Corr
262	1,701	1,736	1,920	424	768	859	Main St / Corr
263	557	583	744	484	765	1,275	Main St / Corr
264	208	208	349	916	1,225	1,461	Main St / Corr
265	577	678	985	866	866	1,000	Employment Area
266	402	431	479	756	756	840	Station Com - Tier 3
267	208	280	507	1,073	1,375	1,625	Town Center - Tier 1

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268	119	108	176	371	431	549	Station Com - Tier 3
269	751	770	890	490	803	1,135	Station Com - Tier 3
270	56	77	134	307	480	675	Station Com - Tier 3
271	914	951	1,104	447	555	745	Main St / Corr
272	290	310	331	812	812	897	Main St / Corr
273	96	99	109	636	699	808	Main St / Corr
274	948	993	1,307	1,549	1,619	1,735	Main St / Corr
275	719	780	1,035	1,069	1,275	1,520	Main St / Corr
276	873	947	1,149	1,375	1,525	1,790	Main St / Corr
277	1,353	1,395	1,442	3,222	3,430	3,755	Main St / Corr
278	955	989	1,370	1,958	1,958	2,278	Main St / Corr
279	853	954	1,056	910	1,010	1,140	Main St / Corr
280	971	1,008	1,111	2,049	2,184	2,456	Main St / Corr
281	597	623	698	813	945	1,011	Main St / Corr
282	656	643	751	1,173	1,305	1,392	Main St / Corr
283	767	766	841	1,745	1,835	1,982	Main St / Corr
284	877	890	1,004	1,892	2,112	2,300	Main St / Corr
285	1,791	1,803	2,030	1,455	1,795	1,899	Main St / Corr
286	694	712	829	1,494	1,605	1,730	Main St / Corr
287	69	70	73	664	680	722	Main St / Corr
288	965	1,015	1,102	1,597	1,652	1,726	Main St / Corr
289	655	678	754	1,270	1,390	1,491	Main St / Corr
290	1,026	1,042	1,135	1,623	1,703	1,791	Main St / Corr
291	1,297	1,348	1,452	1,136	1,229	1,330	Main St / Corr
292	340	356	393	330	395	452	Station Com - Tier 1
293	799	853	988	1,826	1,905	2,129	Main St / Corr
294	1,089	1,137	1,263	1,915	1,915	2,202	Main St / Corr
295	2,715	2,821	3,128	2,847	3,090	3,309	Main St / Corr
296	5,711	6,057	6,471	2,706	3,050	3,800	Main St / Corr
297	922	935	991	1,429	1,545	1,630	Main St / Corr
298	4,649	4,776	5,464	1,277	1,277	1,390	Main St / Corr
299	9,256	9,386	9,703	1,913	1,945	2,330	Town Center - Tier 1
300	1,132	1,129	1,375	602	875	1,000	Town Center - Tier 1
301	1,816	1,867	2,151	2,586	2,645	3,140	Main St / Corr
302	966	1,019	1,195	1,031	1,085	1,481	Main St / Corr
303	118	119	123	794	794	794	Neighborhoods
304	535	560	535	818	830	856	Neighborhoods
305	637	661	765	978	1,080	1,173	Main St / Corr
306	884	940	945	1,575	1,582	1,627	Main St / Corr

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307	99	96	102	713	722	735	Main St / Corr
308	357	369	376	785	799	806	Main St / Corr
309	1,291	1,313	1,500	1,408	1,408	1,638	Main St / Corr
310	1,421	1,475	1,701	1,145	1,287	1,514	Main St / Corr
311	322	330	355	623	623	623	Neighborhoods
312	512	530	562	753	753	790	Main St / Corr
313	729	789	824	1,054	1,265	1,445	Main St / Corr
314	965	1,016	1,097	1,172	1,368	1,572	Main St / Corr
315	493	505	533	1,043	1,095	1,153	Main St / Corr
316	576	596	640	1,065	1,195	1,213	Main St / Corr
317	242	245	245	984	1,006	1,026	Neighborhoods
318	327	345	367	628	645	683	Main St / Corr
319	372	372	355	544	635	701	Main St / Corr
320	915	941	971	916	965	1,001	Main St / Corr
321	526	556	622	911	1,015	1,147	Main St / Corr
322	771	803	902	1,263	1,415	1,558	Main St / Corr
323	999	1,076	1,190	735	845	980	Main St / Corr
324	670	717	808	874	950	1,070	Main St / Corr
325	310	307	317	1,290	1,290	1,343	Neighborhoods
326	933	943	1,049	701	731	802	Industrial Area
327	2,834	2,850	2,971	8	10	13	Industrial Area
328	873	887	1,068	694	704	712	Neighborhoods
329	175	175	187	912	918	935	Neighborhoods
330	405	416	562	24	25	28	Industrial Area
331	734	759	839	6	6	7	Industrial Area
332	26	42	58	202	211	229	Neighborhoods
333	43	47	51	275	288	355	Neighborhoods
334	40	42	45	690	690	785	Main St / Corr
335	91	97	104	642	642	695	Main St / Corr
336	476	500	553	1,265	1,265	1,370	Main St / Corr
337	427	428	482	660	681	749	Main St / Corr
338	329	329	342	1,324	1,324	1,330	Main St / Corr
339	1,017	1,005	1,140	410	420	457	Station Com - Tier 1
340	208	232	283	531	546	575	Station Com - Tier 1
341	316	316	322	640	640	667	Main St / Corr
342	244	300	570	156	210	237	Employment Area
343	710	792	897	1,860	1,860	2,000	Main St / Corr
344	464	464	528	786	839	944	Main St / Corr
345	76	89	100	608	665	764	Main St / Corr

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346	171	181	203	192	194	225	Industrial Area
347	922	893	969	4	5	5	Industrial Area
348	1,622	1,673	1,868	33	34	33	Employment Area
349	237	323	624	944	973	1,070	Employment Area
350	194	194	196	892	892	930	Main St / Corr
351	602	698	810	1,059	1,205	1,299	Main St / Corr
352	*	*	*	431	515	450	Neighborhoods
353	743	753	870	973	1,015	1,070	Main St / Corr
354	653	701	921	381	420	436	Industrial Area
355	1,255	1,210	1,366	0	0	0	Industrial Area
356	1,163	1,171	1,497	1	1	1	Employment Area
357	4,267	4,368	4,505	1	2	2	Industrial Area
358	2,473	2,588	2,775	10	11	12	Industrial Area
359	1,330	1,330	1,459	1	1	1	Industrial Area
360	1,145	1,179	1,780	0	0	0	Industrial Area
361	1,278	1,384	1,515	102	106	112	Industrial Area
362	951	991	1,366	0	0	0	Industrial Area
363	706	714	1,031	0	0	0	Industrial Area
364	1,726	1,750	1,853	5	6	6	Industrial Area
365	2,635	2,743	2,964	1	1	1	Industrial Area
366	1,371	1,465	1,612	29	30	34	Industrial Area
367	708	730	889	334	415	396	Station Com - Tier 3
368	340	374	517	325	430	517	Main St / Corr
369	303	361	416	436	442	556	Main St / Corr
370	103	107	115	616	616	700	Main St / Corr
371	27	50	146	484	484	510	Main St / Corr
372	109	120	158	520	520	525	Main St / Corr
373	40	45	64	521	521	550	Neighborhoods
374	82	88	95	575	640	698	Neighborhoods
375	168	171	186	541	541	543	Neighborhoods
376	*	*	*	117	141	184	Main St / Corr
377	*	*	*	307	307	309	Main St / Corr
378	141	145	155	742	742	853	Main St / Corr
379	222	235	251	856	856	930	Main St / Corr
380	85	91	100	839	839	889	Neighborhoods
381	37	38	39	436	446	448	Main St / Corr
382	18	18	20	151	155	157	Main St / Corr
383	*	*	*	318	327	332	Neighborhoods
384	114	123	134	397	408	415	Neighborhoods

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385	369	375	570	124	128	130	Main St / Corr
386	171	184	188	508	508	525	Main St / Corr
387	1,995	2,090	2,515	369	650	920	Regional Center - Tier 1
388	1,100	1,125	1,303	1,105	1,310	1,410	Regional Center - Tier 1
389	466	479	535	295	323	375	Main St / Corr
390	147	150	157	371	371	402	Main St / Corr
391	2	2	2	226	252	301	Neighborhoods
392	211	222	238	269	269	318	Neighborhoods
393	207	217	272	348	387	463	Main St / Corr
394	655	696	758	824	824	950	Regional Center - Tier 1
395	616	684	882	683	795	1,219	Regional Center - Tier 1
396	1,750	1,887	2,159	1,398	1,398	1,893	Regional Center - Tier 1
397	318	332	373	953	953	1,286	Main St / Corr
398	241	247	294	221	248	300	Station Com - Tier 3
399	18	22	39	526	580	686	Main St / Corr
400	259	267	298	712	735	872	Main St / Corr
401	676	706	813	718	845	1,015	Main St / Corr
402	1,108	1,172	1,304	742	835	958	Main St / Corr
403	3,200	3,318	4,134	265	525	769	Regional Center - Tier 1
404	*	*	*	99	112	136	Neighborhoods
405	161	169	182	1,387	1,387	1,405	Neighborhoods
406	153	159	156	610	610	622	Main St / Corr
407	225	225	228	709	742	846	Neighborhoods
408	90	90	96	893	964	1,079	Station Com - Tier 3
409	164	182	257	969	1,030	1,160	Station Com - Tier 3
410	239	250	276	690	734	803	Main St / Corr
411	136	138	147	553	576	612	Main St / Corr
412	71	76	88	335	335	344	Main St / Corr
413	114	123	132	349	349	357	Neighborhoods
414	229	239	255	770	770	783	Neighborhoods
415	56	69	86	377	389	407	Main St / Corr
416	161	175	187	387	445	483	Main St / Corr
417	199	218	245	217	233	283	Main St / Corr
418	238	281	361	402	505	609	Main St / Corr
419	75	80	87	423	513	609	Main St / Corr
420	122	140	155	798	843	978	Main St / Corr
421	135	150	180	209	230	277	Main St / Corr
422	302	343	402	645	770	925	Main St / Corr
423	11	12	13	249	249	260	Neighborhoods

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424	8	9	10	293	293	300	Neighborhoods
425	238	235	278	464	488	532	Main St / Corr
426	94	99	113	480	480	546	Main St / Corr
427	17	19	25	76	83	94	Main St / Corr
428	422	440	440	97	105	120	Main St / Corr
429	142	150	161	982	986	1,150	Main St / Corr
430	60	65	71	222	222	223	Neighborhoods
431	18	19	21	167	167	172	Neighborhoods
432	174	174	175	278	278	292	Neighborhoods
433	172	181	193	610	610	695	Main St / Corr
434	828	882	880	944	944	1,100	Neighborhoods
435	2,196	2,408	3,007	268	289	404	Regional Center - Tier 1
436	978	1,011	1,168	656	658	887	Main St / Corr
437	837	892	1,039	1,155	1,465	1,882	Main St / Corr
438	798	845	955	803	1,045	1,106	Main St / Corr
439	121	127	149	674	746	888	Main St / Corr
440	189	194	249	797	887	1,027	Main St / Corr
441	192	202	217	1,601	1,878	1,871	Main St / Corr
442	508	554	561	817	1,060	1,317	Main St / Corr
443	438	454	516	1,238	1,640	2,054	Main St / Corr
444	1,233	1,274	1,392	168	190	219	Main St / Corr
445	206	225	256	1,001	1,001	1,034	Main St / Corr
446	198	198	206	961	1,070	1,220	Main St / Corr
447	233	246	246	440	495	593	Main St / Corr
448	153	160	159	396	396	448	Neighborhoods
449	19	19	20	507	565	674	Neighborhoods
450	33	36	48	360	368	435	Main St / Corr
451	233	261	288	604	642	675	Neighborhoods
452	171	171	172	679	679	711	Neighborhoods
453	277	290	387	535	602	707	Town Center - Tier 1
454	269	758	1,078	13	13	14	Industrial Area
455	297	321	326	493	540	549	Neighborhoods
456	29	31	34	254	267	268	Neighborhoods
457	51	54	58	549	570	573	Neighborhoods
458	40	43	47	219	242	272	Neighborhoods
459	410	405	439	141	141	141	Main St / Corr
460	242	267	289	562	569	575	Main St / Corr
461	294	294	298	716	716	716	Main St / Corr
462	129	136	130	436	453	456	Neighborhoods

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
463	29	28	30	320	399	426	Neighborhoods
464	58	59	58	310	478	505	Neighborhoods
465	36	36	37	371	425	460	Main St / Corr
466	*	*	*	49	49	49	Main St / Corr
467	41	44	47	3	4	4	Parks
468	44	49	53	167	169	170	Neighborhoods
469	13	493	2,000	80	80	106	Town Center - Tier 4
470	*	*	*	31	283	664	Main St / Corr
471	39	933	434	1,387	1,387	1,387	Neighborhoods
472	98	140	207	254	354	354	Neighborhoods
473	318	395	433	489	692	726	Neighborhoods
474	*	*	*	44	500	500	Industrial Area
475	49	340	899	77	292	471	Industrial Area
476	58	400	1,085	115	142	470	Industrial Area
477	39	43	48	531	829	1,420	Neighborhoods
478	149	174	192	471	597	719	Neighborhoods
479	127	156	173	470	528	573	Neighborhoods
480	128	155	178	922	986	1,004	Neighborhoods
481	*	*	*	81	97	99	Industrial Area
482	45	56	61	548	578	578	Neighborhoods
483	*	*	*	150	211	222	Neighborhoods
484	78	91	99	478	485	485	Neighborhoods
485	58	79	86	625	642	642	Neighborhoods
486	100	195	330	644	738	756	Neighborhoods
487	48	55	61	916	939	935	Neighborhoods
488	23	28	34	397	408	407	Neighborhoods
489	64	79	87	329	349	349	Neighborhoods
490	63	78	85	501	559	569	Neighborhoods
491	311	361	451	239	240	242	Industrial Area
492	101	105	128	65	181	352	Neighborhoods
493	257	286	310	518	553	580	Main St / Corr
494	167	214	247	504	518	537	Neighborhoods
495	106	134	176	695	736	776	Neighborhoods
496	59	76	83	586	594	599	Neighborhoods
497	258	309	358	469	653	749	Neighborhoods
498	69	72	82	268	310	318	Neighborhoods
499	124	136	153	394	410	430	Neighborhoods
500	660	720	793	0	58	117	Main St / Corr
501	450	568	695	0	45	108	Main St / Corr

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502	156	162	183	347	355	361	Neighborhoods
503	16	5	43	293	308	310	Neighborhoods
504	435	501	562	17	23	27	Regional Center - Tier 1
505	460	500	548	48	53	52	Regional Center - Tier 1
506	152	184	204	802	828	814	Main St / Corr
507	121	139	156	425	427	424	Main St / Corr
508	0	0	0	0	0	0	Employment Area
509	729	854	1,033	955	1,050	1,126	Main St / Corr
510	389	418	447	658	679	674	Main St / Corr
511	41	44	47	343	387	418	Main St / Corr
512	*	*	*	907	942	968	Main St / Corr
513	11	27	50	124	178	202	Main St / Corr
514	38	46	51	246	269	263	Main St / Corr
515	466	518	587	11	87	138	Regional Center - Tier 1
516	323	372	407	202	205	207	Regional Center - Tier 1
517	227	287	345	48	59	66	Regional Center - Tier 1
518	238	278	306	17	23	28	Regional Center - Tier 1
519	145	162	181	63	78	92	Regional Center - Tier 1
520	263	315	371	104	126	149	Regional Center - Tier 1
521	101	115	156	244	262	273	Regional Center - Tier 1
522	190	223	251	119	120	121	Regional Center - Tier 1
523	529	576	628	0	36	70	Main St / Corr
524	*	*	*	509	531	529	Neighborhoods
525	191	237	258	714	724	731	Neighborhoods
526	8	11	11	140	269	280	Neighborhoods
527	40	49	54	287	296	297	Neighborhoods
528	230	273	306	699	745	801	Main St / Corr
529	57	74	81	457	500	538	Main St / Corr
530	309	338	369	167	175	181	Main St / Corr
531	731	793	869	1	23	43	Regional Center - Tier 1
532	572	666	750	295	306	314	Regional Center - Tier 1
533	259	265	296	78	79	79	Regional Center - Tier 1
534	83	100	113	163	169	173	Regional Center - Tier 1
535	355	376	402	0	4	7	Regional Center - Tier 1
536	65	82	95	476	504	509	Main St / Corr
537	59	71	79	302	329	333	Main St / Corr
538	374	462	562	61	96	126	Employment Area
539	16	41	93	136	151	149	Main St / Corr
540	461	490	534	386	409	420	Main St / Corr

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541	208	235	252	608	625	633	Main St / Corr
542	110	257	566	0	0	0	Employment Area
543	65	93	132	412	419	419	Main St / Corr
544	23	57	110	691	735	761	Station Com - Tier 3
545	516	560	604	494	65	69	Regional Center - Tier 1
546	964	996	1,077	13	21	26	Regional Center - Tier 1
547	688	786	883	14	47	75	Regional Center - Tier 1
548	435	475	520	121	146	172	Regional Center - Tier 1
549	30	40	51	267	300	319	Neighborhoods
550	53	58	63	232	244	357	Neighborhoods
551	*	*	*	1	1	1	Industrial Area
552	132	149	166	714	719	722	Main St / Corr
553	574	629	672	173	366	465	Main St / Corr
554	1,177	1,408	1,556	140	203	235	Main St / Corr
555	563	635	692	538	584	617	Main St / Corr
556	140	169	185	472	480	479	Neighborhoods
557	137	158	176	631	640	636	Neighborhoods
558	50	75	112	245	253	255	Main St / Corr
559	*	*	*	0	0	0	Employment Area
560	*	*	*	0	47	0	Employment Area
561	74	133	222	344	381	405	Main St / Corr
562	305	397	488	787	809	823	Main St / Corr
563	223	256	279	0	24	501	Regional Center - Tier 1
564	321	384	433	645	645	645	Regional Center - Tier 1
565	5	17	38	148	153	156	Main St / Corr
566	15	18	20	238	239	239	Main St / Corr
567	15	24	40	227	251	269	Main St / Corr
568	343	434	543	235	306	367	Main St / Corr
569	130	159	174	238	266	275	Main St / Corr
570	352	419	458	2	9	14	Industrial Area
571	*	*	*	0	0	0	Employment Area
572	5	7	7	201	240	270	Main St / Corr
573	39	44	48	124	126	127	Main St / Corr
574	209	272	343	4	18	28	Industrial Area
575	129	164	212	2	10	17	Station Com - Tier 3
576	249	461	856	75	80	85	Industrial Area
577	145	225	379	274	287	291	Main St / Corr
578	261	297	322	399	409	426	Town Center - Tier 2
579	309	361	431	391	410	600	Town Center - Tier 2

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580	16	36	73	626	654	678	Town Center - Tier 2
581	570	718	938	520	609	696	Town Center - Tier 2
582	379	423	462	319	328	335	Main St / Corr
583	3	4	4	292	356	392	Main St / Corr
584	105	110	116	374	396	398	Neighborhoods
585	202	249	317	526	542	700	Town Center - Tier 2
586	297	348	406	471	496	521	Town Center - Tier 2
587	133	188	284	778	811	852	Town Center - Tier 2
588	171	206	246	578	593	595	Town Center - Tier 2
589	273	313	341	271	278	285	Town Center - Tier 2
590	84	104	131	376	388	398	Town Center - Tier 2
591	475	563	646	610	670	711	Town Center - Tier 2
592	117	124	133	369	383	386	Town Center - Tier 2
593	37	40	43	451	457	463	Main St / Corr
594	324	356	377	437	462	485	Main St / Corr
595	458	527	572	535	545	551	Main St / Corr
596	132	195	305	418	489	554	Main St / Corr
597	*	*	*	403	405	407	Neighborhoods
598	2,019	2,143	2,251	0	40	85	Industrial Area
599	772	719	655	0	1	1	Industrial Area
600	822	901	980	27	28	31	Industrial Area
601	481	518	523	269	292	312	Employment Area
602	*	*	*	0	0	0	Industrial Area
603	3,005	3,359	4,500	3	0	0	Industrial Area
604	736	748	1,000	0	0	0	Industrial Area
605	1,166	1,204	1,700	124	124	124	Industrial Area
606	147	212	266	639	696	761	Neighborhoods
607	517	589	782	2	2	2	Employment Area
608	181	323	849	772	837	912	Employment Area
609	52	84	204	784	854	934	Main St / Corr
610	1,014	1,063	1,598	3	4	4	Industrial Area
611	*	*	*	184	213	243	Main St / Corr
612	199	236	269	326	361	382	Main St / Corr
613	9	11	12	159	177	187	Main St / Corr
614	18	38	73	98	109	115	Main St / Corr
615	*	*	*	158	176	186	Main St / Corr
616	322	453	630	398	443	468	Town Center - Tier 3
617	*	*	*	268	296	313	Neighborhoods
618	83	90	96	111	123	131	Industrial Area

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619	196	258	311	628	727	833	Town Center - Tier 3
620	791	1,027	1,422	8	9	10	Town Center - Tier 3
621	104	122	134	527	607	684	Neighborhoods
622	109	134	151	285	329	371	Main St / Corr
623	678	897	925	51	59	68	Industrial Area
624	717	759	856	73	79	87	Industrial Area
625	1,559	1,631	1,893	0	0	0	Industrial Area
626	*	*	*	0	0	0	Industrial Area
627	1,914	1,897	2,188	0	0	0	Industrial Area
628	192	229	526	0	0	0	Industrial Area
629	177	202	262	1	1	1	Industrial Area
630	338	458	669	0	0	0	Town Center - Tier 3
631	494	575	678	0	0	0	Employment Area
632	0	0	0	1	1	1	Town Center - Tier 3
633	209	296	418	278	315	338	Town Center - Tier 3
634	540	625	698	183	221	235	Town Center - Tier 3
635	*	*	*	70	87	92	Town Center - Tier 3
636	*	*	*	41	41	41	Neighborhoods
637	36	45	50	323	399	424	Neighborhoods
638	25	31	34	529	631	664	Neighborhoods
639	28	36	41	227	232	231	Main St / Corr
640	55	64	68	544	642	686	Town Center - Tier 3
641	468	534	598	0	0	0	Town Center - Tier 3
642	468	551	607	604	669	708	Main St / Corr
643	97	104	111	415	474	508	Neighborhoods
644	*	*	*	52	59	63	Main St / Corr
645	79	94	102	669	686	682	Main St / Corr
646	36	44	48	461	495	501	Neighborhoods
647	16	20	22	349	398	427	Main St / Corr
648	149	196	240	374	384	382	Neighborhoods
649	73	96	107	382	441	460	Neighborhoods
650	191	205	224	676	684	685	Neighborhoods
651	458	452	509	754	767	763	Undesignated
652	200	196	222	92	105	109	Rural Reserve
653	0	0	0	10	215	234	Undesignated
654	*	*	*	22	41	43	Rural Reserve
655	*	*	*	108	109	2,166	Urban Reserve
656	200	218	564	163	165	3,097	Urban Reserve
657	79	99	109	261	264	269	Rural Reserve

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658	63	74	88	95	96	96	Rural Reserve
659	127	143	158	125	231	273	Rural Reserve
660	616	667	774	178	202	211	Rural Reserve
661	283	289	382	563	591	582	Undesignated
662	409	424	454	515	581	601	Main St / Corr
663	965	995	1,072	0	0	0	Main St / Corr
664	364	364	386	4	4	44	Station Com - Tier 1
665	172	178	188	0	0	0	Neighborhoods
666	188	189	201	0	0	0	Main St / Corr
667	630	680	826	0	0	0	Employment Area
668	428	460	513	178	264	355	Town Center - Tier 2
669	9	10	11	175	190	196	Town Center - Tier 2
670	221	238	278	0	172	172	Town Center - Tier 2
671	168	180	193	201	219	224	Town Center - Tier 2
672	373	408	494	110	300	300	Town Center - Tier 2
673	370	385	425	254	46	327	Town Center - Tier 2
674	83	85	90	66	85	90	Town Center - Tier 2
675	358	364	393	132	139	136	Town Center - Tier 2
676	28	29	33	312	326	346	Main St / Corr
677	58	57	58	679	705	711	Town Center - Tier 2
678	591	615	675	20	27	30	Town Center - Tier 2
679	866	964	1,258	561	1,111	1,261	Town Center - Tier 2
680	95	106	152	687	713	717	Main St / Corr
681	140	147	156	769	792	790	Neighborhoods
682	179	199	222	328	332	331	Main St / Corr
683	1,723	1,675	1,672	458	465	498	Main St / Corr
684	88	87	89	277	286	284	Main St / Corr
685	144	152	163	202	212	211	Main St / Corr
686	75	77	81	241	262	261	Neighborhoods
687	54	57	61	535	567	565	Neighborhoods
688	344	354	379	804	893	967	Town Center - Tier 2
689	145	149	159	383	409	411	Main St / Corr
690	163	171	176	285	327	360	Main St / Corr
691	67	70	75	491	668	692	Main St / Corr
692	195	204	218	508	550	555	Main St / Corr
693	26	26	28	367	402	406	Neighborhoods
694	2,925	3,119	3,537	0	0	0	Employment Area
695	2,311	2,165	2,150	39	51	55	Main St / Corr
696	445	453	463	184	189	190	Main St / Corr

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697	170	178	192	535	595	602	Neighborhoods
698	122	131	150	387	473	520	Neighborhoods
699	2,013	2,181	2,893	64	71	79	Employment Area
700	144	149	159	258	265	279	Employment Area
701	977	920	992	0	0	0	Employment Area
702	1,123	1,191	1,304	921	928	1,007	Main St / Corr
703	317	314	340	1,480	1,502	1,681	Neighborhoods
704	169	254	345	791	1,147	1,564	Neighborhoods
705	548	802	1,084	1,042	1,498	1,997	Station Com - Tier 3
706	577	831	1,120	1,408	2,016	2,649	Neighborhoods
707	299	294	300	995	1,013	1,092	Neighborhoods
708	314	324	343	1,355	1,393	1,397	Neighborhoods
709	38	39	42	429	457	489	Neighborhoods
710	153	155	160	381	398	398	Main St / Corr
711	110	106	115	874	882	915	Main St / Corr
712	91	153	568	299	303	316	Employment Area
713	200	198	216	58	62	57	Neighborhoods
714	923	1,065	1,441	517	528	528	Employment Area
715	523	556	606	814	829	828	Town Center - Tier 1
716	312	317	340	645	651	691	Main St / Corr
717	377	389	485	595	606	654	Main St / Corr
718	798	861	1,161	1,243	1,317	1,369	Main St / Corr
719	510	523	580	109	145	330	Regional Center - Tier 2
720	*	*	*	5	9	30	Regional Center - Tier 2
721	592	719	935	688	907	1,605	Neighborhoods
722	48	51	54	176	200	247	Undesignated
723	94	92	94	261	260	261	Undesignated
724	40	41	216	220	219	329	Rural Reserve
725	126	136	148	318	661	1,038	Neighborhoods
726	27	30	33	214	465	733	Neighborhoods
727	574	612	712	22	100	436	Regional Center - Tier 2
728	140	140	152	0	6	17	Regional Center - Tier 2
729	198	211	231	32	55	93	Regional Center - Tier 2
730	771	882	1,080	0	189	511	Regional Center - Tier 2
731	356	372	407	185	191	200	Regional Center - Tier 2
732	2,133	2,418	2,758	1,278	1,341	1,438	Neighborhoods
733	121	128	248	89	218	1,184	Neighborhoods
734	*	*	*	48	48	894	Urban Reserve
735	618	682	813	900	986	1,107	Neighborhoods

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736	558	619	704	801	921	1,086	Main St / Corr
737	284	316	355	1,317	1,390	1,467	Neighborhoods
738	294	314	340	513	567	620	Main St / Corr
739	10	8	6	39	53	60	Rural Reserve
740	162	222	339	632	1,031	1,281	Neighborhoods
741	150	157	166	1,349	1,400	1,458	Neighborhoods
742	234	262	286	1,494	1,812	2,260	Neighborhoods
743	5,008	4,709	4,766	895	977	1,082	Employment Area
744	1,816	1,956	2,300	189	531	1,109	Employment Area
745	73	76	84	330	443	569	Neighborhoods
746	35	641	1,405	35	365	643	Industrial Area
747	1,350	1,458	1,695	344	363	377	Employment Area
748	477	577	837	1,169	1,306	1,361	Employment Area
749	396	424	464	852	1,092	1,274	Neighborhoods
750	418	452	503	880	986	1,049	Neighborhoods
751	0	7	20	13	37	76	Rural Reserve
752	5	16	36	46	53	120	Rural Reserve
753	59	120	231	30	93	356	Rural Reserve
754	75	76	79	190	522	694	Rural Reserve
755	38	39	40	91	91	86	Rural Reserve
756	64	68	71	311	313	294	Undesignated
757	220	343	506	278	800	1,210	Undesignated
758	73	123	185	338	483	636	Rural Reserve
759	*	*	*	63	67	175	Rural Reserve
760	11	12	222	140	143	1,194	Urban Reserve
761	66	72	288	556	617	1,904	Urban Reserve
762	43	44	179	140	150	263	Rural Reserve
763	366	371	397	289	356	391	Station Com - Tier 3
764	63	61	61	929	936	977	Neighborhoods
765	159	166	195	600	665	672	Neighborhoods
766	250	260	290	611	686	700	Neighborhoods
767	88	91	99	335	391	395	Neighborhoods
768	25	27	29	194	300	301	Neighborhoods
769	*	*	*	26	300	345	Main St / Corr
770	72	101	163	17	17	140	Main St / Corr
771	70	97	240	43	100	140	Industrial Area
772	85	169	270	102	850	886	Employment Area
773	16	17	19	42	637	650	Neighborhoods
774	266	318	351	512	550	556	Neighborhoods

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775	130	135	149	675	680	680	Neighborhoods
776	127	147	167	542	634	722	Neighborhoods
777	31	43	75	507	577	643	Neighborhoods
778	1,000	1,253	1,557	250	730	1,055	Regional Center - Tier 2
779	387	414	450	892	1,077	1,101	Main St / Corr
780	330	352	432	650	800	840	Main St / Corr
781	120	110	120	349	365	366	Neighborhoods
782	55	59	64	202	244	248	Neighborhoods
783	50	54	60	190	319	339	Neighborhoods
784	*	*	*	117	700	700	Employment Area
785	550	575	615	247	448	448	Employment Area
786	650	700	775	765	1,237	1,267	Town Center - Tier 4
787	43	45	48	303	428	441	Neighborhoods
788	210	230	270	535	580	590	Main St / Corr
789	213	220	240	486	540	553	Main St / Corr
790	300	270	321	699	750	750	Main St / Corr
791	50	51	80	133	202	227	Industrial Area
792	51	47	54	410	464	525	Neighborhoods
793	250	260	270	649	682	755	Main St / Corr
794	*	*	*	6	22	36	Industrial Area
795	76	130	250	500	675	690	Main St / Corr
796	56	70	130	78	310	320	Main St / Corr
797	4	40	100	11	240	295	Industrial Area
798	139	265	500	12	300	480	Industrial Area
799	121	157	258	1,200	1,200	1,635	Neighborhoods
800	85	140	150	169	169	1,445	Main St / Corr
801	23	62	90	148	148	550	Industrial Area
802	53	100	210	93	150	275	Industrial Area
803	32	70	90	133	300	465	Main St / Corr
804	48	250	400	232	803	1,860	Employment Area
805	58	80	750	47	250	2,020	Industrial Area
806	4	4	4	74	74	375	Industrial Area
807	*	*	*	83	83	795	Industrial Area
808	25	45	86	132	132	215	Main St / Corr
809	29	31	130	132	187	487	Employment Area
810	72	50	152	22	58	180	Town Center - Tier 4
811	*	*	*	54	54	180	Town Center - Tier 4
812	*	*	*	49	47	200	Employment Area
813	41	70	100	113	116	650	Rural Reserve

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814	64	72	128	113	114	225	Urban Reserve
815	51	52	75	179	179	258	Neighborhoods
816	8	9	36	88	88	452	Employment Area
817	332	462	672	10	9	22	Town Center - Tier 4
818	*	*	*	116	116	120	Employment Area
819	*	*	*	45	45	605	Neighborhoods
820	47	61	78	151	151	1,124	Neighborhoods
821	14	13	25	50	50	368	Neighborhoods
822	8	8	9	41	41	308	Main St / Corr
823	38	35	99	84	84	496	Main St / Corr
824	16	16	294	172	172	212	Main St / Corr
825	111	113	183	159	160	2,376	Urban Reserve
826	22	24	44	52	52	763	Urban Reserve
827	59	63	74	89	89	84	Employment Area
828	127	116	133	65	65	61	Industrial Area
829	29	38	53	160	160	191	Industrial Area
830	31	30	41	49	49	46	Industrial Area
831	46	44	50	194	195	223	Employment Area
832	18	26	97	147	147	138	Urban Reserve
833	32	31	71	44	44	41	Industrial Area
834	956	1,012	1,246	813	1,686	2,010	Neighboring City
835	945	969	1,047	393	687	789	Neighboring City
836	185	182	195	262	280	272	Neighboring City
837	422	435	465	1,471	1,952	2,149	Neighboring City
838	870	881	916	1,798	2,791	3,199	Neighboring City
839	717	682	714	184	429	450	Neighboring City
840	504	484	481	336	420	416	Undesignated
841	247	282	302	626	980	1,132	Neighboring City
842	1,003	1,073	1,152	838	992	1,064	Neighboring City
843	1,694	1,649	1,742	1,256	1,581	1,698	Rural Reserve
844	1,127	1,129	1,295	1,958	2,484	2,716	Neighboring City
845	1,894	1,802	1,930	894	1,342	1,566	Rural Reserve
846	1,484	1,523	1,637	1,923	2,380	2,546	Neighboring City
847	1,252	1,261	1,380	1,033	1,319	1,401	Neighboring City
848	628	580	602	230	230	216	Rural Reserve
849	245	246	252	233	232	215	Neighboring City
850	1,728	1,733	1,739	1,930	2,406	2,503	Neighboring City
851	770	823	856	686	1,008	1,221	Neighboring City
852	820	829	861	596	819	888	Neighboring City

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853	320	313	312	419	928	1,115	Neighboring City
854	19	19	20	234	236	253	Main St / Corr
855	701	701	754	516	524	587	Industrial Area
856	900	921	1,076	149	179	228	Main St / Corr
857	1,139	1,254	1,523	230	243	258	Station Com - Tier 3
858	149	151	177	361	372	393	Main St / Corr
859	31	32	34	634	652	698	Neighborhoods
860	569	582	688	373	383	410	Main St / Corr
861	412	433	475	256	264	263	Main St / Corr
862	118	120	128	266	267	290	Neighborhoods
863	274	269	282	464	476	525	Neighborhoods
864	435	437	469	38	42	50	Regional Center - Tier 2
865	1,166	1,216	1,315	2,358	2,391	2,504	Regional Center - Tier 2
866	3,269	3,469	3,793	0	41	70	Regional Center - Tier 2
867	1,962	1,934	2,115	0	21	35	Regional Center - Tier 2
868	4,525	4,530	4,969	0	67	115	Regional Center - Tier 2
869	3,037	2,920	3,013	0	18	29	Employment Area
870	*	*	*	326	327	340	Neighborhoods
871	1,291	1,263	1,351	84	165	230	Employment Area
872	235	234	256	1,165	1,214	1,237	Neighborhoods
873	665	657	708	589	621	622	Main St / Corr
874	69	72	78	358	414	454	Neighborhoods
875	222	233	252	532	532	579	Neighborhoods
876	88	83	89	145	169	183	Industrial Area
877	1,082	1,037	1,092	93	100	96	Industrial Area
878	2,302	2,281	2,556	142	151	183	Employment Area
879	1,174	1,158	1,224	269	287	299	Industrial Area
880	879	848	912	463	473	494	Industrial Area
881	408	402	435	448	539	743	Industrial Area
882	1,650	1,574	1,640	0	0	0	Industrial Area
883	1,865	1,761	1,868	1	1	1	Industrial Area
884	1,121	1,057	1,123	0	1	2	Industrial Area
885	1,054	1,123	1,534	296	297	309	Neighborhoods
886	37	36	37	439	448	479	Main St / Corr
887	325	330	353	1,269	1,294	1,386	Neighborhoods
888	60	62	65	327	333	347	Neighborhoods
889	822	1,201	1,623	497	722	951	Main St / Corr
890	153	156	161	790	795	855	Neighborhoods
891	1,195	1,732	2,339	874	1,260	1,657	Main St / Corr

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892	27	27	29	254	264	282	Neighborhoods
893	181	180	187	512	531	568	Neighborhoods
894	1,296	1,819	2,443	647	902	1,181	Main St / Corr
895	398	399	448	454	455	491	Main St / Corr
896	169	176	187	569	581	625	Neighborhoods
897	1,541	1,522	1,684	4	4	4	Industrial Area
898	2,048	1,978	2,095	5	29	67	Industrial Area
899	189	163	158	199	199	204	Rural Reserve
900	*	*	*	17	28	28	Rural Reserve
901	10	11	12	189	194	189	Undesignated
902	50	53	76	174	183	202	Undesignated
903	94	93	97	130	142	158	Rural Reserve
904	53	54	56	177	189	210	Rural Reserve
905	*	*	*	52	52	49	Rural Reserve
906	17	18	19	126	151	164	Rural Reserve
907	148	167	180	327	359	371	Undesignated
908	266	276	288	548	602	618	Undesignated
909	117	119	123	117	119	115	Undesignated
910	63	65	67	63	64	60	Rural Reserve
911	194	212	229	383	387	373	Rural Reserve
912	305	333	360	339	344	335	Undesignated
913	564	543	554	199	201	190	Undesignated
914	331	315	316	362	362	342	Undesignated
915	292	283	283	411	410	387	Undesignated
916	395	399	394	257	257	242	Undesignated
917	745	753	776	753	755	709	Undesignated
918	178	177	181	716	722	656	Undesignated
919	53	54	57	251	254	235	Undesignated
920	597	646	683	1,716	1,742	1,691	Undesignated
921	273	290	307	860	912	888	Undesignated
922	186	201	201	541	543	528	Undesignated
923	112	120	125	573	579	545	Undesignated
924	232	234	242	729	751	726	Undesignated
925	120	133	141	326	344	336	Undesignated
926	191	202	209	399	428	418	Rural Reserve
927	152	181	199	284	297	290	Undesignated
928	219	226	231	401	407	397	Rural Reserve
929	92	94	98	401	429	419	Undesignated
930	272	276	288	220	245	239	Rural Reserve

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931	*	*	*	47	52	59	Rural Reserve
932	26	31	46	130	130	125	Rural Reserve
933	156	151	155	441	438	426	Undesignated
934	155	178	245	618	638	621	Undesignated
935	159	204	326	592	604	590	Undesignated
936	35	34	36	139	139	130	Undesignated
937	95	112	152	353	357	345	Undesignated
938	223	222	228	468	475	462	Undesignated
939	54	51	51	200	203	198	Undesignated
940	701	723	883	392	439	433	Rural Reserve
941	31	33	36	52	56	62	Rural Reserve
942	131	140	154	209	225	252	Urban Reserve
943	113	121	133	9	9	11	Rural Reserve
944	49	52	57	71	77	86	Urban Reserve
945	*	*	*	50	54	60	Urban Reserve
946	*	*	*	16	17	19	Urban Reserve
947	262	280	308	19	20	22	Urban Reserve
948	66	71	78	68	74	82	Urban Reserve
949	145	155	170	24	26	29	Rural Reserve
950	153	163	179	36	39	44	Urban Reserve
951	325	347	381	150	162	181	Urban Reserve
952	*	*	*	102	109	122	Urban Reserve
953	*	*	*	45	48	54	Urban Reserve
954	24	12	15	100	102	105	Rural Reserve
955	41	40	47	55	57	59	Rural Reserve
956	70	64	75	108	113	119	Rural Reserve
957	511	500	523	385	396	387	Rural Reserve
958	206	201	203	514	519	506	Undesignated
959	141	140	144	103	127	130	Undesignated
960	266	279	295	1,239	1,344	1,302	Undesignated
961	1,649	1,664	1,912	1,653	2,772	2,859	Undesignated
962	257	228	228	109	110	103	Rural Reserve
963	70	55	48	96	96	90	Rural Reserve
964	*	*	*	28	30	27	Rural Reserve
965	418	444	494	1,493	1,510	1,494	Neighborhoods
966	3,189	3,443	3,982	2,277	2,356	2,379	Town Center - Tier 2
967	2,808	3,003	3,525	1,640	2,024	2,188	Employment Area
968	67	72	81	790	797	799	Neighborhoods
969	61	83	133	1,127	1,236	1,263	Main St / Corr

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970	2,920	3,081	3,335	49	58	69	Industrial Area
971	252	319	445	1,869	2,247	2,776	Neighborhoods
972	132	177	566	54	78	797	Rural Reserve
973	1,260	1,291	1,495	11	11	11	Industrial Area
974	1,642	1,618	1,657	0	0	0	Industrial Area
975	4,162	4,140	4,734	600	648	680	Employment Area
976	17	15	258	21	986	1,350	Neighborhoods
977	4	516	1,285	24	24	1,178	Urban Reserve
978	2,488	2,513	2,769	333	337	710	Employment Area
979	2,340	2,412	2,647	16	16	16	Industrial Area
980	557	2,227	2,227	46	291	291	Industrial Area
981	556	2,226	2,226	106	290	290	Industrial Area
982	171	169	329	16	21	29	Industrial Area
983	72	68	78	63	68	79	Rural Reserve
984	103	104	112	307	340	344	Undesignated
985	77	104	181	230	397	561	Rural Reserve
986	86	76	74	188	228	320	Rural Reserve
987	130	147	500	152	699	3,738	Urban Reserve
988	46	38	37	78	176	372	Undesignated
989	92	97	106	1,135	1,213	1,213	Neighborhoods
990	246	269	295	1,166	1,191	1,223	Neighborhoods
991	363	410	492	1,370	1,388	1,426	Neighborhoods
992	233	301	389	760	911	1,028	Neighborhoods
993	205	259	315	429	464	504	Neighborhoods
994	2,495	2,546	2,846	1,134	1,158	1,188	Town Center - Tier 3
995	124	150	189	443	464	480	Main St / Corr
996	551	619	691	597	602	634	Main St / Corr
997	2,337	2,402	2,689	9	9	151	Industrial Area
998	45	502	1,187	12	12	12	Industrial Area
999	67	280	599	3	3	3	Industrial Area
1000	262	264	332	20	21	267	Rural Reserve
1001	*	*	*	18	928	1,838	Urban Reserve
1002	*	*	*	8	8	8	Rural Reserve
1003	29	610	1,481	628	943	1,416	Neighborhoods
1004	33	485	1,163	102	480	1,046	Urban Reserve
1005	83	80	83	734	878	932	Neighborhoods
1006	67	65	67	987	1,088	1,105	Neighborhoods
1007	4,543	4,576	5,385	81	910	1,818	Regional Center - Tier 2
1008	4,111	4,191	4,619	67	200	400	Regional Center - Tier 2

