Memo

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Date: January 5, 2022
To: Jaye Cromwell, Legislative Coordinator
From: Roger Alfred, Office of Metro Attorney
Subject: Documents to be included in Council materials for Resolution No. 21-5217

Please include the attached documents as part of the Metro Council materials for the January 6, 2022 Council meeting on Resolution No. 21-5217 regarding the MTIP amendment for the Interstate 5 Bridge Replacement Project. These documents are being submitted so that they will be included in the official record of proceedings:

- Metro Resolution No. 20-5110, dated July 23, 2020, "For the purpose of adopting the 2021-2024 Metropolitan Transportation Improvement Program for the Portland Metropolitan Area" (two pages).
- Staff Memo dated July 2, 2020 regarding Resolution No. 20-5110 (four pages).
- Work Session Worksheet dated July 9, 2020 regarding Resolution No. 20-5110 (five pages).
- 2021-2024 Metropolitan Transportation Improvement Program (MTIP), adopted by Metro Council via Resolution No. 20-5110 (256 pages).

Thank you.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA	RESOLUTION NO. 20-5110 Introduced by Councilor Shirley Craddick

WHEREAS, the Portland metropolitan area Metropolitan Transportation Improvement Program (MTIP), which reports on the programming of all federal transportation funds to be spent in the region, must be periodically updated in compliance with federal regulations; and

WHEREAS, the Metro Council and Joint Policy Advisory Committee on Transportation (JPACT) adopted Metro Resolution 19-4963 which set policy direction to guide the development of the 2021-2024 Metropolitan Transportation Improvement Program; and

WHEREAS, the Metro Council and Joint Policy Advisory Committee on Transportation (JPACT) have proposed programming for federal fiscal years 2022-2024 through the regional flexible funds allocation process for a portion of the federal allocation of transportation funds to this region, as adopted by Metro Resolution 19-4959 and 20-5036; and

WHEREAS, the Oregon Department of Transportation has proposed programming for federal fiscal years 2021-2024 of federal transportation funds for projects in the Portland metropolitan area through funding allocation processes they administer; and

WHEREAS, the transit service providers TriMet and South Metropolitan Area Rapid Transit (SMART) have proposed programming of federal transit funds for federal fiscal years 2021-2024; and

WHEREAS, the draft 2021-2024 MTIP for the Portland, Oregon metropolitan area, attached as Exhibit A, demonstrates compliance with all relevant federal law and Oregon administrative rules; and

WHEREAS, the 2021-2024 Metropolitan Transportation Improvement Program is the first cycle to be undertaken under new federal performance-based programming requirements and demonstrates compliance and further progress towards achieving the federal performance targets; and

WHEREAS, the proposed 2021-2024 MTIP is consistent with the 2018 Regional Transportation Plan, adopted by Metro Ordinance No. 18-1421; and

WHEREAS, a public process has provided an opportunity to comment on the performance evaluation and programming of federal funds to specific projects in specific fiscal years and whether the programming meets all relevant laws and regulations;

WHEREAS, extensive public processes were used to select projects to receive federal transportation funds; and

WHEREAS, on July 16, 2020 JPACT recommended approval of this resolution and the 2021-2024 Metropolitan Transportation Improvement Program; now therefore

BE IT RESOLVED that the Metro Council adopt the 2021-2024 Metropolitan Transportation Improvement Program for the Portland metropolitan areas as shown in Exhibit A; and

BE IT RESOLVED that projects in the existing 2018-2021 MTIP that do not complete obligation of funding prior to September 30, 2020 will be programmed into the 2021-2024 MTIP.

ADOPTED by the Metro Council this 23rd day of July 2020.

Juan Carlos Gonzalez

Juan Carlos Gonzalez, Deputy Council President

Approved as to Form:

Carrie MacLaren

Carrie MacLaren, Metro Attorney

STAFF MEMO

IN CONSIDERATION OF RESOLUTION NO. 20-5110 FOR THE PURPOSE OF APPROVING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA

Date: July 2, 2020 Prepared by: Grace Cho

PURPOSE

The 2021-2024 Metropolitan Transportation Improvement Program (MTIP) is the region's short-term investment strategy of federal transportation funds. The 2021-2024 MTIP summarizes all programming of federal transportation funding in the Portland metropolitan region for the federal fiscal years 2021 through 2024. Acting on this resolution would:

- Approve the scheduling of previously allocated federal funding to projects by project phase and fiscal year;
- Define administrative authority to modify, add or remove projects from the 2021-2024 MTIP (as defined in Chapter 8);
- Affirm the region meets federal planning and programming rules and permit submission of the 2021-2024 MTIP to the Governor of Oregon and incorporation into the State Transportation Improvement Program.

BACKGROUND

The 2021-2024 Metropolitan Transportation Improvement Program (MTIP) is the federally mandated four-year schedule of expenditures (i.e., spending) of federal transportation funds as well as significant state and local funds in the Portland metropolitan region. As a report, the MTIP provides the upcoming four-year implementation schedule of transportation projects in the Portland region. The report must demonstrate the use of federal funds will comply with all relevant federal laws and administrative rules.

In the Portland metropolitan region, there are three processes which propose programming of federal transportation funds and are therefore reflected in the MTIP. These processes are:

- The Regional Flexible Fund Allocation (RFFA): A process led by the Joint Policy Advisory Committee on Transportation and the Metro Council to allocate the region's discretionary federal transportation funds;
- The allocation of the Oregon Department of Transportation (ODOT) administered funds: An allocation framework established by the Oregon Transportation Commission (OTC) and allocations take place statewide or at the different ODOT regions. For the Portland metropolitan area, the Region 1 Area Commission on Transportation (ACT) plays a role in funding recommendations to the OTC. The allocations predominately focuses on capital improvements and maintenance on the national highway system; and
- TriMet's and the South Metro Area Rapid Transit (SMART) Annual Budget Process and Programming of Projects: the processes led by the individual transit operators in region. TriMet's annual budget process includes its rolling capital improvement program, updated each fiscal year and guides the short term implementation of the 20-year service enhancement plans. SMART is the transit agency for the City of Wilsonville and allocates transit funding in conjunction with the city budget process.

All the projects and programs selected to receive federal funding through the three processes are summarized in the tables listed in Chapter 6 of the 2021-2024 MTIP (Exhibit A) by lead agency. The tables illustrate the assignment of funds by fund type and the amount of funding by disbursement year for

the federal fiscal years 2021 through 2024. There are a number of different federal transportation funds assigned to different projects. This includes, but not limited to: Federal Highway Administration (FHWA) funds: surface transportation block grant, congestion mitigation/air quality and the FTA funds new starts, small starts, a program for special needs transportation for seniors and people with disabilities, allocations for bus purchases and allocations for maintenance of the bus and rail systems. Previous programming of these funds have been updated to reflect project completion as well as changes in construction schedules and project costs.

Coordination and Development of the 2021-2024 MTIP

The 2021-2024 MTIP adoption draft (Exhibit A) represents the past three years of efforts to develop the short-term investment strategy and demonstrate compliance and eligibility with federal regulations. Activities in which TPAC, JPACT, and the Metro Council played an active role in the development of the 2021-2024 MTIP include, but are not limited to:

- 2021-2024 MTIP financial forecast (JPACT acknowledgment of receipt April 2018)
- 2021-2024 MTIP policy direction (Resolution 19-4963 April 2019)
- 2021-2024 MTIP performance evaluation (Summer 2019/Spring 2020)
- 2022-2024 RFFA (Resolutions 19-4959 and 20-5063 April 2019 and January 2020)
- MPO feedback into the 2021-2024 ODOT administered funds (2018-2019)
- Annual transit agency budget presentation (2018, 2019)

The allocation and decision processes for determining which transportation projects and programs are expected to receive funds were completed at the beginning of 2020. The 2021-2024 MTIP adoption draft is a reflection of the outcomes of those allocation and decision processes as described in the background section of this staff report.

Public Comment for the Draft 2021-2024 MTIP

The Federal Highway Administration and Federal Transit Administration require Metro make the schedule of federal and regionally significant expenditures available for a 30-day public comment prior to final adoption.

On Friday, April 17, 2020, Metro opened a public comment period for the 2021-2024 MTIP public review draft. As part of the public comment, Metro developed a short survey which provided some information about the 2021-2024 MTIP, the results of the performance evaluation, and asked for feedback. The design of the short survey was a way of gather feedback without having members of the public needing to read the entire 2021-2024 MTIP, but was made available with the survey. In addition, during the public comment, Metro held two live opportunities to provide feedback on the 2021-2024 MTIP. A public hearing was held on April 23, 2020 at the Metro Council meeting and a resource agency and tribal government consultation was held on May 11, 2020. The public comment closed on Monday, May 18, 2020.