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1009	373	389	423	2,158	2,288	2,453	Neighborhoods
1010	70	70	76	348	386	391	Neighborhoods
1011	162	163	171	796	1,027	1,158	Neighborhoods
1012	65	67	71	826	924	989	Neighborhoods
1013	59	64	70	273	337	380	Neighborhoods
1014	137	144	155	654	821	896	Neighborhoods
1015	90	89	95	754	837	848	Neighborhoods
1016	100	108	116	591	591	591	Neighborhoods
1017	649	664	723	759	763	767	Main St / Corr
1018	179	181	194	1,079	1,105	1,105	Neighborhoods
1019	1,605	1,623	1,978	0	373	850	Employment Area
1020	300	298	319	195	216	216	Neighborhoods
1021	19	19	21	289	296	296	Neighborhoods
1022	31	32	34	348	395	400	Neighborhoods
1023	71	72	76	310	316	323	Neighborhoods
1024	407	425	481	405	414	419	Main St / Corr
1025	0	0	0	387	406	446	Main St / Corr
1026	340	347	380	948	958	981	Town Center - Tier 2
1027	792	800	870	2,712	2,734	2,748	Neighborhoods
1028	392	398	436	982	1,046	1,053	Main St / Corr
1029	487	497	543	559	573	577	Main St / Corr
1030	265	281	307	268	279	285	Main St / Corr
1031	333	330	344	175	178	178	Main St / Corr
1032	717	780	984	1,037	1,166	1,239	Neighborhoods
1033	64	103	352	481	859	1,261	Regional Center - Tier 2
1034	148	173	218	481	519	528	Main St / Corr
1035	70	71	77	692	718	723	Neighborhoods
1036	1,683	1,770	2,104	721	954	1,184	Station Com - Tier 3
1037	1,224	1,275	1,630	83	87	88	Town Center - Tier 2
1038	2,372	2,453	3,072	236	818	1,418	Town Center - Tier 2
1039	2,593	2,574	2,824	73	108	108	Town Center - Tier 2
1040	279	290	326	310	327	335	Neighborhoods
1041	517	543	600	233	433	733	Station Com - Tier 1
1042	712	687	717	437	631	764	Station Com - Tier 1
1043	550	565	614	120	253	454	Town Center - Tier 2
1044	3,678	3,750	4,155	0	100	250	Station Com - Tier 2
1045	4,824	4,847	5,472	222	389	565	Employment Area
1046	533	533	640	1,208	1,308	1,308	Neighborhoods
1047	287	318	345	702	763	772	Neighborhoods

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1048	1,653	1,713	1,947	1,068	1,182	1,182	Neighborhoods
1049	8,342	8,483	9,249	0	0	0	Employment Area
1050	542	573	671	1,044	1,072	1,072	Main St / Corr
1051	141	161	172	1,480	1,830	2,180	Neighborhoods
1052	43	45	49	840	843	871	Neighborhoods
1053	264	301	393	247	248	248	Industrial Area
1054	6,408	6,348	6,353	2	2	2	Industrial Area
1055	418	426	458	98	176	218	Industrial Area
1056	298	321	353	960	987	995	Main St / Corr
1057	60	62	67	283	303	303	Neighborhoods
1058	1,121	1,108	1,124	415	421	421	Industrial Area
1059	5,348	5,513	5,790	0	0	0	Industrial Area
1060	3,316	3,328	3,436	9	22	25	Industrial Area
1061	153	155	164	852	881	887	Neighborhoods
1062	497	544	597	1,158	1,230	1,230	Neighborhoods
1063	84	84	90	823	823	823	Neighborhoods
1064	263	275	300	1,178	1,212	1,226	Neighborhoods
1065	5,233	5,319	5,831	604	612	620	Town Center - Tier 3
1066	1,777	1,823	1,972	1,384	1,400	1,405	Town Center - Tier 3
1067	2,888	2,869	3,176	573	573	573	Station Com - Tier 3
1068	2,420	2,446	2,654	171	171	171	Employment Area
1069	1,598	1,687	1,921	1,474	1,496	1,500	Employment Area
1070	1,966	2,005	2,112	1,223	1,417	1,480	Neighborhoods
1071	1,683	1,718	1,842	336	353	353	Neighborhoods
1072	135	133	141	705	704	678	Neighborhoods
1073	2,103	2,032	2,163	705	704	678	Employment Area
1074	304	288	304	729	732	707	Neighborhoods
1075	5,792	5,712	6,167	538	543	544	Employment Area
1076	2,307	2,262	2,423	1,045	1,103	1,094	Main St / Corr
1077	290	290	309	1,396	1,432	1,415	Neighborhoods
1078	236	230	245	1,429	1,430	1,431	Neighborhoods
1079	180	183	200	570	1,502	1,502	Main St / Corr
1080	2,961	2,980	3,332	1,168	1,233	1,372	Town Center - Tier 2
1081	677	703	832	369	411	451	Main St / Corr
1082	257	262	280	1,014	1,029	1,027	Neighborhoods
1083	91	88	93	616	632	632	Neighborhoods
1084	655	659	704	1,560	1,578	1,583	Neighborhoods
1085	195	197	332	497	510	899	Urban Reserve
1086	230	225	242	546	581	561	Neighborhoods

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1087	1,208	1,215	1,355	1,177	1,234	1,675	Main St / Corr
1088	653	644	692	585	603	605	Town Center - Tier 1
1089	330	321	537	517	537	541	Town Center - Tier 1
1090	1,329	1,352	1,723	427	493	493	Town Center - Tier 1
1091	366	387	490	365	495	495	Main St / Corr
1092	196	200	220	271	283	290	Town Center - Tier 1
1093	2	2	2	67	67	65	Main St / Corr
1094	29	28	29	83	85	82	Main St / Corr
1095	135	143	157	258	263	262	Main St / Corr
1096	187	188	199	645	702	695	Main St / Corr
1097	293	292	311	423	432	427	Neighborhoods
1098	829	842	926	1,047	1,074	1,074	Main St / Corr
1099	95	101	113	474	490	618	Neighborhoods
1100	350	371	413	456	501	549	Main St / Corr
1101	195	202	227	522	563	541	Neighborhoods
1102	57	61	66	795	813	1,042	Main St / Corr
1103	352	367	406	1,017	1,030	1,303	Neighborhoods
1104	170	183	211	700	742	989	Neighborhoods
1105	61	55	46	432	436	462	Neighborhoods
1106	1,057	1,112	1,256	611	644	666	Town Center - Tier 2
1107	233	271	429	1,500	1,676	1,687	Neighborhoods
1108	1,203	1,368	1,503	2,618	2,863	3,147	Neighborhoods
1109	1,207	1,275	1,465	1,430	1,458	1,482	Town Center - Tier 3
1110	199	207	521	134	135	3,649	Urban Reserve
1111	2	2	197	70	70	2,709	Urban Reserve
1112	30	29	316	35	35	1,749	Urban Reserve
1113	30	29	575	111	111	587	Urban Reserve
1114	7	8	138	77	77	897	Urban Reserve
1115	2	2	54	52	52	463	Urban Reserve
1116	15	15	77	62	62	540	Urban Reserve
1117	74	67	131	135	136	919	Urban Reserve
1118	137	132	186	18	18	452	Urban Reserve
1119	295	272	344	66	66	1,085	Urban Reserve
1120	34	19	269	227	227	4,055	Urban Reserve
1121	65	64	499	104	106	2,510	Urban Reserve
1122	33	31	2,023	49	49	4,185	Urban Reserve
1123	51	41	177	216	223	3,841	Undesignated
1124	532	554	649	143	150	177	Rural Reserve
1125	121	109	151	116	129	609	Undesignated

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1126	5	6	6	72	76	89	Undesignated
1127	121	107	109	286	286	290	Rural Reserve
1128	192	194	207	184	1,097	1,506	Rural Reserve
1129	1,134	1,150	1,266	1,591	1,617	1,617	Town Center - Tier 3
1130	68	100	125	974	1,045	1,079	Town Center - Tier 3
1131	125	132	138	373	400	420	Neighborhoods
1132	158	157	179	611	636	640	Neighborhoods
1133	1,442	1,465	1,575	438	456	471	Main St / Corr
1134	54	54	57	880	890	908	Main St / Corr
1135	185	188	204	731	737	737	Main St / Corr
1136	657	692	729	1,644	1,657	1,657	Main St / Corr
1137	6,991	6,943	7,434	0	0	0	Regional Center - Tier 2
1138	862	932	1,127	995	1,050	1,075	Main St / Corr
1139	437	466	644	425	463	479	Regional Center - Tier 2
1140	672	718	857	1,401	1,734	2,234	Main St / Corr
1141	609	620	688	1,405	1,526	1,630	Main St / Corr
1142	701	719	777	1,466	1,500	1,600	Main St / Corr
1143	492	495	531	988	1,036	1,036	Main St / Corr
1144	3,863	3,894	4,284	38	70	100	Industrial Area
1145	945	953	1,058	1,011	1,023	1,023	Industrial Area
1146	1,945	1,908	2,088	477	477	477	Regional Center - Tier 2
1147	280	280	289	1,172	1,188	1,188	Neighborhoods
1148	232	234	249	692	701	701	Neighborhoods
1149	126	124	130	489	489	489	Main St / Corr
1150	52	52	55	435	493	504	Neighborhoods
1151	128	135	140	236	250	253	Neighborhoods
1152	232	239	250	250	2,500	3,250	Urban Reserve
1153	*	*	*	100	2,000	2,500	Urban Reserve
1154	70	64	68	221	681	1,027	Neighborhoods
1155	45	44	47	340	561	644	Neighborhoods
1156	42	42	48	712	896	918	Neighborhoods
1157	122	124	124	763	814	821	Neighborhoods
1158	131	126	141	987	1,036	1,053	Neighborhoods
1159	246	241	252	1,119	1,144	1,161	Main St / Corr
1160	79	79	84	676	680	680	Neighborhoods
1161	350	353	372	953	958	958	Main St / Corr
1162	117	114	125	794	795	795	Main St / Corr
1163	183	179	193	620	632	633	Neighborhoods
1164	156	162	174	937	966	970	Neighborhoods

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1165	247	261	275	942	975	975	Neighborhoods
1166	99	101	102	594	625	625	Neighborhoods
1167	686	702	790	1,566	1,622	1,651	Main St / Corr
1168	341	343	357	1,565	1,615	1,637	Main St / Corr
1169	136	138	148	847	894	894	Main St / Corr
1170	466	478	514	750	760	760	Main St / Corr
1171	997	1,025	1,168	498	553	592	Town Center - Tier 3
1172	577	626	811	790	897	942	Main St / Corr
1173	1,373	1,405	1,543	615	691	744	Main St / Corr
1174	2,998	3,029	3,259	389	488	559	Main St / Corr
1175	1,487	1,563	1,674	0	15	26	Regional Center - Tier 1
1176	385	397	423	941	956	956	Main St / Corr
1177	222	223	240	1,070	1,095	1,125	Main St / Corr
1178	19	17	15	472	487	495	Main St / Corr
1179	206	207	225	972	1,060	1,082	Main St / Corr
1180	80	75	81	824	940	936	Main St / Corr
1181	21	23	26	684	736	747	Main St / Corr
1182	45	53	60	785	822	840	Main St / Corr
1183	829	855	912	437	437	437	Main St / Corr
1184	306	363	710	175	175	175	Main St / Corr
1185	571	604	695	350	375	400	Regional Center - Tier 1
1186	950	1,006	1,165	500	600	700	Regional Center - Tier 1
1187	2,407	2,402	2,583	0	161	312	Regional Center - Tier 1
1188	515	544	625	28	57	84	Regional Center - Tier 1
1189	1,783	1,886	2,166	68	186	295	Regional Center - Tier 1
1190	293	303	366	45	95	142	Main St / Corr
1191	2,818	2,633	2,741	459	502	520	Station Com - Tier 3
1192	3,121	3,144	3,373	783	877	927	Employment Area
1193	278	332	376	258	264	269	Main St / Corr
1194	243	297	359	921	1,079	1,130	Town Center - Tier 2
1195	169	186	200	770	770	770	Neighborhoods
1196	2,466	2,502	2,716	125	125	125	Station Com - Tier 3
1197	436	593	877	0	0	0	Station Com - Tier 3
1198	3,437	3,349	3,539	0	0	0	Station Com - Tier 3
1199	2,085	2,185	2,758	249	299	400	Main St / Corr
1200	272	310	476	773	974	1,157	Station Com - Tier 1
1201	113	124	145	528	532	536	Main St / Corr
1202	1,398	1,410	1,519	919	970	989	Main St / Corr
1203	417	431	460	1,077	1,135	1,144	Main St / Corr

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1204	440	442	479	949	995	1,004	Main St / Corr
1205	435	458	534	842	898	912	Main St / Corr
1206	256	270	291	664	778	793	Main St / Corr
1207	55	54	58	194	195	195	Main St / Corr
1208	903	945	1,201	57	169	315	Main St / Corr
1209	450	458	476	955	973	1,006	Main St / Corr
1210	13,194	13,321	14,092	0	0	0	Main St / Corr
1211	750	793	919	932	1,000	1,200	Station Com - Tier 3
1212	277	282	297	1,625	1,669	1,670	Neighborhoods
1213	1,884	1,944	2,090	892	925	960	Main St / Corr
1214	292	327	379	973	1,010	1,010	Main St / Corr
1215	155	158	178	850	905	909	Main St / Corr
1216	434	601	704	1,573	1,597	1,617	Main St / Corr
1217	1,176	1,199	1,380	203	600	1,000	Station Com - Tier 2
1218	913	1,003	1,504	0	616	956	Town Center - Tier 3
1219	5,624	5,458	5,948	95	131	148	Main St / Corr
1220	476	477	507	1,041	1,096	1,106	Main St / Corr
1221	721	729	751	1,210	1,530	1,597	Main St / Corr
1222	102	116	163	589	618	626	Neighborhoods
1223	387	484	651	826	1,121	1,284	Town Center - Tier 3
1224	485	517	718	21	163	247	Main St / Corr
1225	131	122	130	685	718	723	Neighborhoods
1226	425	417	437	1,015	1,149	1,168	Neighborhoods
1227	165	118	110	294	345	352	Neighborhoods
1228	885	934	1,048	2,361	2,488	2,563	Town Center - Tier 3
1229	74	75	81	514	640	660	Neighborhoods
1230	308	319	349	424	469	476	Neighborhoods
1231	1,494	1,526	1,653	755	852	878	Main St / Corr
1232	399	432	471	194	235	259	Town Center - Tier 3
1233	2,815	2,985	3,479	416	552	569	Main St / Corr
1234	4,007	4,019	4,262	557	560	563	Employment Area
1235	161	163	174	334	343	343	Main St / Corr
1236	30	30	33	627	627	627	Neighborhoods
1237	40	40	43	564	572	572	Main St / Corr
1238	52	54	56	494	499	499	Main St / Corr
1239	21	21	22	608	608	608	Main St / Corr
1240	3,405	3,484	3,729	579	610	640	Main St / Corr
1241	140	141	151	1,406	1,435	1,435	Main St / Corr
1242	168	175	186	672	672	672	Neighborhoods

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1243	268	277	297	560	601	609	Main St / Corr
1244	24	24	27	316	342	343	Neighborhoods
1245	64	63	66	367	438	446	Neighborhoods
1246	78	79	85	1,055	1,068	1,069	Main St / Corr
1247	164	168	178	1,161	1,176	1,176	Neighborhoods
1248	435	456	484	483	496	482	Main St / Corr
1249	125	131	140	894	894	894	Main St / Corr
1250	89	90	96	534	534	534	Neighborhoods
1251	108	113	120	316	316	316	Neighborhoods
1252	3,269	3,669	3,669	1	1	1	Industrial Area
1253	368	576	888	74	74	74	Industrial Area
1254	*	*	*	9	9	9	Undesignated
1255	255	293	310	156	370	419	Rural Reserve
1256	18	17	0	17	17	17	Urban Reserve
1257	3	13	30	8	8	8	Urban Reserve
1258	35	1,000	1,500	6	6	6	Urban Reserve
1259	*	*	*	19	89	95	Urban Reserve
1260	1,835	2,061	2,061	2	2	2	Industrial Area
1261	3,287	3,410	3,547	0	0	0	Industrial Area
1262	924	1,149	1,149	0	0	0	Employment Area
1263	2,332	2,409	2,798	0	0	0	Employment Area
1264	2,459	2,513	2,684	99	141	170	Regional Center - Tier 2
1265	1,261	1,292	1,397	1,139	1,169	1,169	Regional Center - Tier 2
1266	4,934	5,053	5,379	3,015	3,015	3,015	Employment Area
1267	2,434	2,540	2,700	0	0	0	Employment Area
1268	263	405	617	0	0	0	Industrial Area
1269	*	*	*	0	0	0	Industrial Area
1270	*	*	*	2	2	2	Industrial Area
1271	0	407	1,017	8	8	8	Industrial Area
1272	*	*	*	42	20	20	Urban Reserve
1273	*	*	*	30	60	60	Industrial Area
1274	33	3,520	8,800	6	6	6	Urban Reserve
1275	*	*	*	5	5	5	Urban Reserve
1276	*	*	*	30	34	34	Urban Reserve
1277	379	403	432	1,108	1,172	1,209	Neighborhoods
1278	127	140	152	1,498	1,498	1,498	Neighborhoods
1279	*	*	*	2	2	2	Industrial Area
1280	1,195	1,325	1,386	0	0	0	Industrial Area
1281	*	*	*	0	0	0	Industrial Area

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1282	3,846	3,908	4,000	427	431	446	Industrial Area
1283	727	750	750	376	376	376	Main St / Corr
1284	404	430	480	1,328	1,366	1,380	Town Center - Tier 2
1285	1,211	1,211	1,211	0	21	29	Town Center - Tier 2
1286	1,922	2,030	2,247	461	461	461	Employment Area
1287	29	29	31	722	841	841	Employment Area
1288	2,667	3,085	3,713	675	2,000	3,100	Regional Center - Tier 2
1289	2,515	2,889	3,449	316	751	1,122	Main St / Corr
1290	140	149	167	951	1,022	1,022	Station Com - Tier 3
1291	*	*	*	0	0	0	Neighborhoods
1292	*	*	*	0	801	1,504	Regional Center - Tier 2
1293	52	53	57	1,221	1,221	1,221	Station Com - Tier 3
1294	1,150	1,265	1,300	2,746	2,781	2,781	Station Com - Tier 2
1295	4,487	4,652	4,824	294	344	344	Station Com - Tier 3
1296	*	*	*	0	0	0	Industrial Area
1297	668	681	715	614	621	621	Main St / Corr
1298	742	790	798	1,473	1,490	1,494	Main St / Corr
1299	229	268	301	408	408	408	Neighborhoods
1300	117	126	135	872	895	900	Neighborhoods
1301	136	150	163	806	862	862	Neighborhoods
1302	22	27	31	293	362	401	Neighborhoods
1303	96	105	115	211	211	211	Neighborhoods
1304	137	198	355	444	525	553	Regional Center - Tier 1
1305	75	78	87	181	187	187	Main St / Corr
1306	69	73	78	473	491	491	Station Com - Tier 3
1307	214	325	325	946	1,076	1,076	Main St / Corr
1308	137	138	137	611	664	667	Main St / Corr
1309	19	59	358	659	745	819	Station Com - Tier 3
1310	248	297	639	1,495	1,622	1,718	Main St / Corr
1311	48	52	60	427	445	451	Main St / Corr
1312	186	256	450	784	815	1,024	Main St / Corr
1313	152	166	187	478	478	478	Main St / Corr
1314	110	118	130	959	1,012	1,012	Neighborhoods
1315	137	148	159	972	1,063	1,063	Main St / Corr
1316	305	300	322	1,064	1,064	1,064	Main St / Corr
1317	105	110	118	766	795	795	Main St / Corr
1318	143	149	164	1,298	1,336	1,371	Main St / Corr
1319	205	205	236	609	654	654	Main St / Corr
1320	2,066	2,092	2,330	858	918	961	Regional Center - Tier 1

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1321	749	850	1,044	398	539	539	Regional Center - Tier 1
1322	3,212	3,044	3,201	441	483	483	Regional Center - Tier 1
1323	143	164	156	132	138	150	Main St / Corr
1324	1,100	1,124	1,280	0	0	0	Main St / Corr
1325	2,299	2,357	2,643	247	329	329	Industrial Area
1326	985	1,575	1,702	377	679	679	Regional Center - Tier 1
1327	1,844	1,843	2,027	1,308	1,320	1,350	Main St / Corr
1328	118	120	129	736	780	787	Neighborhoods
1329	371	372	446	1,183	1,183	1,200	Main St / Corr
1330	867	886	1,101	805	816	820	Main St / Corr
1331	89	92	98	462	467	468	Neighborhoods
1332	664	711	943	669	692	707	Main St / Corr
1333	117	123	132	890	890	890	Neighborhoods
1334	78	90	99	738	744	744	Neighborhoods
1335	89	96	107	804	1,045	1,071	Town Center - Tier 2
1336	145	159	176	496	586	610	Town Center - Tier 2
1337	454	512	622	186	186	186	Town Center - Tier 2
1338	183	190	202	598	619	637	Town Center - Tier 2
1339	391	419	469	440	461	461	Main St / Corr
1340	725	809	926	321	376	394	Main St / Corr
1341	0	1,160	1,160	565	1,158	1,158	Urban Reserve
1342	1,191	1,350	1,538	442	713	713	Industrial Area
1343	413	473	568	326	331	333	Main St / Corr
1344	819	830	899	1,338	1,338	1,338	Neighborhoods
1345	579	579	579	1,044	1,347	1,365	Neighborhoods
1346	212	211	221	231	269	284	Neighborhoods
1347	326	356	396	8	8	8	Industrial Area
1348	11	11	12	0	0	0	Rural Reserve
1349	*	*	*	22	22	22	Undesignated
1350	137	166	192	674	817	955	Neighborhoods
1351	*	*	*	91	363	363	Urban Reserve
1352	0	79	79	11	1,100	1,651	Urban Reserve
1353	0	345	345	0	845	845	Urban Reserve
1354	2,434	60	120	396	433	433	Employment Area
1355	431	460	503	331	362	362	Main St / Corr
1356	124	135	151	183	218	253	Town Center - Tier 2
1357	215	225	237	372	415	440	Town Center - Tier 2
1358	167	175	171	504	601	622	Main St / Corr
1359	206	203	209	733	872	891	Main St / Corr

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1360	465	502	555	792	869	887	Main St / Corr
1361	272	279	290	236	248	248	Neighborhoods
1362	147	167	185	686	708	708	Neighborhoods
1363	*	*	*	11	668	1,002	Urban Reserve
1364	*	*	*	54	540	1,268	Urban Reserve
1365	*	*	*	18	325	785	Urban Reserve
1366	*	*	*	7	1,662	1,662	Urban Reserve
1367	102	129	185	47	231	1,429	Neighborhoods
1368	219	251	290	2,265	2,371	2,376	Neighborhoods
1369	312	337	367	1,120	1,271	1,280	Neighborhoods
1370	171	168	177	1,140	1,322	1,346	Neighborhoods
1371	142	141	139	738	826	839	Neighborhoods
1372	156	169	192	1,085	1,260	1,290	Neighborhoods
1373	40	51	71	12	80	184	Neighborhoods
1374	*	*	*	49	53	53	Rural Reserve
1375	14	17	18	25	25	25	Rural Reserve
1376	253	268	277	101	101	101	Rural Reserve
1377	10	10	10	108	108	108	Rural Reserve
1378	188	188	189	66	66	66	Rural Reserve
1379	*	*	*	10	10	10	Rural Reserve
1380	*	*	*	71	71	71	Rural Reserve
1381	98	202	543	170	296	415	Rural Reserve
1382	708	759	955	694	708	715	Main St / Corr
1383	744	769	839	533	570	616	Town Center - Tier 2
1384	756	750	829	366	383	389	Industrial Area
1385	370	380	411	1,334	1,373	1,401	Neighborhoods
1386	197	224	318	527	1,071	1,907	Urban Reserve
1387	11	9	9	16	18	20	Undesignated
1388	*	*	*	14	14	14	Rural Reserve
1389	77	75	81	46	46	46	Urban Reserve
1390	0	0	0	22	22	22	Rural Reserve
1391	157	129	125	48	48	48	Rural Reserve
1392	18	17	17	21	342	941	Urban Reserve
1393	*	*	*	26	193	510	Neighborhoods
1394	0	0	33	9	9	60	Urban Reserve
1395	*	*	*	14	14	19	Urban Reserve
1396	173	178	210	621	723	918	Neighborhoods
1397	250	260	281	770	832	946	Rural Reserve
1398	39	35	37	536	549	554	Neighborhoods

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1399	250	267	288	810	920	949	Neighborhoods
1400	472	483	512	953	1,159	1,259	Neighborhoods
1401	1,693	1,572	1,539	1,060	1,499	1,804	Town Center - Tier 1
1402	766	721	811	817	1,010	1,189	Industrial Area
1403	989	907	832	408	474	505	Industrial Area
1404	467	506	555	738	763	784	Employment Area
1405	*	*	*	0	2	2	Employment Area
1406	571	613	664	867	961	1,017	Main St / Corr
1407	1,142	1,174	1,246	923	1,364	1,588	Neighborhoods
1408	213	310	333	2	11	22	Rural Reserve
1409	*	*	*	4	4	4	Undesignated
1410	*	*	*	85	90	90	Rural Reserve
1411	73	78	83	55	55	55	Rural Reserve
1412	172	137	130	95	98	99	Rural Reserve
1413	14	12	12	61	63	63	Rural Reserve
1414	19	20	20	37	37	37	Rural Reserve
1415	163	191	207	252	257	257	Neighboring City
1416	131	133	133	188	203	203	Rural Reserve
1417	170	176	184	398	398	398	Rural Reserve
1418	281	296	314	143	143	143	Rural Reserve
1419	195	195	195	87	102	104	Rural Reserve
1420	81	84	85	90	96	96	Rural Reserve
1421	156	176	188	95	106	108	Rural Reserve
1422	86	87	89	133	143	143	Rural Reserve
1423	32	33	35	185	207	207	Rural Reserve
1424	82	85	88	185	220	220	Rural Reserve
1425	74	75	76	165	175	175	Rural Reserve
1426	131	139	145	389	446	490	Rural Reserve
1427	197	198	198	174	191	204	Rural Reserve
1428	*	*	*	19	1,083	2,457	Rural Reserve
1429	18	74	186	90	1,947	4,343	Urban Reserve
1430	50	49	49	80	91	100	Rural Reserve
1431	145	146	146	274	338	387	Rural Reserve
1432	180	226	297	188	1,161	2,410	Rural Reserve
1433	588	647	709	791	824	824	Undesignated
1434	402	491	605	726	899	905	Undesignated
1435	20	19	20	122	123	124	Rural Reserve
1436	45	40	36	131	133	138	Rural Reserve
1437	37	33	34	38	38	38	Rural Reserve

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1438	74	61	48	68	68	68	Rural Reserve
1439	20	15	15	28	28	28	Rural Reserve
1440	579	636	670	530	569	572	Neighboring City
1441	66	68	70	78	93	93	Rural Reserve
1442	104	103	104	58	58	58	Rural Reserve
1443	102	105	111	75	75	75	Rural Reserve
1444	60	70	74	24	24	24	Rural Reserve
1445	13	15	16	37	37	37	Rural Reserve
1446	5	5	5	43	43	43	Rural Reserve
1447	53	57	60	46	46	46	Rural Reserve
1448	*	*	*	18	18	18	Rural Reserve
1449	61	128	236	72	72	72	Rural Reserve
1450	794	860	897	831	1,393	1,662	Neighboring City
1451	*	*	*	11	11	11	Undesignated
1452	254	297	342	687	705	705	Undesignated
1453	190	356	629	427	427	427	Undesignated
1454	168	182	190	285	299	301	Rural Reserve
1455	77	83	87	74	78	78	Rural Reserve
1456	301	358	443	139	302	547	Rural Reserve
1457	*	*	*	32	36	41	Rural Reserve
1458	*	*	*	15	15	1,482	Rural Reserve
1459	38	39	41	649	649	649	Neighborhoods
1460	15	15	16	243	243	243	Main St / Corr
1461	*	*	*	4	204	504	Urban Reserve
1462	*	*	*	1	1	446	Urban Reserve
1463	30	36	41	432	782	1,342	Neighborhoods
1464	0	0	0	19	187	449	Main St / Corr
1465	*	*	*	68	474	1,153	Main St / Corr
1466	7	11	12	292	518	879	Main St / Corr
1467	18	47	59	493	1,107	1,944	Main St / Corr
1468	126	134	143	339	398	497	Neighborhoods
1469	*	*	*	4	15	33	Neighborhoods
1470	210	215	233	663	676	698	Main St / Corr
1471	13	13	14	287	287	287	Main St / Corr
1472	87	89	96	1,075	1,075	1,075	Neighborhoods
1473	16	15	15	278	338	343	Main St / Corr
1474	77	68	68	921	924	925	Main St / Corr
1475	214	282	334	1,257	1,276	1,335	Town Center - Tier 2
1476	1,179	1,187	1,287	1,262	1,297	1,297	Town Center - Tier 2

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1477	307	324	348	563	667	678	Neighborhoods
1478	119	121	130	638	726	735	Neighborhoods
1479	199	164	193	891	1,060	1,060	Neighborhoods
1480	86	89	98	499	583	597	Neighborhoods
1481	101	107	115	482	506	510	Neighborhoods
1482	149	157	169	820	1,046	1,082	Neighborhoods
1483	653	1,079	1,719	160	389	732	Vancouver CBD
1484	272	232	172	191	197	205	Vancouver CBD
1485	265	235	190	226	235	247	Vancouver CBD
1486	269	309	369	46	65	92	Vancouver CBD
1487	147	156	170	169	248	368	Vancouver CBD
1488	514	772	1,159	0	3	7	Vancouver CBD
1489	889	737	508	0	4	9	Vancouver CBD
1490	448	483	535	6	14	26	Vancouver CBD
1491	656	813	1,050	0	54	134	Vancouver CBD
1492	790	854	951	29	62	112	Vancouver CBD
1493	732	716	692	381	346	294	Vancouver CBD
1494	427	443	468	0	58	144	Vancouver CBD
1495	1,961	1,577	1,001	0	57	143	Vancouver CBD
1496	72	70	66	100	101	103	Vancouver CBD
1497	127	162	213	169	118	42	Vancouver CBD
1498	208	387	655	18	29	45	Vancouver CBD
1499	41	187	407	33	332	780	Vancouver CBD
1500	374	612	969	238	256	284	Vancouver CBD
1501	147	190	255	118	225	385	Vancouver CBD
1502	7	6	4	125	124	122	Vancouver CBD
1503	14	562	1,383	0	0	0	Vancouver CBD
1504	298	486	769	1	11	25	Vancouver CBD
1505	114	518	1,125	0	102	256	Vancouver CBD
1506	82	767	1,795	0	540	1,350	Vancouver Rest
1507	226	290	385	157	390	740	Vancouver CBD
1508	0	525	1,312	0	0	0	Vancouver Rest
1509	295	299	305	90	89	88	Vancouver Rest
1510	462	380	257	284	282	280	Vancouver CBD
1511	21	56	108	267	262	255	Vancouver CBD
1512	64	66	68	71	69	66	Vancouver CBD
1513	170	151	123	29	42	62	Vancouver CBD
1514	355	294	202	98	82	58	Vancouver CBD
1515	298	238	149	214	209	200	Vancouver CBD

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1516	10	41	88	138	132	122	Vancouver CBD
1517	194	198	205	50	71	103	Vancouver CBD
1518	346	313	264	288	288	288	Vancouver CBD
1519	19	12	2	117	114	109	Vancouver CBD
1520	255	236	208	189	196	207	Vancouver CBD
1521	79	117	174	112	124	142	Vancouver CBD
1522	5	4	1	85	90	98	Vancouver CBD
1523	1	3	7	115	122	132	Vancouver CBD
1524	123	123	123	25	27	29	Vancouver CBD
1525	40	47	58	206	201	193	Vancouver CBD
1526	6	7	8	262	259	256	Vancouver CBD
1527	97	264	514	464	455	442	Vancouver CBD
1528	609	586	552	358	359	360	Vancouver Rest
1529	0	170	426	315	313	309	Vancouver Rest
1530	93	197	354	0	1	2	Vancouver Rest
1531	4,004	3,984	3,955	46	63	88	Vancouver Rest
1532	1,174	1,468	1,910	102	102	102	Vancouver Rest
1533	4	229	566	169	174	183	Vancouver Rest
1534	41	42	44	377	399	432	Vancouver Rest
1535	37	27	13	301	298	292	Vancouver Rest
1536	15	28	47	423	421	417	Vancouver Rest
1537	18	11	2	83	88	95	Vancouver Rest
1538	95	92	87	284	282	278	Vancouver Rest
1539	103	99	92	365	361	355	Vancouver Rest
1540	13	19	27	285	280	273	Vancouver CBD
1541	705	629	516	163	168	176	Vancouver CBD
1542	2	77	190	251	320	423	Vancouver Rest
1543	10	10	10	232	233	235	Vancouver Rest
1544	153	158	164	491	530	589	Vancouver Rest
1545	136	123	103	457	459	462	Vancouver Rest
1546	716	767	844	597	626	671	Vancouver Rest
1547	1,850	1,673	1,407	61	56	50	Vancouver Rest
1548	219	242	276	113	137	172	Vancouver Rest
1549	256	333	450	23	48	85	Vancouver CBD
1550	18	21	27	183	195	213	Vancouver CBD
1551	1	5	11	184	174	158	Vancouver Rest
1552	118	86	39	286	284	280	Vancouver Rest
1553	37	34	28	193	191	189	Vancouver Rest
1554	12	16	23	123	122	120	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1555	2,783	2,252	1,457	0	0	0	Station Com - Tier 3
1556	452	320	121	0	0	0	Station Com - Tier 3
1557	57	196	405	0	0	0	Vancouver Rest
1558	448	641	929	0	51	128	Vancouver Rest
1559	1,390	1,334	1,250	7	25	51	Vancouver Rest
1560	1,097	1,184	1,314	343	381	438	Vancouver Rest
1561	1,631	1,989	2,526	129	596	1,297	Vancouver Rest
1562	986	1,108	1,291	0	5	13	Vancouver Rest
1563	463	480	505	688	711	744	Vancouver Rest
1564	266	295	338	0	17	43	Vancouver Rest
1565	232	221	203	0	0	0	Station Com - Tier 3
1566	5	502	1,248	0	0	0	Vancouver Rest
1567	448	437	420	761	748	729	Vancouver Rest
1568	36	55	83	166	165	163	Vancouver Rest
1569	114	105	92	308	305	300	Vancouver Rest
1570	23	24	24	380	376	371	Vancouver Rest
1571	84	81	77	209	208	205	Vancouver Rest
1572	164	180	203	492	487	478	Vancouver Rest
1573	68	129	221	517	527	542	Vancouver Rest
1574	159	207	279	213	220	231	Vancouver Rest
1575	142	129	109	384	385	387	Vancouver Rest
1576	1,473	1,409	1,313	45	47	51	Vancouver Rest
1577	389	416	456	463	482	510	Vancouver Rest
1578	177	191	212	585	603	630	Vancouver Rest
1579	165	129	75	359	386	427	Vancouver Rest
1580	57	89	138	510	501	488	Vancouver Rest
1581	204	219	242	453	463	478	Vancouver Rest
1582	188	204	228	463	459	454	Vancouver Rest
1583	201	188	170	304	299	292	Vancouver Rest
1584	288	250	193	224	226	228	Vancouver Rest
1585	1	16	39	305	299	290	Vancouver Rest
1586	55	82	123	799	780	750	Vancouver Rest
1587	398	401	404	748	738	723	Vancouver Rest
1588	11	62	137	408	402	392	Vancouver Rest
1589	28	52	89	295	324	368	Vancouver Rest
1590	0	4	10	296	343	414	Vancouver Rest
1591	202	343	555	619	650	697	Vancouver Rest
1592	554	747	1,038	410	434	469	Vancouver Rest
1593	4	15	31	290	318	361	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1594	5	17	36	416	422	430	Vancouver Rest
1595	3	8	16	121	120	117	Vancouver Rest
1596	49	37	18	228	231	235	Vancouver Rest
1597	89	68	35	747	641	483	Vancouver Rest
1598	120	141	173	364	364	365	Vancouver Rest
1599	38	47	61	286	284	280	Vancouver Rest
1600	1,050	1,036	1,014	165	290	477	Vancouver Rest
1601	199	191	180	326	315	298	Vancouver Rest
1602	141	282	494	416	405	389	Vancouver Rest
1603	304	322	349	1,227	1,115	948	Vancouver Rest
1604	18	16	12	393	414	445	Vancouver Rest
1605	116	102	80	931	947	970	Vancouver Rest
1606	254	324	428	613	629	652	Vancouver Rest
1607	543	578	630	412	418	427	Vancouver Rest
1608	756	942	1,221	63	123	214	Vancouver Rest
1609	665	904	1,264	0	26	64	Vancouver Rest
1610	326	270	186	2	3	5	Vancouver Rest
1611	53	45	34	222	227	235	Vancouver Rest
1612	24	25	25	197	196	195	Vancouver Rest
1613	268	234	183	432	431	431	Vancouver Rest
1614	28	31	37	194	194	194	Vancouver Rest
1615	94	79	57	251	249	247	Vancouver Rest
1616	36	33	30	369	362	351	Vancouver Rest
1617	1,438	1,500	1,592	313	343	388	Vancouver Rest
1618	11	19	32	359	359	359	Vancouver Rest
1619	85	115	160	979	969	953	Vancouver Rest
1620	1,084	1,130	1,200	4	26	60	Vancouver Rest
1621	350	513	757	4	45	106	Vancouver Rest
1622	388	349	291	849	785	690	Vancouver Rest
1623	1,492	1,632	1,841	13	102	236	Vancouver Rest
1624	1,259	1,371	1,539	1,125	1,135	1,151	Vancouver Rest
1625	438	544	702	1,250	1,252	1,255	Vancouver Rest
1626	2,147	1,943	1,636	144	198	279	Vancouver Rest
1627	119	156	211	573	605	654	Vancouver Rest
1628	2,445	2,524	2,643	572	745	1,004	Vancouver Rest
1629	494	334	95	305	334	377	Vancouver Rest
1630	236	218	192	512	503	489	Vancouver Rest
1631	71	63	50	257	255	252	Vancouver Rest
1632	20	17	13	235	229	219	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1633	746	462	36	307	310	315	Vancouver Rest
1634	58	42	19	286	281	273	Vancouver Rest
1635	31	22	8	213	210	205	Vancouver Rest
1636	3,414	4,055	5,017	0	0	1	Vancouver Rest
1637	195	278	402	719	714	708	Vancouver Rest
1638	30	29	27	315	313	310	Vancouver Rest
1639	83	71	52	302	364	456	Vancouver Rest
1640	221	150	45	1,216	1,234	1,262	Vancouver Rest
1641	152	101	24	393	403	418	Vancouver Rest
1642	477	348	154	361	367	376	Vancouver Rest
1643	147	193	262	395	410	433	Vancouver Rest
1644	344	265	146	474	484	500	Vancouver Rest
1645	156	348	635	24	61	116	Vancouver Rest
1646	119	117	114	144	189	258	Vancouver Rest
1647	13	14	14	410	403	392	Vancouver Rest
1648	63	58	51	199	193	183	Vancouver Rest
1649	10	22	41	372	360	342	Vancouver Rest
1650	27	26	23	506	486	456	Vancouver Rest
1651	11	10	7	203	225	258	Vancouver Rest
1652	109	104	97	1	1	1	Vancouver Rest
1653	972	947	909	2	3	5	Vancouver Rest
1654	612	796	1,072	387	391	397	Vancouver Rest
1655	642	605	551	716	715	715	Vancouver Rest
1656	44	54	69	188	179	165	Vancouver Rest
1657	227	210	184	167	199	248	Vancouver Rest
1658	255	207	135	421	440	469	Vancouver Rest
1659	0	5	12	78	74	68	Vancouver Rest
1660	814	771	707	3	21	48	Vancouver Rest
1661	520	435	309	0	18	45	Vancouver Rest
1662	710	589	408	20	43	76	Vancouver Rest
1663	536	721	998	66	81	105	Vancouver Rest
1664	14	33	62	515	500	478	Vancouver Rest
1665	150	152	154	351	345	336	Vancouver Rest
1666	19	16	12	58	92	144	Vancouver Rest
1667	308	255	175	1,164	1,132	1,084	Vancouver Rest
1668	298	277	246	518	509	496	Vancouver Rest
1669	173	252	370	409	432	466	Vancouver Rest
1670	1,614	1,317	871	325	352	391	Vancouver Rest
1671	901	945	1,012	168	176	189	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1672	1,904	1,601	1,146	359	362	366	Vancouver Rest
1673	92	86	78	307	296	278	Vancouver Rest
1674	337	211	23	327	321	311	Vancouver Rest
1675	143	101	38	516	474	410	Vancouver Rest
1676	4	12	23	395	402	413	Vancouver Rest
1677	83	270	550	338	416	534	Vancouver Rest
1678	155	158	164	261	259	257	Vancouver Rest
1679	9	79	185	254	242	224	Vancouver Rest
1680	9	30	62	296	292	287	Vancouver Rest
1681	0	302	754	0	29	72	Vancouver Rest
1682	1,554	1,313	951	522	509	490	Vancouver Rest
1683	43	97	177	388	382	374	Vancouver Rest
1684	735	619	445	662	668	678	Vancouver Rest
1685	756	603	374	0	37	92	Vancouver Rest
1686	175	209	260	12	19	30	Vancouver Rest
1687	116	162	232	139	143	149	Vancouver Rest
1688	73	61	43	230	230	229	Vancouver Rest
1689	119	254	456	30	30	31	Vancouver Rest
1690	939	828	662	319	325	335	Vancouver Rest
1691	18	289	695	196	212	235	Vancouver Rest
1692	881	872	857	147	127	97	Vancouver Rest
1693	7	8	11	385	355	310	Vancouver Rest
1694	55	56	58	513	510	504	Vancouver Rest
1695	16	24	37	409	403	394	Vancouver Rest
1696	21	17	11	689	652	595	Vancouver Rest
1697	5	4	3	112	109	103	Vancouver Rest
1698	0	320	800	0	0	0	Vancouver Rest
1699	0	160	401	0	15	37	Vancouver Rest
1700	0	44	110	0	20	51	Vancouver Rest
1701	0	252	629	0	0	0	Vancouver Rest
1702	1,485	1,482	1,478	380	328	249	Vancouver Rest
1703	260	361	511	0	23	58	Vancouver Rest
1704	290	317	356	573	617	684	Vancouver Rest
1705	42	36	27	299	307	320	Vancouver Rest
1706	126	92	40	441	456	480	Vancouver Rest
1707	638	625	605	1,231	1,281	1,357	Vancouver Rest
1708	15	14	14	241	247	256	Vancouver Rest
1709	805	585	255	322	330	341	Vancouver Rest
1710	16	37	69	338	332	323	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1711	670	611	522	762	758	751	Vancouver Rest
1712	167	191	226	895	743	515	Vancouver Rest
1713	910	856	774	94	272	538	Vancouver Rest
1714	117	146	191	206	223	249	Vancouver Rest
1715	594	588	580	439	456	483	Vancouver Rest
1716	9	256	626	211	212	212	Vancouver Rest
1717	127	120	109	760	740	709	Vancouver Rest
1718	155	219	316	598	591	581	Vancouver Rest
1719	125	145	176	962	908	827	Vancouver Rest
1720	60	48	31	372	367	360	Vancouver Rest
1721	83	68	44	226	223	219	Vancouver Rest
1722	66	309	673	263	250	231	Vancouver Rest
1723	856	785	677	373	355	328	Vancouver Rest
1724	238	231	221	533	530	526	Vancouver Rest
1725	39	37	35	265	269	276	Vancouver Rest
1726	112	97	73	639	640	643	Vancouver Rest
1727	6	12	21	441	436	428	Vancouver Rest
1728	77	54	20	318	306	287	Vancouver Rest
1729	30	24	15	260	291	337	Vancouver Rest
1730	7	32	70	308	311	314	Vancouver Rest
1731	169	225	308	264	271	283	Vancouver Rest
1732	130	798	1,800	191	225	277	Vancouver Rest
1733	180	149	104	46	49	55	Vancouver Rest
1734	336	341	347	300	313	332	Vancouver Rest
1735	143	325	599	580	640	731	Vancouver Rest
1736	301	357	440	244	243	242	Vancouver Rest
1737	400	790	1,375	11	22	39	Vancouver Rest
1738	28	406	974	165	375	691	Vancouver Rest
1739	191	291	440	323	322	321	Vancouver Rest
1740	35	237	539	387	390	395	Vancouver Rest
1741	109	112	116	308	299	286	Vancouver Rest
1742	48	39	26	549	533	510	Vancouver Rest
1743	109	82	42	612	624	642	Vancouver Rest
1744	278	252	212	1,037	1,057	1,087	Vancouver Rest
1745	246	325	444	819	818	816	Vancouver Rest
1746	111	942	2,190	221	492	898	Vancouver Rest
1747	648	528	348	277	213	116	Vancouver Rest
1748	328	419	556	920	843	729	Vancouver Rest
1749	0	219	548	303	258	190	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1750	0	288	719	0	0	0	Vancouver Rest
1751	344	343	342	466	472	482	Vancouver Rest
1752	4,455	3,121	1,120	243	256	277	Vancouver Rest
1753	5	534	1,328	509	504	497	Vancouver Rest
1754	2,564	2,119	1,451	0	0	0	Vancouver Rest
1755	438	429	416	369	380	397	Vancouver Rest
1756	77	67	53	1,343	1,242	1,089	Vancouver Rest
1757	143	129	107	394	401	411	Vancouver Rest
1758	1,191	1,479	1,911	0	14	35	Vancouver Rest
1759	1,020	1,083	1,178	897	908	923	Vancouver Rest
1760	62	57	51	572	558	538	Vancouver Rest
1761	55	41	19	623	595	553	Vancouver Rest
1762	737	942	1,250	813	865	943	Vancouver Rest
1763	183	363	633	301	323	355	Vancouver Rest
1764	137	162	198	96	476	1,046	Vancouver Rest
1765	20	194	455	165	194	237	Vancouver Rest
1766	37	28	14	196	300	457	Vancouver Rest
1767	158	139	110	300	322	356	Vancouver Rest
1768	21	19	15	284	286	288	Vancouver Rest
1769	752	1,139	1,720	62	79	105	Vancouver Rest
1770	37	31	21	490	469	438	Vancouver Rest
1771	0	1,014	2,534	5	59	139	Vancouver Rest
1772	1,950	1,923	1,883	70	76	85	Vancouver Rest
1773	84	235	461	353	352	350	Vancouver Rest
1774	24	379	910	25	48	81	Vancouver Rest
1775	0	163	407	0	0	1	Vancouver Rest
1776	111	299	581	169	216	288	Vancouver Rest
1777	1,145	1,317	1,575	0	0	0	Vancouver Rest
1778	488	446	384	49	51	54	Vancouver Rest
1779	93	1,031	2,437	4	29	66	Vancouver Rest
1780	397	529	728	60	131	239	Vancouver Rest
1781	104	281	546	242	255	275	Vancouver Rest
1782	18	26	37	148	151	156	Vancouver Rest
1783	34	29	23	287	293	303	Vancouver Rest
1784	113	78	25	799	895	1,039	Vancouver Rest
1785	58	51	40	548	548	549	Vancouver Rest
1786	108	104	99	108	107	106	Vancouver Rest
1787	18	19	19	251	284	333	Vancouver Rest
1788	108	97	80	511	658	879	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1789	49	66	91	445	433	414	Vancouver Rest
1790	13	11	7	202	262	353	Vancouver Rest
1791	24	575	1,402	98	322	657	Vancouver Rest
1792	491	539	612	124	377	755	Vancouver Rest
1793	92	133	195	625	705	825	Vancouver Rest
1794	400	489	623	609	620	637	Vancouver Rest
1795	76	69	60	204	209	218	Vancouver Rest
1796	590	1,044	1,725	123	136	156	Vancouver Rest
1797	1,119	1,097	1,064	121	127	135	Vancouver Rest
1798	201	217	242	160	162	166	Vancouver Rest
1799	46	103	188	291	297	306	Vancouver Rest
1800	349	320	276	0	1	3	Vancouver Rest
1801	47	86	145	318	315	309	Vancouver Rest
1802	237	269	317	199	215	239	Vancouver Rest
1803	171	396	735	663	804	1,016	Vancouver Rest
1804	44	46	50	538	781	1,146	Vancouver Rest
1805	190	209	236	720	726	735	Vancouver Rest
1806	90	147	233	345	344	343	Vancouver Rest
1807	335	582	953	97	105	116	Vancouver Rest
1808	890	1,167	1,584	188	222	273	Vancouver Rest
1809	249	337	469	538	543	550	Vancouver Rest
1810	11	9	5	377	413	468	Vancouver Rest
1811	346	337	325	364	474	640	Vancouver Rest
1812	34	321	752	224	481	865	Vancouver Rest
1813	56	44	25	558	588	633	Vancouver Rest
1814	34	30	24	948	1,039	1,175	Vancouver Rest
1815	329	332	338	217	219	221	Vancouver Rest
1816	22	21	20	223	219	213	Vancouver Rest
1817	590	773	1,048	669	667	665	Vancouver Rest
1818	5	52	123	6	12	21	Vancouver Rest
1819	75	58	32	295	349	429	Vancouver Rest
1820	131	124	113	112	130	157	Vancouver Rest
1821	21	15	7	53	74	105	Vancouver Rest
1822	4	579	1,441	27	32	39	Vancouver Rest
1823	18	17	14	244	283	342	Vancouver Rest
1824	37	43	53	249	284	338	Vancouver Rest
1825	17	14	10	25	78	157	Vancouver Rest
1826	15	254	612	113	426	896	Vancouver Rest
1827	33	33	32	184	241	327	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1828	52	53	55	259	278	307	Vancouver Rest
1829	4	9	17	80	171	309	Vancouver Rest
1830	56	232	496	24	662	1,619	Vancouver Rest
1831	238	513	927	3	222	550	Vancouver Rest
1832	6	39	88	111	134	168	Vancouver Rest
1833	31	33	36	336	371	424	Vancouver Rest
1834	490	424	326	835	854	883	Vancouver Rest
1835	72	324	702	30	86	171	Vancouver Rest
1836	7	133	321	166	695	1,488	Vancouver Rest
1837	31	31	31	385	414	459	Vancouver Rest
1838	37	49	67	366	409	474	Vancouver Rest
1839	86	98	116	267	298	344	Vancouver Rest
1840	78	69	56	621	754	953	Vancouver Rest
1841	218	179	119	468	525	610	Vancouver Rest
1842	110	117	126	642	689	759	Vancouver Rest
1843	58	45	27	159	244	372	Vancouver Rest
1844	10	11	13	159	439	859	Vancouver Rest
1845	22	55	105	169	330	571	Vancouver Rest
1846	161	157	152	830	888	975	Vancouver Rest
1847	10	18	30	370	361	346	Vancouver Rest
1848	74	147	257	297	384	515	Vancouver Rest
1849	41	35	26	259	272	291	Vancouver Rest
1850	172	181	195	993	1,052	1,140	Vancouver Rest
1851	30	75	141	581	656	769	Vancouver Rest
1852	371	336	284	325	333	345	Vancouver Rest
1853	34	28	18	349	357	370	Vancouver Rest
1854	0	289	722	139	143	150	Vancouver Rest
1855	5	8	13	192	196	202	Vancouver Rest
1856	12	11	11	193	192	189	Vancouver Rest
1857	128	125	121	458	483	522	Vancouver Rest
1858	93	85	72	431	448	473	Vancouver Rest
1859	1,083	1,117	1,169	339	357	384	Vancouver Rest
1860	56	86	130	323	306	280	Vancouver Rest
1861	189	166	131	646	675	720	Vancouver Rest
1862	40	37	33	297	319	352	Vancouver Rest
1863	32	34	37	469	492	525	Vancouver Rest
1864	139	131	119	426	449	485	Vancouver Rest
1865	308	337	381	284	305	336	Vancouver Rest
1866	179	153	115	440	422	395	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1867	240	522	946	601	637	692	Vancouver Rest
1868	84	83	80	498	555	641	Vancouver Rest
1869	477	439	383	469	473	479	Vancouver Rest
1870	888	771	594	83	90	100	Vancouver Rest
1871	693	784	920	107	115	127	Vancouver Rest
1872	573	519	437	520	548	589	Vancouver Rest
1873	237	502	899	301	320	349	Vancouver Rest
1874	207	205	202	459	492	542	Vancouver Rest
1875	171	174	178	416	426	442	Vancouver Rest
1876	56	59	63	329	339	354	Vancouver Rest
1877	566	559	549	14	14	14	Vancouver Rest
1878	471	493	525	665	654	639	Vancouver Rest
1879	1,115	1,293	1,559	126	143	168	Vancouver Rest
1880	86	126	185	314	331	357	Vancouver Rest
1881	307	348	409	297	345	417	Vancouver Rest
1882	97	120	153	108	145	201	Vancouver Rest
1883	1,507	1,513	1,522	15	15	15	Vancouver Rest
1884	780	930	1,156	2	3	5	Vancouver Rest
1885	114	124	138	6	17	34	Vancouver Rest
1886	541	620	737	1	39	95	Vancouver Rest
1887	84	93	107	318	327	341	Vancouver Rest
1888	54	59	65	311	316	323	Vancouver Rest
1889	219	382	626	95	104	118	Vancouver Rest
1890	133	129	124	337	346	358	Vancouver Rest
1891	153	312	551	325	358	408	Vancouver Rest
1892	223	261	319	564	609	677	Vancouver Rest
1893	138	299	541	442	459	485	Vancouver Rest
1894	118	174	258	590	597	607	Vancouver Rest
1895	1,917	2,293	2,857	430	556	745	Vancouver Rest
1896	389	246	32	457	552	694	Vancouver Rest
1897	36	31	24	311	360	433	Vancouver Rest
1898	73	140	241	168	187	216	Vancouver Rest
1899	72	886	2,107	21	22	24	Vancouver Rest
1900	3	56	135	35	137	289	Vancouver Rest
1901	143	227	354	399	398	396	Vancouver Rest
1902	2	3	4	239	262	297	Vancouver Rest
1903	10	11	12	240	264	300	Vancouver Rest
1904	94	304	618	260	303	367	Vancouver Rest
1905	460	479	507	1,272	1,208	1,111	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1906	66	59	47	669	719	794	Vancouver Rest
1907	70	76	84	468	509	569	Vancouver Rest
1908	33	32	31	422	449	489	Vancouver Rest
1909	631	715	841	693	766	875	Vancouver Rest
1910	30	24	15	336	432	576	Vancouver Rest
1911	247	238	223	597	595	592	Vancouver Rest
1912	18	27	41	320	327	339	Vancouver Rest
1913	19	18	16	261	358	502	Vancouver Rest
1914	210	218	231	134	195	287	Vancouver Rest
1915	47	72	108	365	439	549	Vancouver Rest
1916	15	363	884	7	9	12	Vancouver Rest
1917	110	70	9	229	328	475	Vancouver Rest
1918	0	85	213	68	239	495	Vancouver Rest
1919	12	11	9	144	195	271	Vancouver Rest
1920	302	469	721	137	138	139	Vancouver Rest
1921	865	775	639	128	197	299	Vancouver Rest
1922	139	268	461	193	202	216	Vancouver Rest
1923	119	243	429	46	46	46	Vancouver Rest
1924	46	43	39	596	606	622	Vancouver Rest
1925	308	269	212	629	666	723	Vancouver Rest
1926	609	699	833	546	596	672	Vancouver Rest
1927	47	65	93	769	869	1,019	Vancouver Rest
1928	83	80	75	944	975	1,021	Vancouver Rest
1929	331	310	279	928	981	1,061	Vancouver Rest
1930	95	95	96	800	755	689	Vancouver Rest
1931	17	17	17	240	241	242	Vancouver Rest
1932	558	569	585	593	592	590	Vancouver Rest
1933	49	56	68	573	586	604	Vancouver Rest
1934	29	28	28	315	371	455	Vancouver Rest
1935	99	98	96	223	220	216	Vancouver Rest
1936	260	232	189	1,237	1,489	1,867	Vancouver Rest
1937	63	50	29	318	358	418	Vancouver Rest
1938	316	297	268	529	616	746	Vancouver Rest
1939	454	413	352	738	784	853	Vancouver Rest
1940	181	210	252	967	1,101	1,302	Vancouver Rest
1941	580	557	522	334	323	307	Vancouver Rest
1942	0	107	268	4	4	5	Vancouver Rest
1943	434	586	813	1	1	1	Vancouver Rest
1944	2,387	2,514	2,705	40	43	48	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1945	1,143	953	668	121	165	230	Vancouver Rest
1946	223	207	184	327	463	667	Vancouver Rest
1947	0	43	107	186	287	438	Vancouver Rest
1948	0	6	16	182	297	471	Vancouver Rest
1949	10	219	531	56	209	438	Vancouver Rest
1950	13	12	11	121	328	638	Vancouver Rest
1951	13	72	162	55	281	619	Vancouver Rest
1952	36	36	37	74	312	670	Vancouver Rest
1953	25	22	17	58	74	97	Vancouver Rest
1954	66	63	59	474	517	582	Vancouver Rest
1955	2	89	219	17	39	71	Vancouver Rest
1956	5	10	18	292	319	360	Vancouver Rest
1957	424	373	297	700	751	828	Vancouver Rest
1958	185	184	182	609	633	668	Vancouver Rest
1959	764	726	669	277	293	316	Vancouver Rest
1960	911	927	952	78	83	92	Vancouver Rest
1961	71	159	292	464	462	459	Vancouver Rest
1962	11	31	60	161	262	413	Vancouver Rest
1963	1,355	1,207	986	450	480	525	Vancouver Rest
1964	6	6	6	172	209	264	Vancouver Rest
1965	21	17	12	75	80	87	Vancouver Rest
1966	8	28	59	83	347	744	Vancouver Rest
1967	27	36	50	77	179	332	Vancouver Rest
1968	78	553	1,267	61	294	642	Vancouver Rest
1969	52	73	103	404	455	532	Vancouver Rest
1970	17	59	123	10	118	281	Vancouver Rest
1971	243	448	754	10	32	65	Vancouver Rest
1972	40	49	62	488	439	366	Vancouver Rest
1973	0	361	903	75	71	66	Vancouver Rest
1974	52	38	18	362	418	502	Vancouver Rest
1975	0	56	141	41	237	531	Vancouver Rest
1976	42	433	1,019	37	126	260	Vancouver Rest
1977	0	616	1,539	13	61	134	Vancouver Rest
1978	33	31	28	145	244	394	Vancouver Rest
1979	13	273	663	110	135	174	Vancouver Rest
1980	45	46	46	202	239	295	Vancouver Rest
1981	45	481	1,136	158	649	1,385	Vancouver Rest
1982	16	76	166	116	729	1,648	Vancouver Rest
1983	2	70	172	65	381	854	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
1984	43	364	845	12	11	11	Vancouver Rest
1985	159	277	454	96	232	436	Vancouver Rest
1986	35	28	19	91	107	130	Vancouver Rest
1987	0	8	21	36	186	410	Vancouver Rest
1988	28	287	676	121	275	506	Vancouver Rest
1989	29	135	294	86	102	127	Vancouver Rest
1990	27	33	42	115	200	328	Vancouver Rest
1991	4	13	27	102	112	127	Vancouver Rest
1992	166	666	1,416	109	365	749	Vancouver Rest
1993	433	464	511	85	115	161	Vancouver Rest
1994	20	99	217	76	401	888	Vancouver Rest
1995	217	520	975	101	213	381	Vancouver Rest
1996	0	152	379	342	417	529	Vancouver Rest
1997	81	75	66	610	620	634	Vancouver Rest
1998	363	354	340	1,345	1,070	657	Vancouver Rest
1999	32	106	216	248	384	589	Vancouver Rest
2000	122	329	641	744	720	684	Vancouver Rest
2001	11	458	1,129	371	514	729	Vancouver Rest
2002	32	30	27	52	75	111	Vancouver Rest
2003	58	45	26	307	326	355	Vancouver Rest
2004	33	168	371	465	811	1,330	Vancouver Rest
2005	17	292	704	53	392	901	Vancouver Rest
2006	22	138	311	71	391	870	Vancouver Rest
2007	52	51	51	285	321	376	Vancouver Rest
2008	125	254	448	292	321	364	Vancouver Rest
2009	206	205	203	133	148	171	Vancouver Rest
2010	81	196	367	90	108	134	Vancouver Rest
2011	279	388	551	248	269	302	Vancouver Rest
2012	43	36	26	85	140	224	Vancouver Rest
2013	6	10	15	118	128	143	Vancouver Rest
2014	0	482	1,205	46	188	400	Vancouver Rest
2015	4	225	556	42	250	563	Vancouver Rest
2016	95	150	233	86	222	426	Vancouver Rest
2017	717	1,239	2,022	483	596	766	Vancouver Rest
2018	14	132	310	32	227	520	Vancouver Rest
2019	562	505	420	94	251	486	Vancouver Rest
2020	518	574	659	487	462	423	Vancouver Rest
2021	189	437	809	200	181	153	Vancouver Rest
2022	533	624	759	536	531	523	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
2023	251	907	1,892	288	426	632	Vancouver Rest
2024	35	30	23	218	434	758	Vancouver Rest
2025	117	453	956	323	320	315	Vancouver Rest
2026	426	541	715	410	392	364	Vancouver Rest
2027	454	463	476	502	488	468	Vancouver Rest
2028	27	378	904	9	124	298	Vancouver Rest
2029	251	300	374	516	496	466	Vancouver Rest
2030	702	721	751	295	306	323	Vancouver Rest
2031	1,402	1,219	945	1	1	2	Vancouver Rest
2032	256	249	238	734	741	752	Vancouver Rest
2033	18	14	8	68	151	275	Vancouver Rest
2034	39	38	37	222	295	405	Vancouver Rest
2035	17	36	65	550	532	506	Vancouver Rest
2036	2	256	637	409	384	347	Vancouver Rest
2037	9	217	528	113	231	408	Vancouver Rest
2038	223	481	867	442	396	328	Vancouver Rest
2039	15	15	14	204	455	832	Vancouver Rest
2040	18	19	19	286	492	802	Vancouver Rest
2041	81	69	52	526	524	521	Vancouver Rest
2042	71	526	1,207	217	449	798	Vancouver Rest
2043	76	295	623	292	475	751	Vancouver Rest
2044	11	12	13	113	158	226	Vancouver Rest
2045	11	9	6	77	90	111	Vancouver Rest
2046	139	141	145	94	112	139	Vancouver Rest
2047	182	179	174	222	239	266	Vancouver Rest
2048	54	45	32	181	200	230	Vancouver Rest
2049	105	119	140	361	418	503	Vancouver Rest
2050	193	170	135	144	187	253	Vancouver Rest
2051	56	61	70	548	622	734	Vancouver Rest
2052	24	25	26	300	317	341	Vancouver Rest
2053	18	20	23	239	270	317	Vancouver Rest
2054	94	91	87	514	589	701	Vancouver Rest
2055	239	216	182	90	95	103	Vancouver Rest
2056	4	5	8	72	215	430	Vancouver Rest
2057	19	16	12	96	202	361	Vancouver Rest
2058	61	54	44	126	155	199	Vancouver Rest
2059	12	24	42	144	153	167	Vancouver Rest
2060	94	438	953	235	322	452	Vancouver Rest
2061	8	8	7	159	189	233	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
2062	53	40	20	186	229	294	Vancouver Rest
2063	37	32	24	136	160	196	Vancouver Rest
2064	107	86	53	242	295	374	Vancouver Rest
2065	13	17	22	184	202	230	Vancouver Rest
2066	36	261	599	81	305	641	Vancouver Rest
2067	0	151	378	27	234	545	Vancouver Rest
2068	28	153	341	121	152	197	Vancouver Rest
2069	210	473	867	101	376	789	Vancouver Rest
2070	39	820	1,991	137	258	440	Vancouver Rest
2071	69	61	49	96	109	129	Vancouver Rest
2072	0	0	0	24	26	28	Vancouver Rest
2073	164	340	603	126	140	160	Vancouver Rest
2074	0	698	1,744	22	24	26	Vancouver Rest
2075	60	63	68	165	294	487	Vancouver Rest
2076	26	25	23	75	428	958	Vancouver Rest
2077	20	41	73	70	78	90	Vancouver Rest
2078	24	87	181	19	37	63	Vancouver Rest
2079	0	7	17	17	20	23	Vancouver Rest
2080	35	25	11	26	38	55	Vancouver Rest
2081	15	114	263	62	568	1,326	Vancouver Rest
2082	91	64	23	371	570	869	Vancouver Rest
2083	232	315	439	397	565	817	Vancouver Rest
2084	0	1	2	51	452	1,054	Vancouver Rest
2085	468	976	1,737	3	4	4	Vancouver Rest
2086	580	799	1,127	119	245	434	Vancouver Rest
2087	2	9	18	55	396	907	Vancouver Rest
2088	310	269	207	180	217	272	Vancouver Rest
2089	121	130	144	232	250	276	Vancouver Rest
2090	0	18	46	193	213	243	Vancouver Rest
2091	55	132	247	165	162	156	Vancouver Rest
2092	13	17	22	156	171	194	Vancouver Rest
2093	43	31	13	326	366	427	Vancouver Rest
2094	14	22	34	53	202	426	Vancouver Rest
2095	11	25	46	17	302	729	Vancouver Rest
2096	33	26	16	806	912	1,070	Vancouver Rest
2097	26	142	315	199	305	464	Vancouver Rest
2098	21	839	2,065	10	15	23	Vancouver Rest
2099	0	430	1,075	149	266	443	Vancouver Rest
2100	0	998	2,495	14	14	13	Vancouver Rest

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TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
2101	400	681	1,103	44	29	6	Vancouver Rest
2102	21	816	2,010	15	15	14	Vancouver Rest
2103	41	232	519	1	1	1	Vancouver Rest
2104	2	20	46	46	107	198	Vancouver Rest
2105	83	1,215	2,914	45	50	57	Vancouver Rest
2106	45	554	1,316	68	264	558	Vancouver Rest
2107	13	309	752	98	113	135	Vancouver Rest
2108	0	334	835	9	104	247	Vancouver Rest
2109	65	525	1,214	111	116	124	Vancouver Rest
2110	27	32	40	167	189	221	Vancouver Rest
2111	26	441	1,064	38	43	51	Vancouver Rest
2112	369	566	862	159	181	215	Vancouver Rest
2113	259	255	248	136	141	149	Vancouver Rest
2114	93	97	104	665	648	622	Vancouver Rest
2115	16	22	32	255	312	397	Vancouver Rest
2116	145	122	89	54	128	238	Vancouver Rest
2117	55	48	38	91	179	311	Vancouver Rest
2118	50	269	597	215	658	1,322	Vancouver Rest
2119	94	133	193	67	145	262	Vancouver Rest
2120	0	22	56	84	93	106	Vancouver Rest
2121	25	24	23	92	101	115	Vancouver Rest
2122	27	21	12	95	106	122	Vancouver Rest
2123	24	25	27	91	202	368	Vancouver Rest
2124	51	54	58	125	140	161	Vancouver Rest
2125	15	21	29	87	110	144	Vancouver Rest
2126	2	3	5	65	74	88	Vancouver Rest
2127	411	301	137	547	609	703	Vancouver Rest
2128	70	58	40	404	469	567	Vancouver Rest
2129	24	23	21	363	469	627	Vancouver Rest
2130	72	56	33	267	311	377	Vancouver Rest
2131	30	30	30	221	466	834	Vancouver Rest
2132	82	103	134	415	653	1,011	Vancouver Rest
2133	297	248	175	632	722	858	Vancouver Rest
2134	35	32	28	272	325	405	Vancouver Rest
2135	334	238	95	312	354	418	Vancouver Rest
2136	61	91	136	218	264	333	Vancouver Rest
2137	88	125	180	161	200	258	Vancouver Rest
2138	168	143	105	352	445	584	Vancouver Rest
2139	71	96	133	156	179	214	Vancouver Rest

Attachment 3. 2023 RTP Transportation Analysis Zone Assumptions

Adopted by the Metro Council in 2021 (Ordinance No. 21-1457) after extensive consultation with and review by local governments. An asterisk means * data is suppressed for confidentiality.

TAZ	2020 Employment*	2030 Employment*	2045 Employment*	2020 Households	2030 Households	2045 Households	2040 Design Type
2140	61	47	27	210	249	307	Vancouver Rest
2141	270	340	444	523	563	622	Vancouver Rest
2142	6	167	408	110	156	226	Vancouver Rest
2143	310	417	578	358	443	572	Vancouver Rest
2144	38	41	46	257	320	415	Vancouver Rest
2145	46	47	48	201	261	351	Vancouver Rest
2146	30	27	22	58	92	142	Vancouver Rest
2147	26	19	8	225	289	384	Vancouver Rest

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX N

2023 Regional Transportation Plan

Southwest Corridor Locally Preferred Alternative

July 10, 2023

oregonmetro.gov/rtp

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Project website: **oregonmetro.gov/rtp**

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

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING THE SOUTHWEST CORRIDOR LIGHT RAIL PREFERRED ALTERNATIVE	)))	RESOLUTION NO. 18-4915 Introduced by Councilor Craig Dirksen and Councilor Bob Stacey

WHEREAS, the Metro Council identified the Southwest Corridor, located between downtown Portland and Sherwood, as the region's top priority for consideration for a high capacity transit investment based on the 2009 Regional High Capacity Transit System Plan;

WHEREAS, in June 2010, the Metro Council adopted Ordinance No. 10-1241B, amending the 2004 Regional Transportation Plan (RTP) to comply with federal and state law, which amendments included adoption of the Regional High Capacity Transit (HCT) System Plan;

WHEREAS, the Southwest Corridor includes portions of the cities of Portland in Multnomah County and Tigard, Tualatin, King City, Durham, and Sherwood in Washington County, and includes a broad north/south travel corridor generally along Interstate 5 (I-5) and Pacific Highway (OR-99W)/SW Barbur Boulevard;

WHEREAS, the communities in which the Southwest Corridor light rail developed land use plans to identify their local visions for high capacity transit in order to inform the Southwest Corridor planning process, including Portland's Barbur Concept Plan, Tigard's High Capacity Transit Land Use Plan, and the Linking Tualatin plan;

WHEREAS, in December 2011, the Southwest Corridor Plan Steering Committee, including representatives of the cities and counties in the corridor, as well as Metro, TriMet and ODOT, adopted a charter agreeing to use a collaborative and publicly inclusive approach to developing the Southwest Corridor Plan;

WHEREAS, the Southwest Corridor Plan process has been intended to lead to the adoption of a locally preferred alternative under the National Environmental Policy Act of 1969 (NEPA) for a high capacity transit investment in the Southwest Corridor, and consideration of inclusion of the Southwest Corridor Plan in Metro's revised 2018 Regional Transportation Plan;

WHEREAS, in fall 2013, the Metro Council endorsed the *Southwest Corridor Shared Investment Strategy* (Metro Council Resolution No. 13-4468A), directing staff to coordinate and collaborate with project partners on refinement and analysis of high capacity transit alternatives and local connections in the Southwest Corridor;

WHEREAS, in June 2014, the Steering Committee unanimously adopted for further study the *Southwest Corridor Transit Design Options,* a package of the most promising high capacity transit design alignment options and associated roadway, bicycle and pedestrian projects and potential station areas that support the Southwest Corridor Land Use Vision;

WHEREAS in June 2014, the Metro Council adopted the *Southwest Corridor Transit Design Options*, directed staff to complete a focused refinement period of the *Southwest Corridor Transit Design Options,* and, pending Steering Committee direction on the results of the focused refinement analysis and timing of the draft Environmental Impact Statement (DEIS), directed staff to study the *Southwest*

Corridor Transit Design Options under the National Environmental Policy Act in collaboration with the Southwest Corridor Plan project partners and with the involvement of stakeholders and public.

WHEREAS, the Southwest Corridor project partners collaboratively funded the further study of the options set forth in *Southwest Corridor Transit Design Options*, as demonstrated in the actions of their governing bodies;

WHEREAS, in December 2014, the Steering Committee directed staff to implement an 18-month workplan for the focused refinement of the *Southwest Corridor Transit Design Options* using a place-based approach to narrow alignment options and select a preferred transit mode and terminus;

WHEREAS, on June 13, 2016, the Steering Committee endorsed a *Southwest Corridor High Capacity Transit Proposed Range of Alternatives for Environmental Review* that describes the high capacity transit mode, preferred terminus, and transit alignments, as well as associated roadway, bicycle and pedestrian projects to be considered under NEPA;

WHEREAS, on June 13, 2016, the Steering Committee adopted an updated project "Purpose & Need" statement, reflecting refinements made to the high capacity transit project since the Steering Committee adopted the original Purpose & Need January 2014;

WHEREAS, on July 28, 2016, the Metro Council endorsed the *Southwest Corridor High Capacity Transit Proposed Range of Alternatives for Environmental Review* and the updated project Purpose & Need statement (Metro Council Resolution No. 16-4713);

WHEREAS, on September 2, 2016, the federal environmental review process began with the publication of a Notice of Intent to prepare an environmental impact statement, issued by the Federal Transit Administration (FTA), with FTA, Metro and TriMet as lead agencies, and with the public scoping process soliciting public and agency comments on the *Proposed Range of Alternatives for Environmental Review* and on the revised Purpose & Need, prior to commencing work on the Draft Environmental Impact Statement (EIS);

WHEREAS, FTA published the Draft EIS on the Southwest Corridor Light Rail Project in June 2018, documenting the anticipated beneficial and adverse effects of the proposed light rail route alternatives and potential measures for reducing adverse effects;

WHEREAS, the Southwest Corridor has 11 percent of the region's population and 26 percent of the region's employment, 23,800 people commute daily between Portland and Tigard/Tualatin for work, the corridor is projected to grow by 70,000 residents and 65,000 jobs between 2015 and 2035 and transit demand is projected to grow by over 70 percent over that time, high levels of congestion exist in the corridor today and 13 to 17 hours of congestion per day are expected on I-5 between Portland and Tigard in 2035;

WHEREAS, the Southwest Corridor light rail is expected to provide fast reliable high capacity transit service with a 30 minute trip between Portland State University and Bridgeport Station regardless of congestion, and is projected to carry 43,000 daily weekday riders in 2035, and is projected to carry about 20 percent of PM peak southbound commuters from downtown Portland or the equivalent of one freeway lane's worth of drivers, in 2035;

WHEREAS, the Metro Council is supportive of inclusive engagement in its planning process and equitable development as an outcome of high capacity transit investments;

WHEREAS, a public involvement process was a component of each phase of the Southwest Corridor planning, including a 45-day public comment period following publication of the Draft EIS and a focus on equitable engagement of underrepresented community members, such as non-English speakers;

WHEREAS, 1,015 comments were submitted during the public comment period via web comments, emails, and letters, or at one of 33 hearings, open houses, information sessions, and other meetings held;

WHEREAS, after the Metro Council created the Southwest Corridor Community Advisory Committee (Metro Council Resolution 16-4751) to advise the Steering Committee and to assist with the identification of the locally preferred alternative, which committee represented businesses, community groups, and institutions in Portland, Tigard, Tualatin, and Washington County, the committee met monthly beginning in February 2017, and on July 30, 2018, the committee provided a consensus recommendation for a light rail alignment for the Southwest Corridor;

WHEREAS, equitable planning includes not only shared distribution of the benefits and burdens of growth and investments, but partnership in the process resulting in shared decision-making and more equitable outcomes for the region; and

WHEREAS, to increase the likelihood that a new Southwest Corridor light rail line will benefit rather than displace vulnerable households and businesses, Metro received a grant from the FTA to collaborate with the community to create an Equitable Development Strategy for partners to implement in coordination with the light rail project;

WHEREAS, the Southwest Corridor Light Rail Project Steering Committee heard public input and testimony on the Draft EIS and the proposed project, received the Community Advisory Committee recommendation, and received recommendations from project staff representing Metro, TriMet, ODOT, Portland, Tigard, Tualatin, Washington County and Sherwood, and made recommendations for a locally preferred alternative on August 13, 2018, including the mode of transportation, alignment, and station locations as attached in Exhibit A;

WHEREAS, on September 10, 2018, the Tualatin City Council adopted Resolution No. 5398-18, to support the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, on September 25, 2018, the Washington County Board of Commissioners adopted Resolution and Order No. RO 18-95, to endorse the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, on September 26, 2018, the TriMet Board of Directors adopted Resolution 18-09-66 recommending that the Metro Council adopt the Locally Preferred Alternative as shown in the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, on October 16, 2018, the Beaverton City Council adopted Resolution 4533 supporting the Locally Preferred Alternative as shown in the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, on November 1, 2018, the Portland City Council adopted Resolution 37393 adopting the Locally Preferred Alternative as shown in the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, on November 13, 2018, the Tigard City Council adopted Resolution 18-47 supporting the Locally Preferred Alternative as shown in the Southwest Corridor Steering Committee Preferred Alternative Report; and

WHEREAS, FTA requires that the locally preferred alternative be included in the Regional Transportation Plan's financially constrained project list and in the Metropolitan Transportation Improvement Plan, in order to be considered for a Capital Investment Grant project rating; and

WHEREAS, in December 2018, the Metro Council is anticipated to consider Resolution No. 18-4892 (For the Purpose of Adopting the 2018 Regional Transit Strategy and Replacing the 2009 High Capacity Transit System Plan) and Ordinance No. 18-1421 (For the Purpose of Amending the 2014 Regional Transportation Plan to Comply with Federal and State Law and Amending the Regional Framework Plan); now therefore

BE IT RESOLVED that, the Metro Council:

1. Endorses the Southwest Corridor Light Rail Locally Preferred Alternative as described in the Southwest Corridor Light Rail Project Steering Committee Preferred Alternative Report, attached as Exhibit A to this resolution and that generally includes the following:
   a. An extension of the existing MAX light rail southward from SW Fourth Avenue and SW Lincoln Street, largely traveling within the SW Barbur Boulevard right-of-way until the Barbur Transit Center, then serving the Tigard Triangle and downtown Tigard before terminating near SW Bridgeport Road in Tualatin; and
   b. Continuous bicycle and pedestrian facilities constructed along the light rail alignment between downtown Portland and the Barbur Transit Center; and
   c. A new pedestrian connection from a light rail station to OHSU facilities on Marquam Hill, an improved pedestrian and bike connection to the Portland Community College Sylvania Campus via SW Fifty Third Avenue, and a new mechanized shuttle service connecting one or more light rail stations to the Sylvania campus; and
   d. A shared transitway in South Portland to provide exclusive right of way to select TriMet buses in addition to light rail.

2. Directs staff to include the Southwest Corridor Light Rail Locally Preferred Alternative as described in Exhibit A, in the 2018 Regional Transportation Plan financially constrained project list (RTP #11587 and #10907) and in the depiction of the Regional Transit Network in the Regional Transit Strategy (which is the transit component of the 2018 Regional Transportation Plan);

3. Directs staff to add the Southwest Corridor Light Rail Locally Preferred Alternative to the Metropolitan Transportation Improvement Plan;

4. Expresses its appreciation for the commitment and extraordinary efforts of the Southwest Corridor Steering Committee and the Southwest Corridor Community Advisory Committee, finds the charges of both committees to be complete, and dissolves both effective immediately;

5. Directs Metro staff to work with FTA and TriMet to complete the federal environmental review process and to support TriMet's new role as the planning lead on the Southwest Corridor Light Rail Project, as provided by agreement between Metro and TriMet;

ADOPTED by the Metro Council this 15th day of November, 2018.

Tom Hughes, Council President

Approved as to Form:

Nathan A.S. Sykes, Metro Attorney

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Southwest Corridor Light Rail Project

Steering Committee Preferred Alternative Report

1. RECOMMENDATION

This report presents the Southwest Corridor Steering Committee's recommended Preferred Alternative for the proposed Southwest Corridor light rail project. The Preferred Alternative must include the transit mode (light rail), route, stations and termini.

Summary of alignment chosen

This recommendation represents a commitment to identifying a cost-effective transit project that extends from downtown Portland to Bridgeport Village and meets the adopted project Purpose & Need. It is based on the project staff recommendation, analysis documented in the *Southwest Corridor Light Rail Project Draft Environmental Impact Statement* (EIS), input from the public and agencies, and also takes into consideration the Federal Transit Administration's (FTA) rating criteria for large transit projects.

The recommended Preferred Alternative is shown on Figure 1 and includes the following alternatives and refinements described in the Draft EIS:

- Alternative A1, Barbur
- Alternative B2, I-5 Barbur Transit Center to 60th
    - Refinement 2, Taylors Ferry I-5 Overcrossing, which modifies Alternative B2*
    - Refinement 4, Barbur Undercrossing, which modifies Alternative B2
- Alternative C2, Ash to Railroad
    - Refinement 5, Elmhurst, which modifies Alternative C2
    - Refinement 6, Tigard Transit Center Station East of Hall, which modifies Alternative C2

*The committee recommends a preference for Refinement 2, but with Alternative B2 as studied in the Draft EIS, or a modification of either, remaining in consideration.

In addition, the committee directs staff to continue to work together to evolve and finalize the work plan for further design and environmental review, keeping members of this or a subsequent steering committee informed on its progress and contents. If the design and environmental review finds a "fatal flaw" with any project component, staff will present the issue to TriMet's future project steering committee for guidance.

This Preferred Alternative would provide a number of benefits to the SW Corridor and the Portland region. These include:

- Providing a reliable, fast travel option between Bridgeport, Tigard, SW Portland and downtown Portland that will maintain its travel time even as the population grows by 70,000 in the corridor by 2035.
- Serving a projected 43,000 average weekday riders in 2035.
- Carrying 1 in 5 southbound commuters leaving downtown Portland in the PM peak in 2035.
- Connecting existing and future jobs and homes, along with Portland State University (PSU), Oregon Health & Science University (OHSU), National University of Natural Medicine (NUNM) and Portland Community College-Sylvania (PCC).
- Providing a new transit "backbone" for the local bus system in southeastern Washington County, including new transit centers and park and rides to enable people to easily switch between travel modes.
- Creating a new pedestrian connection to the jobs, medical services and educational opportunities on Marquam Hill at OHSU, the Veterans Administration and Shriners hospitals.
- Creating an improved bike and pedestrian link to PCC Sylvania campus and a quick shuttle connection between the campus and MAX.
- Building a shared transitway in South Portland to allow buses from Hillsdale to bypass congestion to more quickly reach downtown Portland, and vice versa.
- Building continuous sidewalks and bike lanes where light rail would be located within an existing roadway, such as on SW Barbur Boulevard and SW 70th Avenue.
- Creating the required transportation infrastructure to support local and regional plans such as the Tigard Triangle Strategic Plan, Barbur Concept Plan and 2040 Growth Concept. These plans aim to accommodate continued population and job growth without a proportionate increase in traffic congestion by supporting transit-oriented development.

Implications

The Preferred Alternative will be evaluated in the Final EIS, which will document the significant beneficial and adverse effects of the project, commit to mitigation strategies and document their effects, and respond to comments submitted on the Draft EIS. Appropriate review and analysis of the Preferred Alternative will also be undertaken under Sections 106, 4(f), 6(f) and 7, which address historic resources, parks and endangered species.

This recommendation would end further analysis of Alternatives A2-BH (Naito with Bridgehead Reconfiguration), A2-LA (Naito with Limited Access), Design Refinement 1, B1 (Barbur), B3 (I-5 26th to 60th), B4 (I-5 Custer to 60th), C1 (Ash to I-5), C3 (Clinton to I-5), C4 (Clinton to Railroad), C5 (Ash and I-5 Branched) and C6 (Wall and I-5 Branched), as well as Refinement 3 (I-5 Undercrossing). This recommendation would also end further work on aspects of Alternative B2: a new light rail bridge near the Portland/Tigard city boundary crossing over I-5 and Pacific Highway to enter the Tigard Triangle, and

traveling adjacent to SW Atlanta Street to connect to SW 70th Avenue; and of Alternative C2: the east-west alignments along SW Beveland Street and SW Ash Avenue.