The various public comment opportunities resulted in a total of 210 public comments received on the 2021-2024 MTIP. The 2021-2024 MTIP received a greater amount of comments than the previous two cycles (2015-2018 and 20218-2021). In review of the public comments, the following themes and key takeaways emerged:

- Across the regional priorities of advancing equity, advancing climate, and reducing congestion, more than half of all respondents indicated strongly that more and faster work is needed.
- Survey responses indicate climate change is where there is the greatest need for more and faster work and investments should work to reduce greenhouse gas emissions. The focus on climate change is reflected in the comments submitted through the survey as well as the comment made during the Metro Council hearing.

- Comments made about addressing climate change often pointed to strategies to reduce congestion as well as investments in transit and active transportation. Although most comments about reducing traffic congestion were connected to a desire to address climate change, there were also comments that requested congestion be addressed through increased investment in the motor vehicle network, including expanding roadways.
- There is also a strong interest in more and faster work to advance equity. Comments discussed the need to increase a variety of types investments in historically marginalized communities, including improved and expanded transit service, affordability of transit, a better connected active transportation system and safety improvements. Comments also highlighted the disproportionate impacts of transportation-related air pollution on communities of color and low income communities.
- Survey responses indicate the lowest level of urgency related to safety, although more respondents indicated more and faster work is needed to advance safety than indicated that the region is on the right track.

The public comment report and a summary of comments received on the draft 2021-2024 MTIP can be found in Appendix V of Exhibit A.

Partner Coordination and Finalizing the 2021-2024 MTIP Adoption Draft
Throughout the development of the 2021-2024 MTIP, Metro has worked closely with key partners ODOT, SMART, and TriMet to reflect the near-term federal and regionally significant transportation investments in the programming of the 2021-2024 MTIP. Throughout the coordination process, Metro worked with partners and provided guidance to ensure federal eligibility requirements are being met. Additionally, Metro, ODOT, TriMet and SMART have worked closely to define which programming changes get reflected and synced in the 2021-2024 MTIP and 2021-2024 STIP between the public comment draft and the adoption draft versions. These changes have been documented as formal requested comments by ODOT and TriMet. Of those proposed changes which were significant, an opportunity for comment was provided between May 29 through June 29, 2020 on the programming changes made between the public review draft and the adoption draft.

In recognition of the coordination undertaken, TPAC recommend adoption of the 2021-2024 Metropolitan Transportation Improvement Program as presented. The presented 2021-2024 MTIP reflects the coordinated changes agreed to by Metro, ODOT, TriMet, and SMART.

The documentation of programming changes can be found in the companion documents, considered under Resolution No. 20-5110.

Implementation of the 2021-2024 MTIP and Moving Forward to the 2024-2027 MTIP
The 2021-2024 MTIP is expected to take effect on October 1, 2020, the beginning of the federal fiscal year 2021. In the meantime, agency staff are monitoring the progress of projects currently scheduled for federal obligation this federal fiscal year as a part of the 2018-2021 MTIP. If a project is unsuccessful in meeting its current schedule for action this year, it may be proposed for amendment into the 2021-2024 MTIP so that is may proceed under a delayed schedule. These changes will be addressed as part of a transition amendment to the 2021-2024 MTIP immediately following federal approval of the 2021-2024 STIP by the U.S. Department of Transportation.

Following the adoption of the 2021-2024 MTIP and STIP in summer 2020, ODOT will begin the process of launching into the development of the 2024-2027 cycle. Additionally, the transit agencies will begin their annual budget process and financial forecasting for fiscal year 2022.

Based on the input and feedback heard in the public comment, the discussion of the performance evaluation and throughout the development of the 2021-2024 MTIP, staff recommends the following to guide the development of the 2024-2027 MTIP:

- Continue to focus on the RTP priorities: equity, safety, climate, and traffic congestion to guide the investments
- Conduct a technical analysis retrospective to refine and explore methods that can better assess the package of investments and its effect on getting the our region's goals around equity, safety, climate, and traffic congestion
- Increase partner coordination to articulate the on-going funding trade off discussions and the decision processes that lead to the transportation investments included in the MTIP

The development of the 2024-2027 MTIP policy direction, project charter among partners, workshops with TPAC and discussions with Metro Council and JPACT are some initial staff proposed avenues to implementing these recommendations. Further development of the approach to implementing the staff recommendations for the 2024-2027 MTIP will be undertaken after adoption of the 2021-2024 MTIP.

ANALYSIS/INFORMATION

1. **Known Opposition** None known at this time.

2. **Legal Antecedents** The 2021-2024 MTIP programs transportation funds in accordance with the federal transportation authorizing legislation (currently known as the FAST ACT). The 2021-2024 MTIP is intended to implement the Regional Flexible Fund Allocation (RFFA) process for years 2022 through 2024 as defined by Resolution Nos. 20-5063 and 19-4959. The 2021-2024 MTIP must be consistent with the 2018 Regional Transportation Plan, adopted by Metro Ordinance No. 18-1421 and reiterated in the 2021-2024 MTIP policy direction Resolution No. 19-4963.

3. **Anticipated Effects** Adoption of this resolution is a necessary step to make the transportation projects and programs defined in the 2021-2024 MTIP, provided as Exhibit A, eligible to receive federal funds to reimburse project costs. A delay in adopting the 2021-2024 MTIP can create a delay in transportation projects and programs accessing funds or receiving federal approvals in order to move forward. This includes several Metro programs which received an allocation of federal funding through the Regional Flexible Fund process.

4. **Budget Impacts** Adoption of this resolution is a necessary step in making eligible federal surface transportation program funds for planning activities performed at Metro. These impacts have been previously described as a part of the actions on Metro Resolution Nos. 19-4959, 19-4963, and 20-5063. This includes $47,133,715 of federal funds to be used for planning activities at Metro between 2021 through 2024. Grant funds allocated to Metro planning require a match totaling 10.27% of project costs. This would include $11,417,923 through the course of the 2021-2024 time period. An additional $23,779,667 of planning and project activities are scheduled and funded to take place in the 2021-2024 MTIP. These funds are subject to being sub-allocated to transportation agencies, including Metro through regional programs, although Metro would only be responsible for matching the portion of funds sub-allocated to Metro. Further action through the annual Unified Planning Work Program (UPWP) and individual Intergovernmental Agreements (IGA) will be needed to execute these planning and project activities.

RECOMMENDED ACTION

Staff recommends approval of Resolution No. 20-5110.

FOR THE PURPOSE OF ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA

Date: July 9, 2020
Department: Planning and Development
Meeting Date: July 23, 2020

Presenter(s) (if applicable): Grace Cho, Ted Leybold
Length: TBD

Prepared by: Grace Cho, 267-909-3490 (mobile), grace.cho@oregonmetro.gov

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ISSUE STATEMENT

The Metropolitan Transportation Improvement Program (MTIP) is a federally required document and is one of Metro's major responsibilities as the metropolitan planning organization for the Portland region. The MTIP serves two primary purposes: 1) to ensure the costs of delivering federally-aided transportation projects do not exceed expected revenues; and 2) to ensure the projects identified in the MTIP expenditure plan are consistent with the Regional Transportation Plan (RTP) and demonstrate expected progress in advancing the RTPs goals. The MTIP is updated on a three-year cycle with the 2021-2024 MTIP scheduled for Metro Council adoption in July 2020.

Presented before the Metro Council is the 2021-2024 MTIP as recommended by the Joint Policy Advisory Committee on Transportation (JPACT) for adoption. Upon adoption by the Metro Council, the 2021-2024 MTIP will be submitted to the Governor for inclusion in the State Transportation Improvement Program (STIP) and federal partners – the Federal Highway Administration and the Federal Transit Administration – for approval.

ACTION REQUESTED

For the Metro Council to adopt Resolution 20-5110: For the purposes of adopting the 2021-2024 MTIP for the Portland metropolitan area.

POLICY OPTIONS FOR COUNCIL TO CONSIDER

<u>Adoption of the 2021-2024 MTIP</u>

The 2021-2024 MTIP represents the funding allocation processes and decisions undertaken by Metro, ODOT, SMART, and TriMet between 2017 through 2020. During that time, Metro worked closely with partners to identify the types of investments that advance the region's four priorities – addressing safety, equity, climate, and managing congestion – while also verifying and ensuring federal funding eligibility.

Additional steps were undertaken by Metro staff to help ensure transparency of the content of the 2021-2024 MTIP. A formal public comment on the package of transportation investments in the 2021-2024 MTIP took place in spring 2020. A second comment opportunity was provided to address technical corrections not shown as part of the public

review draft that was available during the public comment. The 2021-2024 MTIP received the most comments any of previous cycle.

After robust discussions, the 2021-2024 MTIP was recommended by TPAC for JPACT approval on June 5, 2020. JPACT approved the 2021-2024 MTIP at the July 16, 2020 meeting and recommended Metro Council adoption.

By taking action to adopt the 2021-2024 MTIP, the Metro Council is carrying forward the coordination efforts undertaken by partners for the past three years and the recommendations from JPACT. In addition, adopting the 2021-2024 MTIP allows federally funded and regionally significant transportation projects and programs to move forward.