Further action recommended

In preparation for the Final EIS, the Steering Committee directs staff to continue work to identify ways to avoid, minimize, or mitigate the adverse effects documented in the Draft EIS, including:

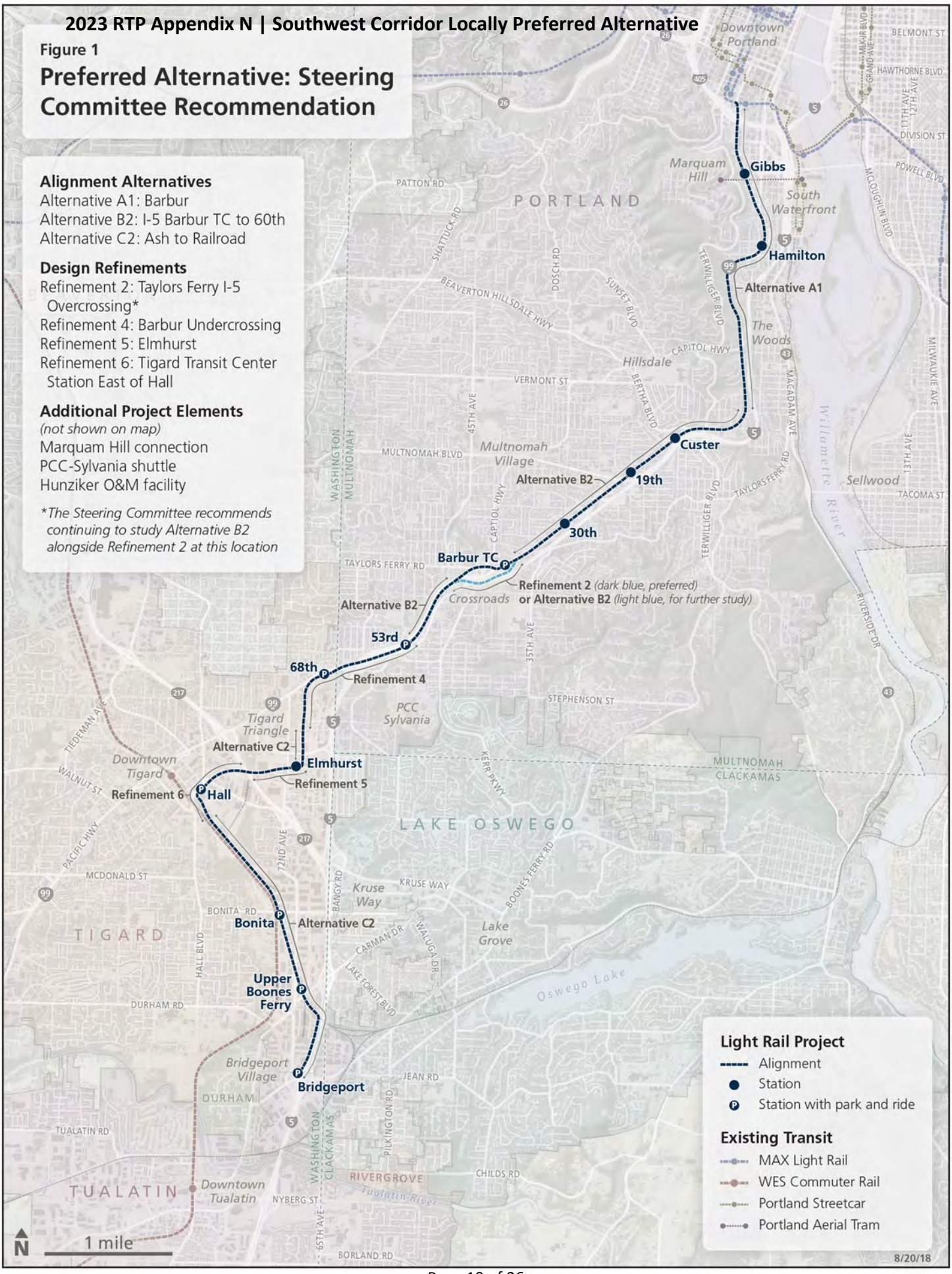
- The relocation of households and businesses along the alignment. TriMet will update designs to avoid or minimize property effects but when that is not possible then property owners, tenants and businesses will receive fair market financial compensation and relocation assistance.
- Increased traffic congestion and queuing at several locations throughout the corridor. Additional traffic analysis will be performed where necessary, including at highway ramp terminals, park and ride accesses, and at-grade light rail crossings of streets. Specific locations may include:
    - South Portland in the vicinity of the Bridgehead Reconfiguration
    - The Barbur/Bertha/I-5 off-ramp
    - The Crossroads area in the vicinity of Refinement 2
    - Downtown Tigard in the vicinity of Refinement 6
    - The SW Upper Boones Ferry at-grade crossing area, with consideration of a grade-separate crossing
    - The greater Bridgeport area
- Routing over wetlands and floodplains in Tigard, and the generation of additional storm water runoff. These effects must be mitigated to levels that meet federal and local requirements.
- Various effects on historic resources and public parks, largely in South Portland. These properties receive special federal protection and extra public engagement and analysis will be undertaken on these impacts.
- Tree removal along the route, particularly in Segment A.

Design work on the Preferred Alternative should also address detailed questions relating to station locations and designs, park and rides, station connections and other issues.

The Southwest Corridor Equitable Development Strategy should continue to explore policy options and investments to address the potential for existing and future displacement, including its current funding of pilot programs to promote housing and workforce development options in SW Corridor.

Figure 1

Preferred Alternative: Steering Committee Recommendation



2. PREFERRED ALTERNATIVE DESCRIPTION AND RATIONALE

For each of the three segments studied in the Draft EIS, this document describes the recommended Preferred Alternative route, stations and additional project elements; recaps the options removed from further consideration; and explains the rationale for its recommendation.

Segment A: Inner Portland

Description

In Segment A (Inner Portland), which extends from the southern end of the Portland Transit Mall to just north of the intersection of SW Barbur Boulevard and SW Brier Place, the recommended Preferred Alternative includes:

- Alternative A1, Barbur

The Preferred Alternative in Segment A is shown in Figure 2.

Green Line light rail trains would continue from Clackamas County, through downtown Portland and into the Southwest Corridor, with tracks diverging from existing MAX tracks just west of the current Lincoln Station, at SW Fourth Avenue and SW Lincoln Street. It would cross Interstate 405 (I-405) on a new structure east of and parallel to SW Fourth Avenue. The alignment would run along the east side of SW Barbur Boulevard for several blocks, then transition into the center of SW Barbur Boulevard at SW Hooker Street. The alignment would continue running in the center of SW Barbur Boulevard into the Woods area. In this section, the existing Newbury and Vermont viaducts would be replaced by two new bridges that would carry four auto lanes, light rail, and improved bike and pedestrian facilities.

Between this point and through the southern end of Segment A and into Segment B, light rail would continue to travel in the center of SW Barbur Boulevard.

Continuous bicycle and pedestrian facilities would be constructed along the light rail alignment through Segment A and into Segment B, between downtown Portland and the Barbur Transit Center.

Stations

The Preferred Alternative includes the following stations in Segment A:

- Gibbs Station
- Hamilton Station

No park and rides are proposed in Segment A.

Additional Project Elements

The committee recommends the continued consideration of these components of the proposed project:

- Marquam Hill connection to provide access between the Gibbs light rail station to the medical complex on Marquam Hill. This connector will allow pedestrians to reach the South Waterfront district via the Darlene Hooley pedestrian bridge. Multiple options for this connection are

included in the Draft EIS; the committee recommends a public process later in 2018 for the selection of the preferred option to be studied in the Final EIS.

- A shared transitway extending over one mile from downtown Portland on SW Barbur Boulevard, with a stop at SW Gibbs, to improve the speed and reliability of buses traveling between downtown Portland and Hillsdale.

The Steering Committee also recommends the following additional action beyond the proposed light rail project:

- Development of a Ross Island Bridgehead Reconfiguration that includes changes to SW Naito Parkway in coordination with the light rail project, based on the roadway designs in Alternative A2-BH. This separate project would redirect regional traffic away from local neighborhood streets in the South Portland neighborhood, convert SW Naito Parkway to a surface boulevard with at-grade intersections, improve safety for pedestrians and bicyclists, and make nearly three acres of land available for development. It would provide benefits to the region and to a neighborhood that has been historically negatively impacted by transportation investments, and could potentially mitigate some traffic impacts caused by the light rail project.
- Study of the proposed Bridgehead Reconfiguration in the Final EIS for the light rail project.
- Identification of funding sources for non-project-related mitigation portions of the Bridgehead Reconfiguration independent of the light rail project. Cost estimates must be developed.

Options considered and removed from consideration

The following alternatives were considered for Segment A:

- Alternative A2-BH, Naito with Bridgehead Reconfiguration
- Alternative A2-LA, Naito with Limited Access

Both of these alternatives would have routed light rail on SW Naito Parkway instead of on SW Barbur Boulevard south of downtown Portland.

- Refinement 1, East side running in the Woods, which would have constructed a separate light rail structure to avoid the Vermont and Newbury viaducts

Additional alternatives were considered and narrowed by the Steering Committee in project phases completed prior to the initiation of the Draft EIS.

Rationale for selection

Compared to Alternatives A2-BH and A2-LA, Alternative A1 would:

- Provide faster light rail travel times
- Provide a shorter connection to Marquam Hill
- Result in fewer displacements of residents, businesses and employees and fewer impacts on potentially protected historic resources

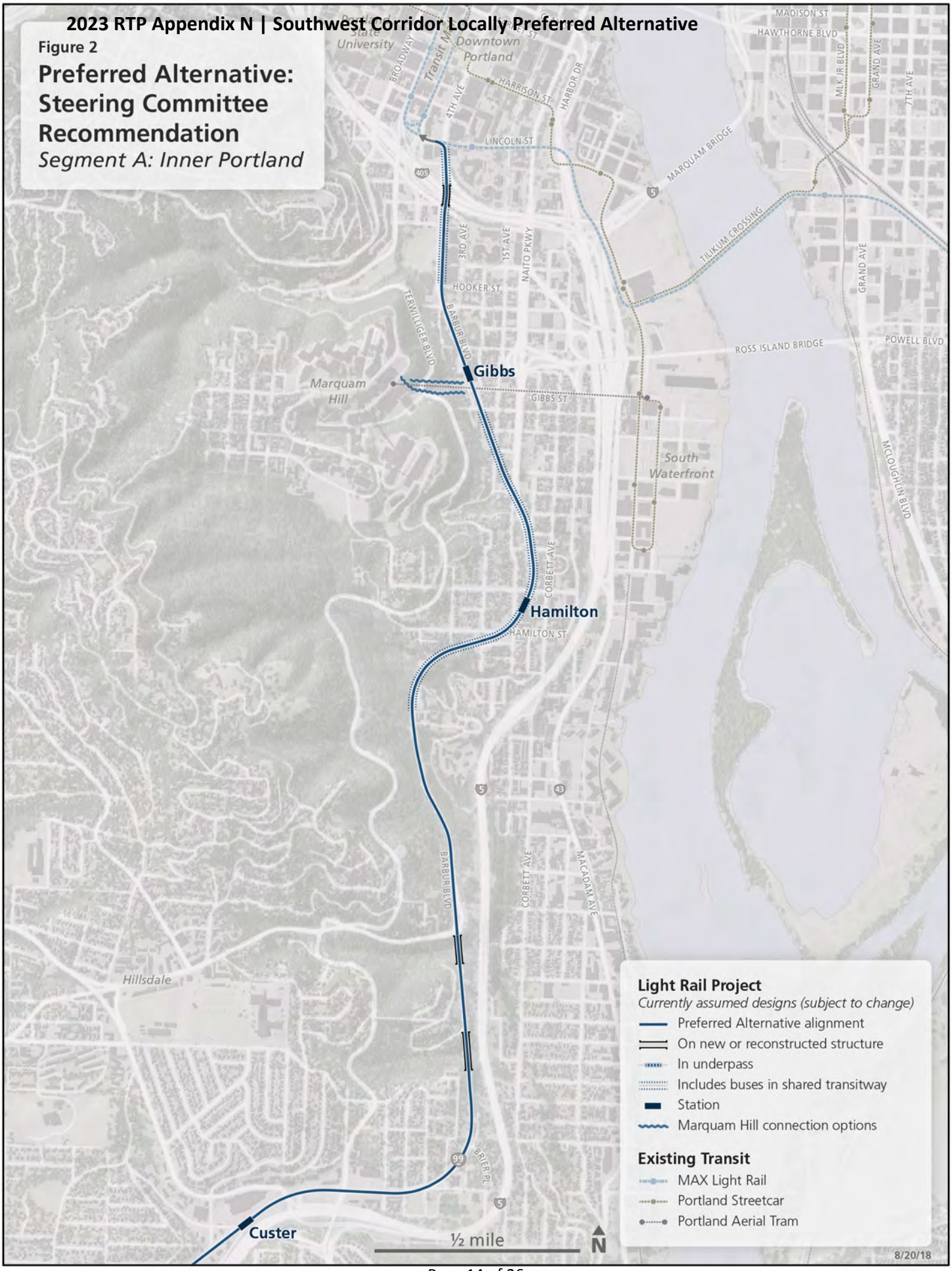
Compared to Refinement 1, Alternative A1 would:

- Replace the Vermont and Newbury viaducts, wood structures built in 1934, that compromise the safety of bicyclists and pedestrians due to their narrow widths
- Provide a continuous route for light rail, bicyclists, and pedestrians that would not require an at-grade crossing of northbound SW Barbur Boulevard auto lanes
- Be the result of an agreement between ODOT and City of Portland in which ODOT would contribute funding toward the replacement of the viaducts. This funding could be considered separate from project costs

Figure 2

Preferred Alternative: Steering Committee Recommendation

Segment A: Inner Portland



Segment B: Outer Portland

Description

In Segment B, Outer Portland, which extends from SW Barbur Boulevard at SW Brier Place to the intersection of SW 68th Avenue and SW Atlanta Street, just west of the Portland/Tigard city boundary, the recommended Preferred Alternative includes:

- Alternative B2, I-5 Barbur Transit Center to 60th
- Refinement 2, Taylors Ferry I-5 Overcrossing
- Refinement 4, Barbur Undercrossing

The Preferred Alternative in Segment B is shown in Figure 3.

Light rail would operate in the center of SW Barbur Boulevard from the northern end of Segment B until just north of the Barbur Transit Center. At this location, with Refinement 2, light rail would cross the southbound lane of SW Barbur Boulevard at a gated crossing to run north of and parallel to SW Taylors Ferry Road. It would cross SW Capitol Highway at grade before turning south on structure to cross over SW Taylors Ferry Road and I-5 to land between I-5 and SW Barbur Boulevard. If pending analysis of the benefits and impacts of Refinement 2 indicates it would not represent an improvement over Alternative B2, this or the subsequent Steering Committee may recommend replacing Refinement 2 in the Preferred Alternative with Alternative B2 without the refinement, or some other design resulting from continued analysis. Without Refinement 2 , light rail would cross the northbound lane of SW Barbur Boulevard at a gated crossing to run between Barbur Transit Center and I-5. It would cross over a new light rail structure crossing I-5, SW Capitol Highway, and SW Barbur Boulevard to land between SW Barbur Boulevard and I-5.

Where SW Barbur Boulevard crosses I-5 (the northern point of the Tigard Triangle), light rail would cross over I-5 on a new parallel structure that would then descend into the space between the I-5 off-ramp and southbound SW Barbur Boulevard/Pacific Highway. The alignment would then cross under Pacific Highway to transition to the southeast side of the roadway just west of SW 65th Avenue. The alignment would accommodate Highway 99W and I-5 planning envelopes and sight distance standards set by ODOT.

Continuous bicycle and pedestrian facilities would be constructed along Barbur Boulevard from Segment A to the Barbur Transit Center.

The Steering Committee recommends further environmental analysis of Refinement 2, with TriMet's future steering committee to determine whether the Final EIS studies Refinement 2, unrefined Alternative B2 or a design variation of either.

Stations and park and rides

The Preferred Alternative includes the following stations and park and rides in Segment B:

- Custer Station
- 19th Station

- 30th Station
- Barbur TC Station and park and ride with up to 825 spaces
- 53rd Station and park and ride with up to 950 spaces
- 68th Station and park and ride with up to 900 spaces (located in overlap of Segments B and C)

Additional Project Elements

The committee recommends the continued consideration of these components of the proposed project:

- 53rd Avenue pedestrian and bicycling improvements between the station and the PCC Sylvania campus
- PCC Sylvania bus shuttle, either between campus and the SW 53rd Avenue Station, or between Barbur Transit Center, PCC Sylvania, and the SW 68th Avenue Station

Options considered and removed from consideration

The following alternatives were considered for Segment B:

- Alternative B1, Barbur, in which the light rail alignment would remain on SW Barbur Boulevard throughout Segment B
- Alternative B3, I-5 26th to 60th, in which light rail would transition from SW Barbur Boulevard to adjacent to I-5 near SW 26th Avenue
- Alternative B4, I-5 Custer to 60th, in which light rail would transition from SW Barbur Boulevard to adjacent to I-5 near SW Custer Street
- Refinement 3, I-5 Undercrossing, in which light rail would cross SW Barbur Boulevard south of the 53rd Station and continue adjacent and east of I-5, until tunneling under I-5 to reach the Tigard Triangle parallel to SW Atlanta Street and connecting to SW 70th Avenue.

Additional alternatives were considered and narrowed by the committee in project phases completed prior to the initiation of the Draft EIS.

Rationale for selection

Compared to Alternatives B3 and B4, Alternative B2 would:

- Offer more accessible and visible station locations
- Include more streetscape and safety improvements to SW Barbur Boulevard
- Result in fewer residential displacements
- Better support the Barbur Concept Plan

Compared to Alternative B1, Alternative B2 would avoid the complex reconstruction of the existing bridge over I-5 at Crossroads. The committee believes Alternative B1 to be largely infeasible and undesirable for reasons not described in the Draft EIS, namely that the Barbur/Capitol bridge over I-5

would need to be reconstructed as the existing structure is not strong enough for light rail trains. The reconstructed bridge would likely:

- Be rebuilt to be higher to meet current clearance standards and thus create challenges with adjacent property accesses as the elevation of streets immediately adjacent to the structure would also need to be raised. Bike and pedestrian connectivity and safety issues would not be resolved and may be exacerbated.
- Result in a multiple year closure of SW Capitol Highway (Highway 10) and SW Barbur Boulevard
- Require supports (the current structure is a free span), necessitating the widening of I-5 for a length in each direction, which could result in reconstruction of existing on and off ramps, and may trigger a federal requirement for a full interchange at current standards. These resultant effects would significantly increase the financial cost and adverse effects of the project.

Refinement 2 would, in comparison to Alternative B2 as designed:

- Reduce construction impacts on I-5 by providing a shorter light rail bridge
- Reduce visual impacts because the bridge over I-5 would be lower as it would not cross over SW Barbur Boulevard or SW Capitol Highway
- Reduce costs

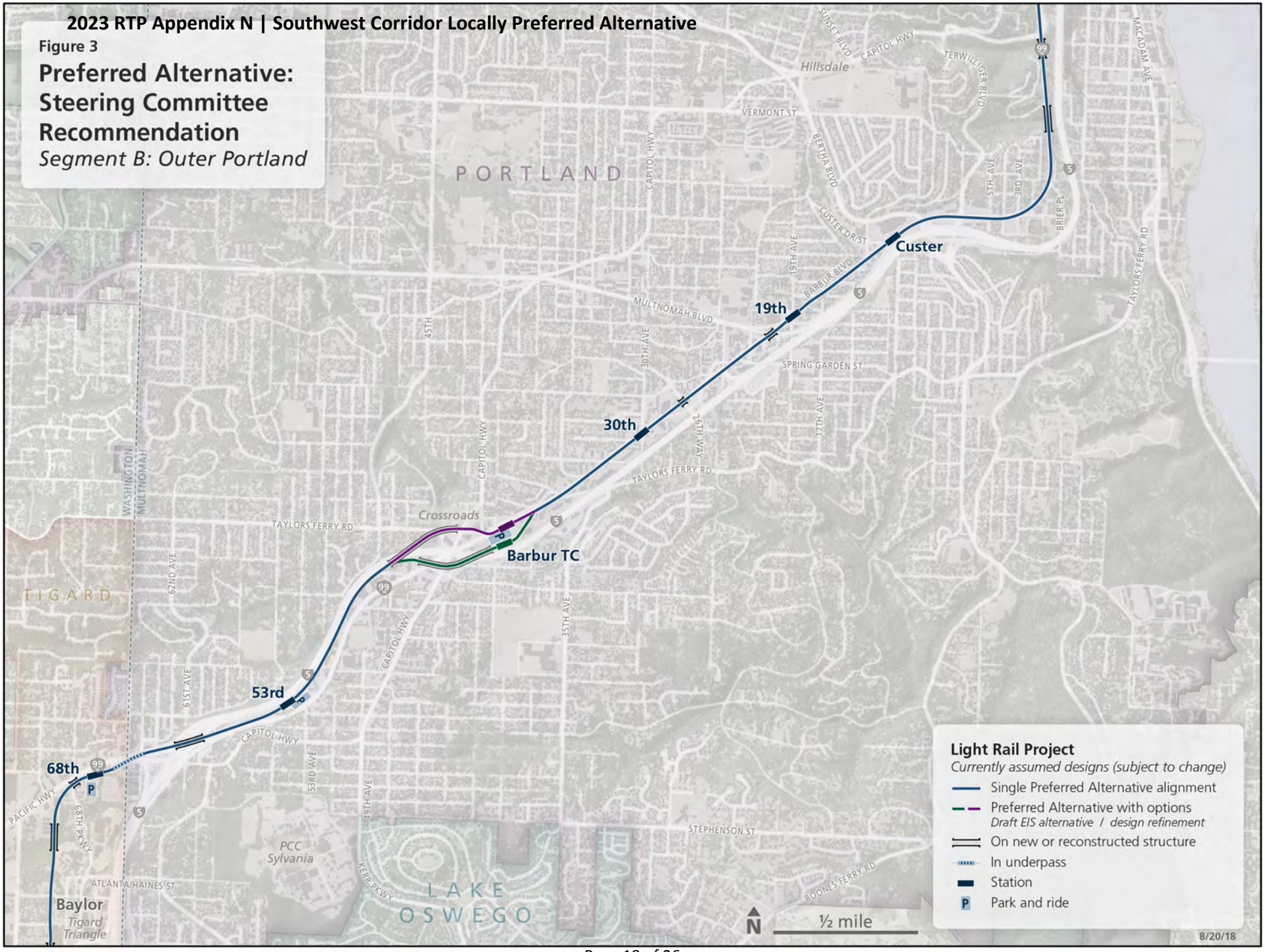
Refinement 4 would, in comparison to both Alternative B2 as designed and Refinement 3:

- Result in a faster travel time for transit passengers
- Lower capital costs
- Reduce visual impacts by providing a shorter light rail bridge
- Reduce construction-period traffic impacts on I-5
- Shift the Baylor Station and park and ride to SW 68th Avenue near OR-99W, improving station spacing and park and ride access, and increasing ridership

Figure 3

Preferred Alternative: Steering Committee Recommendation

Segment B: Outer Portland



Segment C: Tigard and Tualatin

Description

In Segment C, which extends from the intersection of SW 68th Place and Pacific Highway to Bridgeport Village in Tualatin, the recommended Preferred Alternative includes:

- Alternative C2, Ash to Railroad
- Refinement 5, Elmhurst
- Refinement 6, Tigard Transit Center Station East of Hall

The Preferred Alignment in Segment C is shown in Figure 4.

This combination of Alternative C2 and refinements represents a Through-Routed alignment direct to Bridgeport Village, and ends consideration of a Branched alignment with separate branches to downtown Tigard and to Bridgeport Village. For more details, see Chapter 2 of the Draft EIS.

From the southeast side of SW Barbur Boulevard near SW 68th Avenue, a new curved light rail bridge would connect to the Tigard Triangle, via a light rail-only bridge over 68th Avenue, with a north-south alignment bridge over Red Rock Creek connecting to SW 70th Avenue at SW Atlanta Street. Between SW Atlanta Street and SW Elmhurst Street, light rail would operate along the SW 70th Avenue right-of-way, which would include bicycle and pedestrian facilities, and cross over SW Dartmouth Street on structure.

The alignment would turn west from SW 70th Avenue onto SW Elmhurst Street, with a station between SW 70th Avenue and SW 72nd Avenue. The alignment would continue west to cross SW 72nd Avenue at grade, before elevating to cross over Highway 217 on a light rail-only bridge toward downtown Tigard. Upon reaching the ground west of Highway 217, the alignment would turn southwest and cross SW Hunziker Street at grade in the vicinity of SW Knoll Drive and travel along the east side of SW Hall Boulevard to reach a station, which would include a bus transfer area and new park and ride.

From this new transit center east of Hall, light rail would turn to the southeast and travel adjacent to the freight rail and WES Commuter Rail tracks. Light rail would be on a structure between just south of SW Tech Center Drive and just south of SW Bonita Road to avoid a freight rail spur track and SW Bonita Road, resulting in an elevated station at SW Bonita Road. The alignment would continue adjacent to the railroad at grade and cross SW 72nd Avenue and SW Upper Boones Ferry Road with at-grade gated intersections. The route would approach I-5 about 0.25 mile south of SW Upper Boones Ferry Road before turning south to pass over the railroad on structure toward the terminus at SW Lower Boones Ferry Road near Bridgeport Village.

Continuous bicycle and pedestrian facilities would be constructed along the light rail alignment where it is on SW 70th Avenue south of Red Rock Creek, and potentially in other locations as well.

The alignment would accommodate Highway 99W and I-5 planning envelopes and sight distance standards set by ODOT.

Stations and park and rides

The Preferred Alternative includes the following stations and park and rides in Segment C:

- 68th Station and park and ride with up to 900 spaces (located in overlap of Segments B and C)
- Elmhurst Station
- Hall Station and park and ride with up to 300 spaces
- Bonita Station and park and ride with up to 100 spaces
- Upper Boones Ferry Station and park and ride with up to 50 spaces
- Bridgeport Station and park and ride with up to 950 spaces

Additional Project Elements

- An operations and maintenance facility to the southeast of the Hall station, between SW Hunziker Street and the WES/freight tracks

Options considered and removed from consideration

The following alternatives were considered for Segment C:

- Alternative C1, Ash to I-5, in which light rail would diverge from the railroad right of way near SW Landmark Lane south of downtown Tigard to reach I-5 and operate adjacent to I-5 to Bridgeport Village
- Alternative C3, Clinton to I-5, in which light rail would utilize a bridge extending from SW Clinton Street in the Tigard Triangle to downtown Tigard
- Alternative C4, Clinton to Railroad, in which light rail would be routed as Alternative C1 south of downtown Tigard and as Alternative C3 between the Tigard Triangle and downtown Tigard
- Alternative C5, Ash and I-5 Branched, in which light rail service would branch in the southern Tigard Triangle, with some trains using SW Ash Avenue to terminate in downtown Tigard, and some trains continuing along an adjacent to I-5 alignment to terminate at Bridgeport
- Alternative C6, Wall and I-5 Branched, in which light rail service would branch in the southern Tigard Triangle, with some trains using SW Wall Street to terminate in downtown Tigard, and some trains continuing along an adjacent to I-5 alignment to terminate at Bridgeport

Additional alternatives were considered and narrowed in project phases completed prior to the initiation of the Draft EIS.

Rationale for selection

Compared to Alternatives C5 and C6, which would branch service in the Tigard Triangle and have one terminus in downtown Tigard and one terminus in Bridgeport Village, C2 would:

- Provide better Tigard-Tualatin connectivity and better transit service in Downtown Tigard
- Have lower operating costs, resulting in more cost-effective light rail operations and allowing more local bus service in the corridor

Compared to C3 and C4, which would use an alignment on SW Clinton Street, C2 would:

- Provide an additional light rail station in the Tigard Triangle
- Result in higher ridership
- Better support the Tigard Strategic Plan
- Avoid a critical traffic impact at SW Hall Boulevard near Highway 99W

Compared to C1 and C3, which would operate a through route along I-5, C2 would:

- Provide faster service with faster travel times
- Result in fewer impacts to businesses and employees

Refinement 5 would:

- Avoid impacts to businesses on SW Beveland Street
- Result in faster travel times and increased ridership

Refinement 6 would:

- Avoid residential displacements along SW Hall Boulevard and SW Ash Avenue
- Reduce traffic impacts by avoiding two at-grade auto crossings of SW Hall Boulevard

Figure 4

Preferred Alternative: Steering Committee Recommendation

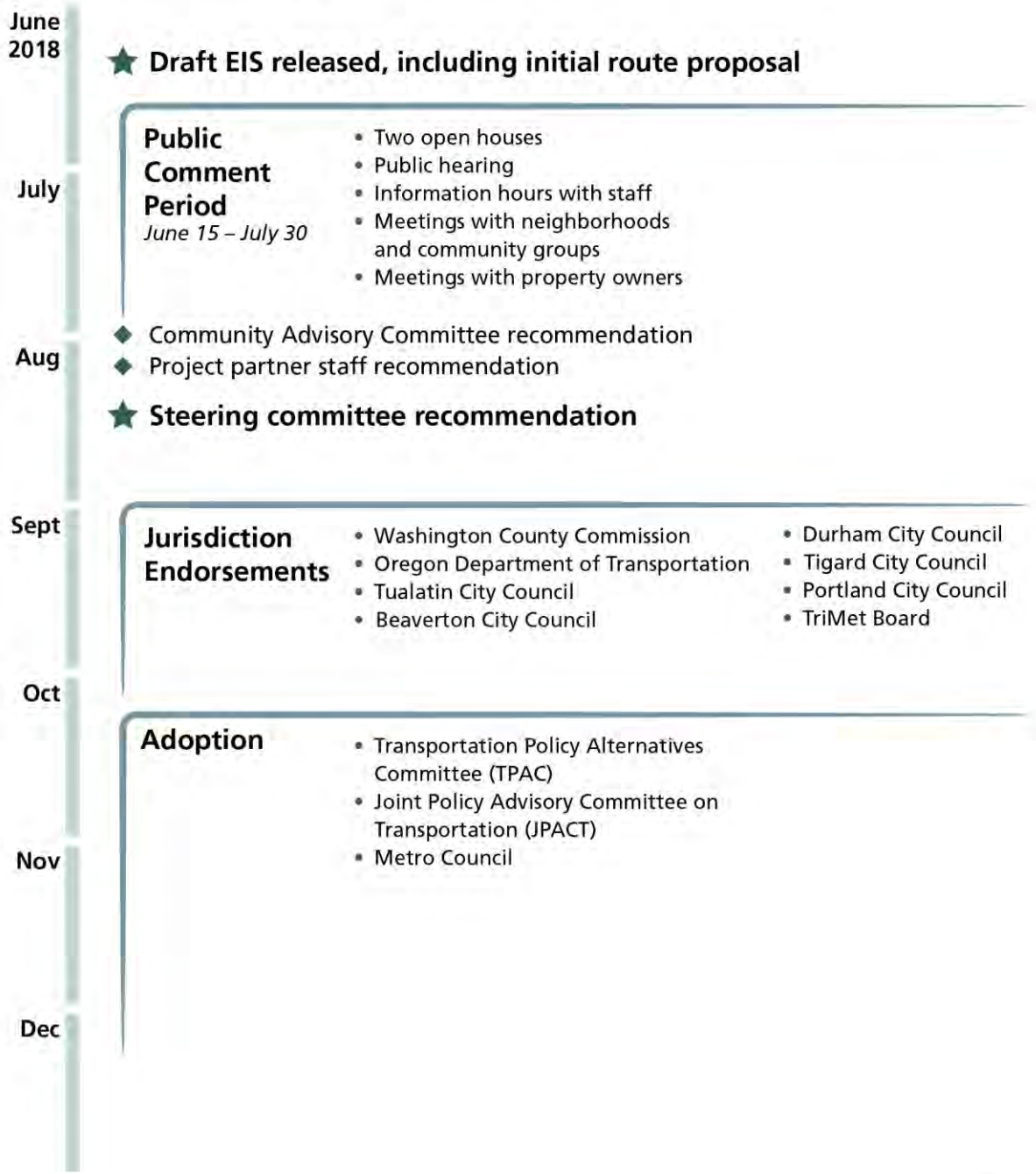
Segment C: Tigard and Tualatin

3. PREFERRED ALTERNATIVE SELECTION PROCESS

The anticipated process for adoption of the Preferred Alternative into the Regional Transportation Plan is shown in Figure 5.

Figure 5

Preferred Alternative Decision Process



Appendix A – Preliminary Work Plan Development

The following text is an initial set of interests that does not yet represent a finalized, consensus agreement. Factors from public comments and federal environmental permitting needs must also be taken into account before the workplan is finalized.

Segment A – Issues to be addressed

The committee recommends the following design and planning efforts as the project proceeds:

- Work with FTA to determine which portions of the viaducts replacement are eligible for federal funding recognizing that some elements may become betterments to the transit project
- Develop construction sequencing that minimizes traffic impacts related to replacement of the viaducts and associated SW Capitol Highway (Highway 10) overpass
- Define bicycle and pedestrian improvements at the tie-in of light rail to existing infrastructure at SW 4th Avenue and SW Lincoln Street.
- Optimize designs for the light rail alignment tie-in to existing light rail tracks at SW 4th Avenue and SW Lincoln Street to ensure reliable light rail operations.
- Maximize speeds of buses and trains operating together on the shared transitway in South Portland.
- Initiate a planning process to select and refine a Marquam Hill connection design.
- Continue traffic analysis with focus on, but not limited to, the South Portland area.

Segment B – Issues to be addressed

- Initiate a planning process to select and refine the bus shuttle route connecting light rail to the PCC Sylvania campus.
- Initiate discussion among project partners about the best locations and sizes of park and rides.
- Continue traffic analysis with focus on, but not limited to, the Crossroads area in the vicinity of Refinement 2.

Segment C – Issues to be addressed

- Continue cooperative design work between TriMet and the City of Tigard on the layouts and configurations of the Hall station and its related elements (bus stops, pedestrian connections, park and ride).
- Work to define MOS options that support Tigard's downtown vision, are cost effective, extendable to Tualatin and are operationally efficient.
- TriMet and City of Tigard will work on an agreement regarding the design, development opportunities, benefits and adverse effects of the downtown station.
- Initiate discussion among project partners about the best locations and sizes of park and rides.
- Explore ways to avoid or minimize impacts to businesses at the Bridgeport station and park and ride location.

- Continue traffic analysis with focus on, but not limited to areas near freeway ramps, at-grade rail crossings of roadways, and the Bridgeport terminus.
- Prioritize and identify funding for sidewalk and bike facilities or a multi-use path on the light rail bridge over Highway 217.

General planning and design

- Maintain the goal of creating a fast, cost effective project that reaches Bridgeport Village and includes a robust public engagement process to incorporate community values
- Continue to strive to minimize property impacts
- Continue collaboration of TriMet, Metro, Cites of Portland, Tigard and Tualatin and Washington County to pursue opportunities for regulated affordable housing in conjunction with the light rail project.
- Optimize the supporting transit network to ensure connectivity and broad transfer access to light rail
- Continue collaboration of project partners with FTA and other local and federal agencies participating in the environmental review process to define the work program of the Final EIS, particularly on issues such as traffic, ecosystems, water resources and indirect effects.

Design – bicycle and pedestrian

Prioritize and identify funding for sidewalks, bicycle facilities, or multi-use paths adjacent to the alignment or connecting to stations and consider including as betterments, including:

- The station access improvements included in the Draft EIS
- Over I-5 in the Crossroads area if not incorporated in light rail bridge design
- Over Red Rock Creek
- Over Highway 217

Design – stations and park and rides

Initiate a station and park and ride planning process to optimize the number of stations, park and rides, and their locations, and to optimize park and ride capacities and accesses. Further refine station access improvement projects based on the station locations.

- All park and rides: Evaluate sizing to balance transit performance with safety, traffic impacts, costs, and property impacts.
- All stations and park and rides: Identify opportunities to integrate new technologies for shared vehicles, autonomous vehicles, traffic signal coordination and more into station access and design.
- Barbur Transit Center: Optimize layout for transit operations and redevelopment potential
- Tigard Transit Center (Hall Station): Ensure designs create safe pedestrian and bicycling access between the station and downtown Tigard and to the WES Commuter Rail station, and foster

the station area's redevelopment as a mixed use area supporting housing and jobs. Design the operating and maintenance facility east of the Hall station in a manner that facilitates redevelopment in the vicinity.

- Bridgeport station: Emphasize the station's importance as the terminus in connecting to areas beyond the light rail line. With this potential as a mobility hub, ensure that all connecting modes—autos, buses, bicycles and pedestrians—have convenient access. Explore ways to avoid or minimize impacts to the Village Inn.

Traffic analysis

Consider expanding the scope of traffic analysis, while maintaining current methodologies. Staff needs to assess the following suggested analyses to distinguish those that may impact major alignment decisions and should be initiated in the short term to inform the Final EIS, versus those that will inform elements of the final design and can be performed later. The suggested analyses are:

- Assess traffic diversion and traffic circulation changes in the South Portland area, including SW Naito Parkway, SW Barbur Boulevard, I-405, US-26, local streets, and Ross Island Bridge ramps to identify required mitigations if the Ross Island Bridgehead Reconfiguration is not constructed in coordination with the light rail project, and to identify impacts and mitigations if it is.
- Assess traffic queuing resulting from light rail crossing of SW Upper Boones Ferry road crossing, and whether queuing would spill back to the I-5 ramps at SW Carmen Drive, and to the SW Durham Road crossing of WES Commuter Rail tracks. Identify mitigations, including consideration of grade separation.
- Study traffic and safety impacts in the greater Bridgeport area, including Nyberg Road, Tualatin-Sherwood Road, and Lower Boones Ferry Road resulting from access to the proposed park and ride terminus.
- Perform additional analysis where necessary at other highway ramp terminals, park and ride accesses, and at-grade light rail crossings of streets.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX O

2023 Regional Transportation Plan

Earthquake Ready Burnside Bridge Preferred Alternative

July 10, 2023

oregonmetro.gov/rtp

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

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

Project website: **oregonmetro.gov/rtp**

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

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING THE PREFERRED ALTERNATIVE FOR THE EARTHQUAKE READY BURNSIDE BRIDGE PROJECT	))))))	RESOLUTION NO. 23-5306 Introduced by Chief Operating Officer Marissa Madrigal in concurrence with Council President Lynn Peterson

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

WHEREAS, the RTP fulfills statewide planning requirements to implement Statewide Planning Goal 12 (Transportation), as implemented through the Transportation Planning Rule and the Metropolitan Greenhouse Gas Reduction Targets Rule; and

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

WHEREAS, the most recent update to the RTP was completed on December 6, 2018, following adoption by the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council; and

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

WHEREAS, the next update to the RTP is currently underway, and will be completed by December 6, 2023; and

WHEREAS, our region's infrastructure systems need to be resilient and prepared for multiple hazard risks, which include earthquakes, wildfires, landslides, floods, severe weather and volcanic events, and the increasing impacts of climate change; and

WHEREAS, resilient infrastructure systems and emergency management planning will help mitigate the risks these hazards pose to the public health and safety of communities and the region's economic prosperity; and

WHEREAS, research and experience demonstrate that climate change and natural hazards have a disproportionate effect on historically marginalized communities, including Black, Indigenous and people of color (BIPOC), people with limited English proficiency, people with low income, youth, seniors, and people with disabilities, who typically have fewer resources and more exposure to environmental hazards, and are, therefore, the most vulnerable to displacement, adverse health effects, job loss, property damage and other effects; and

WHEREAS, the Willamette River Bridges, including the Burnside Bridge, provide critical east-west connections that connect the two halves of the region and are of regional economic importance; and

WHEREAS, the 2018 RTP describes the need for a long-term strategy for maintaining the region's bridges, particularly the bridges spanning the Willamette River; and

WHEREAS, in 1994, the City of Portland identified the Burnside corridor, including the Burnside Bridge, as an Emergency Service Lifeline Corridor; and

WHEREAS, in 1996, Metro identified the Burnside corridor, including the Burnside Bridge, as a Regional Emergency Transportation Route (ETR); and

WHEREAS, the 2018 RTP identified the need for an update to the designated Regional ETRs to support future planning, policymaking and investment related to regional emergency management, transportation recovery and resiliency; and

WHEREAS, updates to the Regional ETRs incorporated changes recommended by the City of Portland, Clackamas, Columbia, Multnomah and Washington counties and ODOT through recent work that evaluated seismic risks along Statewide Seismic Lifeline Routes identified in the Oregon Highway Plan; and

WHEREAS, the 2021 Regional ETR Update Report identified a network of local and state-owned route segments in the region that should be designated as Regional ETRs, and summarized key findings about the resilience and connectivity of these routes and recommendations for future planning work, including a second planning phase to tier and operationalize the routes; and

WHEREAS, the analysis found that many of the Regional ETRs and their bridges are vulnerable to significant seismic and other hazard risks, such as flooding, landslides and liquefaction; and

WHEREAS, the analysis found that the network of Regional ETRs provide adequate connectivity and access to the Statewide Seismic Lifeline Routes as well as the region's population centers, isolated populations, areas with high concentrations of vulnerable populations, and critical infrastructure and essential facilities of state and regional importance; and

WHEREAS, by accepting the findings and recommendations in the 2021 Regional ETR Update, JPACT and the Metro Council recognized that all routes designated in the report are of state and regional importance during an emergency; and

WHEREAS, the 2021 Regional ETR Update Report identified the Burnside corridor, including the Burnside Bridge, as a Regional ETR; and

WHEREAS, the 2021 Regional ETR Update Report identified the Burnside Bridge as the only non-state owned ETR with a direct connection over the Willamette River to downtown Portland; and

WHEREAS, the Burnside Bridge carries approximately 38,000 people daily by car, truck, bus, bicycle and on foot; and

WHEREAS, Multnomah County is the owner and operator of the Burnside Bridge; and

WHEREAS, in the 2015 Willamette River Bridges Capital Improvement Plan, Multnomah County identified the need to either replace the existing Burnside Bridge with a new seismically resilient bridge or complete a major seismic rehabilitation; and

WHEREAS, from 2016 to 2018 Multnomah County conducted a feasibility study for an Earthquake Ready Burnside Bridge, which developed and screened over 100 river crossing alternatives; and

WHEREAS, in November 2018 the Multnomah County Board of Commissioners approved the Earthquake Ready Burnside Bridge Feasibility Study Report and advanced four bridge alternatives for further study in the Environmental Review phase; and

WHEREAS, from October 2018 to July 2022, Multnomah County convened three stakeholder committees to provide input on the Earthquake Ready Burnside Bridge project: the Community Task Force, the Policy Group, and the Senior Agency Staff Group; and

WHEREAS, on October 29, 2020, the Multnomah County Board of Commissioners approved the Long-span Approach Alternative and the No Temporary Bridge Option as the Preferred Alternative for the Earthquake Ready Burnside Bridge project; and

WHEREAS, on February 5, 2021, Multnomah County and the Federal Highway Administration (FHWA) published a Draft Environmental Impact Statement (DEIS) for the Earthquake Ready Burnside Bridge project that assesses the potential impacts of the project alternatives, including the No-Build Alternative, the Enhanced Seismic Retrofit Alternative, the Replacement Alternative with Short-span Approach, the Replacement Alternative with Long-span Approach, and the Replacement Alternative with Couch Extension; and

WHEREAS, on March 17, 2022, the Multnomah County Board of Commissioners approved three cost-saving refinements to the Preferred Alternative, consisting of a bascule movable span, a westside girder approach and reduced width of the bridge; and

WHEREAS, on April 29, 2022, Multnomah County and the FHWA published a Supplemental DEIS for the Earthquake Ready Burnside Bridge project, which addresses refinements to the Replacement Alternative with Long-span Approach that was published in the February 2021 Draft EIS; and

WHEREAS, on March 3, 2022, the Earthquake Ready Burnside Bridge project Policy Group, which consists of elected officials and agency executives from Multnomah County, the cities of Portland and Gresham, TriMet, ODOT, FHWA and staff representatives from Oregon's Congressional delegation and the Oregon Legislature, endorsed the refinements to the Preferred Alternative as described in the Supplemental DEIS; and

WHEREAS, on July 20, 2022, the Portland City Council adopted Resolution No. 37582, to accept the Locally Preferred Alternative for the Earthquake Ready Burnside Bridge design as defined in the Supplemental DEIS and direct further actions; and

WHEREAS, Multnomah County and City of Portland are actively collaborating on project refinements to address further actions identified in Portland City Council Resolution No. 37582 and in response to public involvement during SDEIS phase; and

WHEREAS, Multnomah County and the FHWA anticipate publishing a Final Environmental Impact Statement and Record of Decision for the Earthquake Ready Burnside Bridge project in 2023; and

WHEREAS, on July 13, 2020, the Metro Council approved Resolution No. 20-5122 adopting the Get Moving 2020 Corridor Investment Package, which identified the Burnside corridor, including the Earthquake Ready Burnside Bridge project, as a regional funding priority; and

WHEREAS, JPACT and Metro Council identified the Earthquake Ready Burnside Bridge project as a regional funding priority as part of the 2021 Jobs, Climate Action, Transit & Safety: Greater Portland's 2021 Regional Congressional Directed Spending Request; and

WHEREAS, the Earthquake Ready Burnside Bridge project is projected to cost up to $895 million; and

WHEREAS, federal funding is increasingly competitive at the federal level, and project-specific funding in federal legislation has resumed; and

WHEREAS, the FHWA requires that the construction phase of the Earthquake Ready Burnside Bridge project be included in the RTP financially constrained project list prior to issuing a Record of Decision for the project; and

WHEREAS, the 2018 RTP currently identifies the Earthquake Ready Burnside Bridge as a regionally significant project; and

WHEREAS, the adopted 2018 RTP financially constrained project list includes Earthquake Ready Burnside Bridge Phase 1 and Phase 2 projects (RTP Project 11129 and RTP Project 11376) that reflect planning and project development activities, including planning required under the National Environmental Policy Act (NEPA) process, project design and right-of-way acquisition; and

WHEREAS, the adopted 2018 RTP strategic project list includes additional priority projects the region would pursue if more funding becomes available, including the Earthquake Ready Burnside Bridge Phase 3 (RTP Project 12076) that reflects the construction phase of the project; and

WHEREAS, the 2018 RTP does not currently include the construction phase of the Earthquake Ready Burnside Bridge project in the RTP financially constrained project list or RTP financial plan; and

WHEREAS, since adoption of the 2018 RTP a financial plan for construction of the Earthquake Ready Burnside Bridge project has been completed using best available information that shows project costs and future revenue sources that are reasonably likely to be available and can be included in the 2023 RTP financially constrained revenue forecast, including $300 million identified in locally committed funding from Multnomah County; and

WHEREAS, on May 5, 2022, Metro Council adopted Resolution No. 22-5255, For the Purpose of Approving a Work Plan and Public Engagement Plan for the 2023RTP Update, and is therefore no longer accepting formal amendments to the 2018 RTP while the 2023 RTP is being developed; and

WHEREAS, the 2023 RTP call for projects will begin in January 2023; and Multnomah County submitted a letter on December 30, 2022 committing to submit the construction phase of the Earthquake Ready Burnside Bridge project among their list of project priorities recommended for the 2023 RTP financially constrained project list; and

WHEREAS, in November 2023, Metro Council and JPACT will consider approval of the 2023 RTP and financially constrained project list; and

WHEREAS, at its meeting on February 16, 2023, JPACT recommended approval of the following; now therefore,

BE IT RESOLVED that the Metro Council:

1. Supports the Earthquake Ready Burnside Bridge project as a priority for the region, consistent with federal, state, regional and local resilience priorities, and supports the Burnside Bridge as a Regional Emergency Transportation Route.

2. Supports an Earthquake Ready Burnside Bridge Preferred Alternative as described in Exhibit A, "Earthquake Ready Burnside Bridge Preferred Alternative," attached.

3. Recognizes the extensive, multi-year public process and advanced technical analysis that has been completed to date resulting in the Earthquake Ready Burnside Bridge Preferred Alternative being approved with broad local and regional support.

4. Recognizes that Multnomah County has prepared a finance plan for the project, as described in Exhibit B: "Earthquake Ready Burnside Bridge Financial Plan," attached, which identifies project costs and future revenue sources that are reasonably expected to be available for inclusion in the 2023 RTP financially constrained revenue forecast.

5. Supports Multnomah County's commitment to submit the construction phase of the Earthquake Ready Burnside Bridge project among their list of project priorities recommended for the 2023 Regional Transportation Plan financially constrained project list as described in Exhibit C, "Letter of Commitment from Multnomah County Transportation Division Director," attached.

6. Directs Metro staff to accept the Earthquake Ready Burnside Bridge project submission for inclusion in the list of projects considered in development of the 2023 RTP financially constrained project list.

ADOPTED by the Metro Council this 16th day of March, 2023.

Lynn Peterson, Council President

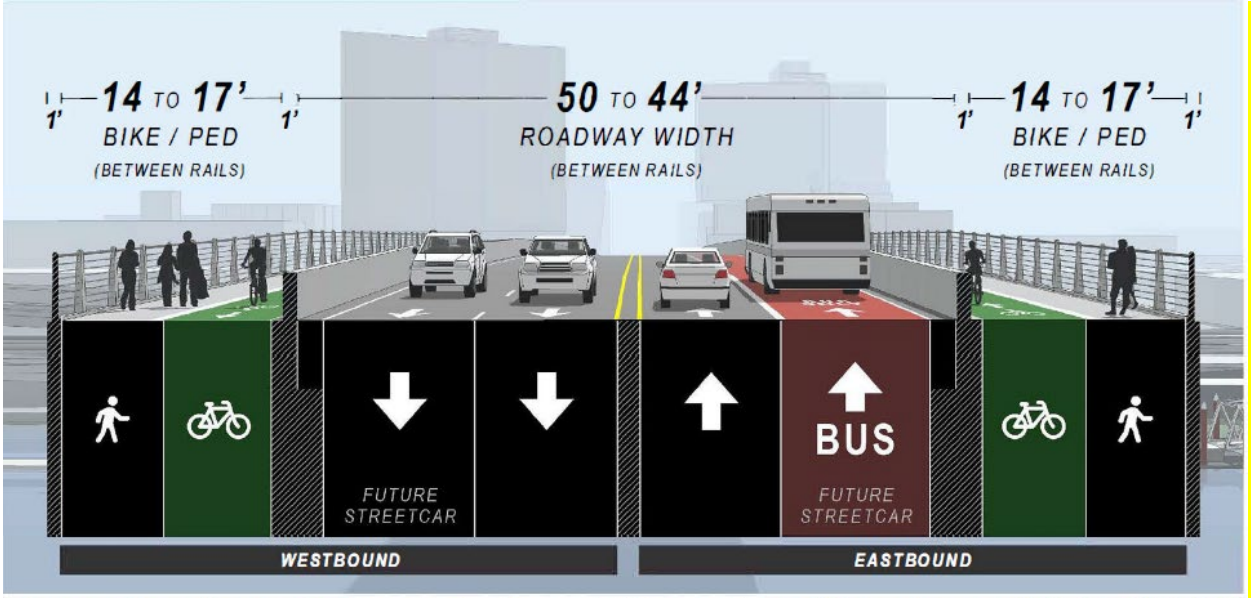
Approved as to Form:

Carrie MacLaren

Carrie MacLaren, Metro Attorney

Exhibit A: Earthquake Ready Burnside Bridge Preferred Alternative

The recommended Preferred Alternative for the Earthquake Ready Burnside Bridge is a girder style bridge type for the west span, a bascule for the middle movable span, and four travel lanes with separated pedestrian and bicycle facilities as shown below.



Cross Section: Refined Preferred Alternative (Supplemental Draft EIS)

Exhibit B: Earthquake Ready Burnside Bridge Project Financial Plan

The Earthquake Ready Burnside Bridge (EQRB) Project is a project led by Multnomah County in collaboration with the Federal Highway Administration, Oregon Department of Transportation, City of Portland, Metro, and TriMet.

The EQRB Project was identified in Multnomah County's Willamette River Bridge Capital Improvement Plan (2015) as the top priority project for the 2015-2035 timeframe. In 2019, Multnomah County Board of County Commissioners approved raising the Vehicle Registration Fee (VRF) by $19/year, from $37 to $56, specifically for the design and construction of this project. It is notable that City of Portland and other small cities within the County waived their allotted portions of the VRF in order to help fund the Project. Collections began January 2021 with estimates anticipating that annual revenues will secure approximately $328M in bonding capacity. The County is actively pursuing federal funding opportunities to secure the remaining revenue needed to fully fund the Project.

The US Department of Transportation awards capital construction grants on a competitive basis. The EQRB project has been awarded a $5M RAISE Planning Grant for final design and has submitted an application to the USDOT for a Multimodal Projects Discretionary Grant (2022) and a Bridge Investment Program Grant (2022). In addition, the County was also awarded a $2 million Community Project Funding Grant from the FY23 federal appropriations bill.

It is reasonable to assume that the Project will be successful in securing federal funds given the increase in funding for new and existing grant programs from the recently passed Infrastructure Investment and Jobs Act (IIJA), available FY22 through FY26. The Project is considered competitive for the grant programs given the County is nearing completion of the NEPA phase, has identified local match for approximately 30% of project costs, the bridge is located on the National Highway System, the Project is scheduled for construction by 2025, and has garnered broad community and agency support.

The project costs and assumed funding sources for the total project are summarized in Table 1 and Table 2 below.

Table 1: Total Project Costs

Description	Cost*
Preliminary Engineering	$90.0 M
Construction Engineering	$81.8 M
Right of Way	$34.6 M
Construction	$565.7 M
Construction Contingency	$122.9 M
Total	**$895.0 M**

*escalated to year of expenditure

Table 2: Potential Sources of Project Funds (2022 $)

Source of Funds	Multnomah County	Community Project Funding Grant	Multimodal Project Discretionary Grant (MPDG)	Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant	Bridge Inv. Program Grant	Total
Preliminary Engineering	$83.0 M	$2.0 M		$5.0 M		$90.0 M
Construction Engineering	$81.8 M					$81.8 M
Right of Way	$34.6 M					$34.6 M
Construction	$5.7 M		$435.0 M		$125.0 M	$565.7 M
Construction Contingency	$122.9 M					$122.9 M
Total	$328.0 M	$2.0 M	$435.0 M	$5.0 M	$125.0 M	$895.0 M

COUNCIL MEETING STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 23-5306, FOR THE PURPOSE OF ENDORSING THE PREFERRED ALTERNATIVE FOR THE EARTHQUAKE READY BURNSIDE BRIDGE PROJECT

Date: December 30, 2022
Department: Planning, Development & Research
Meeting Date: March 16, 2023

Prepared by: Alex Oreschak
Presenter(s) (if applicable): Alex Oreschak, Metro and Megan Neill and Taylor Steenblock, Multnomah County
Length: 30 minutes

ISSUE STATEMENT

Multnomah County and the Federal Highway Administration (FHWA) published a Supplemental Draft Environmental Impact Statement for the Earthquake Ready Burnside Bridge (EQRB) Project on April 29th, 2022, followed by a 45-day public comment period. FHWA anticipates publishing a Final EIS and Record of Decision (ROD) for the EQRB Project in 2023. In order to publish a Record of Decision, FHWA generally requires that a project be able to demonstrate fiscal constraint by identifying all phases of the project anticipated during the lifetime of the Regional Transportation Plan (RTP) in the financially constrained project list. Currently, the planning, project development, design, and right of way phases of the project are identified in the 2018 RTP's financially constrained project list. The construction phase of the project is currently in the 2018 RTP's unconstrained project list.

Additionally, on May 5, 2022, Metro Council adopted Resolution No. 22-5255, For the Purpose of Approving a Work Plan and Public Engagement Plan for the 2023 Regional Transportation Plan Update. Metro is no longer accepting formal amendments to the 2018 RTP while the 2023 RTP is being developed.

Alongside the adoption of a Preferred Alternative by JPACT and Metro Council, Multnomah County anticipates submitting the construction phase of the project as part of the 2023 RTP call for projects, to be considered in development of the 2023 RTP financially constrained project list. Inclusion of the construction phase in the 2023 RTP financially constrained project list would satisfy federal requirements that must be met for FHWA to issue a Record of Decision for the project.

On January 6, 2023, Metro's Transportation Policy Alternatives Committee (TPAC) recommended that JPACT recommend adoption of Resolution No. 23-5306, For the Purpose of Endorsing the Preferred Alternative for the Earthquake Ready Burnside Bridge Project. On February 16, 2023, Metro's Joint Policy Advisory Committee on Transportation (JPACT) recommended that Metro Council adopt Resolution No. 23-5306, For the Purpose

of Endorsing the Preferred Alternative for the Earthquake Ready Burnside Bridge Project as amended.

ACTION REQUESTED

Adopt Resolution No. 23-5306, For the Purpose of Endorsing the Preferred Alternative for the Earthquake Ready Burnside Bridge Project.

IDENTIFIED POLICY OUTCOMES

Adoption of this resolution will allow the project to advance design work, for Multnomah County to submit the construction phase of the project in the 2023 RTP update's call for projects, and for the construction phase of the project to be considered for inclusion in development of the 2023 RTP financially constrained project list.

POLICY QUESTION(S)

Does the Council support the Preferred Alternative for Multnomah County's Earthquake Ready Burnside Bridge Project?

STAFF RECOMMENDATIONS

Adopt Resolution No. 23-5306, For the Purpose of Endorsing the Preferred Alternative for the Earthquake Ready Burnside Bridge Project.

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

Legal Antecedents

Federal

- National Environmental Policy Act

State

- Statewide Planning Goals
- State Transportation Planning Rule
- Oregon Transportation Plan
- Oregon Highway Plan
- Oregon Public Transportation Plan
- Oregon Bicycle and Pedestrian Plan

Local

- Resolution No. 22-5255, For the Purpose of Approving a Work Plan and Public Engagement Plan for the 2023 Regional Transportation Plan Update

Local Jurisdictions

- The City of Portland adopted Resolution No. 37582, to accept the Locally Preferred Alternative for the Earthquake Ready Burnside Bridge design as defined in the Supplemental Draft Environmental Impact Statement and direct further actions

BACKGROUND

The primary purpose of the EQRB Project is to create a seismically resilient Burnside Street lifeline crossing of the Willamette River that would remain fully operational and accessible for vehicles and other modes of transportation immediately following a major Cascadia Subduction Zone (CSZ) earthquake.

The adopted 2018 RTP's financially constrained project list includes Phase 1 and Phase 2 of the EQRB Project, which reflect planning and project development activities, including planning required under the National Environmental Policy Act (NEPA) process, project design and right-of-way acquisition. Additionally, the adopted 2018 RTP's strategic project list, which identifies additional priority projects the region would pursue if more funding becomes available, includes the EQRB Project's Phase 3, reflecting the construction phase of the project.

Over 100 options were studied during the EQRB Project's Feasibility Study Phase (2016-2018), including tunnels, ferries, a fixed bridge, and other bridge alignments. From that study, four bridge alternatives were recommended for further study in an Environmental Impact Statement (EIS). The Replacement Long Span alternative was recommended by the Community Task Force and Policy Group in late fall 2020. Responses from an online public survey showed 88% support for the recommendation. On February 5th, 2021, the County published a Draft Environmental Impact Statement that included the recommended Preferred Alternative followed by a 45-day public comment period.

Following publication of the Draft EIS, the County asked the project team to identify ways to bring the overall cost of the project down, while maintaining the core purpose and need of the project, in order to help ensure a new bridge is funded and built. Any significant changes to the project as a result would be documented in Supplemental Draft Environmental Impact Statement and published for public review and comment. Over the course of the summer of 2021, the project team worked to identify a range of cost saving measures and presented them to the Community Task Force in October 2021.The range of cost saving measures included the selection of a conventional girder style structure type for the west approach span over Tom McCall Waterfront Park, a bascule style structure type for the movable span in the river, and the narrowing of the overall bridge width resulting in the reduction of one vehicular lane of traffic. The Community Task Force then provided a preliminary approval of the range of cost saving measures, subject to hearing feedback from the public on the changes being proposed.

After reviewing the results from the public outreach campaign conducted in late fall of 2021, the Community Task Force voted by majority on January 24th, 2022 to recommend that the cost saving measures be adopted as part of an updated recommended Preferred Alternative. On March 3rd, 2022 the Policy Group of the Earthquake Ready Burnside Bridge Project approved the recommendation put forth by the Community Task Force. The Board of County Commissioners approved the refined recommended Preferred Alternative on

March 17th, 2022. Subsequently, the Supplemental Draft Environmental Impact Statement was published on April 29th, 2022, followed by a 45-day public comment period.

ATTACHMENTS

Attachment 1: Resolution No. 23-5306, For the Purpose of Endorsing the Preferred Alternative for the Earthquake Ready Burnside Bridge Project

- Is legislation required for Council action? ☑ Yes ☐ No
- If yes, is draft legislation attached? ☑ Yes ☐ No

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX P

2023 Regional Transportation Plan

East Metro Connections Plan

July 10, 2023

oregonmetro.gov/rtp

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

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

Project website: **oregonmetro.gov/rtp**

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

East Metro Connections Plan

June 2012

This East Metro Connections Plan analyzed present and future transportation challenges and presents solutions that reflect community values. The recommendation identifies transportation and other investments that advance economic and community development.

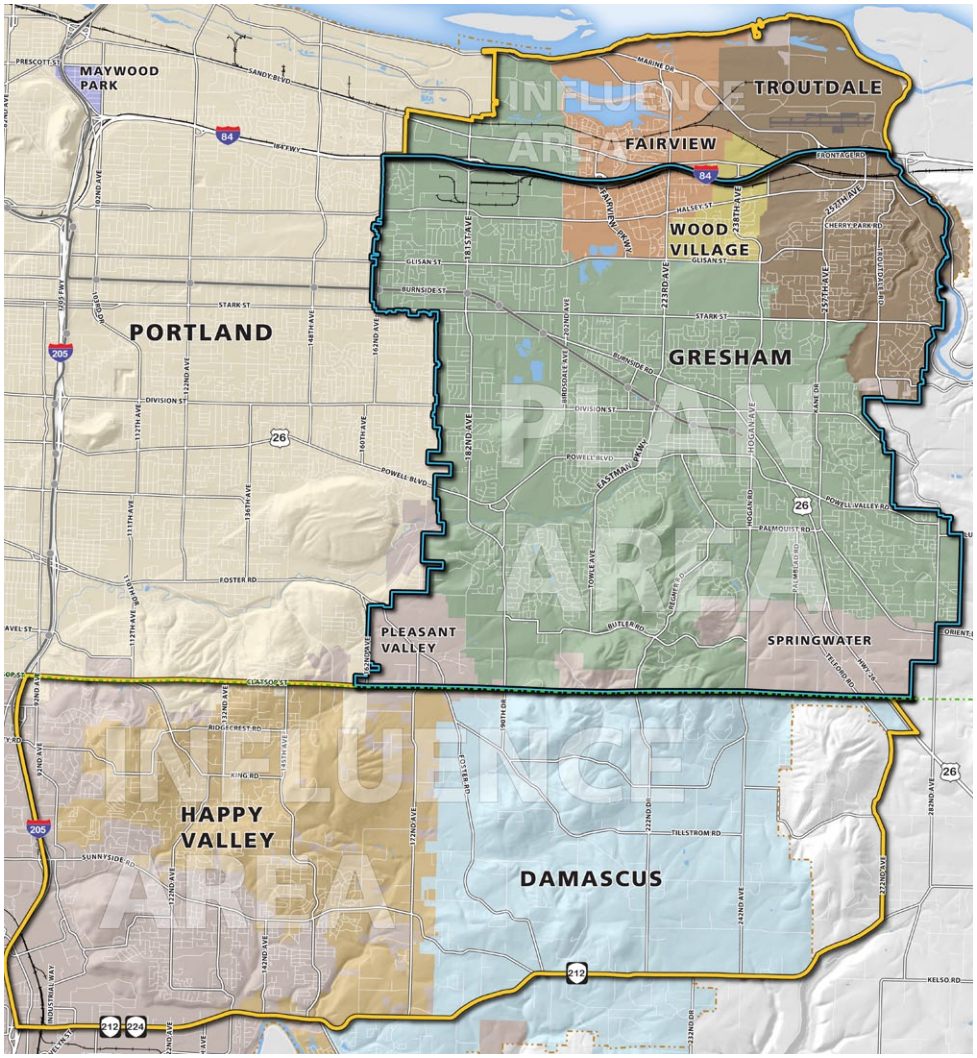
Investments in the plan area support economic and community development by providing better access and mobility, increasing safety, activating employment areas and helping people find their way through and to key destinations in the East Metro area. These proposed investments emerged through prioritization of over 200 transportation projects evaluated and target enhancements with a focus on:

1. North/south connections - Proposed projects improve the arterial road network connecting I-84 and US 26, and access to important community destinations.
2. Downtowns and employment areas - Proposed projects improve access to downtowns and jobs.
3. Regional mobility - Proposed projects capitalize on previous investments by making the existing system smarter and more efficient through changes to signal timing and enhanced transit service.

Table of contents

The four cities of east Multnomah County will work closely with state, county, regional and federal partners to implement solutions in the plan area.

Development will be closely coordinated with the Columbia Cascade River District, a critical regional employment area along the Columbia River, as well as ongoing projects in east Portland and Clackamas County.



EAST MULTNOMAH COUNTY WILL WORK TOGETHER TO:

Support north/south connectivity between I-84 and US 26, as well as east/west connectivity and capacity in the East Metro plan area.

Make the best use of the existing transportation system.

Develop multiple solutions that encompass all transportation modes.

Foster economic vitality.

Distribute both benefits and burdens of growth.

Enhance the livability and safety of East Metro communities. Ensure that East Metro is a place where people want to live, work and play.

Support the local land use vision of each community.

Enhance the natural environment.

East Metro Connections Plan Recommendation

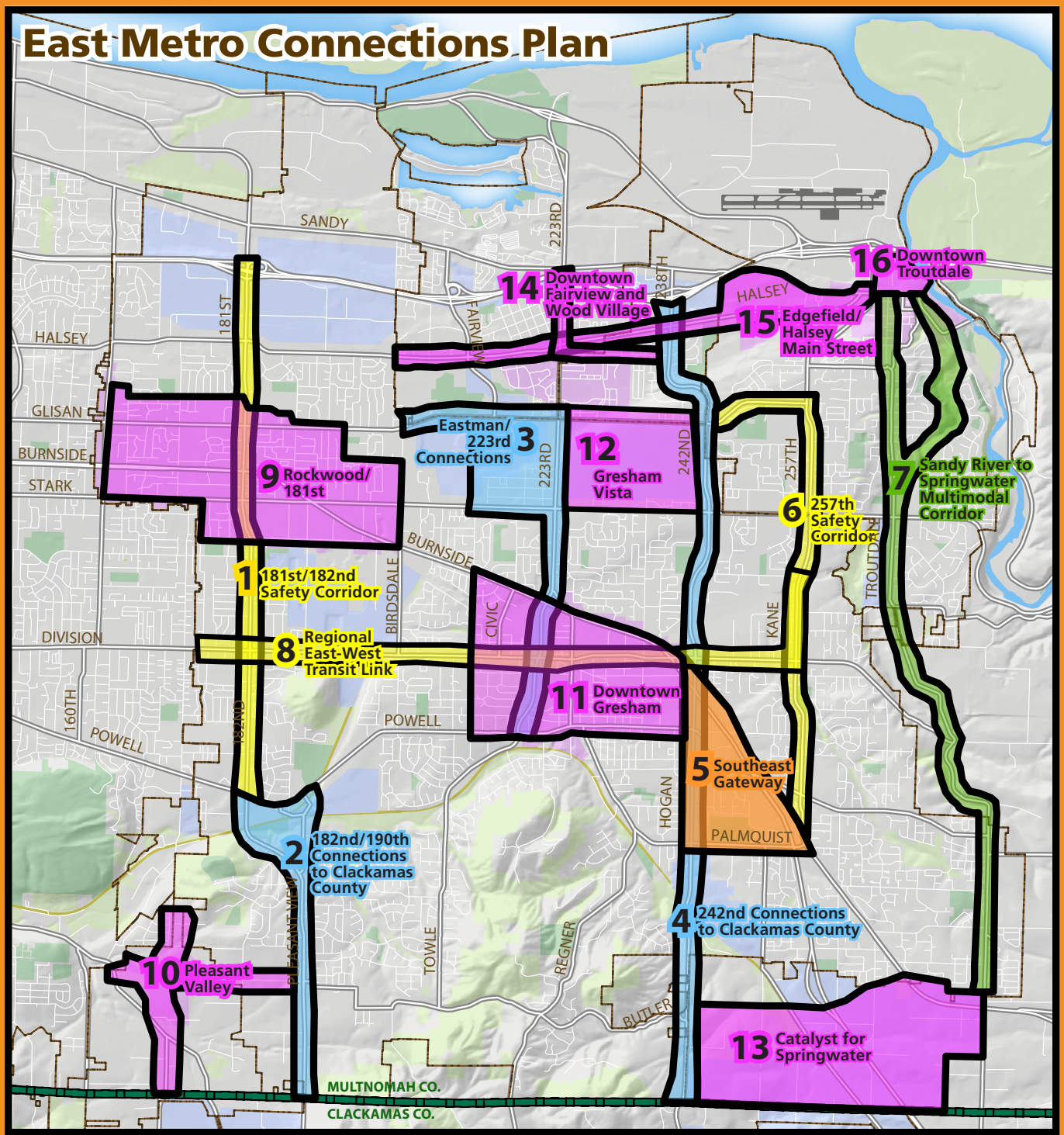
(1) The steering committee recommends the action plan in order to solve pressing transportation challenges and activate and protect the assets of the East Metro area.

(2) The steering committee recommends that East Metro jurisdictions endorse this recommendation.

(3) The steering committee recognizes that East Metro Connections Plan is a separate but complementary process to jurisdictions' transportation system plans and capital improvement programs. The committee recommends that the cities and county update policies and plans as appropriate to support these projects and outcomes.

(4) The steering committee recommends that Metro amend the Regional Transportation Plan (RTP) to support these projects, policies and outcomes. This includes the projects identified in the action plan, and related policies to support their implementation.

East Metro Connections Plan
Action Plan



Recommended Investment Packages

June 6, 2012

- **Access & mobility**
- **Safety**
- **Economic development**
- **Multimodal**
- **Regional gateway**

1) 181st/182nd Safety Corridor
2) 182nd/190th Connections to Clackamas County
3) Eastman/223rd Connections
4) 242nd Connections to Clackamas County
5) Southeast Gateway
6) 257th Safety Corridor
7) Sandy River to Springwater multimodal Corridor
8) Regional East-West Transit Link
Managing the System *(*not mapped)*

9) Rockwood/181st
10) Pleasant Valley
11) Downtown Gresham
12) Gresham Vista
13) Catalyst for Springwater District
14) Downtown Fairview and Wood Village
15) Halsey Main Street
16) Downtown Troutdale

1 Mile

Numbers are for the map key, and do not imply project priority

Integrated Strategies

The action plan represents the timeline, funding, and partnerships needed to implement the investments recommended in the East Metro Connections Plan. Projects developed on the "freight grid" will be designed for safe freight movement.

		North/South connections						Regional mobility		
		181st/182nd safety corridor	182nd/190th connections to Clackamas County	Eastman/ 223rd connections	242nd connections to Clackamas County	Southeast gateway	257th safety, walking and biking connection	Sandy River to Springwater multi-modal connection	Regional east-west transit link	Managing the System
Timing and phasing	Phase I	{L} Complete new crossings and sidewalk widening on 181st between Glisan and Yamhill, Stark {L} Complete new crossings near Centennial schools {R} Improve transit service to 'one-seat' ride between Sandy and Powell	{L} Advance system management along entire corridor	{L} Advance system management {L} Complete pedestrian crossing at Eastman/25th	{L} Advance system management {L} Complete improvement to 238th/242nd based on steering committee recommendation	{S} Advance system management, including improved signage, and potential variable messaging {L} Advance road improvements to Hogan/Burnside/ Powell {L} Complete safety project in gateway	{L} Advance system management {L} Complete safety improvements on 257th and Cherry Park {L} Reconstruct Stark to arterial standards	{R} Begin trail master plan to define alignment	{R} Initiate FTA Alternatives Analysis {R} TriMet updates TIP per EMCP recommendations {L} Complete sidewalk and bike lane improvements	{S} Implement improved signalization on all arterials, invest in adaptive signal improvements on Burnside and Kane Road, implement variable signage on the four north/south arterials
	Phase II	{L} Complete sidewalk connections between I-84 and San Rafael	{L} Complete arterial improvements along Highland/190th and Pleasant View to Clackamas County line; coordination with 172/190th Corridor Plan	{L} Complete intersection at 223rd/Stark {L} Complete improvements to Glisan between 201st and Fairview Parkway	{L} Complete arterial improvements on Hogan between Division and Clackamas County line	{L} Complete improvements to Palmquist {S} Complete multi-modal improvements to US 26 {L} Reconstruct Bull Run Rd {L} Complete Powell Valley improvements			{R} Implement preferred transit alternative	
	Phase III			{L} Complete improvements on Powell and Eastman {L} Consider extension of 207th as a 2-lane collector			{L} Complete improvements to Division between 257th and 268th	{L} Construct multimodal corridor		
potential funding sources		HB 2001, RFFA	CIP, SDC	RFFA, CIP	RFFA, CIP	ODOT, RFFA	HB 2001, RFFA	RFFA, TE	HB 2001, FTA, RFFA	ODOT, Metro, Gresham
East Metro Connections Partners		Gresham, TriMet	Gresham	Gresham, Multnomah County, Fairview, ODOT	Multnomah County, Gresham, Wood Village, Troutdale	Metro, ODOT, Gresham	Multnomah County, Troutdale, Gresham	Multnomah County, Metro, Troutdale, Gresham. Mount Hood Community College	Metro, TriMet, Multnomah County, Gresham, Mt Hood Community College	ODOT, Metro, Multnomah County, Gresham

{L} is a locally sponsored effort by county or city
{R} is a regionally sponsored effort by Metro or TriMet
{S} is a state sponsored effort by ODOT

CIP = capital improvement program
FHWA = Federal highways
FTA = Federal Transit Administration funds
HB 2001 = (Oregon Jobs and Transportation Act) is the transportation funding plan adopted by the 2009 Legislature.
RFFA = Regional flexible funds

SDC = system development charges
URA = Urban Renewal Area Funds
TIP = Transportation Improvement Program
TE = Transportation enhancement funds

Downtowns and employment areas								Related Actions	
Rockwood/ 181st	**Pleasant Valley**	**Downtown Gresham/ Civic**	**Gresham Vista Business Park**	**Catalyst for Springwater District**	**Downtown Fairview and Wood Village**	**Edgefield/ Halsey main street implementation**	**Downtown Troutdale**	**Policies**	**Related Projects**
{L} Complete street improvements, including pedestrian enhancements on 181st, Stark, Burnside		**{R}** Complete MAX Trail **{L}** Complete street improvements to Cleveland, Hood in downtown and collector streets in Civic		**{S}** Implement components of Interchange Access Management Plan (IAMP), including safety improvements	**{L}** Complete Arata Blvd improvements **{L}** Complete Faiview improvements between I84 and Arata	**{L}** Complete main street improvements to Halsey	**{L}** Build local streets to urban renewal area on Sandy River **{L}** Extend regional trail from Reynolds Troutdale Industrial Park to urban renewal area.	**{R}** Metro amends Regional Transporation Plan (RTP) **{R}** Metro updates regional trail system **{R}** TriMet updates TIP per EMCP recommendation **{L}** Cities and county update local Transportation System Plans (TSP)	**{L}** coordination on roadway and improvements per Columbia Cascade River District Strategic Planning **{L}** coordination with Port of Portland on improvements in Troutdale Reynolds Industrial Park **{L}** coordination with City of Portland on Powell/Foster **{L}** Coordination with Clackamas County on 172nd/190th Corridor Plan improvements
{L} Complete pedestrian and bike improvements on Stark and Burnside	**{L}** Complete arterial improvements to Jenne/Foster/ 174th	**{L}** Complete sidewalks and crossings to Burnisde and Powell	**{L}**Complete intersection improvements **{L}** Complete new crossings on Glisan **{L}** Complete intersection at 223rd/Stark **{L}** Complete intersection at Hogan/Stark	**{S}** Construct new interchange and related projects of Interchange Access Management Plan (IAMP)	**{L}** Complete Wood Village Boulevard extension to Halsey				
	{L} Complete arterial improvements to Giese Rd/ 172nd			**{L}** Complete arterial/street network per Springwater Plan					
URA, RFFA	SDC	RFFA, CIP	SDC, RFFA, CIP	FHWA, SDC	RFFA, CIP	SDC	URA , CIP		
Gresham	Metro,Gresham	Metro, TriMet, Gresham	Multnomah County, Gresham, Port of Portland	ODOT, Gresham	Multnomah County, Metro, Fairview, Wood Village	Multnomah County/ Troutdale/ Fairview/ Wood Village	Troutdale, ODOT, Metro	Metro /DOT/all jurisdictions	Multnomah County, Metro,Gresham, Troutdale, Fairview, Wood Village, Portland, Clackamas County

Action Plan projects

The projects in this list are recommended to be advanced in the Regional Transportation Plan amendment, and reflect the prioritization of projects to meet current and future needs. Projects are organized by the identified investment packages. Projects developed on the "freight grid" will be designed for safe freight movement. Projects identified as "catalyst" are the key project to prioritize for advancement within each investment package.

					Timeline			
Investment	RTP ID	Actions	catalyst?	funded	Phase I	Phase II	Phase III	cost
(1) 181st/182nd safety corridor								
	10454	181st Ave. improvements Glisan - Yamhill - complete blvd design			X			$$$
	99107	Complete sidewalk connections {181st: I-84-San Rafael}				X		$
	99136	Safety corridor: 181st/Rockwood {I-84 - Stark}			X			$
	99137	Safety corridor: Halsey {162nd-181st}			X			$$
(2) 182nd/190th connections to Clackamas County								
	10431	Highland/190th Rd. widening				X		$$$
	10859	Pleasant View Dr., Powell Loop - Highland Dr {widen, curb, gutter, sw, bike}				X		$$
	99105	190th Ave / Pleasant View widening {Butler-190th extension - all modes}				X		$$$
	99141	System management: 181st/182nd {I-84 - Powell}			X			$
(3) Eastman/223rd connections								
	10386	Glisan St. multi-modal {4-lanes; 201st - Fairview Parkway}				X		$$$
	10473	223rd/Stark {intersection improvements} new turn lanes				X		$
	99150	Powell and Eastman {additional southbound left turn}					X	$
	99131	207th new collector extension					X	$$$
	99153	Eastman & 25th pedestrian crossing			X			$
	99142	System management: Fairview Pkwy/Glisan/223rd/Eastman {I-84 - Powell}			X			$
(4) 242nd connections to Clackamas County								
	99118	238th bike facilities				X		$$
	99132	238th/242nd improvements (3 lane with multimodal)			X			$$
	10420	Palmquist Rd. improvements (including culvert replacement)			X			$$
	10425	Bull Run Rd. Reconstruction {242nd - 257th}				X		$$
	10485	Hogan {Palmquist to Rugg Road}				X		$$$$
	10511	Hogan Rd. at Stark St. {Stark - add RT lanes, 2nd NB and SB turn lanes}				X		$$
	99154	Hogan at Glisan				X		$
	99155	Hogan/Butler new signal				X		$$
	99143	System management: 238th/242nd/Hogan {I-84 - Powell}			X			$
(5) Southeast Gateway								
	10512	Hogan: Powell to Burnside {blvd improvements + 3 intersection improvs}			X			$$
	10522	Burnside, Hogan to Powell {safety improvements and reconstruction}			X			$$
	10527	Hogan, Powell Blvd to Palmquist {improve to arterial - 4 lanes +center}			X			$$
	99103	US 26 multimodal improvements {Burnside to Palmquist: sidewalks}				X		$
	99139	Safety Corridor: Hogan/Burnside/Powell {Division - Palmquist}			X			$
	10420	Palmquist Rd. improvements (including culvert replacement)			X			$$
	10425	Bull Run Rd. reconstruction {242nd - 257th}				X		$$
	10429	Powell Valley improvements {Burnside to 282nd ped and bike facilities}				X		$$$
	99156	US 26/Southeast Gateway system management improvements			X			$
(6) 257th safety, walking, biking connections								
	10403	257th Ave. Pedestrian improvements at intersections and mid-block crossings			X			$
	10422	Division St improvements {257th - 268th}					X	$$
	99138	Safety corridor: Cherry Park/257th {Cherry Park - Division}			X			$$
	10382	Reconstruct Stark St. to arterial standards			X			$$
	99125	17th Ave/Cochran pedestrian improvements {257th to Troutdale Rd}			X			$$
	99144	System management: 257th/Kane {I-84 - Palmquist}			X			$
(7) Sandy River to Springwater multi-modal connections								
	99151	Sandy to Springwater master plan			X			$
	99100	Troutdale Road improvements {ped btwn 21st - Stark}				X		$
	99101	Troutdale Road improvements {bike btwn Buxton-Stark}				X		$$
	10390	Reconstruct Troutdale Rd. {Stark to Division}					X	$$
	10409	Beaver Creek Trail					X	$
	99149	40-Mile Loop extension: Orient to Troutdale Rd.				X		$$$
(8) Regional east-west transit link								
	99152	Transit alternative analysis			X			$
	10440	Division St. multimodal improvements {Wallula - west city limits}			X			$$
	99112	Complete bicycle facilities {Division: Birdsdale to Wallula}			X			$
	99115	Division ped imps - widen sidewalks, improve crossings 212th-242nd			X			$

A catalyst project is defined as a neccessary project to begin implementation of a package. These include projects needed for year 2035 system performance standards, needed economic development investments, and critical safety corridors.

Planning-level cost estimate
$ - less than $2 million
$$ - $2-10 million
$$$ - $11-25 million
$$$$ - greater than $25 million

6

				Timeline				
Investment	RTP ID	Actions	catalyst?	funded	Phase I	Phase II	Phase III	cost
Managing the existing system								
	99141	System management: 181st/182nd {I-84 - Powell}			X			$
	99142	System management: Fairview Pkwy/Glisan/223rd/Eastman {I-84 - Powell}			X			$
	99143	System management: 238th/242nd/Hogan {I-84 - Powell}			X			$
	99144	System management: 257th/Kane {I-84 - Palmquist}			X			$
	99145	System management: Burnside {Eastman - Palmquist}			X			$
	99146	System management: Division St. transit prioirity {162nd - 257th}		X				$
(9) Rockwood/181st								
	10454	181st Ave. improvements Glisan - Yamhill - complete blvd design			X			$$$
	10459	Burnside SC pedestrian imps. 172,197, Glisan, Stark +intersecting sts			X			$
	10519	Pedestrian enhancements {Burnside: 162nd-181st}			X			$
	99109	Widen and buffer sidewalks and improve crossings {Stark: 181st-Burnside}				X		$
	99110	Widen and buffer sidewalks; add bicycle facilities {Burnside: 181st-197th}				X		$
	99111	Widen and buffer sidewalks; add bicycle facilities {Burnside: 171st-181st}				X		$
(10) Pleasant Valley								
	10460	SE 174th N/S Improvements Giese - 174/Jenne				X		$$$$
	10463	Foster Rd. Extension (north) Jenne - 172nd				X		$$$
	10464	Giese Rd. Extension {182 - 172}					X	$$$
	10465	172nd Ave. Improvements {Giese to Foster}					X	$$$
	10466	172nd Ave. Improvements {Foster to Cheldelin}					X	$$
(11) Downtown Gresham/Civic								
	10423	Cleveland Ave. reconstruction {Powell - Stark}		X				$
	10434	Burnside Rd. improvements {Wallula to Hogan}				X		$$$$
	10436	Max Trail {Rockwood to Gresham downtown}		X				$
	10504	Ped to Max: Hood Ave. {Powell - Division on Hood Ave.}		X				$
	10505	Civic collector streets, new signal Eastman/16th {Civic Drive - Eastman Prkwy}			X			$$
	99115	Division ped imps - widen sidewalks, improve crossings {Wallula - Hogan}			X			$
	99116	Powell ped imps - widen sidewalks, improve crossings {Eastman - Main}				X		$
	99117	Powell ped imps - widen sidewalks, improve crossings {Hood - Hogan}				X		$
	99152	Eastman bikelane/stormwater improvements {Division - Powell}			X			$
(12) Gresham Vista								
	10473	223rd/Stark {intersection improvements} new turn lanes				X		$
	10511	Hogan Dr. at Stark St. {Stark - add RT lanes, 2nd NB and SB turn lanes}				X		$$
	99154	Hogan at Glisan				X		$
(13) Catalyst for Springwater District								
	10864	New interchange on US 26 to serve industrial area.				X		$$$$
	10474	Rugg Rd. ext. {new arterial per Springwater plan} Orient to US 26				X		$$$$
	10475	Rugg Rd. ext. {new arterial per Springwater plan} US 26 to 252nd				X		$$$$
	10476	Rugg Rd. ext. {new arterial per Springwater plan} 252nd -242nd				X		$$$
	10477	Springwater Road section 4 242nd - 252nd					X	$$$
	10478	252nd Ave. {Springwater to Palmquist collector}					X	$$$$
	10479	252nd Ave. {Rugg Road to new collector}					X	$$
	10480	Springwater Road Section 7 {new collector Hogan-Orient} 242nd					X	$$
	10481	Springwater Road Section 8 {new collector Hogan-Orient} 242nd					X	$$
	10482	Springwater Road Section 9 {new collector Hogan-Orient} 252nd					X	$$
	10483	Springwater Road Section 10 {new collector Hogan-Orient} 252-Telford					X	$$$
	10484	Springwater Road Section 11 {new collector Hogan-Orient} Telford-Orient					X	$$$
(14) Downtown Fairview & Wood Village								
	10387	Reconstruct Arata Rd.		X				$$
	10398	Wood Village Blvd extension				X		$
	99129	Wood Village extension - multi use path		X				$
	99130	Fairview Ave multi-modal improvements {I-84 to Arata}			X			$$
(15) Edgefield / Halsey main street implementation								
	11287	Halsey St improvements {223rd to 238th}			X			$
	10385	Reconstruct Halsey St. with improvements			X			$
(16) Downtown Troutdale								
	10408	40 Mile Loop Trail {Reynolds to downtown Troutdale}			X			$$
	99148	Troutdale urban renewal access			X			$

NORTH/SOUTH CONNECTIONS

(1) 181st/182nd safety corridor: Projects will provide safety improvements in known areas of high crash rates and improve safe routes to schools in the Centennial School District. This includes a recommendation to improve transit service to 'one seat' frequent service between Sandy Blvd and Powell Blvd. **CATALYST PROJECTS:** Safety projects on 181st&Stark and Halsey.

(2) 182nd/190th connections to Clackamas County: Leveraging Clackamas County's 172nd/190th Corridor Project, targeted improvements to the road network in Pleasant Valley along Highland/190th will create opportunity for economic and residential development. **CATALYST PROJECTS:** Widening of Highland/190th.

(3) Eastman/223rd connections: Projects address future traffic growth with targeted north-south roadway capacity investments along 223rd/Eastman, including at Stark/223rd and Eastman and Powell. Projects to better coordinate the signal timing at intersections along Eastman/223rd will provide needed capacity improvements. **CATALYST PROJECTS:** Intersection improvements on Eastman/223rd & Stark.

(4) 242nd connections to Clackamas County: Projects address future growth with additional roadway capacity along this corridor, particularly south of Powell, along with opportunities for access and safety enhancements to the existing conditions. This includes intersection improvements at Glisan and Stark, including signal coordination. **CATALYST PROJECTS:** Widening of Hogan/242nd south of Powell Boulevard, Palmquist improvements, intersection improvements Stark.

(5) Southeast gateway: Projects address future capacity needs, safety (this is one of the highest crash areas), way-finding and needed pedestrian improvements (there are sidewalk gaps in this area, particularly along US 26 and challenging crossings). Way-finding treatments should be integrated with the adopted Mt Hood Scenic Byway route. **CATALYST PROJECTS:** Improvements to Hogan and Powell, Burnside intersections, safety improvements.