No Action/Delay of Adoption

If the Metro Council does not take action to adopt the 2021-2024 MTIP in July 2020, the delay in adoption can create a delay in transportation projects and programs accessing funds or receiving federal approvals in order to move forward. This includes several Metro programs which received an allocation of federal funding through the Regional Flexible Fund process.

STAFF RECOMMENDATIONS

Metro staff recommends adopting the 2021-2024 MTIP (Resolution 20-5110)

BACKGROUND

The MTIP is a federally required document which outlines the schedule of federal and regionally significant transportation expenditures. Metro staff is developing a new MTIP for the upcoming four federal fiscal years of 2021-2024, that is scheduled for JPACT and Metro Council adoption in July 2020 and subsequent submission to the Governor of Oregon for approval and incorporation into the statewide Transportation Improvement Program (STIP). U.S. Department of Transportation (USDOT) approval is then expected by fall of 2020. Once approved by USDOT, the new 2021-2024 MTIP replaces the existing 2018-2021 MTIP as the active governing program of federal transportation expenditures on projects within the Portland metropolitan area.

A current and effective MTIP is necessary for the region to access federal transportation funds as the MTIP demonstrates the region's project costs and spending does not exceed projected revenues, also known as fiscal constraint. Beyond the MTIP's financial planning and project delivery functions, the MTIP ensures projects are consistent with the RTP and demonstrates how the investments into the transportation system make progress towards the Regional Transportation Plan (RTP) goals for the transportation system.

The 2021-2024 MTIP was developed over three-years and includes the near-term federally funded and regionally significant transportation projects and programs by ODOT, SMART, TriMet, and Metro. Some examples of projects and programs included in the 2021-2024 MTIP include: Metro's Regional Travel Options Program, TriMet's bus purchases and replacements, SMART's elderly and disabled transit operations, Washington County's Basalt Creek Parkway, and ODOT's Powell Boulevard widening and complete street project.

RELATIONSHIP TO METRO'S CORE MISSION & STRATEGIC PLAN

The development and administration of the 2021-2024 MTIP is one of Metro's responsibilities as the metropolitan planning organization (MPO) for the Portland region. As a federally required schedule of planned federal transportation expenditures, an effective MTIP is an obligatory activity for Metro and the Portland region to remain eligible to receive and expend federal transportation funding or allow regionally significant transportation projects to move forward in the project delivery process.

RELATIONSHIP TO METRO'S RACIAL EQUITY AND CLIMATE ACTION GOALS

The 2021-2024 MTIP is the implementation mechanism for the 2018 Regional Transportation Plan (RTP). The 2018 RTP identified four goals to make prioritize and make further near-term progress. These include:

- Addressing safety by reducing serious injury crashes and getting to zero roadway deaths
- Addressing equity by reducing disparities with the transportation system experienced by people of color, people with low-income, and people with limited English language proficiency
- Addressing climate change by reducing greenhouse gas emissions from transportation sources
- Managing traffic congestion

A performance analysis of the 2021-2024 MTIP illustrates how the package of investments are progressing towards the four goal areas. The performance evaluation shows the region is making progress towards all four goals. However faster progress is being made towards region's climate goals while more work is necessary to make faster gains towards the region's equity goals.

STAKEHOLDERS

The 2021-2024 MTIP public review draft was cooperatively developed with key partners – ODOT, SMART, and TriMet. As these agencies carry responsibilities to administer federal surface transportation funds, the development of the federal aid and regionally significant package of investment is primarily developed and coordinated among these four agencies.

In addition, TPAC and JPACT have been active in the development of the 2021-2024 MTIP over the three-year process.

Each of the key partners provided opportunities for public comment during their funding allocation processes. These comment opportunities took place between 2017 through spring 2020. The 2021-2024 MTIP, once brought together as a package of investments reflecting the funding decisions of Metro, ODOT, SMART, and TriMet also held a public comment opportunity between mid-April through mid-May 2020. The public comment opportunity included a virtual public hearing opportunity at the Metro Council meeting on April 23, 2020. Lastly, an opportunity to comment on technical corrections was also provided from late May through late June 2020.

The public comment report is included as part of the 2021-2024 MTIP appendices in Exhibit A.

LEGAL ANTECEDENTS
The 2021-2024 MTIP programs transportation funds in accordance with the federal transportation authorizing legislation (currently known as the FAST ACT). The 2021-2024 MTIP is intended to implement the Regional Flexible Fund Allocation (RFFA) process for years 2022 through 2024 as defined by Resolution Nos. 20-5063 and 19-4959. The 2021-2024 MTIP must be consistent with the 2018 Regional Transportation Plan, adopted by Metro Ordinance No. 18-1421.

ANTICIPATED EFFECTS
Adopting the 2021-2024 MTIP will allow for those transportation projects and programs in the region to spend federal funding between federal fiscal year 2021 through 2024. Upon approval by federal partners on the adopted 2021-2024 MTIP, the transportation projects and programs which receive federal funding may access those funds. This is particularly significant for projects which anticipate spending federal funding in federal fiscal year 2021, which begins on October 1, 2020.

FINANCIAL IMPLICATIONS
A delay in getting to the adoption of the 2021-2024 MTIP can create a delay in transportation projects and programs accessing funds or receiving federal approvals in order to move forward. This includes several Metro programs which received an allocation of federal funding through the Regional Flexible Fund process.

More specifically, adoption of this resolution is a necessary step in making eligible federal surface transportation program funds for planning activities performed at Metro. These impacts have been previously described as a part of the actions on Metro Resolution Nos. 19-4959, 19-4963, and 20-5063. This includes $47,133,715 of federal funds to be used for planning activities at Metro between fiscal years 2021 through 2024. Grant funds allocated to Metro planning require a match totaling 10.27% of project costs. This would include $11,417,923 through the course of the 2021-2024 time period. An additional $23,779,667 of planning and project activities are scheduled and funded to take place in the 2021-2024 MTIP. These funds are subject to being sub-allocated to transportation agencies, including Metro, through regional programs, although Metro would only be responsible for matching the portion of funds sub-allocated to Metro. Further action through the annual Unified Planning Work Program (UPWP) and individual Intergovernmental Agreements (IGA) will be needed to execute these planning and project activities.

ATTACHMENTS
2021-2024 MTIP and appendices.

[For work session:]
- Is legislation required for Council action? X Yes No
- If yes, is draft legislation attached? X Yes No

- What other materials are you presenting today? 2021-2024 MTIP and appendices

ADOPTION DRAFT

2021-2024 Metropolitan Transportation Improvement Program

June 2020

oregonmetro.gov

Metro

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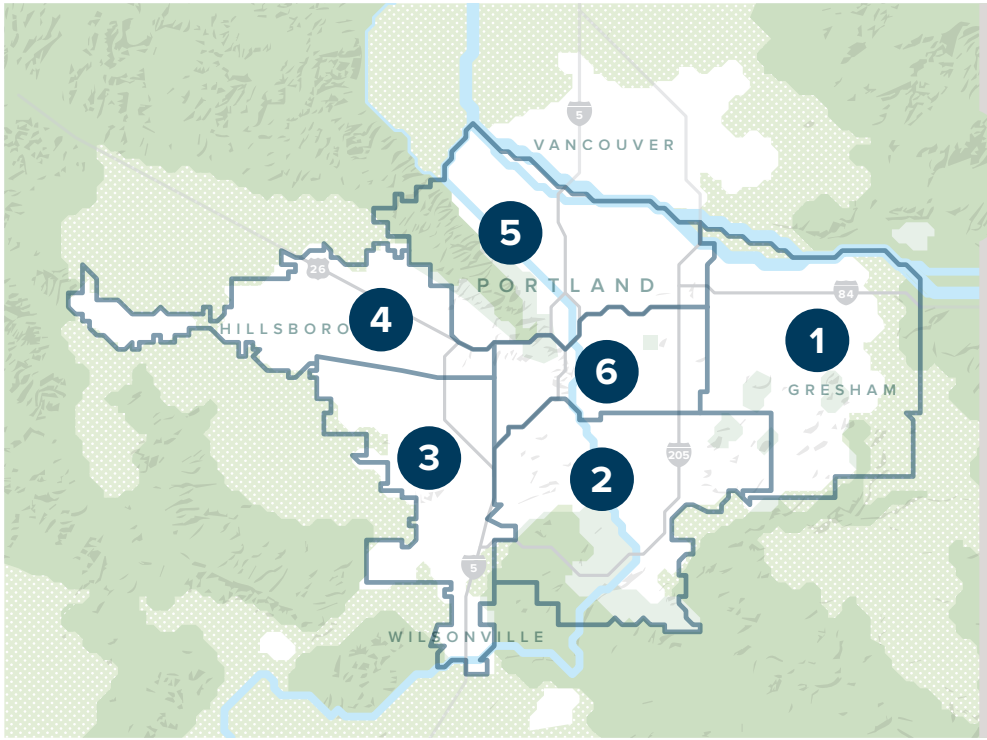

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Acknowledgements

Metro wishes to thank the many staff and partners for their contributions in developing the 2021-2024 Metropolitan Transportation Improvement Program.