(6) 257th safety, walking and biking connection: Projects create safe and attractive pedestrian crossings along 257th, particularly between Reynolds High School and Mt Hood Community College. **CATALYST PROJECTS:** Safety improvements between Cherry Park and Division.

REGIONAL MOBILITY

(7) Sandy River to Springwater multi-modal connection: Projects provide multi-modal connections from Downtown Troutdale to Mt Hood Community College and the Springwater Corridor Trail. **CATALYST PROJECTS:** Master plan for new multimodal corridor

(8) Regional east-west transit link: Projects improve east-west transit that connects Mt Hood Community College, Downtown Gresham, Portland and South Waterfront's Innovation Quadrant. Projects include enhanced bus/bus rapid transit and safety, and pedestrian and bike improvements (sidewalks, medians, crossings, access management) to make Division a great corridor for transit and walking. Gresham will continue street improvements for sidewalks and other features to make walking and access to transit easier. **CATALYST PROJECTS:** Transit alternatives analysis for Powell/Division.

Managing the existing system (not mapped): Projects address congestion at intersections through the coordination of signal timing. Improvements to adaptive signal timing along 181st/182nd, Burnside, and Kane Drive. Other projects include signage, messaging and other techniques that improve way-finding and traffic flow. **CATALYST PROJECTS:** System management, including coordinated signals, adaptive signal timing, and message systems, on all north-south corridors.

DOWNTOWNS AND EMPLOYMENT AREAS

(9) Rockwood/181st: Projects include targeted bicycle and pedestrian improvements on 181st between I-84 and Stark, and Stark between 181st and Burnside to improve access to the important commercial areas in Rockwood. **CATALYST PROJECTS:** Improvements to 181st, Burnside, Stark and intersecting streets.

(10) Pleasant Valley: Projects develop the necessary public infrastructure for development of Pleasant Valley town center consistent with the Pleasant Valley Community Plan. **CATALYST PROJECTS:** Improvements to 174 and Foster.

(11) Downtown Gresham/Civic: Projects include boulevard treatments along all of Burnside and redevelopment opportunities along this important street. Projects better connect Main City Park, the Springwater Corridor Trail and Johnson Creek to Downtown Gresham. Sidewalk and streetscape projects in Downtown improve walking, window shopping and branding of Downtown Gresham as a unique place. **CATALYST PROJECTS:** Road improvements to Cleveland and Hood collector improvements in Civic, MAX trail.

(12) Gresham Vista Business Park: The Port of Portland's November 2011 purchase of one of the area's largest shovel-ready employment sites is an immediate opportunity to bring jobs and revenue to East Metro communities. Projects increase mobility along the north/south and east/west arterials and improve access to industrial employment land. **CATALYST PROJECTS:** Intersection improvements on Stark and Glisan.

(13) Catalyst for Springwater District: Projects help develop the necessary public infrastructure for private investment and jobs in this regionally significant employment area. Projects include a new interchange on US 26 and an extension of Rugg Road to connect US 26 and Hogan, as well as collector street improvements to provide needed access for future jobs and employment. **CATALYST PROJECTS:** New interchange on US 26 and arterial connections.

(14) Downtown Fairview and Wood Village: Projects on Fairview Avenue between I-84 and Arata Road improve access provide needed safety and multi-modal improvements. Projects also improve connections between Arata Road and Halsey. **CATALYST PROJECTS:** Fairview Avenue completion with Arata intersection, complete Arata Rd.

(15) Edgefield/Halsey main street implementation: Projects implement features of the Halsey Street Concept Design Plan (2005), a joint effort of Fairview, Wood Village, Troutdale, and Multnomah County. Projects include realizing Halsey as a 2-lane road with median/turn lane, full bike lanes, sidewalks and pedestrian crossings. Projects support the downtown visions for the three cities and help attract commercial development, particularly adjacent to Edgefield, an important destination in East Multnomah County.
CATALYST PROJECTS: Complete main street treatments on Halsey.

(16) Downtown Troutdale: Projects support future development of the urban renewal area in Downtown Troutdale, creating local road connections to the urban renewal area site and extending the regional trail system along the Sandy River from Troutdale Reynolds Industrial Park into Downtown Troutdale. **CATALYST PROJECTS:** Local street access to urban renewal area, extend regional trail into downtown.

Numbers are for the map key, and do not imply project priority

East Metro Policy Updates

The East Metro Connections Plan will result in amendments to the Regional Transportation Plan, and accordingly, local Transportation System Plans.

The East Metro Connections Plan identifies transportation and other investments that advance economic and community development. Working within the cities of Gresham, Fairview, Troutdale, Wood Village and Multnomah County, the East Metro Connections Plan has relied on coordination across jurisdictional boundaries to advocate for results that ensure prosperity of the East Metro area.

Advocacy for regional, state, and federal funding for the investments identified in the action plan will require collaboration among public and private partners in East Multnomah County. Jurisdictions will continue this advocacy through the local endorsement process. The final recommendation and action plan has identified the needs, transportation mode, function, and scope and general location of solutions needed for the East Metro Plan Area between now and the year 2035.

1. What is the product of a corridor refinement plan?

- A corridor refinement plan is designed to amend the Regional Transportation Plan.
- Amendments include updates to RTP projects and policy maps.

2. What is the role of the steering committee?

- Provides local and regional perspective to guide the development of projects within the action plan.
- Provides local and regional perspective to inform changes to the Regional Transportation Plan.

2035 Regional Transportation Plan
The RTP represents the overarching policies, and goals, system concepts for all modes of travel, funding strategies and local implementation. The plan recommends how to spend federal, state, and local transportation funding to projects throughout the region.

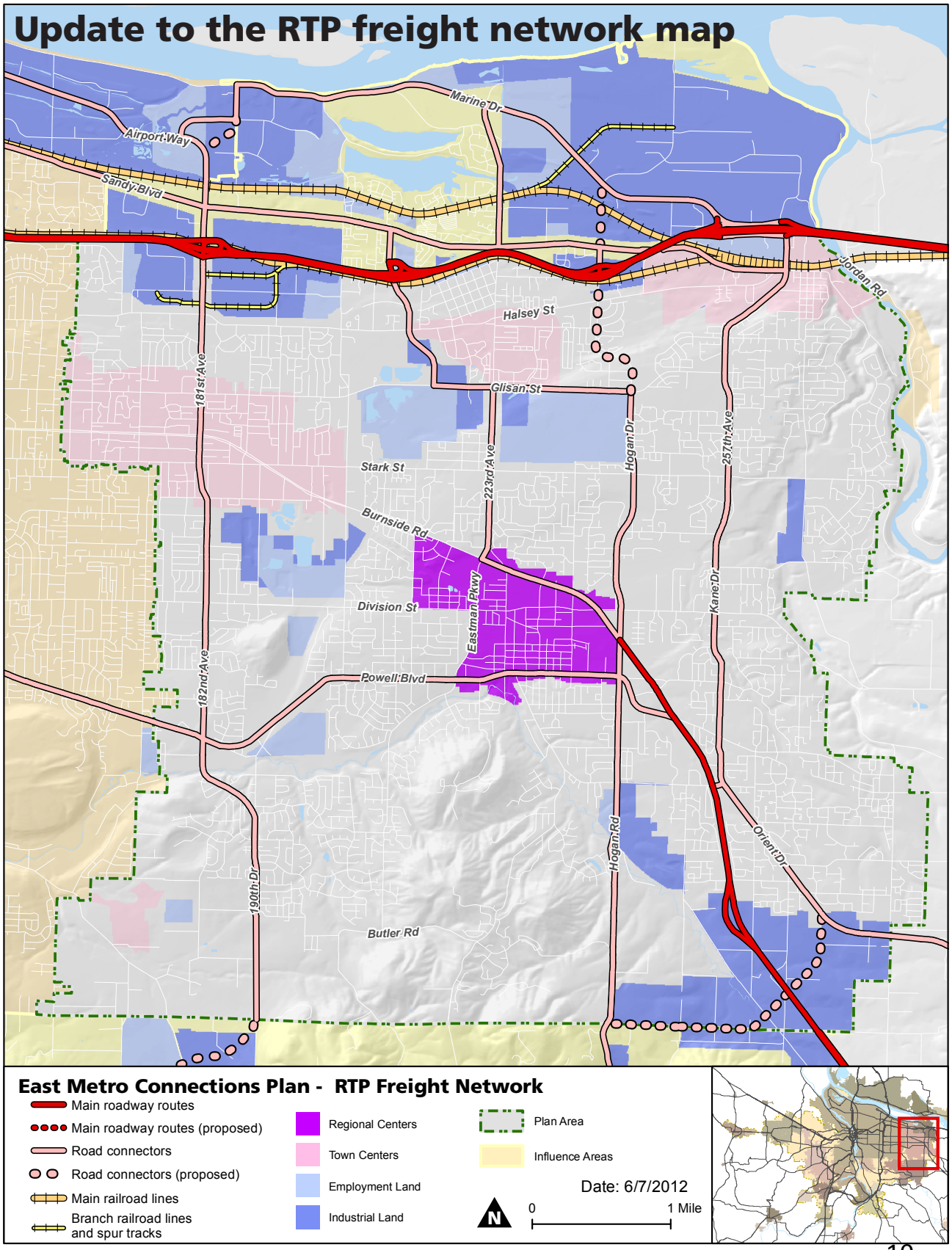
East Metro Connections Plan
Analysis considers land use, local aspirations, pedestrian, bike, management and operations, freight, highway, road and transit solutions to address identified needs and issues.
- Updated projects
- Updated system policy maps

Local Transportation System Plans
Updates to local system plans to be consistent with the findings in the Regional Transportation Plan and East Metro Connections Plan.

- Multnomah County
- Fairview
- Wood Village
- Gresham
- Troutdale

Update to the RTP freight network

As reviewed in December 2011, The Regional Transportation Plan freight network map (RTP figure 2.20) should be amended to reflect the proposed East Metro Connections Plan "Freight Grid", including main roadway routes and road connectors. Projects developed on the "freight grid" will be designed for safe freight movement. This page shows the recommended update to the freight network map based on the decision on June 6, 2012.



East Metro Policy Updates

What is the regional freight network?

The Regional Transportation Plan (RTP) has two types of freight designations:
• Main roadway routes are the "trunk" of the freight system - higher volume, major connectors with other regions.
• Road connectors have lesser volumes, provide connectivity to industrial/employment land and connect those more significant main roadway routes.

What changes are proposed?

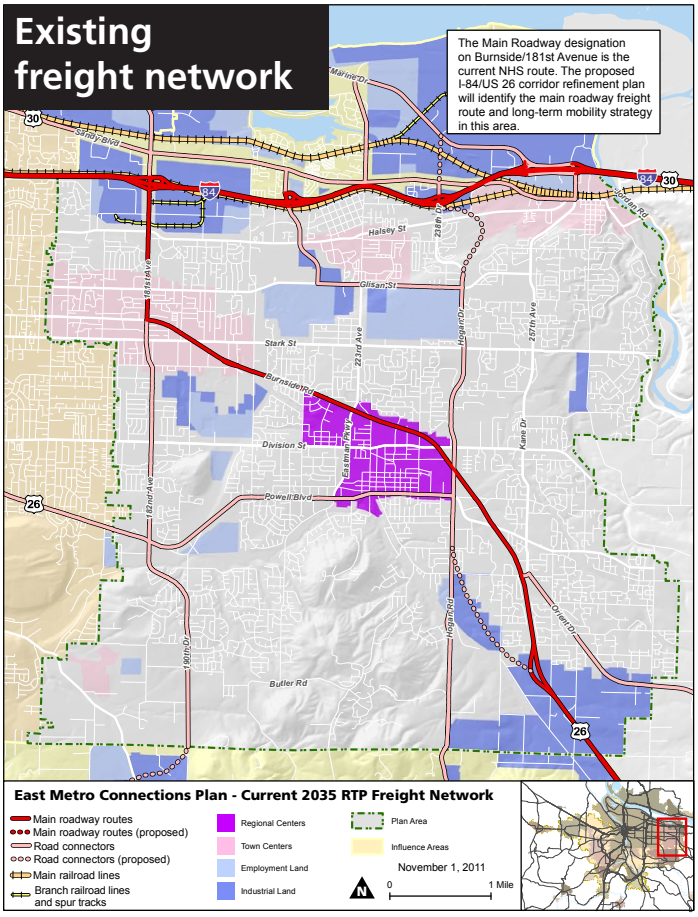
• Remove, from the RTP freight network, Burnside between 181st and 223rd to reflect its actual usage and resolve safety issues.
• Broaden the RTP freight network to include the following routes as road connectors: 223rd between Glisan and Burnside; 257th/Kane from I-84 to US 26 (Note: projects would not include major improvements that connect Kane to US 26 which might attract more through trips).
• Update the US 26/Hogan connector to be consistent with Springwater Plan.
• EMCP is not proposing changes to the National Highway System (NHS) at this time. However, a more detailed review of these networks has been conducted to ensure consistency with plans and policies.

Why propose changes to the freight network?

Proposed changes to the RTP freight network would bring the use and function of plan area roads more in line and resolve land use conflicts.

• Proposed freight network roads could see projects that increase their mobility (reducing stops/starts and travel time), that increase safety of other users and projects that accommodate trucks.

• The RTP freight network map (figure 2.20) should be amended to reflect the proposed East Metro Connections Plan "freight grid", including main roadway routes and road connectors. Projects developed on the "freight grid" will be designed for safe freight movement.



Updates to other RTP road networks

Consistent with the updated Freight Network, updates will also occur to the Arterial and Throughway Network and the System Design Network.
• Update the 238th/242nd link north of Glisan pending steering committee decision.
• Update the US 26/Hogan connector to be consistent with Springwater Plan (identified as a proposed link on the proposed freight network).

Endorsement Schedule

Following the steering committee's final meeting on June 6, 2012, the action plan will go to local elected councils for endorsement. The public is invited to attend.

Troutdale City Council
7 p.m. on Tuesday, June 26
104 SE Kibling, Troutdale

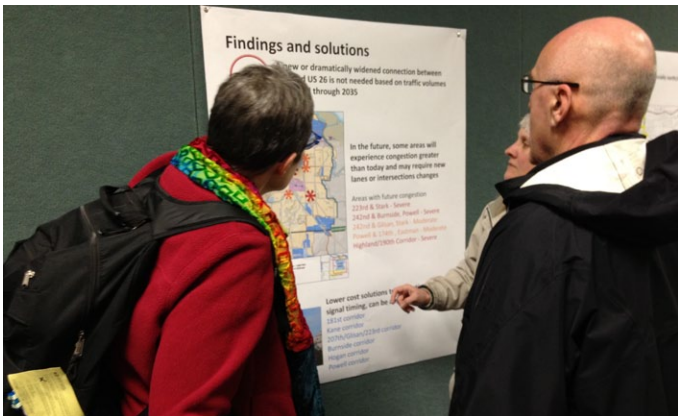
Wood Village City Council
6 p.m. on Tuesday, July 10
2055 NE 238th Drive, Wood Village

Multnomah County Board of Commissioners
9:30 a.m. on Thursday, July 12
501 SE Hawthorne Blvd., Portland

Gresham City Council
3 p.m. on Tuesday, July 17
1333 NW Eastman Parkway, Gresham

Fairview City Council
7 p.m. on Wednesday, July 18
1300 NE Village St., Fairview

Metro Council
2 p.m. on Thursday, August 2
600 NE Grand Ave., Portland



Regional Transportation Plan amendment process

Consistent with the outcomes based planning framework of the Regional Transportation Plan and the mobility corridor strategy, the East Metro Connections Plan will be advancing updated policy elements to support project development in the Action Plan.

Amended Regional Transportation Plan

FINDINGS – Updates to projects and policies

- The East Metro Connections Plan will be recommending refinements to the Regional Transportation Plan policies and projects.
- The Regional Transportation Plan project list will be updated with projects identified in the action plan.
- These changes will include updates to the Regional Freight Network Map. Updates to the Arterial and Through Network and Regional Design Classifications will update the "proposed connectors" identified on those maps.
- Through the identification of a "freight grid" through the plan area, changes will allow for policy consistency with the Arterial and Through Network Map and the System Design Map. The proposed "freight grid" and associated regional system policy map changes proposed for the Regional Transportation Plan recognize that projects developed on freight routes will be designed for safe freight movement. The action plan and recommendation will also be reflected in updates to Chapter 4: Mobility Corridor Strategy for Mobility Corridor #15 as well as Chapter 6: Implementation.

PROCESS – Regional Transportation Plan amendment process to being in fall of 2012.

- After the local jurisdictional actions and Metro Council Resolution endorsing the findings of the East Metro Connection Plan, Metro will initiate the Regional Transportation Plan amendment process, scheduled for fall of 2012.
- The process includes the following actions:
    - Project lists (as identified in the Action Plan)
    - System maps (as in the changes to the Freight Network and associated Arterial and Through Network and System Design Maps)
    - Updated chapter 4 (summary changes to mobility corridor per recommendation)
    - Updated or deleted chapter 6 (change from corridor refinement to implementation)
- Steps included in amending the RTP include:
    - Consultation with air quality partners
    - Regional model run with air quality
    - Conformity determination (based on model results)
    - Removal of other financially constrained projects (delete/replace)
    - 30-day public comment period
    - TPAC recommendation to JPACT
    - JPACT recommendation to Metro Council
    - Metro council action
- Changes to the state project list identified in the RTP also include:
    - 45-day public comment period
    - MPAC recommendation as well as JPACT action
- Local Transportation system plans will be updated to reflect changes to the Regional Transportation Plan.

Updates to local transportation system plans

PROCESS – Update local transportation system plans (TSP).

- Gresham Transportation System Plan process is currently underway.

Changes to RTP will be coordinated with Gresham TSP.

- Wood Village Transportation System Plan process is currently underway. Changes to RTP will be coordinated with Wood Village TSP.
- Changes to Fairview TSP will be initiated after EMCP recommendation.
- Changes to Troutdale TSP will be initiated after EMCP recommendation.

Next steps

Find funding. Build projects.

- How do we reduce competition, and increase cooperation among projects for funding?
- How can certainty in efforts to fund and implement projects be increased?

Effectively securing funding for the action plan and other east Multnomah County priorities will require jurisdictions to be both strategic and opportunistic.

Strategic. There is an opportunity to clarify how projects can be funded, i.e., which projects can go after specific sources of money. This effort will produce two important results. Clarity will illuminate where prioritization among projects will need to occur, and there is an opportunity to strategically align projects with sources of funds. The action plan has begun to identify funding sources.

Opportunistic. Having projects ready for development, prior to identifying or securing a funding source, increases opportunities to apply for new or unexpected funding sources. For example, projects that were most successful in securing ARRA funds were those that were ready to implement immediately. Some projects are local and will use local sources of funds. Others require collaboration and partnerships to unlock funds.

Strategic Partnerships

- **Coordination with Columbia Cascade River District Strategic Plan: Project development for investments such as Sandy Boulevard and Marine Drive are critical for economic development in east Multnomah County.**

- **Establishing principals of partnership: How do we, through a detailed understanding of financing mechanisms, combined with a strategic understanding of future project opportunities, unlock funds that would not otherwise be available?**

- **Partnerships: There are opportunities to continue the momentum that began with the 2007 Memorandum of Understanding (MOU) and the East Metro Connections Plan. The development of partnerships with business groups such as the East Metro Economic Alliance (EMEA), the Gresham Chamber and West Columbia Gorge Chamber of Commerce, Mount Hood Community College, and the Port of Portland will create opportunities that public agencies cannot develop alone.**

What are current sources of revenue?

Federal

Highway Trust Fund. For road-related projects, Congress provides these revenues to the Metro region through the Federal Highway Administration (FHWA) to the Oregon Department of Transportation (ODOT) and then to Metro and the region's local cities and counties. The original source of these monies is primarily the federal gas tax, various truck taxes and funding from the federal general fund. Allocation and distribution of federal funds, other than routine maintenance, are accounted for in the Metropolitan Transportation Improvement Program (MTIP).

Transit Discretionary Funds. These funds are for major new transit capital projects. In this region, these funds have primarily been used to provide the federal portion of capital cost construction of the light rail system. Other eligible uses include bus purchases, bus rapid transit and system capital improvements. As the regional transportation planning agency, Metro determines which large transit capital projects will be given priority in the region to receive these funds.

State

State revenues for transportation projects are distributed by the Oregon Transportation Commission, in accordance with state statutes, from the State Highway Trust Fund. The fund primarily derives its revenues from:

- Statewide gas taxes;
- Vehicle registration fees; and
- Weight mile taxes on trucks.

Local

Many of the cities and counties in the region raise other sources of revenue for the operation, maintenance and preservation (OMP) and new construction. The amount of revenue applied to the system is controlled by each jurisdiction and is spent within their boundaries.

- **Local Portion of State Highway Trust Fund.** Historically 40 percent of state trust fund revenues are distributed to the cities and counties of Oregon; although there is anticipation that 50 percent of new trust fund revenues would be distributed to cities and counties by formula.
- **Local Gas Tax.** Multnomah County levies a three-cent per gallon gas tax and Washington County levies a one-cent per gallon gas tax. Both counties share these revenues with the cities within their boundaries. Recently gas taxes have been approved for the cities of Milwaukie and Tigard. These revenues may be used for road maintenance and road expansion.

Development based sources

Development-based sources of transportation funding are fees collected by local governments based on the development of or use of land. These fees provide funding for transportation and other public investments as deemed appropriate by the local government that collects the fees and allocates the revenue. In some cases, the projects receiving these funds are transportation projects of regional significance and, therefore, a portion of these revenues estimated to be spent on regional projects is assumed in this forecast based on historical trends. These include:

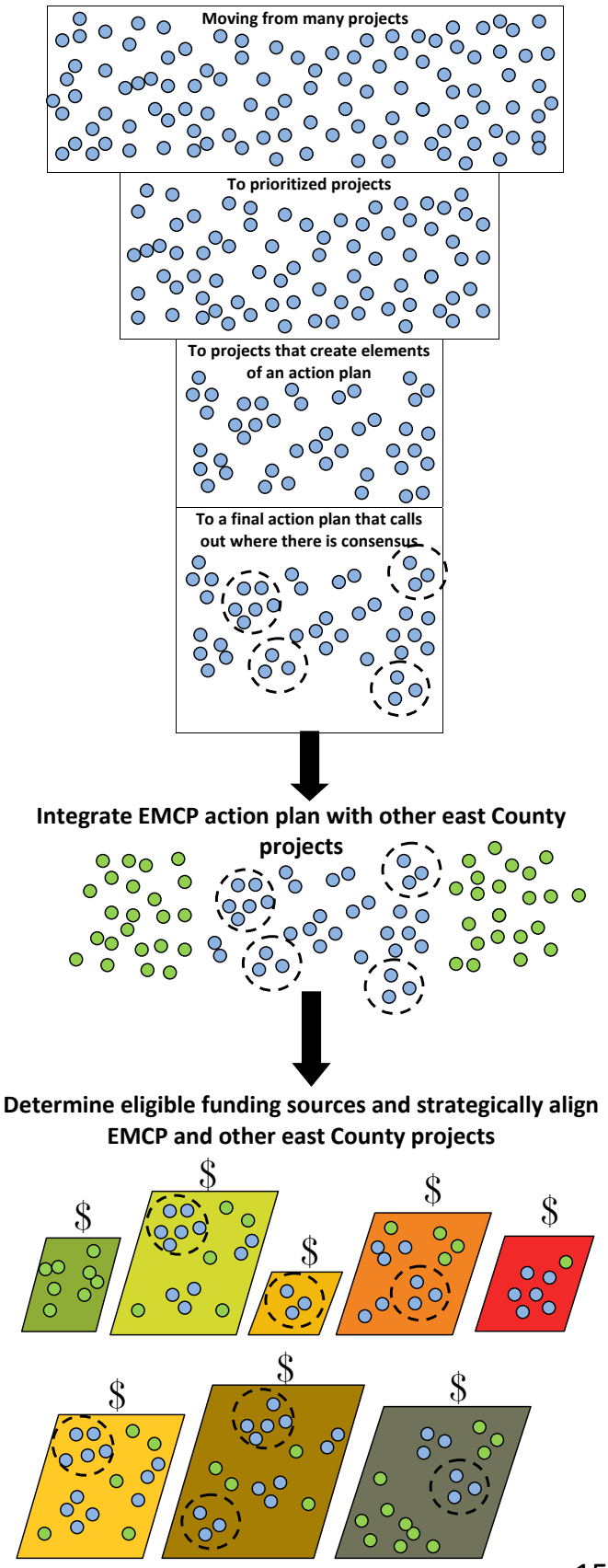
- Transportation system development charges (SDCs) levied on new development
- Traffic impact fees (TIFs) on commercial properties
- Urban renewal funding in designated districts
- Developer contributions

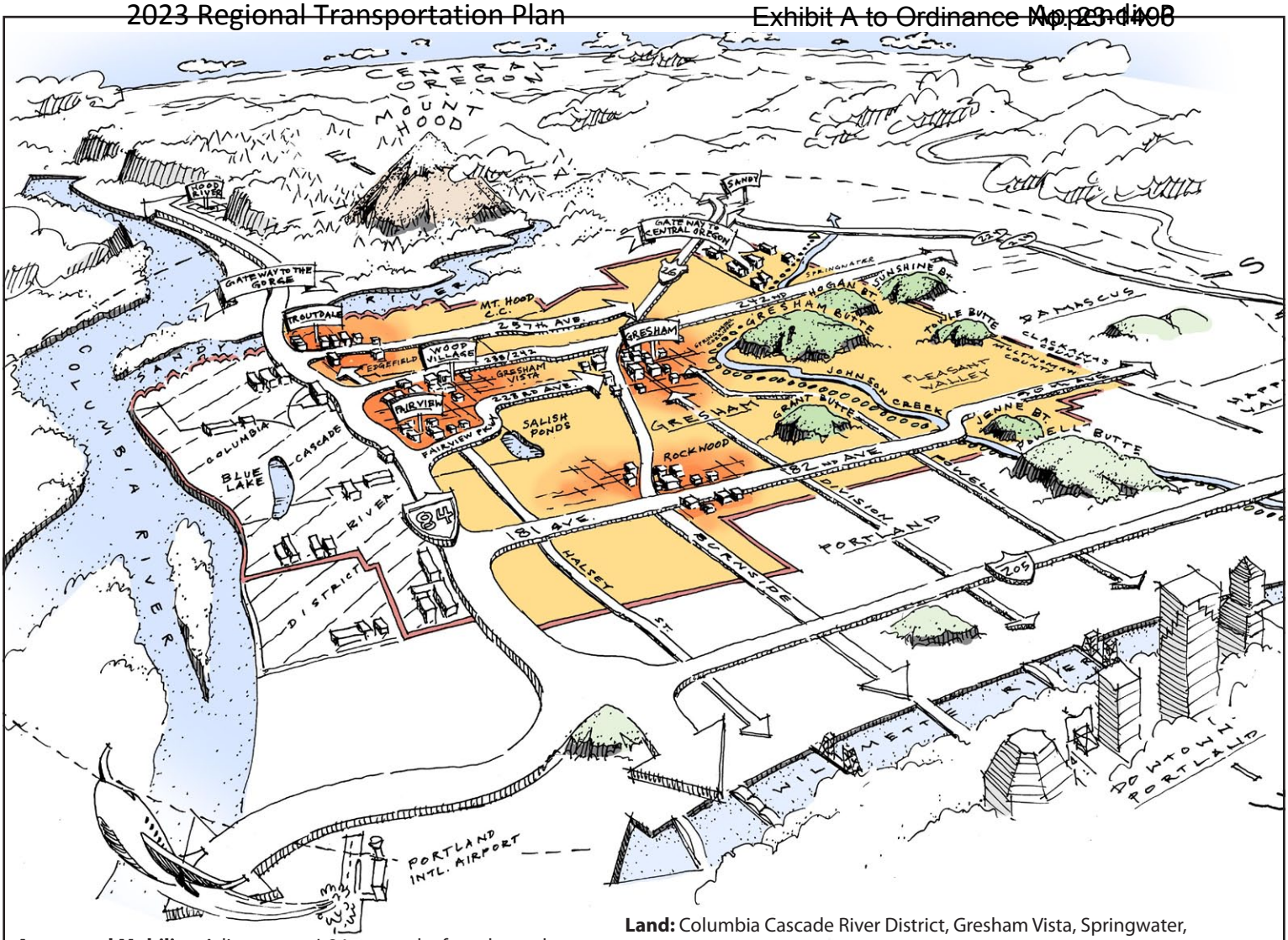
Future Project Development

Moving from the action plan to project development

East Metro Connections Plan will conclude with the identification of transportation projects bundled into an effective action plan. Following East Metro Connections Plan, efforts to clarify potential funding sources will (1) move projects to implementation, (2) help integrate projects outside the scope of EMCP, and (3) narrow where prioritization will need to take place. These three outcomes should facilitate cooperation among east County jurisdictions.

Dec 14 2011	**Initial strategies** Ties anticipated future conditions to potential solutions and local aspirations and identifies framework for evaluating tradeoffs. **Steering committee decision: Provide input on the evaluation framework, list of candidate projects to be developed and options for study at 238th/242nd.**
April 2 2012	**Preferred strategies** Narrows solutions based on technical evaluation and steering committee weighting of evaluation factors. Begins to prioritize investments. **Steering committee decision: Establish how projects will be prioritized through weighting of evaluation factors. Establish an approach the preliminary action plan.**
April 18 012	**Preliminary action plan** Identifies investment opportunities in the plan area. It will include projects, their likely timeline, partnerships, implementation actions and funding status. Reflects input from steering committee, local councils and public. **Steering committee decision: Refine and confirm projects and other components of action plan.**
June 6 2012	**Final action plan and steering committee recommendation** Identifies investment opportunities -- highlighting those with a significant degree of consensus -- in the plan area. It will include projects, their likely timeline, partnerships, implementation actions and funding status. Reflects input from steering committee, local councils and public. The recommendation will go to elected councils for endorsement. **Steering committee decision: Refine and confirm action plan. Recommend action plan for endorsement by local and regional elected councils.**
Summer 2012 and beyond	**Following East Metro Connections Plan** How do we reduce competition for funding among projects? How do we increase certainty in our efforts to implement projects? It may seem that EMCP projects are competing for funds with each other and other projects in the influence area, such as Sandy Blvd and the Columbia Cascade River District. By understanding which projects are eligible for specific sources of funding, we reduce the number of projects competing against each other. Aligning projects with eligible sources will clarify where prioritization needs to take place. A process to clarify funding sources and financing mechanisms could be conducted with public and private partners to form a strategic development partnership. This effort has the potential to yield long-lasting and fruitful results. East County leaders would serve as a model for the rest of the region.





Access and Mobility: Adjacency to I-84, network of north-south and east-west arterials, future improved connections to Clackamas County

Location: Proximity to Portland airport, Columbia Cascade River District, 20 minutes to downtown Portland, connections to Eastern and Central Oregon

Land: Columbia Cascade River District, Gresham Vista, Springwater, Edgefield, downtowns in Troutdale, Fairview, Wood Village and Gresham

Natural Resources: Sandy River, Johnson Creek and East Buttes, Gateway to Mount Hood and Columbia River Gorge

East Metro Connections Plan Steering Committee

Councilor Shirley Craddick, Metro
Mayor Mike Weatherby, City of Fairview
Mayor Jim Kight, City of Troutdale
Mayor Patricia Smith, City of Wood Village
Mayor Shane Bemis, City of Gresham
Councilor Diana Helm, City of Damascus
Commissioner Jamie Damon, Clackamas County
Commissioner Diane McKeel, Multnomah County
Rian Windsheimer, Oregon Department of Transportation
Steve Entenman, East Metro Economic Alliance
Mark Garber, East Metro Economic Alliance
Carol Rulla, Coalition of Gresham Neighborhoods
Greg Olson, Multnomah County
Bicycle & Pedestrian Citizen Advisory Committee
Alan Lehto, TriMet
Michelle Gregory, Mount Hood Community College
Susie Lahsene, Port of Portland
Hector Osuna, El Programa Hispano
Dwight Unti, Tokola Properties
Ron Cazares, FedEx
Jane Van Dyke, Columbia Slough Watershed

• June 2012 •

www.oregonmetro.gov/eastmetro

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX Q

2023 Regional Transportation Plan

Sunrise Project Locally Preferred Alternative

July 10, 2023

oregonmetro.gov/rtp

Metro respects civil rights

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

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

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

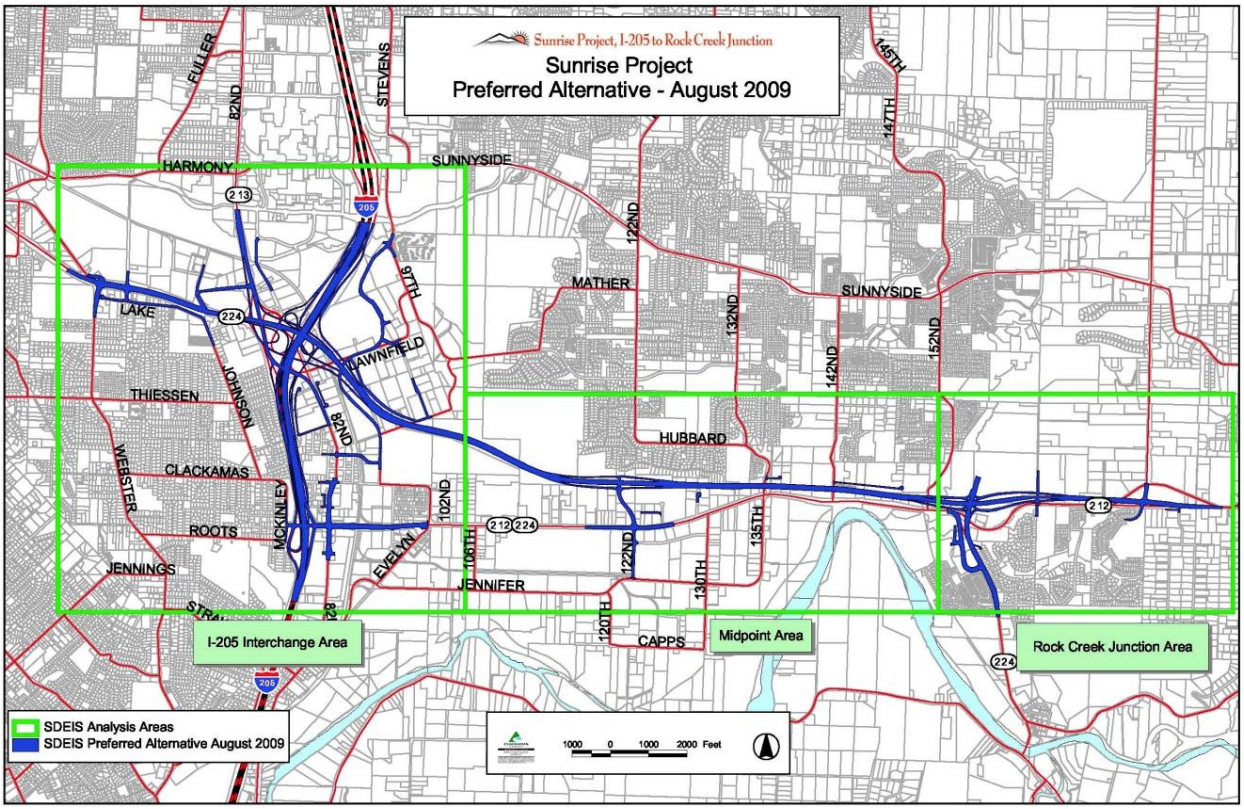
Project website: **oregonmetro.gov/rtp**

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

Sunrise Project Preferred Alternative

In July 2009, the project's Policy Review Committee (PRC) selected the Preferred Alternative for the Sunrise Project.

The Preferred Alternative is Alternative 2 as studied in the SDEIS with Design Options C-2 and D-3 and a portion of Design Option A-2 (Tolbert Overcrossing). Additionally, the Preferred Alternative includes several refinements to the individual portions of the SDEIS alternatives and a limited number of refinement alternatives that were not studied as part of the SDEIS alternatives. These refinement alternatives are based on stakeholder input and additional design refinement related to assessment of environmental resource avoidance and analysis of traffic performance.



The following more completely describes the Preferred Alternative from west to east:

In the **<u>I-205 Interchange Area</u>**, the Preferred Alternative consists of:

- Alternative 2 with the addition of the Tolbert Crossing from Design Option A-2
- The Sunrise Project western transition to the Milwaukie Expressway is widened within the existing right-of-way for OR 224 and extended farther to the west past Webster Road.

- The Lake Road intersection with Webster Road is closed and traffic re-routed eastward to the revised OR 224 / Pheasant Court intersection;
- Access from Johnson Road (south of OR 224) to OR 224 is re-routed westward along Lake Road to a new connection at the existing OR 224 / Pheasant Court intersection.
- The southern leg of the existing OR 224 / Johnson Road intersection is closed.
- The Deer Creek Lane / Johnson Road connection is relocated to the west at the existing intersection.
- The Lawnfield North extension alignment is shifted to avoid impacts to the KEX site historic resource (copper ground wire mat) and other cultural and natural resources in the area between the existing Lawnfield Road and 97th Avenue.
- The additional of the Tolbert Overcrossing (Design Option A-2) to Alternative 2.
- 3rd Westbound Lane on OR 212 / 224 from I-205 to 102nd Avenue with the dedicated right turn lane at 82nd Drive.
- 82nd Drive and its intersection with OR 212/224 are expanded to improve overall mobility by:
    - Restricting all left-turns at this intersection and adding a raised median both north and south of the existing intersection.
    - 82nd Drive is widened and a new signalized intersection at 82nd Drive and Clackamas Road is created to accommodate U turns including trucks.
    - 82nd Drive is widened and the existing signalized intersection at 82nd Drive and the northern Fred Meyer access point is reconfigured to accommodate U turns including trucks.

In the ***Midpoint Area***, the Preferred Alternative consists of:

- Alternative 2, the narrow diamond interchange at 122nd Avenue with a connection to OR 212/224 at 122nd Avenue.
- Design Option C-2, the southern-most alignment between the mid-point and Rock Creek interchanges -.
- The multi-use path that was planned between I-205 and the Midpoint Area will be extended along OR 212/224 to the Rock Creek interchange based on stakeholder and agency input.

In the **Rock Creek Junction Area**, the Preferred Alternative consists of:

- Design Option D-3, a Single Point Urban Interchange (SPUI)
- The eastern leg of the Goosehollow Drive / OR 224 intersection would be closed.
- A right-out-only access end of Orchard View Lane to northbound OR 224 will be created from the as an access mitigation measure.
- A 162nd Avenue connection to OR 212 will be created at the NE corner of the Orchard Lake neighborhood as an access mitigation measure.
- Existing OR 212 will become a cul-de-sac just east of 162nd Avenue.
- The Sunrise Project eastern transition reconnects with OR 212 east of the 172nd Intersection with OR 212.
- The Sunrise Project southern transition reconnects with OR 224 at Eckert Lane

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX R

2023 Regional Transportation Plan

I-5/99W connector study recommendations

July 10, 2023

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Project website: **oregonmetro.gov/rtp**

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I-5/99W Connector Study Recommendations and Conditions

WASHINGTON COUNTY
OREGON

MAY 6 2009

May 1, 2009

COPY

Carlotta Collette, JPACT Chair
Metro
600 NE. Grand Ave.
Portland, OR 97232-2736

Dear Councilor Collette:

As you may recall, the I-5/99W Connector Project Steering Committee met for the last time on February 25, 2009. At that meeting, the committee members voted on a package of improvements for the study area along with some important conditions regarding future improvements. While the final vote was not unanimous (6-2), there seems to be a general agreement that the package of arterial improvements, referred to as "Alternative 7", is preferred to a single freeway like facility through the study area. The attached materials summarize the Committee's decision.

Since some of the projects proposed for the study area are different than what is in the current Regional Transportation Plan (RTP), we believe the next step in the process is to amend the RTP to reflect the work of the Committee. We understand that work is currently underway to amend the RTP later this year with final adoption scheduled for 2010. On behalf of the Project Steering Committee, I am requesting that the RTP be amended to incorporate the Committee's decision. We look forward to cooperatively working with Metro on the RTP update. If the Metro staff needs additional information, please have them contact Mark Brown at 503-846-3406.

Sincerely,

Tom Brian

Tom Brian, Chairman
Washington County Board of Commissioners

Attachments
1. Recommendation memorandum
2. Alternative 7 Cost Estimate
3. Alternative 7 Map
4. Table summarizing environmental impacts
5. Feb. 25, 2009 PSC meeting summary
6. Recommended Conditions

Board of County Commissioners
155 North First Avenue, Suite 300, MS 22, Hillsboro, OR 97124-3072
phone: (503) 846-8681 • fax: (503) 846-4545

MEMORANDUM

I-5 TO 99W Connector Project

DATE:	February 17, 2009
TO:	Project Steering Committee (PSC)
FROM:	**Executive Management Team (EMT)**
SUBJECT:	I-5 to 99W Connector, Recommended Alternative for RTP Amendment

Alternative 7 Recommendation for RTP Amendment

The majority of the EMT recommends that on February 25, 2009 the PSC select Alternative 7, the Three Arterial Corridors Alternative, as the Portland metropolitan region's southwest quadrant transportation solution-concept for Metro's consideration and adoption into the Regional Transportation Plan (RTP). A conceptual representation of Alternative 7 is shown in Figure 1 and the project's elements are described in Table 1.

This recommendation is based on the following advantages of Alternative 7:

1. Alternative 7 would address the project's purpose by providing an enhanced transportation network of multi-modal improvements that can effectively serve regional and intrastate access to the area's highways while also enhancing local access and circulation in the southwest quadrant of the Metro region.

2. Alternative 7 draws from the best elements of the build alternatives studied in the Alternatives Analysis (AA) and incorporates additional actions to enhance mobility. In general, Alternative 7's performance would be most similar to Alternative 6 and generally better than Alternatives 3, 4, and 5 while having fewer adverse effects on the human and natural environment and lower overall cost than Alternatives 3, 4, 5, and 6.

3. A significant advantage of Alternative 7 over the connector Alternatives 4, 5, and 6, is it could be more easily implemented in phases over time. This would provide jurisdictions flexibility to strategically adapt to funding availability, and to protect livability and economic viability of communities as increased system capacity commensurate with development in this part of the Metro region is warranted. Smaller, more affordable individual projects may be advanced with independent utility under the integrated multi-modal framework of Alternative 7. Strategic measures to protect the affordability of right-of-way for future construction elements of Alternative 7 could also occur.

Conditions of Recommendation

As with any large-scale system of transportation improvements, a number of issues will need to be dealt with in the course of advancing a planning level transportation concept to construction projects and other implementation actions. While the corridor level alternative selected on February 25th is the final decision milestone for the PSC, additional work will continue in collaboration with stakeholder entities in advancing Alternative 7. The conditions listed below serve as a roadmap for this work.