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Table of contents

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List of acronyms

3R	Resurfacing, Restoration and Rehabilitation project
AASHTO	American Association of State Highway and Transportation Officials
AC	Advance Construct
ADA	Americans with Disabilities Act
AMPO	Association of Metropolitan Planning Organizations
AQMA	Air Quality Maintenance Area
ARTS	All Roads Transportation Safety
ATM	Active Traffic Management
ATMS	Advanced Transportation Management System
AV	Autonomous Vehicle
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
BRT	Bus Rapid Transit
BUILD	Better Utilizing Investments to Leverage Development
BY	Bypass
CAAA	Clean Air Act Amendments
CAV	Connected and Autonomous Vehicles
CBD	Central Business District
CCTV	Closed Circuit Television
CDBG	Community Development Block Grant
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Process
CO	Carbon Monoxide
CO2e	Carbon Dioxide Equivalent
COC	Communities of Color
CONS	Construction
CRF	Crash Reduction Factor
C-TRAN	Clark County Public Transportation Benefit Area Authority
CV	Connected Vehicle
DBE	Disadvantaged Business Enterprise
DEIS	Draft Environmental Impact Statement
DEQ	Oregon State Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DOA	Design Option Alternatives (Project Phase)
DOT	Department of Transportation
E&D	Elderly and Individuals with Disabilities
EA	Environmental Assessment
EFA	Equity Focus Area
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
EQ/EQ Bonus	Equity Bonus (fund)
ETC	Enhanced Transit Corridor or Enhanced Transit Concept
ETR	Emergency Transportation Route
EV	Electric Vehicle
FARS	Fatal Analysis Reporting System
FAST Act	Fixing America's Surface Transportation Act (2015) – the current Federal Transportation Act
FDE	Final Design and Engineering
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFO	Full Federal Oversight
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
FFY	Federal Fiscal Year
GHG	Greenhouse Gases
GIS	Geographic Information System
HB	House Bill
HC	Hydrocarbons
HCM	Highway Capacity Manual
HCT	High Capacity Transit
HIC	High Injury Corridor
HIP	Highway Infrastructure Program
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual

HSP	Highway Safety Plan
HUD	Department of Housing and Urban Development
I/M	Integrated Corridor Management
ICM	Incident Management
IGA	Intergovernmental Agreement
IM	Inspection/Maintenance
IOF	Immediate Opportunity Fund
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITS	Intelligent Transportation System
JPACT	Joint Policy Advisory Committee on Transportation
JTA	Jobs and Transportation Act
LCDC	Oregon Land Conservation and Development Commission
LEP	Limited English Proficiency
LI	Low Income
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
MAP-21	Moving Ahead for Progress in the 21st Century (2012)
MIS	Major Investment Study
MMLOS	Multi Modal Level of Service
MMUCC	Model Minimum Uniform Crash Criteria Guideline
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emissions Simulator
MP	Mile Point
MPA	Metropolitan Planning Area
MPAC	Metro Policy Advisory Committee
MPO	Metropolitan Planning Organization
MSTIP	Major Streets Improvement Program
MTAC	Metro Technical Advisory Committee
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NB	North Bound
NEPA	National Environmental Protection Act
NHFP	National Highway Freight Program
NHPP	National Highway Performance Program
NHS	National Highway System
NHSTA	National Highway Safety Traffic Administration
NOx	Nitrogen Oxides
NPMRDS	National Performance Management Research Data Set
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation
OHP	Oregon Highway Plan
OMSC	Oregon Modeling Steering Committee
ORS	Oregon Revised Statutes
OTC	Oregon Transportation Commission
OTP	Oregon Transportation Plan
P&R	Park and Ride
PCI	Pedestrian Comfort Index
PBPP	Performance Based Planning and Programming
PD	Project Development
PE	Preliminary Engineering
PERC	Public Engagement Review Committee
PHEV	Plug-in Hybrid Electric Vehicle
PL	Metropolitan Planning
PM10	Particulate Matter (coarse)
PM2.5	Particulate Matter (fine)
POC	People of Color
PORTAL	Portland Transportation Archive Listing
PRD	Parks and Recreation District
RATP	Regional Active Transportation Plan
RCS	Regional Conservation Strategy
RCTO	Regional Concept for Transportation Operations
RDPO	Regional Disaster Preparedness Organization
RETR	Regional Emergency Transportation Route
RF	Rapid Flashing
RFF	Regional Flexible Funds
RRFB	Rectangular Rapid Flashing Beacon
RFP	Regional Framework Plan
ROD	Record of Decision
ROW	Right of Way
RSIA	Regionally Significant Industrial Area
RTAC	Regional Transportation Advisory Committee
RTC	Southwest Washington Regional Transportation Council
RTFP	Regional Transportation Functional Plan
RTO	Regional Travel Options
RTP	Regional Transportation Plan
RTS	Regional Transit Strategy
RTSS	Regional Transportation Safety Strategy

RUGGO	Regional Urban Growth Goals and Objectives
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Southbound
SHSP	Strategic Highway Safety Plan
SIP	State Implementation Plan
SFY	State Fiscal Year
SMART	South Metro Area Regional Transit
SOV	Single Occupant Vehicle
SPIS	Safety Priority Indexing System
SPR	State Planning and Research
SRTS	Safe Routes to School
STBG	Surface Transportation Block Grant
STF	Special Transportation Fund
STFAC	Special Transportation Fund Allocation Committee
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
TA	Transportation Alternatives
TAP	Transportation Alternatives Program
TAM	Transit Asset Management
TAMP	Transit Asset Management Plan
TAZ	Transportation Analysis Zone
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21st Century (1998)
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TMA	Transportation Management Associations
TMA	Transportation Management Area
TOD	Transit Oriented Development
TPAC	Transportation Policy Alternatives Committee
TPM	Transportation Performance Management
TPR	Transportation Planning Rule
TRILOC	TriMet Local Funds
TriMet	Tri-county Metropolitan Transportation District
TSAP	Transportation Safety Action Plan
TSM	Transportation System Management
TSMO	Transportation System Management and Operations
TSP	Transit Signal Priority
TSP	Transportation System Plan
UGB	Urban Growth Boundary
UGMFP	Urban Growth Management Functional Plan
UPWP	Unified Planning Work Program
UR	Utility Relocation
USDOT	United States Department of Transportation
UZA	Urbanized Area
V/C	Volume to Capacity
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
WSDOT	Washington State Department of Transportation
YOE	Year of Expenditure

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Chapter 1: What is the MTIP?

What is the Metropolitan Transportation Improvement Program?

The Metropolitan Transportation Improvement Program (MTIP) is a federally required document. The MTIP demonstrates how transportation projects planned advance the Portland metropolitan region's shared goals and comply with federal regulations – such as fiscal constraint, air quality impacts, and public involvement. The MTIP outlines the implementation schedule of federally funded transportation projects in the region for the next four years and helps to manage the project delivery of transportation projects.

The MTIP exists as a financial planning and project delivery tool for the metropolitan region. As a tool, the MTIP assists in ensuring the region does not overspend and tracks the delivery of transportation projects. As a document, the MTIP shows how the investments into the transportation system make progress towards the goals for the system.

Adopted in December 2018, the region agreed to eleven shared goals for the transportation system. Of the eleven, the region prioritized four goals:

- **Safety** – People's lives are saved, crashes are avoided and people and goods are safe and secure when traveling in the region.
- **Equity** – The transportation-related disparities and barriers experienced by historically marginalized communities, particularly communities of color, are eliminated.
- **Climate leadership** – The health and prosperity of people living in the greater Portland region are improved and the impacts of climate change are minimized as a result of reducing transportation-related greenhouse gas emissions.
- **Managing congestion** – The transportation system is managed and optimized to ease congestion, and people and businesses are able to safely, reliably and efficiently reach their destinations by a variety of travel options.

Federal regulatory context

The Federal-Aid Highway Act of 1962 established metropolitan planning organizations (MPOs), like Metro, to ensure regional cooperation in transportation based on a continuing, cooperative, and comprehensive ("3C") planning process. MPOs conduct long-range planning and fund programming for the regional transportation system. For Metro, that means developing and implementing two planning and policy documents: the Regional Transportation Plan (RTP) and the Metropolitan Transportation Improvement Program (MTIP).

What is an MPO?

A metropolitan planning organization is a federally mandated and federally funded transportation policy-making organization for urbanized areas with a population greater than 50,000. Made up of representatives from local government and governmental transportation authorities, MPOs ensure regional cooperation in transportation based on a continuing, cooperative, and comprehensive ("3C") planning process. Federal funding for transportation projects and programs are channeled through this planning process.

As the metropolitan planning organization for the Portland metropolitan area, Metro is authorized by Congress and the State of Oregon to coordinate and plan investments in the transportation system for Clackamas, Multnomah and Washington counties.

The RTP serves as the long-range transportation policy document. It outlines the vision for the region's urban transportation system and sets a baseline of priority investments. The MTIP, as the RTP's companion, serves as a snapshot of where federal transportation funds are anticipated to be spent over the first four federal fiscal years of the RTP.

Per federal requirements, planning and policy documents are "constrained to reasonably expected revenue." This means Metro, working with partner agencies, makes long-term (for the RTP) and short-term (for the MTIP) projections of transportation revenue expected to come to the region from federal and significant state, regional, or local sources. The projected revenues set the anticipated capacity of the region to make long-term and short-term transportation investments without over-expending or becoming unconstrained. These revenue projections are updated with each RTP and each MTIP cycle.

Who plays a role in the MTIP?

The MTIP is a joint effort between regional and state partners. Metro acts as the main author and owner of the MTIP and works closely with the Oregon Department of Transportation (ODOT) and transit agencies, Tri-County Metropolitan Transportation District (TriMet), and South Metro Area Regional Transit (SMART) to reflect the transportation investments in the Portland region. Metro, ODOT, TriMet, and SMART each have authority over expending federal transportation dollars in the Portland metropolitan region. For example, as public transit agencies TriMet and SMART utilize funding from the Federal Transit Administration (FTA) to support capital and maintenance programs to deliver services. Metro, ODOT, TriMet, and SMART are each responsible for providing details of transportation expenditures from year-to-year. These agencies must also demonstrate how the total combination of transportation expenditures advance federal, state, and regional priorities.

Chapter 2: Overview of the 2021-2024 MTIP

2021-2024 MTIP investment program overview

The 2021-2024 MTIP is a little over $1.2 billion in transportation project and program investments. Spread over 203 projects and programs, the 2021-2024 MTIP includes:

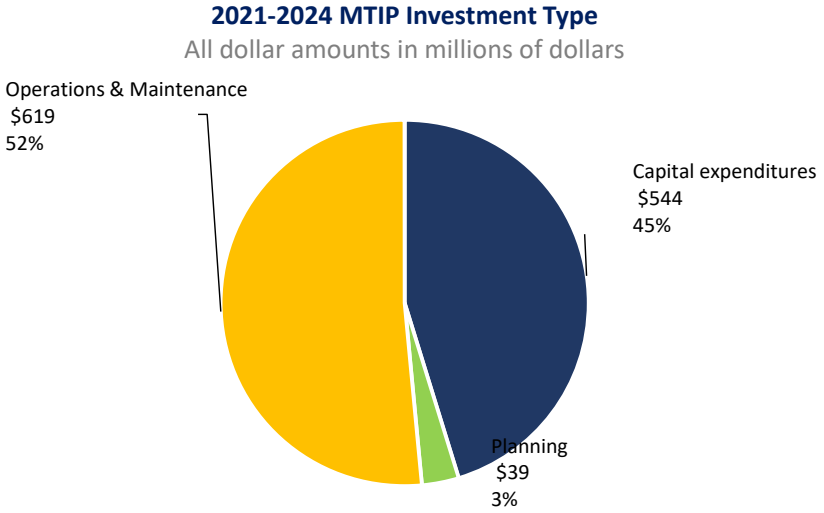
- a mix of capital investments to enhance and fill gaps on the transportation system across all forms of travel,
- maintenance investments to take care of the transportation infrastructure already in place,
- operations investments to use technologies to make the system run smoother and safer, and
- programs that educate about travel options, support kids in walking and rolling to school safely, and reinforcing the connection between housing and transit.

Chapter sections

Taking care of the roads versus building new facilities (maintenance vs. capital investment)

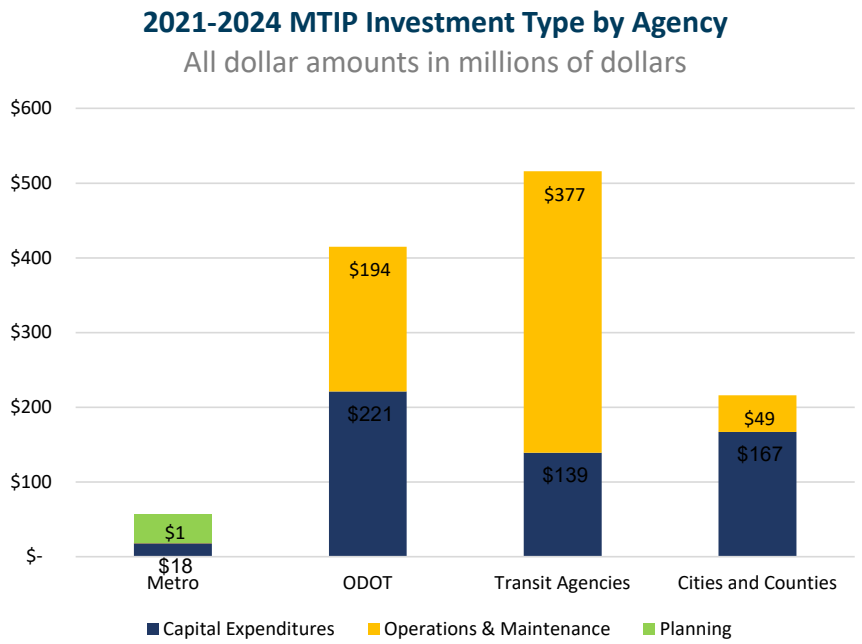
Approximately 45 percent of the transportation investments in the 2021-2024 MTIP represent capital investments and 52 percent represented maintenance and operations investments. The remaining 3 percent of the 2021-2024 MTIP represent planning activities or running programs.

Figure 2-1. 2021-2024 MTIP investment type



The MTIP is a snapshot of the region's transportation investments and the investment profile can change. The near even split between the capital investments (45%) and the maintenance investments (52%) demonstrate the region striving to balance many different goals and objectives across the system. The near even split also highlights the challenge of balancing policy direction coming from different places – from federal directives, state legislative mandates, or local policies. At times, the policy direction to focus on certain goals and objectives for the transportation system compete against each other. For example, ODOT's statewide policy to "fix it first" means maintaining the system is priority, but federal directives to increase reliability for people and goods traveling on the roadway system means transportation projects competes for finite investments.

Figure 2-2. 2021-2024 MTIP investment type by agency



Note: Metro's capital investments includes the Columbia Boulevard Overcrossing project being delivered by Metro's Parks and Nature Department and the Transit-Oriented Development program.

The region's main project delivery agencies show varying level of investment towards capital and maintenance. For example, the transit agencies – SMART and TriMet – may show the largest amount of investment in the MTIP, but the majority of its federal funding is primarily for maintaining the assets (e.g. buses, light rail track work, etc.) of the transit system. As with any funding source, federal funds have a number of restrictions. Some dollars are restricted solely for the purpose of maintaining roadways or purchasing buses, whereas others have greater flexibility. However, federal transportation funds tend to focus on capital investments such as roads, transit, bicycle and pedestrian networks, which are short-term commitments. The expectation by the federal government is for states, local governments, and transit agencies to maintain and operate the system. Nonetheless, there are federal sources of monies for maintenance, as represented in the 2021-2024 MTIP, but the bulk of revenue for maintenance programs and activities is typically raised by state and local governments.

Definitions of capital, maintenance, and operations

In the public works universe, a capital investment is the planning and construction for new infrastructure such as roads, bridges, water and sewer systems, and other structures. The new infrastructure may fill in gaps in a system, such as building missing sidewalks on a busy street to create a contiguous walking environment. Beyond building roads, sidewalks, and new transit lines, other common types of capital investments include new traffic signals, variable message and speed signs on the freeway, and marked crosswalks with on-demand flashing lights.

A maintenance investment is the planning and construction to rebuild an existing piece of infrastructure. The infrastructure may be decaying or at a certain age when it needs replacement. Common maintenance investments are repaving streets, fixing the joints on bridge spans, or restriping a faded bicycle lane.

Major investments not shown

The investment profile does not include funding for three of the region's upcoming major capital investments – the Division Transit Project, Interstate-5 Rose Quarter Improvements, and the MAX Red Line Extension. The three projects are not programmed in the 2021-2024 MTIP for two reasons. First, federal rules require that projects must demonstrate that all of the funds needed to complete the project are available before those funds may be programmed to the project in the MTIP. For large scale, multi-year capital projects, the project can get broken into phases and phases may be programmed in the MTIP when the full funding of that phase can be demonstrated. For the I-5 Rose Quarter project and the MAX Red Line extension, full funding commitments for the construction phases have not been secured and are not yet ready to program into the MTIP for this reason.

Additionally, when a project phase has executed its agreement with the US Department of Transportation as eligible and ready to receive funds, it no longer needs to be programmed in the MTIP, even though work on that project phase has not been completed. The Division Transit project executed its funding agreement with USDOT for construction funding in fiscal year 2020 and therefore is not included in the 2021-24 MTIP, even though the physical construction of the project will occur in calendar years 2021 and 2022. (More information about the three capital projects and why they are not in the 2021-2024 MTIP can be found in Appendix II)

Wait, don't I pay for the potholes to get fixed on my street?