For Alternative 7, the EMT recommends the following conditions accompany the RTP recommendation of Alternative 7:

1. **Future phasing plans for implementing Alternative 7 projects must take into consideration the transportation, environmental, and economic impacts of advancing some improvements sooner than others.** The sequencing of affordable improvements should be done in a manner that does not create new transportation problems or liabilities for the vitality of affected jurisdictions.
2. **The timing and priority of an I-5 corridor study must be considered in the RTP adoption process for Alternative 7.** The connector project development process emphasized the need for a corridor study along I-5 from Portland to the Willamette River. The results of this study may affect the timing and designs of some improvements within Alternative 7.
3. **Access between I-5 and the southern arterial must be resolved.** The alternatives development and analysis process determined the general corridor location for the new southern arterial. However, additional preliminary engineering work is needed to determine the optimal access option and configuration for connecting the southern arterial to I-5. Construction of the southern arterial should be conditioned on defining the I-5 improvements needed to accommodate it. Options to be explored include modifying the I-5/North Wilsonville Interchange into a tight split-diamond interchange, or extending a new arterial over I-5 and connecting to Elligsen Road on the east side of I-5.
4. **Completion and construction of major project elements is subject to compliance with the National Environmental Policy Act (NEPA) and design refinement.** The Alternative 7 concept provides only the general locations and functional characteristics of new transportation facilities. A fully collaborative public/agency involvement and environmental analysis process must be conducted in developing the design details of any major construction element of Alternative 7. Subsequent project development work will need to define the actual alignments and designs of each of these facilities within the framework of these general parameters. On-going coordination with the Tualatin River National Wildlife Refuge must also occur to ensure optimum compatibility of Alternative 7 elements with refuge objectives.
5. **Land Use Concept Planning will have to be completed by local governments to conform to the Alternative 7 decision.** Local governments need to complete concept plans that incorporate Alternative 7 elements for lands that are: a) within the Metro UGB, and b) within the project area and are not incorporated, and c) in areas where concept planning has not yet commenced.
6. **The design of the southern arterial; must incorporate any conditions that may come out of land use goal exceptions processes (if required) by Metro, Washington County, and Clackamas County.** Portions of Alternative 7 may require exceptions under state land use goals in order to be adopted in the RTP and to achieve needed federal and jurisdictional approvals. The extent of this issue may be affected by Metro's coming decisions on rural/urban land use reserves. Portions of proposed new transportation facilities are outside Metro's jurisdictional boundaries and will require coordination of actions between Metro and other affected jurisdictions. Possible design requirements may include forms of access management and land use control measures.
7. **State highway system routing and ODOT mobility standards must be key considerations in the design and future ownership of improvements within Alternative 7.** Current RTP assumptions are that a new limited-access connector would be built between I-5 and 99W, and that this roadway would become the new state route, possibly replacing OR 99W through Tigard. Alternative 7 does not result in a limited-access connector, which may result in OR 99W remaining the designated state highway route through Sherwood, King City and Tigard.

8. **Strategic protection of right-of-way should be considered by agencies for the Alternative 7 elements within the UGB and along potential alignments where land development could conflict with the future implementation of corridor improvements.** Protective measures could include property setbacks, dedication of right-of-way, specific acquisition(s), and/or right-of-way purchases consistent with NEPA process.

The Development of Alternative 7

The June 2008 I-5 to 99W Connector Project Alternatives Analysis (AA) evaluated a range of six alternatives including a No-Build. A series of public hearings were held following the AA document's release. Based on consideration of input from the public hearings and subsequent direction from the PSC, a seventh alternative was identified for study. This alternative (Alternative 7) is a combination of key features represented in the original five build alternatives.

The PSC direction to the project team was, in a broad sense, to look for a hybrid solution drawing from elements of the Build Alternatives considered in the AA but creating a transportation network rather than relying on a single expressway corridor to address the project purpose and need. The PSC was also concerned about the magnitude and cost of collector/distributor improvements along I-5 to support an expressway connection. The project team's response to this direction led to a strategy of creating three arterial-level corridors that would disperse regional travel between I-5 and OR 99W rather than concentrating it in one connector corridor. The distribution of traffic between these east-west arterial corridors was further enhanced by adding a new north-south arterial (124th Extension). By dispersing the east-west traffic to the three existing interchanges on I-5, the need for an extensive collector/distributor system on I-5 is no longer essential to the performance of this project.

Alternative 7 draws from the five build alternatives studied in the AA and incorporates many projects already identified in the RTP and local Transportation System Plans (TSPs). All of the Transportation Demand Management/Transportation System Management (TDM/TSM) measures contained in Alternative 2 are incorporated in Alternative 7. Many of the roadway improvements as well as the commuter rail extension between Tualatin and Sherwood in Alternative 3 and in adopted plans are also included. Although the expressway-type approaches of Alternatives 4, 5, and 6 were not included, the respective alignments of these facilities and some of their functional characteristics were adapted for use in Alternative 7.

Analysis of Alternative 7

At the direction of the PSC, Alternative 7 was analyzed to compare its transportation performance and effects on the natural and built environments with the other build alternatives studied in the AA. The results of these evaluations are summarized in the attached matrix (Table 2).

Alternatives 1 (No Build) and 2 (TDM/TSM) would not effectively address the project purpose. In general, Alternative 7 addresses the project's purpose as well or better than Alternatives 3, 4, 5, and 6 while having less adverse effects on the human and natural environment. The reduced environmental effects are generally attributed to Alternative 7's smaller area of potential impact (API) or spatial footprint. The main reasons for the reduced footprint are:

- Additional roadways and structures along I-5 would be minimized compared to Alternatives 4, 5, and 6 (the connector alternatives). Alternative 7 would include auxiliary lanes, built within the existing ODOT right-of-way (as modeled for Alternative 3). In contrast, the connector alternatives included an extensive collector-distributor system along I-5 as well as improvements to existing interchanges.
- The southern arterial modeled for Alternative 7 was developed under the assumption that there would be signalized, surface intersections rather than more spatially-intensive grade-separated interchanges.
- The connector alternatives were modeled under the assumption that they would be compatible with expressway design requirements. By changing to an arterial, narrower design widths may be possible.
- Alternative 7 would have a smaller total footprint than Alternative 3, which may seem counter-intuitive since it includes a southern arterial alignment. However, a majority of the 15 road extension and/or widening projects assumed for Alternative 3 are not included in Alternative 7 (e.g., Avery Street, Adams Street, Sagert Street, and OR 99W improvements) and the collective impact area of these elements would exceed that of the southern arterial.

Attachments (3)

Table 1. Alternative 7 Project Elements with Planning-Level Cost Estimates

Road	Location and General Description of Action	Conceptual Costs in $ millions (2008 dollars)
	Northern Arterial Project Elements	
Tualatin Road/Lower Boones Ferry Road	Extend Tualatin Rd. as 5-lane arterial east across the Tualatin River from Herman Rd. to Lower Boones Ferry Rd. (LBFR). Widen LBFR to 5 lanes from extension to 72nd Ave.	$95
SW Herman Road	Construct 3-lane extension of Herman Rd. between Tualatin Rd. and OR 99W	$30
SW Bradbury Court	Construct new east-west connection across I-5 to 72nd Ave. on Bradbury Ct. alignment	$20
	Central Arterial Project Elements	
Tualatin–Sherwood and Roy Rogers Road	• Widen Tualatin-Sherwood Rd. (TSR) to 5 lanes from OR 99W to SW 124th Ave.	$25
	• Widen Roy Rogers Rd. between Borchers Rd. and OR 99W to 5-lanes	$5
Tualatin–Sherwood Road	Widen TSR to 5 lanes from SW 124th Ave. to Teton Ave.	$20
	Southern Arterial	
Southern Arterial/Interstate 5 interface	Complete either a tight split diamond N. Wilsonville Interchange or a new I-5 over-crossing with 2-lane road connecting southern arterial to Elligsen Rd. east of I-5 and associated connection improvements	$50
Boones Ferry Road	• Widen Boones Ferry Rd. to 5-lanes between new southern arterial and Day Rd.	$5
Southern Arterial	• Purchase ROW for 5-lane arterial (OR 99W to I-5)	$100
	• Construct a new 2-3 lane arterial (OR 99W to I-5)	$120
	• Widen arterial to 5-lanes (OR 99W to I-5)	$70
	• Improve Commerce Circle/95th Ave. and Boones Ferry Rd. intersection	$5
	Other Alternative 7 Elements	
TSM / TDM	Regional Trail System, Bike Lanes, Sidewalks & Bus Stops	$30
Commuter Rail	Commuter rail extension to Sherwood	$40
Interstate 5	Add auxilliary lanes to I-5 between I-205 and Elligsen Interchange (assumes Norwood over-crossing replacement)	$30
SW 124th Avenue	• Purchase ROW for 5-lane arterial (TSR to southern arterial)	$5
	• Extend 124th Avenue as a 2-3 lane roadway between TSR and Tonquin Road	$45
	• Widen and extend 124th Avenue as a 4-5 lane roadway between TSR and the southern arterial	$20
	Total Costs	**$715**

At their meeting on February 25, 2009, the PSC agreed on the following conditions as amended from those presented to them in the Alternative 7 Recommendation Memorandum dated February 17, 2009 to accompany the RTP recommendation of Alternative 7:

1. **Future phasing plans for implementing Alternative 7 projects must take into consideration the transportation, environmental, and economic impacts of advancing some improvements sooner than others.** The sequencing of affordable improvements should be done in a manner that does not create new transportation problems or liabilities for the vitality of affected jurisdictions.
2. **The timing and priority of an I-5 corridor study must be considered in the RTP adoption process for Alternative 7.** The connector project development process emphasized the need for a corridor study along I-5 from Portland to the Willamette River. The results of this study may affect the timing and designs of some improvements within Alternative 7.
3. **Access between I-5 and the southern arterial must be resolved.** Additional study is required to fully understand the impacts and trade offs between transportation solutions and land use, economic and environmental consequences of a new southern arterial. The impacts on rural lands are of particular importance and must be further evaluated before pursuing an exceptions process. The study area may need to be expanded to include connections to Stafford Road and additional areas along the OR 99W corridor that were not included in the alternatives analysis. The alternatives analysis process determined the general corridor location for the new southern arterial. However, additional preliminary engineering and planning work is needed to determine the optimal access option and configuration for connecting the southern arterial to I-5, OR 99W, and other arterials in the expanded study area. Construction of the southern arterial should be conditioned on defining the I-5 improvements needed to accommodate it and ensuring no negative impacts to I-5 and I-205 occur beyond the forecast No-Build condition as a result of Alternative 7. Options to be explored include modifying the I-5/North Wilsonville Interchange into a tight split-diamond interchange, or extending a new arterial connection crossing over I-5 and connecting to Stafford Road and/or Elligsen Road on the east side of I-5 for regional traffic benefits.
4. **Completion and construction of major project elements is subject to compliance with the National Environmental Policy Act (NEPA) and design refinement.** The Alternative 7 concept provides only the general locations and functional characteristics of new transportation facilities. A fully collaborative public/agency involvement and environmental analysis process must be conducted in developing the design details of any major construction element of Alternative 7. Subsequent project development work will need to define the actual alignments and designs of each of these facilities within the framework of these general parameters. On-going coordination with the Tualatin River National Wildlife Refuge must also occur to ensure optimum compatibility of Alternative 7 elements with refuge objectives.
5. **Land Use Concept Planning for UGB expansion areas should be coordinated with the refinement of these transportation recommendations.**
6. **The design of the southern arterial; must incorporate any conditions that may come out of land use goal exceptions processes (if required) by Metro, Washington County, and Clackamas County.** Portions of Alternative 7 may require exceptions under state land use goals that have not yet been studied or approved in order to be adopted in the RTP and to achieve needed federal and jurisdictional approvals. The extent of this issue may be affected by Metro's coming decisions on rural/urban land use reserves. Portions of proposed new transportation facilities are outside Metro's jurisdictional boundaries and will require coordination of actions between Metro and other affected jurisdictions. Possible design requirements may include forms of access management and land use control measures.
7. **State highway system routing and ODOT mobility standards must be key considerations in the design and future ownership of improvements within Alternative 7.** Current RTP assumptions are that a new limited-access connector would be built between I-5 and 99W, and that this roadway would become the new state route, possibly replacing OR 99W through Tigard. Alternative 7 does not result in

a limited-access connector, which may result in OR 99W remaining the designated state highway route through Sherwood, King City and Tigard.

8. **Strategic protection of right-of-way should be considered by agencies for the Alternative 7 elements within the UGB and along potential alignments where land development could conflict with the future implementation of corridor improvements.** Protective measures could include property setbacks, dedication of right-of-way, specific acquisition(s), and/or right-of-way purchases within the UGB consistent with NEPA process.

Following agreement on the above conditions, PSC representatives of Washington County, ODOT, Metro, and the cities of Tualatin and Sherwood voted in favor of recommending Alternative 7 with the conditions as amended above. PSC representatives of the City of Wilsonville and Clackamas County voted against this recommendation.

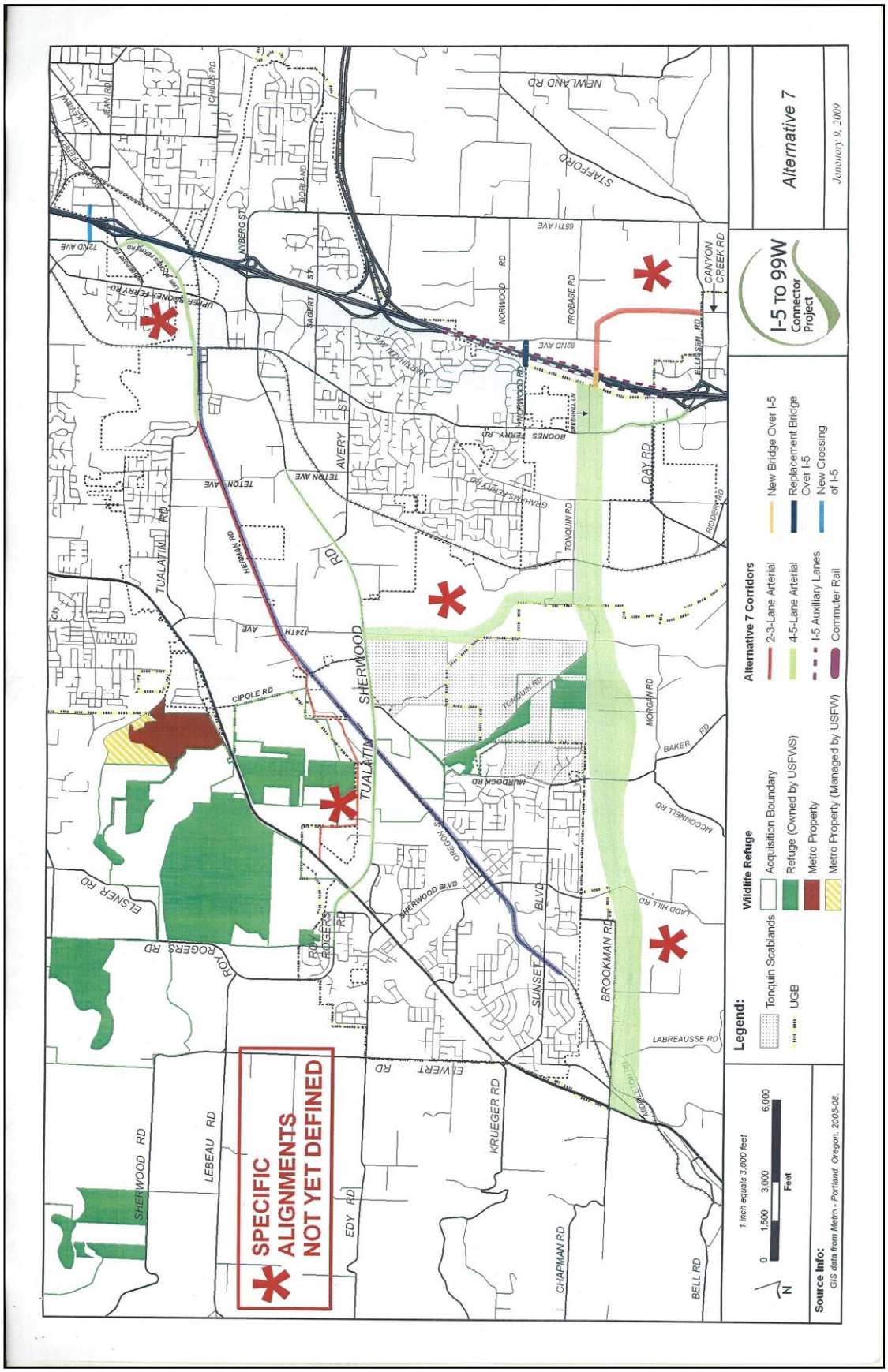
I-5 TO 99W Connector Project
Alternative 7
January 9, 2009
Legend:
Tonquin Scablands
UGB
Wildlife Refuge
Acquisition Boundary
Refuge (Owned by USFWS)
Metro Property
Metro Property (Managed by USFW)
Alternative 7 Corridors
2-3-Lane Arterial
4-5-Lane Arterial
I-5 Auxiliary Lanes
Commuter Rail
New Bridge Over I-5
Replacement Bridge Over I-5
New Crossing of I-5
1 inch equals 3,000 feet
0 1,500 3,000 6,000
Feet
N
Source Info:
GIS data from Metro - Portland, Oregon, 2005-08.
SPECIFIC ALIGNMENTS NOT YET DEFINED
SHERWOOD
TUALATIN
STAFFORD
NEWLAND RD
SHERWOOD BLVD
TONQUIN RD
BROOKMAN RD
LABREAUSSE RD
SUNSET BLVD
ROY ROGERS RD
ELSNER RD
SHERWOOD RD
LEBEAU RD
EDY RD
KRUEGER RD
CHAPMAN RD
BELL RD
ELLWERT RD
MORGAN RD
BAKER RD
MCCONNELL RD
LADD HILL RD
DAY RD
AVERY ST
TETON AVE
TUALATIN RD
HEBRON RD
124TH AVE
CIPOLE RD
MULLDOCK RD
NORWOOD RD
PROBASE RD
CANYON CREEK RD
ELLASEN RD
BOONES FERRY RD
GRAHAMS FERRY RD
RIDDER RD
NYBERG ST
SAGERT ST
MERIDIAN AVE
65TH AVE
82ND AVE
72ND AVE
UPPER BOONES FERRY RD
CHILDS RD
BORLAND
GEAN RD
LAKE FOREST BLVD

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Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX S

2023 Regional Transportation Plan

I-5/Interstate Bridge replacement modified locally.preferred alternative

July 10, 2023

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Project website: **oregonmetro.gov/rtp**

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BEFORE THE METRO COUNCIL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BE IT RESOLVED that:

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

ADOPTED by the Metro Council this 14th day of July 2022.

Lynn Peterson, Council President

Approved as to Form:

Carrie MacLaren

Carrie MacLaren, Metro Attorney

MODIFIED LOCALLY PREFERRED ALTERNATIVE RECOMMENDATION

MAY 27, 2022

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

1. A replacement of the current I-5 Bridge with a seismically sound bridge.

2. A commitment to increase and implement attractive transit options across the Columbia River by supporting a variety of transit services that meet the needs of customers traveling between varied markets through:

   i. Continuation of C-TRAN express bus service from markets north of the Bridge Influence Area (BIA) to the downtown Portland area utilizing new bus on shoulder facilities, where available, within the BIA.

   ii. Continuation of C-TRAN's current and future Bus Rapid Transit lines as described in adopted regional plans and known as the Vine.

   iii. New Light Rail Transit (LRT) service as the preferred mode for the dedicated High-Capacity Transit improvement within the BIA.

   iv. An alignment of LRT that begins with a connection at the existing Expo Center LRT station in Portland, OR, extends north, with a new station at Hayden Island, continues across the Columbia River on a new I-5 bridge, and generally follows I-5 with an interim Minimum Operable Segment not extending north of E. Evergreen Boulevard, in Vancouver, WA. There will be multiple stations in the City of Vancouver to be decided by the Vancouver City Council in consultation with C-TRAN, the Port of Vancouver, and TriMet.

3. Active transportation and multimodal facilities that adhere to universal design principles to facilitate safety and comfort for all ages and abilities. Exceptional regional and bi-state multi-use trail facilities and transit connections will be created within the BIA. Opportunities will be identified to enhance active transportation facilities, with specific emphasis on local and cross-river connections between the region's Columbia River Renaissance Trail and the 40-mile Loop.

4. The construction of a seismically sound replacement crossing for the North Portland Harbor Bridge with three through lanes, northbound and southbound.

5. The construction of three through lanes northbound and southbound on I-5 throughout the BIA.

6. The inclusion of one auxiliary lane northbound and one southbound between Marine Drive in Portland and E. Mill Plain Boulevard in Vancouver to accommodate the safe movement of freight and other vehicles.

7. A partial interchange at Hayden Island, and a full interchange at Marine Drive, designed to minimize impacts on the Island's community; and improve freight, workforce traffic, and active transportation on Marine Drive.

8. A commitment to study improvements of other interchanges within the BIA.

9. Variable Rate Tolling will be used for funding, such as constructing the program, managing congestion, and improving multi-modal mobility within the BIA. The Program will study and recommend a low-income toll program, including exemptions and discounts, to the transportation commissions.

10. A commitment to establish a GHG reduction target relative to regional transportation impact, and to develop and evaluate design solutions that contribute to achieving program and state-wide climate goals.

11. A commitment to evaluate program design options according to their impact on equity priority areas with screening criteria such as air quality, land use, travel reliability, safety, and improved access to all transportation modes and active transportation facilities. The Program also commits to measurable and actionable equity outcomes and to the development of a robust set of programs and improvements that will be defined in Community Benefits Agreement.

Exhibit A to Ordinance No. 23-1496

COUNCIL MEETING STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 22-5273, FOR THE PURPOSE OF ENDORSING THE MODIFIED LOCALLY PREFERRED ALTERNATIVE FOR THE INTERSTATE BRIDGE REPLACEMENT PROGRAM

Date: June 27, 2022
Department: Planning, Development, and Research
Meeting Date: July 14, 2022
Prepared by: Matt Bihn, matt.bihn@oregonmetro.gov

Presenter(s): Margi Bradway, Deputy Director, Planning, Development, and Research; Matt Bihn, Principal Transportation Planner

Length: 30 minutes

WORK SESSION PURPOSE

Purpose: Consider endorsement of the Interstate Bridge Replacement Program (IBRP) Modified Locally Preferred Alternative (LPA).

BACKGROUND

The IBRP has worked with project partners to develop a Modified LPA with project components that reflect changes since the Columbia River Crossing LPA was approved over a decade ago, with the goal of submitting the Modified LPA to the US Department of Transportation. The Modified LPA was developed with input of the project staff and was informed by technical analysis and ongoing community engagement including feedback from the Community Advisory Group (CAG) and Equity Advisory Group (EAG).

On May 5, 2022 the Executive Steering Group (ESG) supported agreement to bring the Modified LPA to their eight respective boards and councils for consideration. On June 3, 2022 TPAC recommended endorsement of Resolution No. 22-5273, and on June 16, 2022, JPACT endorsed Resolution No. 22-5273.

Below is the anticipated schedule for the eight IBR partners' endorsement of the Modified LPA:

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

Later this summer the ESG will consider a consensus recommendation to move the Modified LPA forward to the Supplemental Environmental Impact Statement process.

QUESTION FOR COUNCIL CONSIDERATION

- Does Council agree to endorse the IBRP Modified Locally Preferred Alternative, with Conditions of Approval adopted by Council in advance of this decision?
- Does Council have questions about the next steps in the overall LPA process?

PACKET MATERIALS

- Would legislation be required for Council action X Yes ☐ No
- If yes, is draft legislation attached? X Yes ☐ No
- What other materials are you presenting today?
    - Resolution No. 22-5273
    - Exhibit A: IBR Recommended Modified LPA

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX T

2023 Regional Transportation Plan

Clackamas to Columbia Corridor Plan

July 10, 2023

oregonmetro.gov/rtp

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

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

Project website: **oregonmetro.gov/rtp**

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

Exhibit A to Ordinance No. 23-1496

CLACKAMAS TO COLUMBIA CORRIDOR

C2C

CORRIDOR

LIVE • WORK • CONNECT

SEPTEMBER 30, 2020

ACKNOWLEDGMENTS

The development of this plan was guided by the Project Partners and Steering Committee members. Each individual devoted their time and effort to provide valuable input and feedback and their participation was instrumental in the development of the plan.

PROJECT PARTNERS

City of Gresham
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City of Happy Valley
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Multnomah County
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STEERING COMMITTEE

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City of Gresham

Councilor Brett Sherman,
City of Happy Valley

Commissioner Paul Savas,
Clackamas County

Commissioner Lori Stegmann,
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This project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development (DLCD). This TGM grant is financed, in part, by federal Fixing America's Surface Transportation Act (FAST Act), local government, and State of Oregon Funds. The contents of this document do not necessarily reflect views or policies of the State of Oregon.

TABLE OF CONTENTS


STOP

INTRODUCTION

The C2C Corridor Plan is a consistent, coordinated, multijurisdictional transportation plan. It focuses on needed multimodal improvements along the 181st/182nd/190th/172nd corridor, which connects Interstate 84 and Highway 212. The C2C Corridor is the only major north-south through route east of I-205.

The C2C Corridor Plan provided the framework and performance standards by which projects from previous and ongoing planning efforts were measured, prioritized, and organized into investment packages. A group of project partners provided content and context for the projects and materials in this plan. The partners included staff members from the Cities of Gresham and Happy Valley, and from Multnomah and Clackamas Counties. Feedback from the project partners, steering committee (composed of elected officials from each partner agency), and the public guided selection of the preferred investment package and implementation strategies.

This section describes the plan's purpose and development, and the public involvement process.

PROJECT PURPOSE AND BENEFIT

The purpose of the project is to create a consistent, coordinated, multijurisdictional transportation plan that focuses on needed improvements for all modes along the 181st/182nd/190th/172nd corridor, which connects I-84 in Multnomah County and Highway 212 in Clackamas County, and develop a preferred investment package to aid in funding and implementation of the plan. Though used heavily as a through route, the corridor is not continuous. Improving this route's continuity will yield immediate, noticeable benefits for people traveling by all modes through some of the fastest growing and most underrepresented communities in the Metro area. The intended use of this document is to organize projects on and along the C2C Corridor into prioritized investment packages for implementation by the partner agencies.

More information is included in Appendix A: Project Purpose and Objectives Memorandum.

DEVELOPING THE PLAN

The C2C Corridor Plan was developed using previous planning efforts to establish goals, objectives, evaluation criteria, and key projects along the corridor. Workshops, work sessions, and virtual public engagement opportunities provided feedback for the Partner Agency Steering Committee to help them confirm the prioritization and packaging of these projects. Figure 1 shows the steps taken to develop the C2C Corridor Plan.

FIGURE 1. THE PROCESS

PUBLIC INVOLVEMENT PROCESS

The C2C Corridor Plan includes projects that have already been vetted through extensive public outreach processes, including some from transportation system plans (TSPs) and from the Metro Regional Transportation Plan (RTP). Table 1 describes public involvement efforts related to area refinement and investment package prioritization.

TABLE 1. PUBLIC INVOLVEMENT ACTIVITIES

TYPE OF MEETING	MEETING DETAILS
Project Partner Calls	Held throughout the duration of project to review materials and provide updates on ongoing planning efforts
Online Open House	Gathered feedback on the projects, packages, and ordering of investments; confirmed and refined recommendations; and identified information and clarification desired in the draft C2C Corridor Plan
Steering Committee Work Session #1	
Online Open House	Provided opportunities for comment and feedback on the draft C2C Corridor Plan and reported back to stakeholders on what we heard throughout the project.
Online Listening Session	

RELATED PLANS & NEEDS

Previous and ongoing planning efforts guided the goals, objectives, evaluation criteria, and projects that served as the basis of the C2C Corridor Plan. A list of the reviewed plans appears below. Those that had the most direct and substantial relevance to the C2C Corridor are **bolded.**

More information is included in Appendix B: Plan Summary Memorandum and Appendix C: Planning Summary Update Memorandum.

GRESHAM

- **Gresham TSP**
- **Pleasant Valley Concept Plan**
- **Pleasant Valley TSP Refinement Project**

CLACKAMAS COUNTY

- **Clackamas County TSP**
- **172nd/190th Corridor Plan**
- **Revised Sunrise Concept per the Metro Regional Investment Measure Refinement**

HAPPY VALLEY

- **Happy Valley TSP**
- East Happy Valley Comprehensive Plan
- Pleasant Valley/North Carver Comprehensive Plan

MULTNOMAH COUNTY

- **Capital Improvement Plan and Program**
- **East Metro Connections Plan**

PORTLAND

- Outer Powell Transportation Safety Project
- Foster Streetscape Plan
- Portland Comprehensive Plan

METRO

- **2020 Regional Investment Measure**
- **Regional Transportation Plan 2018**
- Powell-Foster Corridor Transportation Plan
- Powell-Division Transit Corridor Plan
- Powell-Division Transit and Development Project
- **East Metro Connections Plan**
- **2040 Growth Concept**
- Regional Transit Strategy
- Regional Freight Strategy
- Regional Active Transportation Plan
- Regional Travel Options Strategy
- Regional Safety Strategy
- **Climate Smart Strategy**
- Transportation System Management and Operations Action Plan
- Parks and Nature System Plan
- **Designing Livable Streets & Trails Guide**

TRIMET

- Division Transit Project
- **Southeast Service Enhancement Plan**
- **Eastside Service Enhancement Plan**


Powell Vista Center
TO
84

EVALUATION & PRIORITIZATION CRITERIA

This section is an overview of the plan objectives, evaluation, and prioritization criteria that guided the organization and prioritization of investment packages.

PLAN OBJECTIVES

The purpose of the project was to create a consistent, coordinated, multijurisdictional transportation plan that focuses on needed improvements for all modes along the 181st/182nd/190th/172nd corridor, which connects I-84 in Multnomah County and Highway 212 in Clackamas County. The project also includes developing a preferred investment package to aid in funding and implementation of the plan.

The plan objectives include:

- Advance C2C by identifying projects to be amended into the Metro Regional Transportation Plan.
- Identify sequencing and phasing of transportation investments along the corridor.
- Develop a coordinated, consistent set of policy and project recommendations for incorporation into the next update of each jurisdiction's TSP (including Clackamas County, Multnomah County, Gresham, and Happy Valley).
- Achieve elected leadership knowledge of and agreement on prioritization of projects needed in the C2C corridor
- Incorporate applicable elements of the C2C plan to future TSP updates.
- Document needs and develop prioritization of C2C investments packages and projects by regional/state partners.
- Target a prioritized project list for consideration for upcoming funding opportunities, such as Metro's Get Moving 2020 regional investment measures, future Metropolitan Transportation Improvement Program (MTIP) or Statewide Transportation Improvement Program (STIP) investments, urban renewal districts, or other funding sources.
- Identify other potential funding sources for projects within the C2C Plan

EVALUATION & PRIORITIZATION CRITERIA

The evaluation and prioritization criteria were used to assess and organize projects into investment packages. These criteria were based on those used across previous and ongoing planning efforts and were intended to address the goals of the C2C Corridor.

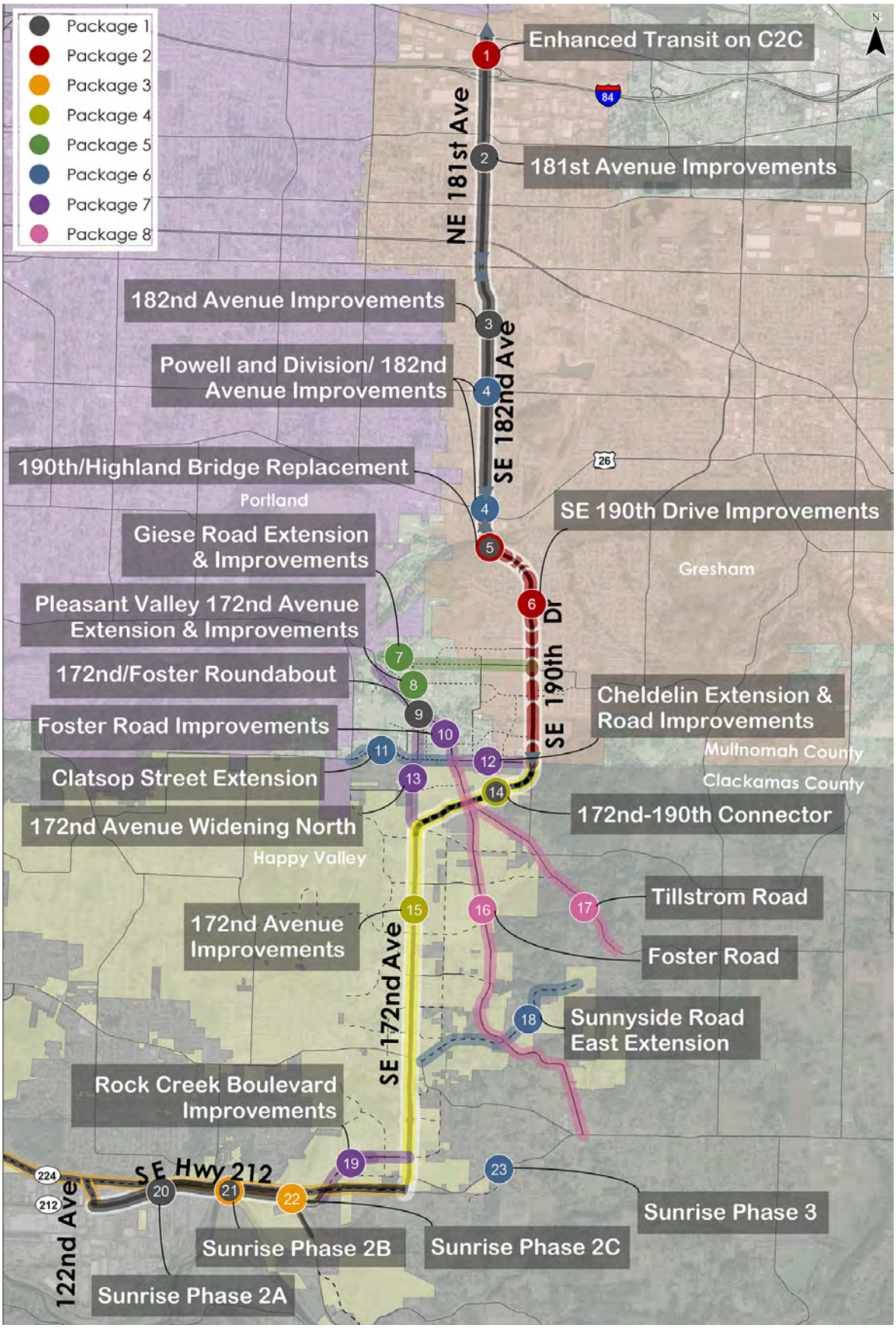
The prioritization measures were framed as questions that help assess to what extent a project supports the plan's goals. The projects were scored on each prioritization measure to create a quantitative way of comparing projects. Table 2 provides a scoring scale from -1 to +2, reflecting the extent to which a project achieves the prioritization measure. The scores were averaged for each goal and summed to provide a project score from -6 to +14, as shown on the following page.

More information is available in Appendix D: Corridor Evaluation and Prioritization Methodology Memorandum.

TABLE 2. GOAL AND TOTAL PROJECT SCORING

PROPOSED C2C GOAL	PROPOSED C2C PRIORITIZATION MEASURE	MINIMUM SCORING	MAXIMUM SCORING
Safety & Security	» Does the project improve an intersection or roadway identified as a **safety** concern, especially those with more severe crashes? » Does the project improve **safety** and comfort for all users, especially non-auto travelers? » Does the project improve the security and resiliency of the transportation system?	-1 *Average of three prioritization measure scores*	+2 *Average of three prioritization measure scores*
Equitable Transportation	» Does the project positively impact a disadvantaged population?	-1	+2
Multimodal Mobility	» Does the project address an operational deficiency (based on level of service and/or volume-to-capacity ratio)? » Does the project positively impact goods mobility and freight?	-1 *Average of two prioritization measure scores*	+2 *Average of two prioritization measure scores*
Livability and Accessibility	» Does the project increase access between residential and commercial areas or to daily needs and services **(jobs, community places)**? » Does the project increase **access to active transportation and transit**?	-1 *Average of two prioritization measure scores*	+2 *Average of two prioritization measure scores*
Economic Development	» Does the project increase access to an employment area **(access to jobs)**?	-1	+2
Fiscal Stewardship	» Does the project provide high value considering the cost **(cost effectiveness)**? » Does the project better manage the existing transportation system or make better use of an existing facility?	-1 (average of two prioritization measure scores)	+2 (average of two prioritization measure scores)
Connectivity	» Does the project fill a gap in the existing network and increase north-south continuity **(system completeness)**?	0	+2
	Total Project Score	**-6**	**+14**

FIGURE 2. INVESTMENT PACKAGES



INVESTMENT PACKAGES & PROJECTS

This section includes the investment packages and project priorities for the corridor shown in Figure 1. Each package is then summarized with its own prospectus sheet outlining the projects (illustration, narrative, and benefits), sequence of the projects, relative benefits each project provides related to the evaluation criteria, and the overall cost of the package.

More information is available in Appendix E: Project List Memorandum, Appendix F: 190th Drive Refinement Memorandum and Appendix G: Preferred Investment Packages Memorandum.

PACKAGE 1: METRO REGIONAL INVESTMENT MEASURE PROJECTS

Package 1 contains projects proposed for full or partial funding through the Metro Regional Investment Measure. Remaining needs for partially-funded projects have been added to another package based on other criteria. The projects in this package are near-term improvements and should be completed in the next 15 years.

TOTAL COST

$362,500,000 - $364,300,000

PROJECTS

2 & 3 - 181ST AVENUE IMPROVEMENTS AND 182ND AVENUE IMPROVEMENTS

$70,100,000 | Provides safety, transit, and traffic signal improvements along the 181st/182nd Corridor.

5 - 190TH/HIGHLAND BRIDGE BASELINE REPLACEMENT

$13,400,000[1] | Replaces the 190th/Highland Bridge for structural safety improvements.

9 - 172ND/FOSTER SINGLE-LANE ROUNDABOUT

6,500,000 - $8,300,000[2] | Provides a roundabout at 172nd/Foster for safety and operational improvements.

14 - 172ND-190TH TWO-LANE CONNECTOR

$61,600,000[1] | Connects 172nd and 190th to complete the C2C Mainline. Realigns Tillstrom Road at Foster Road at a stop-controlled intersection.

20 - SUNRISE PHASE 2A

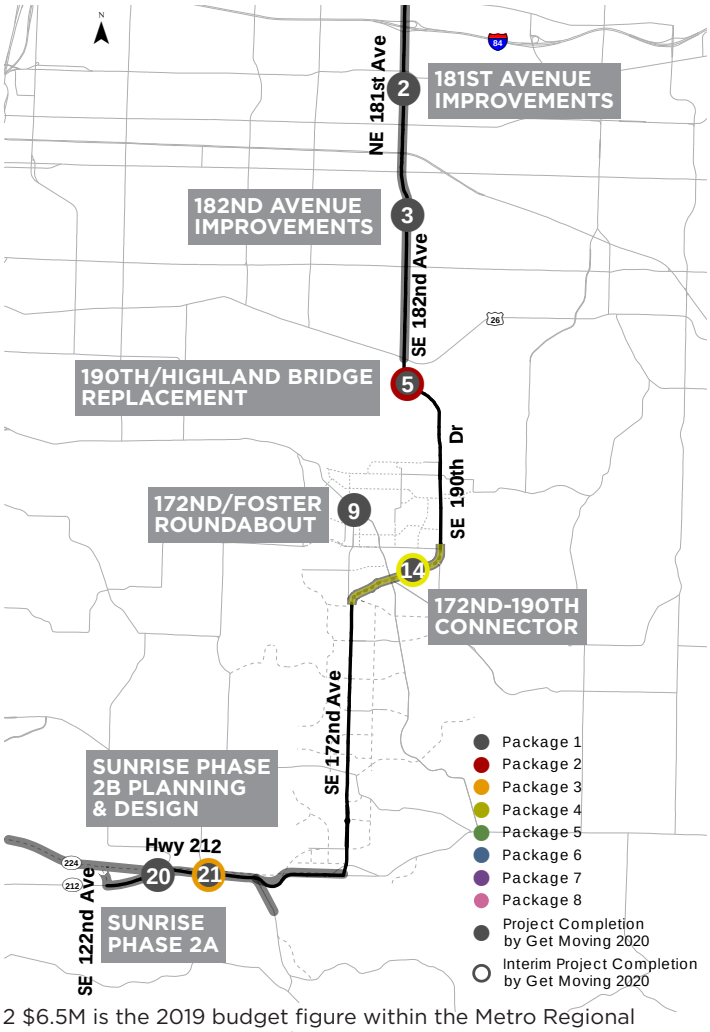
$204,200,000 | Provides complete street improvements on Highway 212 and provides local street connections.

21 - SUNRISE PHASE 2B PLANNING AND DESIGN

$34,000,000 | Completes planning and design for future Sunrise facility.

Project Sequence: 2&3, 5, 9, 20, 14, 21

1 Estimate for interim 190th/Highland Bridge Baseline Replacement and two-lane facility from Metro Regional Investment Measure work, including right-of-way.



2 $6.5M is the 2019 budget figure within the Metro Regional Investment Measure work; $8.3M is YOE project cost based on project descriptions and potential delivery timelines as of June 30, 2020, subject to change.

Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
2 and 3	◕	●	●	●	●	●	◑
5	◑	○	◑	●	●	●	●
9	◕	○	◔	◕	◑	●	○
14	●	●	●	●	●	◑	●
20	●	●	◕	◕	●	●	○
21	●	●	◕	◕	●	●	○

MINIMAL BENEFIT ○ ◔ ◑ ◕ ● MAXIMUM BENEFIT

PACKAGE 2: C2C MAINLINE CAPITAL PROJECTS

Package 2 contains projects located along the C2C mainline that are unlikely to be constructed through development, as shown in Table 3. Package 2 projects also include enhanced transit on the C2C Corridor. While frequent service may not be immediately needed and/or feasible in the near-term, the corridor will be complete within Package 2 and will benefit from transit services. As densities in the area grow, transit can be improved to meet "enhanced transit" criteria. Clackamas County is currently producing a Transit Development Plan (TDP) to assess the densities and associated frequencies for transit in the County, including the C2C Corridor. The projects in this package are near-term improvements and should be completed in the next 15 years.

TOTAL COST

$32,019,000 - $35,017,000 + ROW for Project 6

PROJECTS

1 - ENHANCED TRANSIT ON C2C

Funded through Expanded Service District

Provide enhanced transit (arrivals every 15 minutes or sooner during most of the day) along the C2C Corridor. While frequent service may not be immediately needed and/or feasible in the near term, the corridor will be complete within Package 2 and benefit from transit services. As densities in the area grow, transit can be improved to meet "enhanced transit" criteria.