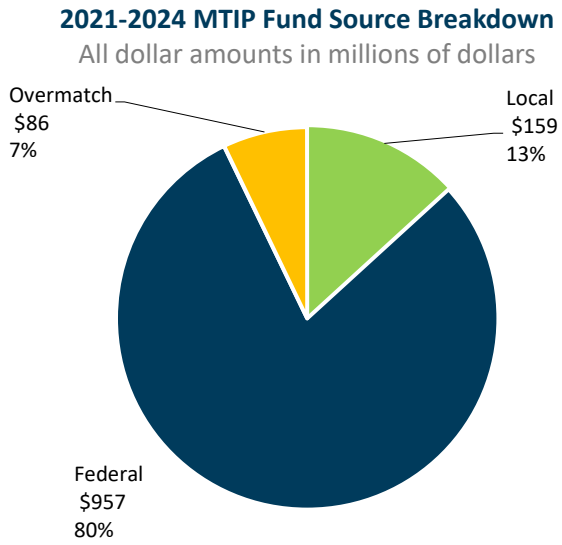
The Metropolitan Transportation Improvement Program does not include all the scheduled funding for maintenance activities in the Portland metropolitan region in the upcoming four fiscal years. The MTIP only includes those maintenance activities/ programs that receive federal funds. The bulk of maintenance funding is generated through local and state sources, like local gas taxes. Since the MTIP is not required to include the majority of locally funded capital or maintenance projects, it only shows a portion of the overall funding that goes towards maintaining the transportation system. The maintenance activities that MTIP is able to illustrate are those undertaken by ODOT, SMART, and TriMet because these agencies receive and administer federal transportation funds. Still, the MTIP is only showing a partial picture of the overall resources each of these agencies dedicates to maintenance.

The City of Portland's Fix Our Street's local gas tax is an example of local maintenance revenues not included in the 2021-2024 MTIP.

2021-2024 MTIP investment portfolio

In addition to being an investment snapshot in time, the 2021-2024 MTIP primarily functions as the investment program for federal funds and regionally significant projects and programs. The 2021-2024 MTIP includes 80 percent of federal funding and the remaining 20 percent is local funding. Of the local funding 7 percent is overmatch, meaning it is beyond the minimum required local dollars by the federal government. The region is contributing over $86 million in local and state dollars in the upcoming four years towards the federally supported projects and programs. The increased contribution beyond what is necessary shows a commitment and partnership with the federal government to implement transportation projects and programs that meet shared objectives.

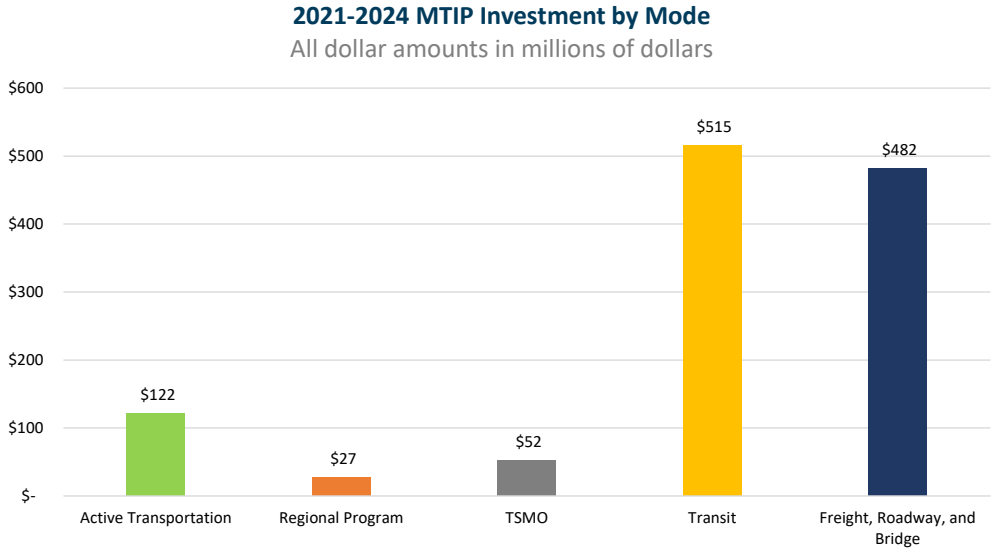
Figure 2-3. 2021-2024 MTIP fund by source



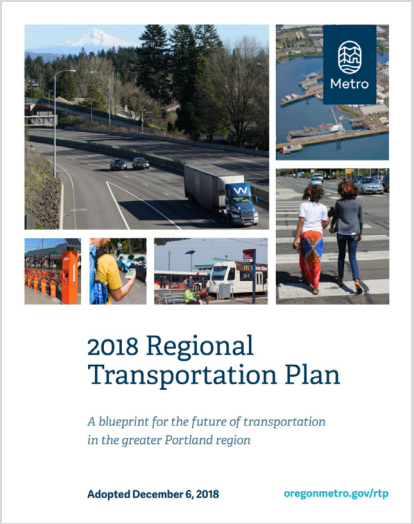
Note: Metro's capital investments includes the Columbia Boulevard Overcrossing project being delivered by Metro's Parks and Nature Department and the Transit-Oriented Development program.

The 2021-2024 MTIP invests across all different forms of travel in the upcoming four years. While the bulk of the 2021-2024 MTIP investments – just under $1 billion combined – are for roadway and transit, the region is also directing over $120 million towards building out the active transportation network. In addition, $52 million is for transportation system management and operations (TSMO), which compliments the region's investments into the roadway and transit systems to help manage demand. The TSMO investments use a mix technologies and communications infrastructure to help manage the traffic flow of roadways, provide traveler information, or provide priority to buses, light rail, and even bicyclists to get through intersections.

Figure 2-4. 2021-2024 MTIP investment by mode



While roadway and transit investments may dominate the 2021-2024 MTIP, it is important to remember the investments represent a mix of maintenance and capital projects, where the active transportation investments are primarily to upgrade or build new facilities. Nonetheless, the active transportation investment is not as large as investments in roadways or transit, preventing the



2018 Regional Transportation Plan

Portland to Milwaukie light rail, the most recent high capacity transit project to open in the region

completion of a network that provides connectivity and facilitates ease of traveling by walking, bicycling, or getting to transit. Federal funds are also incredibly challenging to use for smaller scale projects like sidewalk infill on a main street, building a protected bikeway, or a multiuse path because the federal aid process can be difficult to navigate. Local jurisdictions as well as ODOT will often try to fund active transportation projects with local or state funds to avoid the federal aid process. Therefore the investment into active transportation may not fully be represented.

What changed from 2018-2021 MTIP to the 2021-2024 MTIP?

The 2021-2024 MTIP represents $1.1 billion in combined capital and operations and maintenance investments in the regional transportation system. This is approximately $300 million less than the 2018-2021 MTIP. The difference in the level of funding can be attributed to a number of changes which occurred since the adoption of the 2018-2021 MTIP in July 2017. A discussion of the changing landscape and how the events influenced the 2021-2024 MTIP is below.

Major events since the adoption of the 2018-2021 MTIP

Since summer 2017, a number of activities occurred which directly and indirectly influenced and shaped the development of the 2021-2024 MTIP. These include:

- A statewide transportation package was passed in 2017 and the infusion of new revenues and work towards the implementation of legislatively named projects launched;
- Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) completed a certification review of Metro and the region's metropolitan planning activities;
- The Portland region adopted a new urban growth forecast in 2018, anticipating 200,000 new households in the Portland metropolitan region over the next 20 years;
- The Portland region adopted an update to the Regional Transportation Plan (RTP) which identified the transportation priorities for the region;
- Subsequently after the adoption of the 2018 RTP, in spring 2019, the region adopted the policy direction for the 2021-2024 MTIP;
- As directed by the statewide transportation legislation, ODOT submitted a successful application to the federal government to pursue pricing of Interstate 5 and Interstate 205 to manage demand and raise revenue;
- The region, in conjunction with ODOT

and transit partners, began the implementation of MAP-21 performance targets with the development of 2 and/or 4-year targets, baselines, and monitoring;

- ODOT, in coordination with the metropolitan planning organizations across the state launched an annual obligation target process;
- The last reimbursement payments from the Federal Transit Agency arrived for the construction of the Portland-Milwaukie light rail project, which to-date is the region's largest capital transit project;
- The region's voters approved an affordable housing funding measure to address the shortage of affordable homes in the region;
- The region began a process to consider placing a regional transportation funding package to the voters in November 2020

The different events and milestones all play different roles in how they shaped the 2021-2024 MTIP. In some cases, the adoption of new regional policies provided direction towards the allocation of funds. For other cases, state legislation and federal directives directed certain projects or types of projects to be included in the investment profile. The federal directives also shaped the transparency of the financial plan for the 2021- 2024 MTIP. The activities explicitly – like federal directives – or implicitly – like the projected population forecast – played a role in shaping investments in the regional transportation system.

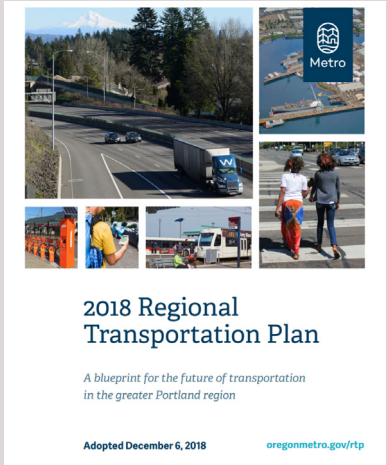
Major areas to influence the 2021-2024 MTIP

Of the many events to occur since summer 2017, four areas significantly influenced the 2021-2024 MTIP: regional and agency policy direction, statewide legislation, project delivery, and responding to federal directives. A short summary is provided for each of these areas to set into context the profile of investments shown in the 2021-2024 MTIP.

Regional and agency policy direction

The 2021-2024 MTIP was developed in parallel with the adoption of the 2018 RTP. The 2018 RTP outlines four priority areas for investments in the system:

- Safety – Get to zero death and serious injuries on the region's roadways (Vision Zero)
- Equity – Reduce the disparities gap people of color, people with lower incomes, and people with limited English language skills experience with the transportation system
- Climate – Reduce greenhouse gas emissions from transportation sources and make progress towards the implementation of the region's Climate Smart Strategy



2018 Regional Transporation Plan

2021-2024 MTIP policy direction, adopted April 2019

Defining terms

- **Joint Policy Advisory Committee on Transportation (JPACT)** – A joint decision-making body with the Metro Council for all metropolitan planning organization activities, including the metropolitan transportation improvement program (MTIP) and regional transportation plan (RTP). Convened by Metro.
- **Technical Policy Alternatives Committee** – The staff-level technical advisory committee to JPACT. Convened by Metro.
- **Region 1 Area Commission on Transportation** – An advisory body convened by the Oregon Department of Transportation to advise the Oregon Transportation Commission on local transportation issues and provide recommendations. The Region 1 ACT geography encompasses the majority of the metropolitan planning area and well as rural areas in Clackamas County, Multnomah County, and Hood River County.

- Congestion – Manage demand on the transportation system through a variety of strategies and tools.

Reaffirmed with the adoption of the 2021-2024 MTIP policy direction, the region's expectation was set that near-term investments into the transportation system must advance the 2018 RTP priorities. The regional policy direction was taken into account for the different funding allocations processes undertaken by each MTIP partner – Metro, ODOT, SMART, and TriMet in different ways. For Metro's 2022-2024 Regional Flexible Fund Allocation (RFFA), the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council directed the region to use the four investment objectives adopted in the RTP as the policy objectives guiding the allocation. This resulted in technical evaluation criteria focusing on the four 2018 RTP priorities. Whereas for ODOT's 2022-2024 STIP funding allocation discussion, JPACT and the Metro Council provided feedback to the Region 1 Area Commission on Transportation (ACT) and the Technical Policy Alternatives Committee (TPAC) engaged with ODOT staff that investments in the regional system should prioritize advancing the four priorities.

While Metro's allocation of the RFFA explicitly linked regional policy direction to the funding allocation process, the allocations undertaken by ODOT, SMART, and TriMet weighed and balanced the regional policy direction with their agency leadership direction and priorities. In areas where agency direction and regional policy direction aligned, the link was clear and explicit in the funding. For example, the region's transit providers TriMet and SMART both have a role in the region's ability to implement the Climate Smart Strategy and reduce greenhouse gas emissions. As a result, the transit agency budget processes allocated funding towards fleet electrification that is illustrated in the 2021-2024 MTIP. The 2021-2024 MTIP is a reflection of the deliberation to balance across policy direction coming from different areas.

Statewide legislation

At the end of the 2017 legislative session, Oregon lawmakers passed a new statewide transportation package. Known as House Bill 2017, this transportation package raised new revenues through a combination of gas tax increases, vehicle registration increases, a privilege tax on vehicles, and other mechanisms. The state transportation package did earmark some of these new revenues to regionally significant transportation projects, including Interstate-5 Rose Quarter project, new lanes on Oregon 217, Interstate-205 auxiliary lanes from Glen Jackson Bridge to Johnson Creek, and planning work towards Interstate-205 Abernathy bridge retrofit and expansion to Stafford road. Additionally, House Bill 2017 directed new funding towards safety, bridge maintenance, transit service, and also

provided an influx of new pass-through revenues to cities and counties. The diverse mix of investments outlined in the 2021-2024 MTIP reflects the infusion of state funds combined with anticipated federal funding to invest into the transportation system.

Project Delivery

Aside from a statewide transportation package and a newly adopted long-range regional transportation blueprint, the region as well as the state went through a significant learning process related to project delivery and implementation of transportation projects. In coming to the critical realization project programming did not reflect the actual schedules of project delivery, the 2021-2024 MTIP is the first MTIP which employs a six-year programming framework for those projects funded through Metro's Regional Flexible Fund Allocation (RFFA). The six-year programming assists partners to develop realistic project delivery schedules, especially because of the complexities in planning and designing transportation projects in an urban environment.

While each project had reasons for its delay in delivery, the numerous project delays had cascading effects in continually financially constraining the MTIP and STIP. For a number of years, ODOT supported the region by swapping out older federal dollars on Metro allocated projects and expending those on state projects ready to go into construction. However, with the infusion of new funds from a state transportation package and challenges in delivering its own portfolio of projects, ODOT could no longer provide that level of support in swapping out funds. After a series of discussions with partners, ODOT launched an obligation target framework to better manage and incentivize project delivery. This change has resulted in the 2021-2024 MTIP extending programming through fiscal year 2026 to better reflect the delivery schedules of projects and get a better pulse of when the upcoming four-years of funding will get expended.

Kate Brown holds a ceremonial signing of House Bill 2017 at Portland Community College in Fall 2017

A six-year MTIP for project delivery, but with only four-years of funding capacity

Federal regulations allow for MTIPs to show a six-year schedule of expending federal monies to better depict project delivery and facilitate better management of financial constraint. This is in recognition that transportation projects can have extended timeframes to deliver or unexpected events happens in the middle of a transportation project. (Like a global pandemic.) While the 2021-2024 MTIP shows project schedules extended to fiscal year 2026, the 2021-2024 MTIP only represents the funding capacity for fiscal years 2021-2024. Transportation projects which are programmed in fiscal years 2025 and 2026 are not utilizing the funding capacity expected in those years.

Defining terms

Obligation - An obligation is the Federal government's legal commitment to pay the federal share of a project's cost. An obligated project is one that has been authorized by the federal agency (e.g. FHWA or FTA) as meeting eligibility requirements for federal funds.

A rendering of the Division Transit Project, the Portland region's first bus rapid transit project.

Federal Directives

At the end of 2017, FHWA and FTA completed a quadrennial certification review of Metro's metropolitan planning activities for the Portland metropolitan region. Overall, the certification review affirmed the region is in compliance with most directives governing metropolitan planning activities. However, the certification review gave corrective actions pertaining to the cooperative development of the 2018-2021 MTIP between partners – Metro, ODOT, SMART, and TriMet – and required a number of actions to take place in the development of the 2021-2024 MTIP. (See Appendix I) The corrective actions primarily focus on the region's financial plan for the near term investment program and the ability to demonstrate funds are available to complete projects. Subsequently, the state received the federal approval letter from FHWA and FTA on the 2018-2021 STIP, which includes all the MTIPs across Oregon. (See Appendix I) The 2018-2021 STIP approval letter reinforced and reiterated statewide the necessary actions to demonstrate fiscal constraint in the development of the 2021-2024 MTIP and STIP. As a result the 2021-2024 MTIP took additional steps and actions to give transparency towards the financial plan and constraining during the development process. Chapters 4 and 5 provides in-depth discussion of 2021-2024 MTIP's fiscal constraint. Chapter 8 also outlines the procedural process undertaken to demonstrate and maintain fiscal constraint with amendments to the 2021-2024 MTIP.

The 2021-2024 MTIP is also the first MTIP developed under the directive of the federal performance measures and targets to emerge from the federal transportation reauthorization, Moving Ahead toward Progress in the 21st Century (MAP-21). The target setting process, undertaken as part of the development of the 2018 RTP, established the region's 2 and 4-year performance targets around asset management, system reliability, safety, and environment. The investments in the 2021-2024 MTIP investments are expected to move to region towards achieving the 2 and 4-year targets and as a result the investment profile has a mix of projects which look to address each.

Further discussion about the 2021-2024 MTIP and progress towards MAP-21 performance targets can be found in Chapter 3.