5 - 190TH/HIGHLAND COMPLETE BRIDGE REPLACEMENT

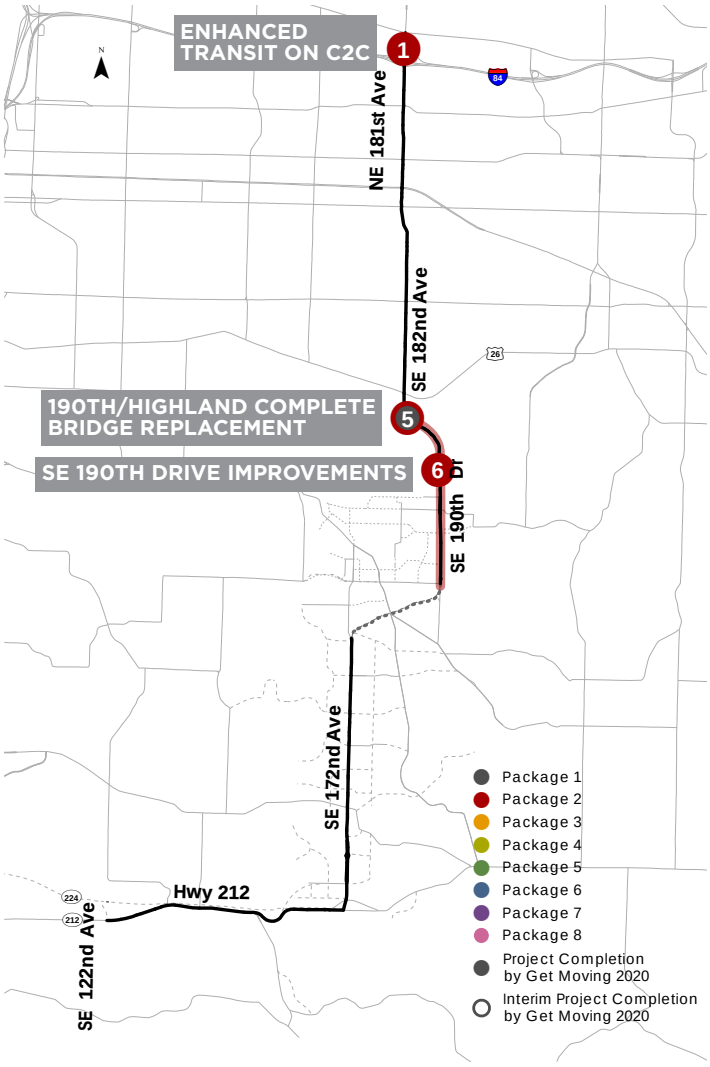
Up to $2,998,000[1]

Four-lane bridge replacement with sidewalks and bike facilities as well as a seismic upgrade.

6 - SE 190TH DRIVE IMPROVEMENTS + ROW

$32,019,000

Widen 190th Drive from Powell Boulevard to Cheldelin Road. Provide five-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks. Signalize or provide roundabouts for 190th at Giese Road, Butler Road, Richey Road, and Cheldelin Road.



Project Sequence: 5, 6, 1

Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
1	◐	●	◐	●	●	●	●
5	◐	○	◐	●	●	●	●
6	◐	○	●	●	●	●	●

MINIMAL BENEFIT ○ ◔ ◑ ◕ ● MAXIMUM BENEFIT

PACKAGE 3: HIGH SCORE CAPITAL PROJECTS

Package 3 contains projects that were likely to be capital projects that scored higher than others, as shown in Table 4. These projects are anticipated to be needed to support future development along 172nd Avenue and the 172nd-190th Connector. Constructing these will promote development-driven improvements for the next package. The projects in this package are mid-term improvements and should be completed in the next 10–15 years.

TOTAL COST

$312,877,000

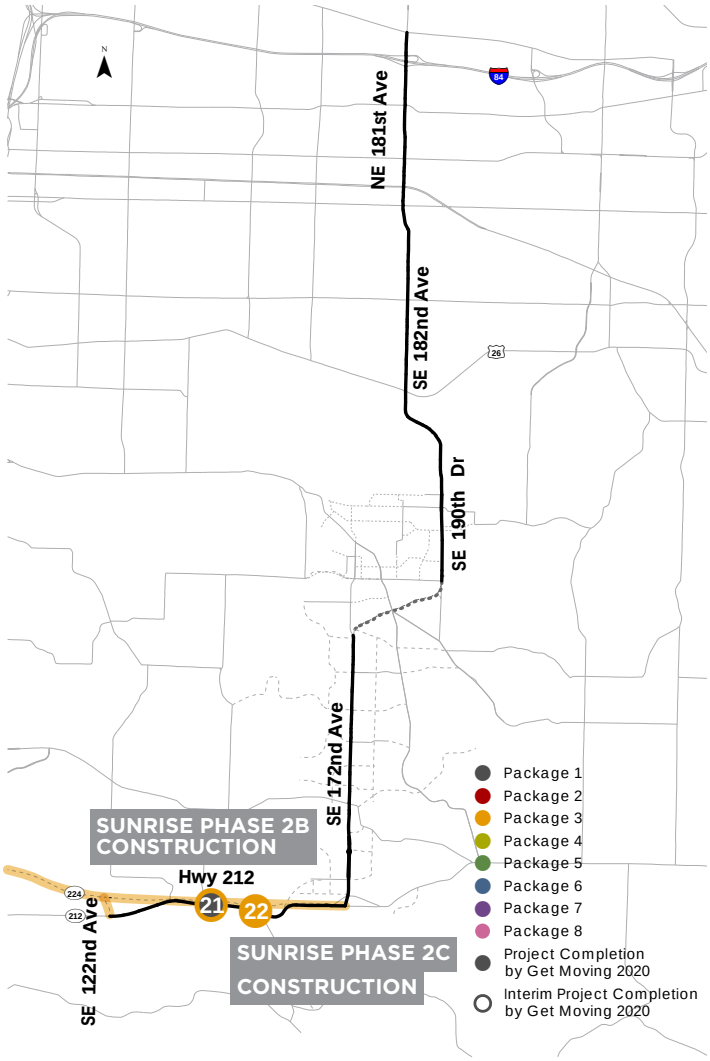
PROJECTS

21 - SUNRISE PHASE 2B
$292,879,000

Constructs Sunrise Gateway access-controlled facility from 122nd Avenue to 172nd Avenue and parallel trail.

22 - SUNRISE PHASE 2C
$19,998,000
Constructs roundabout at Rock Creek Junction (OR 212/OR 224)

Project Sequence: 21, 22



Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
21	●	●	◐	◐	●	●	○
22	●	●	◐	◐	●	●	○

MINIMAL BENEFIT ○ ◔ ◑ ◕ ● MAXIMUM BENEFIT

PACKAGE 4: C2C MAINLINE DEVELOPMENT PROJECTS

Package 4 contains projects located along the C2C mainline that are likely to be constructed through development (e.g., half street improvements and improvements in undeveloped areas). These projects are mid-term improvements and should be completed in the next 10–20 years.

TOTAL COST

$53,288,000

PROJECTS

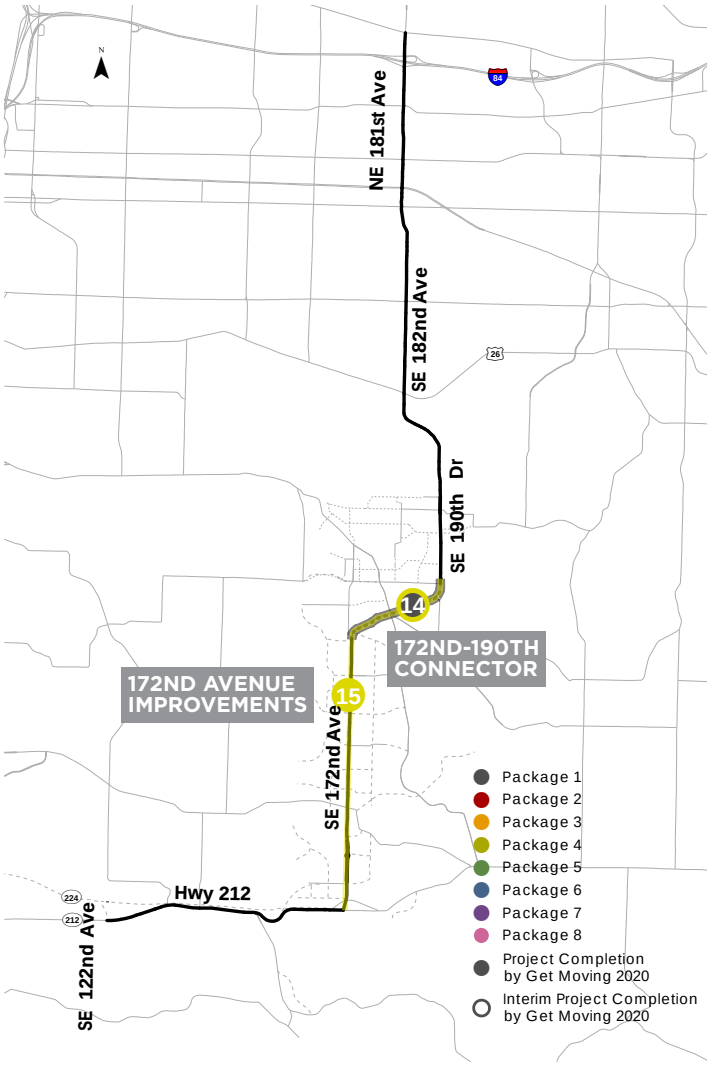
14 - 172ND-190TH CONNECTOR
$10,288,000[1]

Expand from two-lane to five-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks. Provide roundabouts at Cheldelin Road, Foster Road, and 172nd Avenue.

15 - 172ND AVENUE IMPROVEMENTS
$43,000,000

Provide five-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks on 172nd Avenue from Connector to Sunnyside Road. Provide roundabouts at Hemrich Road and Scouter Mountain Road, and signalize Troge Road and Vogel Road.

Project Sequence: 14, 15



1 Cost differential between five-lane and two-lane cost estimates. Actual value may differ, depending on amount of two-lane facility that is forward-compatible.

Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
14	●	●	●	●	●	◐	●
15	●	○	●	●	●	●	●

MINIMAL BENEFIT ○ ◔ ◑ ◕ ● MAXIMUM BENEFIT

PACKAGE 5: MEDIUM SCORE CAPITAL PROJECTS

Package 5 contains projects that were likely to be capital projects and had moderate scores compared to other capital projects. These projects are long-term improvements and should be completed in the next 15+ years.

TOTAL COST

$35,734,000 + three stream crossings

PROJECTS

7 - GIESE ROAD EXTENSION & IMPROVEMENTS

$22,714,000 + two Stream Crossings

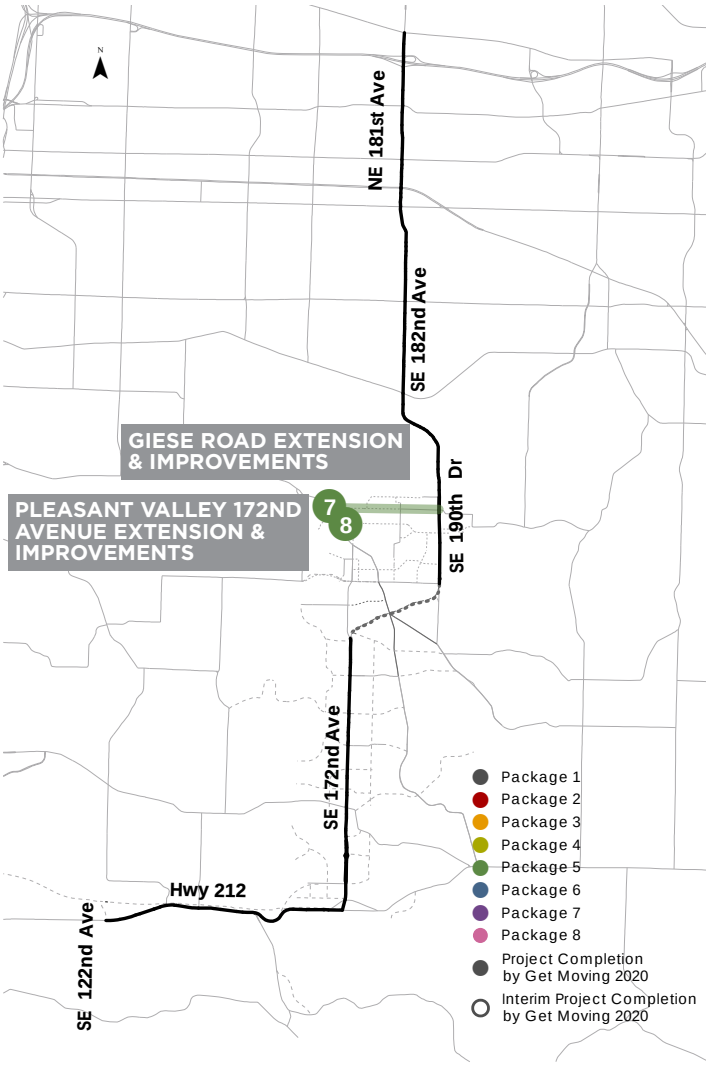
Extend Giese Road from Foster Road to 182nd Avenue. Widen Giese Road from 182nd Avenue to 190th Drive. Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks. Add or replace two stream crossings.

8 - PLEASANT VALLEY 172ND AVENUE EXTENSION & IMPROVEMENTS

$13,020,000 + one stream crossing

Extend 172nd Avenue from Foster Road to Giese Road. Widen 172nd Avenue from Foster Road to Cheldelin Road. Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks. Add or replace one stream crossing.

Project Sequence: 7, 8



Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
7	○	○	◐	●	●	◐	○
8	○	○	◐	●	●	◐	◐

MINIMAL BENEFIT ○ ◔ ◐ ◕ ● MAXIMUM BENEFIT

PACKAGE 6: LOW SCORE CAPITAL PROJECTS

Package 6 contains projects that were likely to be capital projects and had lower scores compared to other capital projects. These projects are long-term improvements and should be completed in the next 15+ years.

TOTAL COST

$19,554,000

PROJECTS

4 - POWELL AND DIVISION/ 182ND AVENUE IMPROVEMENTS

$2,093,000

Add a second westbound left-turn lane at Division, add northbound and southbound double left-turn lanes and through lanes at Powell, and add transit/enhanced transit corridor supportive projects.

11 - CLATSOP STREET EXTENSION

$4,302,000

Extend Clatsop Street from 162nd Avenue to 172nd Avenue. Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks.

18 - SE SUNNYSIDE RD EAST EXTENSION

$13,159,000

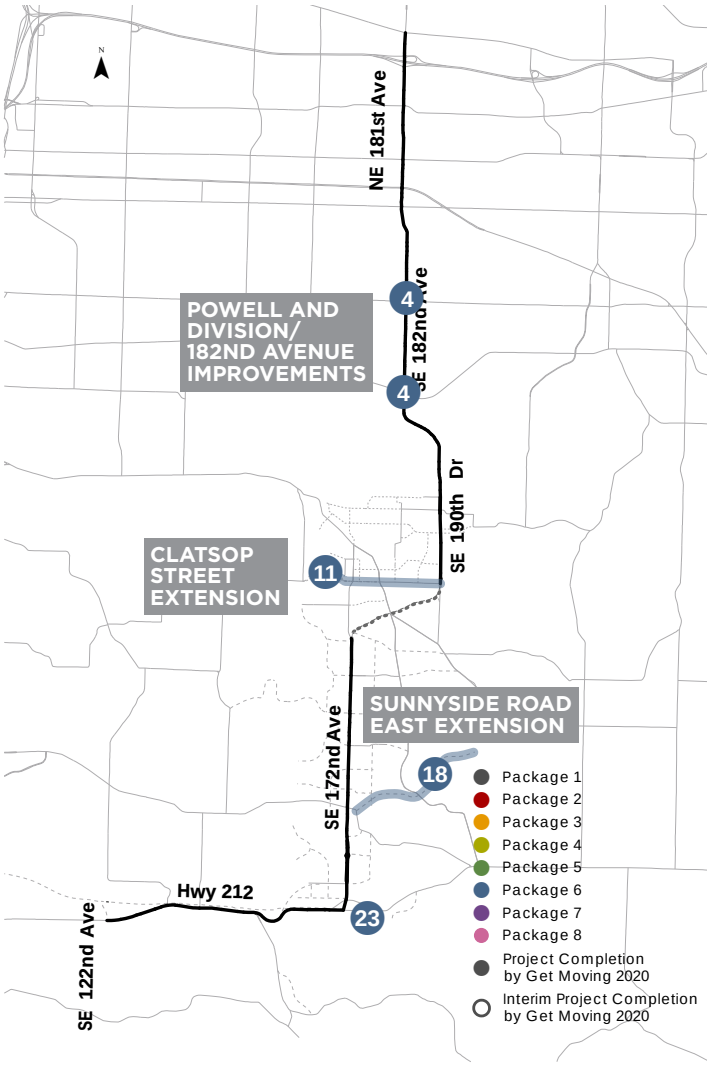
Construct new five-lane road with continuous left turn lane, sidewalks, bike lanes, and traffic signals.

23 - SUNRISE PHASE 3

TBD

Provides improvements east of 172nd Avenue.

Project Sequence: 18, 4, 23, 11



Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
4	◐	○	◐	◔	●	●	○
11	○	○	◐	●	●	◐	○
18	○	○	◔	◐	○	○	○
23	TBD	TBD	TBD	TBD	TBD	TBD	TBD

MINIMAL BENEFIT ○ ◔ ◐ ◕ ● MAXIMUM BENEFIT

PACKAGE 7: HIGH SCORE DEVELOPMENT PROJECTS

Package 7 contains projects that were likely to be development-driven and had higher scores compared to other development-driven projects. These projects are long-term improvements and should be completed in the next 15+ years.

TOTAL COST

$43,132,000 + two stream crossings & ROW for Project 10

PROJECTS

10 - FOSTER ROAD IMPROVEMENTS

$7,593,000 + two stream crossings + ROW

Widen Foster Road from 172nd Avenue to Cheldelin Road. Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks. Add or replace two stream crossings.

12 - CHELDELIN EXTENSION & ROAD IMPROVEMENTS

$12,000,000

Extend Cheldelin Road from 172nd Avenue to Foster Road. Widen Cheldelin Road from Foster Road to 190th Drive. Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks.

13 - 172ND AVENUE WIDENING NORTH

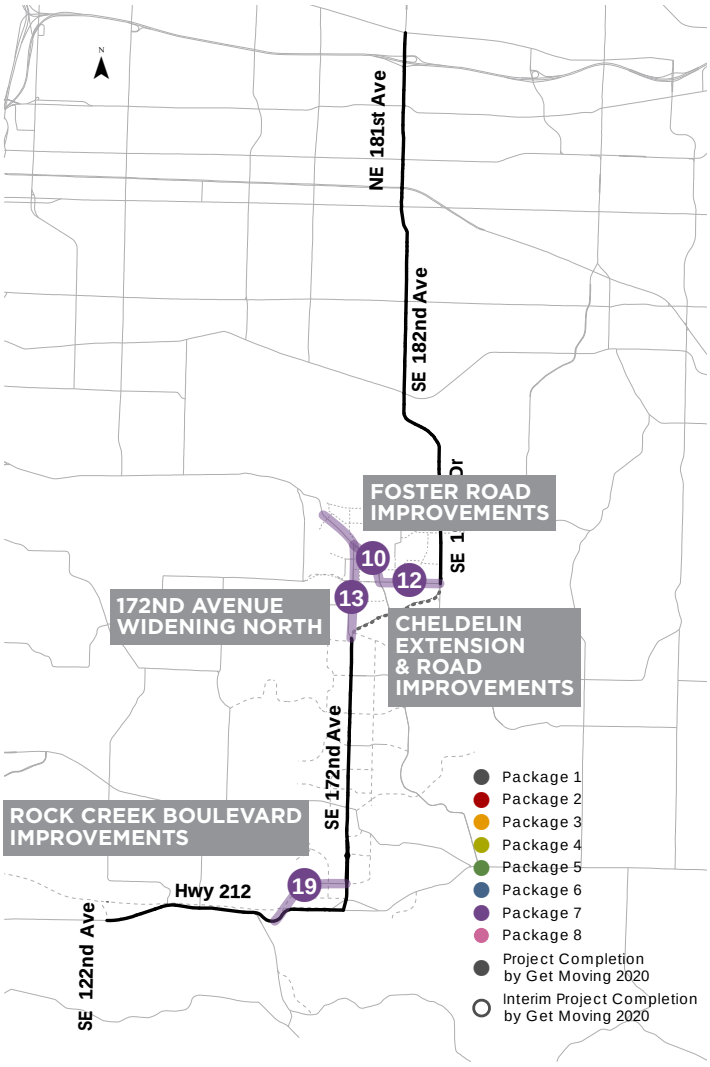
$10,000,000

Widen 172nd Avenue to three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks between 172nd-190th Connector to Cheldelin Road.

19 - ROCK CREEK BOULEVARD IMPROVEMENTS

$13,539,000

Construct new five-lane vehicle cross section from Sunrise Corridor to 162nd Avenue; Widen existing alignment of Rock Creek Boulevard to five lanes from 162nd to 177th Avenue. Facility improvements include continuous left-turn lane, sidewalks, bicycle lanes, and traffic signals. In addition, this will improve safety on a High Injury Corridor.



PROJECT SEQUENCE: 12, 10, 13, 19

Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
10	◐	○	◐	◐	●	◐	◐
12	◐	○	◐	●	●	◐	○
13	○	○	◐	●	●	◐	◐
19	◐	○	◐	◐	●	○	●

MINIMAL BENEFIT ○ ◐ ◐ ◐ ● MAXIMUM BENEFIT

PACKAGE 8: LOW SCORE DEVELOPMENT PROJECTS

Package 8 contains projects that were likely to be development driven and had lower scores compared to other development-driven projects. These projects are long-term improvements and should be completed in the next 15+ years.

TOTAL COST

$43,054,000

PROJECTS

16 - FOSTER ROAD

$28,000,000

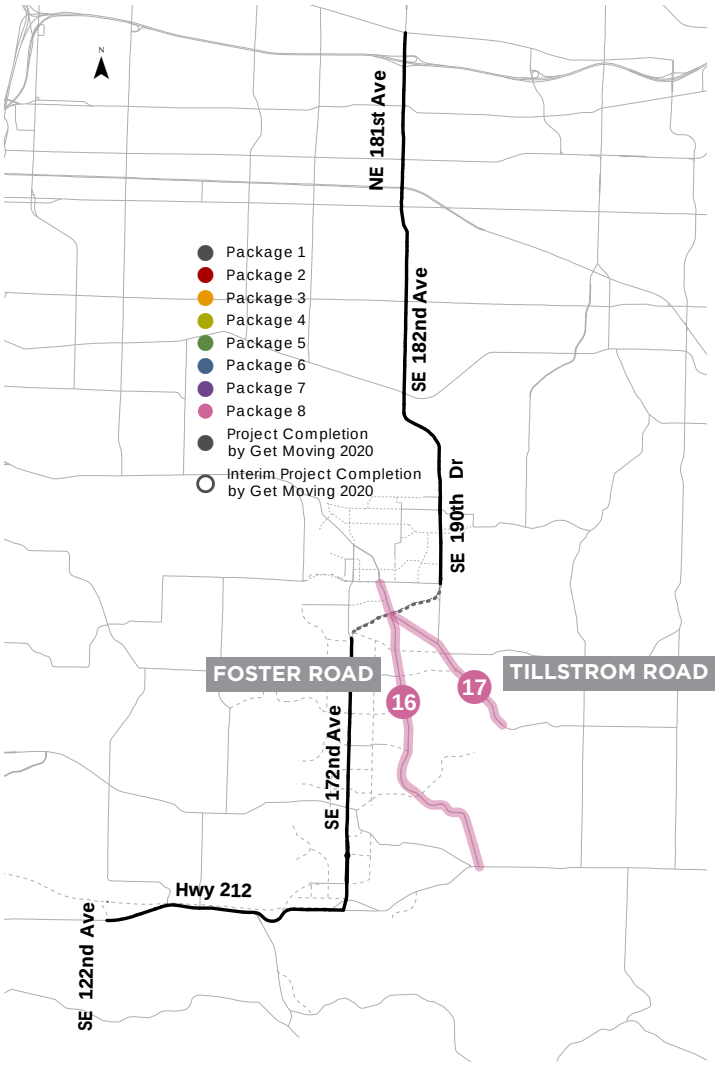
Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks from Cheldelin Road to OR 212.

17 - TILLSTROM ROAD

$15,054,000

Provide three-lane vehicle cross section, bicycle lanes, landscape strip, and sidewalks.

PROJECT SEQUENCE: 16, 17



Project	Safety & Security	Equitable Transportation	Multimodal Mobility	Livability and Accessibility	Economic Development	Fiscal Stewardship	Connectivity
16	◕	○	◔	◑	○	○	◑
17	◕	○	◔	◑	○	○	◑

MINIMAL BENEFIT ○ ◔ ◑ ◕ ● MAXIMUM BENEFIT


AHEAD

IMPLEMENTATION STRATEGIES

This section includes the implementation strategies, including sequencing, funding strategies, timelines, and agency coordination needs.

More information is available in Appendix H: Implementation Strategies Memorandum.

SEQUENCING

C2C involves many different projects drawn from multiple planning documents from the region. Because of this, the projects are not yet arranged in a sequence that will most benefit the corridor as it develops. The order in which projects are competed will be critical to corridor development and operations as more people begin using the route as a major north-south connection.

The 172nd –190th Connector and related corridor safety and congestion bottleneck improvements should be prioritized to promote safe and efficient travel for all modes as the corridor progresses. Beyond making the critical linkage between 172nd and 190th, multimodal improvements should be sequenced to start in development-pressured southern Gresham and the Rock Creek Employment Center area in southern Happy Valley and continue toward the middle of the corridor until they meet. This will form the complete 172nd –190th corridor.

Supplemental improvements that parallel and support continued development along the corridor will be sequenced next.

The prospectus sheets in the previous section detail the recommended package and project sequencing for the C2C Corridor based on the priorities outlined above; the corridor projects likely to need public investment versus those private development will likely accommodate; individual project scores documented in the Project List Memorandum; and steering committee and public feedback.

It should be noted that unique funding opportunities, unanticipated development activities or staging needs, and/or other multimodal safety/operation issues may warrant completing certain projects out of package or project sequence. The intent of the recommended sequencing is to lay out which projects the partner agencies will collectively prioritize, assuming no unique circumstances arise. If such circumstances do arise, the partner agencies will coordinate to identify the issue and share findings that justify a change in sequence.

FUNDING STRATEGY

Table 3 shows the potential funding mechanisms for the C2C Corridor. Table 4 shows which funding sources can be applied to which projects. The funding sources are divided into two categories: roadway-focused funding sources are shown in light blue, and sources generally used for active transportation (e.g., transit, pedestrian, and bicycle) improvements are in light green. The overall project map is included in Figure 1 for reference.

TABLE 3. FUNDING SOURCES

FUNDING SOURCE	DESCRIPTION	ELIGIBILITY		
		MPO	County	City
Surface Transportation Block Grant (STBG)	Federal flexible funding that may be used for projects to preserve and improve conditions on and performance of any federal-aid highway, bridge, or tunnel project on any public road; pedestrian and bicycle infrastructure; and transit capital projects, including intercity bus terminals. These funds are distributed through Metro's Regional Flexible Fund Allocation (RFFA), and projects are focused on four primary RTP investment priorities – Equity, Safety, Climate Smart Strategy, and Congestion.	●	●	●
State Highway Fund	Revenue sources are: motor vehicle registration and title fees; driver license fees; motor vehicle fuel taxes; and weight-mile taxes. Fund expenditures are restricted to construction; improvement; maintenance; operation; and use of public highways, roads, streets, and roadside rest areas.		●	●
Road Fund Serial Levy	Voter-approved property tax levied in addition to the permanent tax rate.		●	●
Road Utility Fee	Monthly user fee with revenue dedicated to road operations. Enacted legislatively or by popular vote. This source is generally better suited to funding operations than capital improvements.		●	●
Vehicle Registration Fee	An extra fee on all registered motor vehicles, enacted legislatively or by popular vote. This source could fund operations or capital programs.	●	●	●
Motor Vehicle Title Fee	All motor vehicles registered in the jurisdiction are also required to have a title recorded as personal property within the jurisdiction. This source generates two sources of revenue: the fee itself and personal property taxes levied on motor vehicles.	●		
Local-Option Fuel Tax	Enacted legislatively or by popular vote. This source could fund operations or capital programs.		●	●
Immediate Opportunity Funds	Enacted legislatively or by popular vote. This source could fund operations or capital programs.	●	●	●
All Roads Transportation Safety (ARTS)	MAP-21 increased safety funding and emphasizes a focus on all roads. Because of this, ODOT offered a portion of its safety funds to improve safety on local roads, leading to the creation of the ARTS program.	●	●	●
General Fund	Property taxes from local agencies' permanent tax rate.		●	●
Transportation Development Tax	Based on the estimated traffic generated by each type of development; revenue is dedicated to transportation capital improvements designed to accommodate growth. Eligible projects are on major roads, including sidewalks and bike lanes, as well as transit capital projects.		●	●
System Development Charges (SDC)	A reimbursement fee, an improvement fee or a combination thereof assessed or collected at the time of increased usage of a capital improvement or issuance of a development permit, building permit, or connection to the capital improvement.		●	●

FUNDING SOURCE	DESCRIPTION	ELIGIBILITY		
		MPO	County	City
Local Improvement District (LID)	Used as a method of financing capital improvements constructed by the local agency or utility district that provide a special benefit to the properties within the boundary of the LID.		●	●
Tax Increment Financing	Used to capture additional property taxes generated in the vicinity of transit-specific improvements or areas. This type of funding can also be used to capture a portion of property value increase caused by a particular investment.		●	●
Urban Renewal Districts	Uses the future increase in property taxes from the rehabilitation of urban areas by renovating or replacing dilapidated buildings with new housing, public buildings, parks, roadways, industrial areas to finance infrastructure improvements within the district. This is a type of tax increment financing.		●	●
State Special Transportation Funds (STF)	Allocated by the Oregon Legislature every two years. Funds may be used for any purpose directly related to public transportation services for seniors and people with disabilities. Funds managed locally by STF agencies (transit districts, counties, tribes); the eligible recipient for the C2C Corridor is TriMet.	●	●	●
Federal Transit Administration (FTA) Grants	Section 5310 Funds: formula funding to states and metropolitan regions for the purpose of meeting the transportation needs of seniors and people with disabilities. ODOT allocates state 5310 funds to rural areas via local STF agency and may reserve for discretionary programs.		●	●
	Section 5339 Funds: funding through an allocation process to states for small urban and rural areas, and transit agencies in large urban areas, to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.		●	●
	Section 5307: formula transit funds for large and small urban districts (TriMet)	●		
	Section 5309: capital investment grants: fund major transit capital investments, including heavy rail, light rail, and bus rapid transit.	●		
	Section 5303/4/5: Metropolitan and Statewide Planning. Funds are allocated to states, which then distribute them to regional and local agencies for transit planning.	●	●	●
Connect Oregon Funds	Projects are eligible for grants covering up to 70% of project costs. A minimum 30% cash match is required from the recipient for all grant-funded projects. Projects eligible for funding from state fuel tax revenues are not eligible for Connect Oregon funding.	●	●	●
Private/Public Sponsorships	Private/public sponsorships involve a private entity, such as a local business owner, working with the public agency to fund a project (e.g., bus stop shelter and sidewalk connection maintenance). In return for their investment in the community, these business owners often have recognition for their role, providing a marketing venue for the business.	●	●	●

FUNDING SOURCE	DESCRIPTION	ELIGIBILITY		
		MPO	County	City
Congestion Mitigation & Air Quality (CMAQ)	Federal flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. These funds are distributed through Metro's RFFA, and projects are focused on four primary RTP investment priorities – Equity, Safety, Climate Smart Strategy, and Congestion.	●	●	●
STIP Enhance	Funds allocated to projects through a competitive grant application process. Eligible projects include public transit capital improvements.		●	●
Property Taxes	Tax assessed on the value of an owned property, a portion of which can be used to fund transit.	●	●	●
Payroll Taxes	Taxes imposed on employers or employees, usually calculated as a percentage of the salaries that employers pay their staff, and generated through deductions from an employee's wages or taxes paid by the employer based on the employee's wages.		●	●
Business Taxes	Tax assessed on the net income of businesses near transit facilities/ routes.		●	●
Tax Increment Financing	Used to capture additional property taxes generated in the vicinity of transit-specific improvements or areas. This type of funding can also be used to capture a portion of property value increase caused by a particular investment.		●	●
Tax Incentive Zones	Designated areas that provide an indirect avenue for transit funding by potentially increasing fare revenue, sponsorship revenue, etc. by providing tax incentives for businesses and residents near transit-oriented or transit-friendly developments.		●	●
Multimodal Impact Fees	Similar to transportation SDCs, but focused on improvements to multimodal transportation options. In the event a TIF is established, the fixed-route service could work to allocate a portion of funds towards transit-enhancing improvements.		●	●
ODOT Safe Routes to School Grant Program	Eligible projects include safety improvements that positively affect the ability of children to walk and bicycle to school. Projects must be within a public road right-of-way, consistent with jurisdictional plans, supported by the school or school district, within a one-mile radius of a school, and able to be constructed within five years of the application. Project examples include sidewalks, median refuge islands, rapid flashing beacons, etc. The minimum funding request is $60,000, and the maximum is $2 million.		●	●
Metro Grant Programs	Metro provides grant opportunities for various transportation-based projects. One such opportunity is the Regional Travel Options (RTO) grant, which includes Infrastructure and Innovation grants to support light infrastructure that make it easier, more convenient, or safer for people to get around using travel options and Safe Routes to School grants.	●	●	●

TABLE 4. PROJECT FUNDING AVAILABILITY

	PROJECTS (see figure 1 for reference)																						
FUNDING SOURCE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**
Surface Transportation Block Grant (STBG)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
State Highway Fund	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Road Fund Serial Levy	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
Road Utility Fee	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
Vehicle Registration Fee	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Motor Vehicle Title Fee	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Local-Option Fuel Tax	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Immediate Opportunity Funds	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
All Roads Transportation Safety (ARTS)		●	●			●			●	●		●			●	○	○			○	○	○	○
General Fund	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Transportation Development Tax	●	●	●	●	●	○	●	●	●	○	●	○	○	●	○	○	○	●	○	●	●	●	●
System Development Charges (SDC)	●	●	●	●	●	○	●	●	●	○	●	○	○	●	○	○	○	●	○	●	●	●	●
Local Improvement District (LID)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tax Increment Financing	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Urban Renewal Districts	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
State Special Transportation Funds (STF)	●																						
Federal Transit Administration (FTA) Grants	●																						
Connect Oregon Funds	●																						
Private/Public Sponsorships	●	○	○			○								○	○					○	○	○	○

● Indicates an opportunity for full or significant funding ○ Indicates an opportunity for partial or limited funding

FUNDING SOURCE	PROJECTS (see figure 1 for reference)																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Congestion Mitigation & Air Quality (CMAQ)	●																						
STIP Enhance	●																						
Property Taxes	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Payroll Taxes	●																						
Business Taxes	●																						
Tax Increment Financing	●	○	○			○								○	○					○	○	○	○
Tax Incentive Zones	●	○	○			○								○	○					○	○	○	○
Multimodal Impact Fees	●	●	●			●								●	●					○	○	○	○
ODOT Safe Routes to School Grant Program		●	●	○		○	○	○	○	○	○	○	○	○	○	○		○	○	○	○	○	○
Metro Grant Programs	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

● Indicates an opportunity for full or significant funding ○ Indicates an opportunity for partial or limited funding

TIMELINE

The C2C Corridor is expected to be complete in the next 20 years, but its completion depends on funding that is not yet identified. With this time frame in view, projects are divided into three ranges within the coming two decades: near-term projects, mid-term projects, and long-term projects. Near-term projects should be completed within the next 15 years (Packages 1 and 2). Mid-term projects should be completed within the next 10 to 20 years (Packages 3 and 4). Long-term projects can be completed in the next 15 or more years (Packages 5, 6, 7, and 8).

AGENCY COORDINATION NEEDS

Several projects in this plan need to be incorporated or updated within other plans. Project partners identified revisions to their own TSPs in the next chapter. The next Metro RTP update should also include these revisions. A complete list of affected projects can be found in Appendix H: Implementation Strategies Memorandum (Appendix H, pp 12 and 13).


DEAD END
SE CIRCLE

POLICY & PLAN AMENDMENT RECOMMENDATIONS

This section includes the project and plan revisions, agency coordination needs, and plan acceptance.

More information is available in Appendix I: Policy and Plan Amendment Recommendation Memorandum.

PROJECT REVISIONS AND INCORPORATIONS

This section identifies projects that are not currently shown in the City of Gresham, City of Happy Valley, Clackamas County, and Multnomah County TSPs, or that need to be updated. This section also indicates changes to Metro RTP and MTIP project names, descriptions, or cost estimates.

City of Gresham
The City of Gresham will update the 172nd/Foster roundabout cost estimate in their TSP and identify the roundabout as the preferred alternative from the Pleasant Valley TSP Refinement.

City of Happy Valley
The City of Happy Valley TSP is currently being updated to reflect the correction of a street classification error. 172nd Avenue north of the 172nd –190th Connector Road is currently classified as a major arterial and is being re-classified as a minor arterial.

Clackamas County
Clackamas County will update their TSP to reflect project changes to the Sunrise Corridor and classification changes to 172nd Avenue as noted by the City of Happy Valley.

Multnomah County
Multnomah County updated the 172nd /Foster roundabout cost estimate as part of the County's Roads Capital Improvement Plan 2020-2024. This was adopted by the Board of County Commissioners in January 2020.

Metro
Relevant project changes should be reflected in the next Metro RTP update. Additionally, the C2C Corridor Plan should be included as an appendix into the RTP Metro Mobility Corridor 24 section. *A complete list can be found in Appendix H: Implementation Strategies Memorandum.*

DEVELOPMENT REVIEW PROCEDURES AND COMPLIANCE

C2C Corridor Plan implementation, through private development land use actions and/or land use amendments, will follow the development application and approval procedures of the local agency that has land use jurisdiction. Any deviations to the C2C Corridor Plan's projects should be coordinated and communicated with directly-impacted project partners (City of Happy Valley, City of Gresham, Clackamas County, Multnomah County). The approved C2C Corridor Plan will inform jurisdiction TSP elements. It will also provide guidance for identifying the necessary transportation facility provisions associated with a given land use action or amendment (e.g., right-of-way, improvements, traffic control devices). However, the C2C Corridor Plan's acceptance does require the local agency with land use jurisdiction to consider the following things when reviewing and approving land use actions:

- **Right-of-way Dedication Requirements:** Right-of-way dedications should be consistent with the C2C Corridor Plan and its projects.
- **Direction of Requiring Construction of Improvements,** Partial Improvements, or Cash-in-Lieu Payments: The local agency with land use jurisdiction should require, through conditions of approval and/or development agreements, the specific improvements, partial improvements, or cash-in-lieu payments consistent with and necessary to implement the C2C Corridor Plan based on the impacts and properties associated with the specific land use action and/or amendment.
- **Cash-in-Lieu Payments (Optional):** Local agencies may seek cash in lieu of construction payments for land use actions that would result in isolated elements of the corridor being constructed prior to use, and allow cash-in-lieu across jurisdictional boundaries where appropriate. Example projects may include roundabouts where a property owner on one quadrant provides funding rather than constructing a partial improvement or those where different agencies control the adjacent land use and the subject roadway. These funds would need to be properly administered by the local agencies to ensure funds are both preserved and allocated in the most appropriate manner to realize the overall C2C Corridor Plan.

The following sections identify needed changes or other trigger mechanisms that need to be added to the respective agencies' development/zoning codes.

City of Gresham
No changes are anticipated.

City of Happy Valley
The City of Happy Valley will finalize an Intergovernmental Agreement (IGA) with Multnomah County for off-site impact fees for the 172nd/Foster intersection.

Clackamas County
No changes are anticipated.

Multnomah County
Multnomah County will finalize an IGA with the City of Happy Valley for off-site impact fees for the 172nd/Foster intersection.

C2C CORRIDOR PLAN ACCEPTANCE

The C2C Corridor Plan will be implemented at several levels of government. The cities and counties will incorporate the C2C Corridor Plan as applicable into their next respective TSP update. In addition, new ordinances, or amendments to existing ordinances, resolutions, and/or other agreements will be required to ensure that the improvements, right-of-way, access management, and coordination elements of the C2C Corridor Plan are achieved in a way that will allow the transportation system to build toward the long-term needs of the project study area.

The acceptance of the C2C Corridor Plan by the Partner Agencies (City of Gresham, City of Happy Valley, Clackamas County, and Multnomah County) will be done through resolutions passed by each agency's legislative body. The agencies and steering committee members have agreed to make best efforts to accept the C2C Plan by resolution prior to June 30, 2021.. Following acceptance and incorporation of the C2C Corridor Plan, the Partner Agencies will present the plan to Metro for incorporation into the RTP during the next update process.

After local acceptance, partner agencies should explore potential funding sources, monitoring and improvement responsibilities, and project prioritization. These efforts could be documented through various agreements forms and/or resolutions. An agreement between the counties and cities would likely focus on notification guidelines and coordinating the partner agencies' desires regarding funding sources, monitoring and improvement responsibilities, and project prioritization.

City of Gresham
The City of Gresham will accept the C2C Corridor Plan by resolution, incorporating needed changes to Gresham's TSP into future TSP updates.

City of Happy Valley
The City of Happy Valley will accept the C2C Corridor Plan via resolution and adopt it in its entirety by making it an ancillary document to the City's Comprehensive Plan, including any necessary TSP amendments. This will be accomplished through public notice and public hearings before the City's Planning Commission and City Council. The City of Happy Valley will participate in all applicable IGAs.

Clackamas County
Clackamas County will accept the C2C Corridor Plan by resolution. C2C Corridor Plan recommendations will ultimately be included in the next TSP update.

Multnomah County
Multnomah County will accept the C2C Corridor Plan by resolution.

Metro
Following the acceptance of incorporation of the C2C Corridor Plan by the four local partner agencies, the agencies and Metro should ensure that the projects are prioritized as agreed in the next RTP update.


SE Anderegg Pkwy
SE 172nd Av

APPENDICES

A: Project Purpose and Objectives Memorandum

B: Plan Summary Memorandum

C: Planning Summary Update Memorandum

D: Corridor Evaluation and Prioritization Methodology Memorandum

E: Project List Memorandum

F: 190th Drive Refinement Memorandum

G: Preferred Investment Packages Memorandum

H: Implementation Strategies Memorandum

I: Policy and Plan Amendment Recommendation Memorandum

Exhibit A to Ordinance No. 23-1496

APPENDIX A: PLANNING SUMMARY MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX B: PLANNING SUMMARY UPDATE MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX C: PROJECT PURPOSE AND OBJECTIVES MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX D: CORRIDOR EVALUATION AND PRIORITIZATION METHODOLOGY MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX E:
PROJECT LIST MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX F: 190TH DRIVE REFINEMENT MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX G: PREFERRED INVESTMENT PACKAGES MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX H: IMPLEMENTATION STRATEGIES MEMORANDUM

Exhibit A to Ordinance No. 23-1496

APPENDIX I: POLICY AND PLAN AMENDMENT RECOMMENDATION MEMORANDUM

Exhibit A to Ordinance No. 23-1496

CC2 CORRIDOR

LIVE • WORK • CONNECT

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

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July 10, 2023

Exhibit A to Ordinance No. 23-1496

PUBLIC REVIEW DRAFT

APPENDIX U

2023 Regional Transportation Plan

Summary of comments received and recommended actions

July 10, 2023

oregonmetro.gov/rtp

Note: This appendix will reflect Exhibit C to Ordinance No. 23-1496 and will be part of the final 2023 RTP Appendices.

Metro