Major projects delivered from the 2018-2021 MTIP and general implementation progress

From 2018 through 2020, the region's partners worked cooperatively and collaboratively on the development of the 2021-2024 MTIP. At the same time, the implementation of the 2018-2021 MTIP was in progress. Adopted in July 2017, the $1.4 billion dollar investment program included an array of transportation projects and programs. In the first two years of the

2018-2021 MTIP, the region obligated a total just over $550 million towards projects and programs. The $550 million was obligated on over 176 transportation projects and programs.

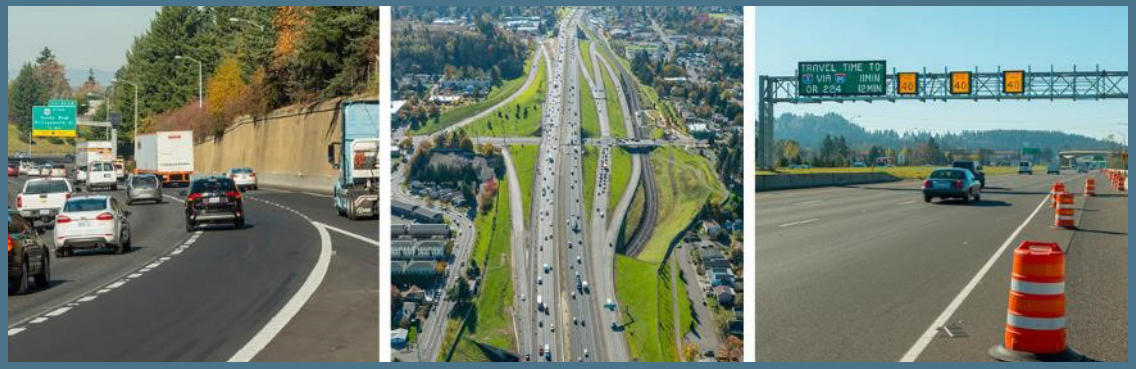
The 2018-2021 MTIP saw some long planned accomplishments come to fruition. Three marquee transportation projects and programs to get implemented from the 2018-2021 MTIP include:

- the Division Bus Rapid Transit (BRT) project
- the Interstate-205 auxiliary lanes, and
- implementation of the region's first strategic plan for demand management: the Regional Travel Options (RTO) strategy under a consolidated program administered at Metro

The Division Transit Project is the first BRT project in the region and runs along southeast Division street between downtown Portland and Gresham. With initial construction beginning in 2019, the enhanced buses, transit stations, and amenities along this 15-mile corridor will reduce travel times up to 20 percent, with buses running every 12 minutes and more often during the rush hour commute. A celebration between the Federal Transit Administration, TriMet, the Cities of Portland and Gresham, and Metro was held in February 2020 when FTA awarded the full federal grant to the project.

The Interstate 205 auxiliary lanes project from the Glen Jackson Bridge to Johnson Creek Boulevard opened in Fall 2019. Under the added pressure of the state transportation package requiring the project to be completed to allow for a scheduled gas tax increase to take place, the project repaved nine miles, constructed three new auxiliary lanes, and installed 6 variable message and 26 variable speed warning signs to alert drivers of hazards or delays, allowing them to make travel decisions before they reach a problem area. Additionally at the northeast Glisan Street intersection, the project installed accessible sidewalk curb ramps, upgraded crosswalk buttons with audible message, and widened sidewalks.

We paved 9 miles of I-205, constructed three new auxilary lanes, and installed ODOT RealTime signs between Johnson Creek Boulevard and the Glenn Jackson Bridge.



Core elements to the Interstate 205 auxiliary lanes project from Glen Jackson Bridge to Johnson Creek Boulevard

Lastly, one of the transportation programs, the Regional Travel Options (RTO) program celebrated implementation of the region's first transportation demand management strategic plan under a consolidated administration at Metro. Adopted in 2018, the new strategic plan updated the program's goals and objectives to align with the 2018 RTP. With the continued focus on encouraging people to use other forms of travel to reduce single occupancy vehicle trips, the updated strategic plan outlines goals to reach new markets for travel options – particularly historically marginalized communities – and improve the performance of grant-funded projects.

In addition to the highlighted projects, a list of transportation projects which were completed from the 2018-2021 MTIP are identified in Table 2-1. For the purposes of this report, completed transit projects are those projects that have executed their grant agreement with FTA and have completed all or significant portions of construction or capital acquisitions. Programmatic work, such as the Regional Travel Options program, are on-going and therefore considered completed upon contractual obligation of program funds with FHWA or FTA to carry out the program work. All other projects are considered completed when the project has received a second note status from ODOT which typically indicated the project is open and operational.

Table 2-1. Completed Projects from the 2018-2021 MTIP

Project Sponsor	Project Name
ODOT	I-5: Interstate Bridge - Hassalo St
ODOT	US26: SE 282nd Ave (Boring Rd) Oxing
ODOT	OR213 Operational Improvements
ODOT	OR99E railroad tunnel illumination and ITS
ODOT	OR99E:Rockfall - Oregon City Tunnel to Old Canemah Park
CITY OF KING CITY	OR99W: SW Royalty Parkway - SW Durham Rd (King City)
TRIMET	OR99W: SW Lane St (Portland)- SW Naeve St (Tigard)
ODOT	US26: Beaver Creek Culvert Repair
ODOT	Regional active traffic management (ATM) project
ODOT	I-205 Shared Use Path at Maywood Park
ODOT	I-84/I-5: Banfield Interchange
ODOT	I-5: Marquam Br Electric & Lighting System Replace
ODOT	Region 1 High Friction Surface Treatment
ODOT	I-205:Johnson Creek-Glenn Jackson Bridge phase 2
ODOT	I-5: Interstate bridges (Columbia River)
MULTNOMAH COUNTY	Morrison Bridge Lift Deck Replacement
CITY OF GRESHAM	NE Kane Drive at Kelly Creek Culvert
CITY OF GRESHAM	East Metro Connections ITS
MULTNOMAH COUNTY	Newberry Road at MP 0.5
CITY OF PORTLAND	SE 122nd Ave: Johnson Creek Bridge Replacement
CITY OF PORTLAND	Foster Road Streetscape: SE 50th - 92nd Ave
CITY OF PORTLAND	HSIP 2016 Signalized Improvements (Portland)
CITY OF PORTLAND	St Johns Truck Strategy Phase II
CITY OF PORTLAND	HSIP City of Portland BikePed
WASHINGTON COUNTY	Beef Bend Road Culvert Replacement
CITY OF PORTLAND	Springwater Trail Gap: SE Umatilla - SE 13th Ave
CITY OF PORTLAND	East Portland Active Transportation to Transit

What project delays occurred and what is carryover from the 2018-2021 MTIP

Even the most rigorously planned project can encounter delays due to issues such as unknowable field conditions, commodities price fluctuations, or labor shortages. The projects and programs represented in the 2018-2021 MTIP are not immune to the unexpected. The following section identifies a list of transportation projects which were first programmed in the 2018-2021 MTIP which have been delayed and carried over to the 2021-2024 MTIP. Delayed projects are defined as those transportation projects or programs which originally programmed a construction phase prior to federal fiscal year 2020, but are not expected to obligate the construction phase as by August 1, 2020. Project delays to operations and maintenance projects are not included.

Table 2-2. Projects from the 2018-2021 MTIP carried over to the 2021-2024 MTIP

Project Name	Lead Agency
Red Electric Trail: SW Bertha - SW Capitol Hwy	Portland
40 Mile Loop: Blue Lake Park - Sundial & Harlow Rd	Port of Portland
Cedar Creek/Tonquin Trail: OR99W - SW Pine St	Sherwood
Durham Rd/Upper Boones Ferry Rd. OR99W - I-5	Tigard
SW Barbur Blvd: SW Caruthers St - SW Capitol Hwy	Portland
OR8: SW Hocken Ave - SW Short St	ODOT
Willamette Greenway Trail: Columbia Blvd Bridge	Metro
NE Columbia Blvd: Cully Blvd and Alderwood Rd	Port of Portland
OR217 Southbound: OR10 to OR99W	ODOT
Jennings Ave: OR 99E to Oatfield Rd	Clackamas County
SE 129th Avenue - Bike Lane and Sidewalk Project	Happy Valley
East Portland Access to Employment and Education	Portland
Central City in Motion	Portland
Fanno Crk Trail: Woodard Pk to Bonita Rd/85th Ave - Tualatin BR	Tigard
Beaverton Creek Trail: Westside Trail - SW Hocken Ave	Tualatin Hills PRD
Basalt Creek Ext: Grahams Ferry Rd - Boones Ferry Rd.	Washington County
OR8 Corridor Safety and Access to Transit II	ODOT
OR43: Arbor Dr - Hidden Springs Rd	West Linn
Stark Street Multimodal Connections	ODOT
I-205 Undercrossing (Sullivans Gulch)	Portland
Seventies Neighborhood Greenway	Portland
SW Farmington Rd at 170th Ave	ODOT
OR99W (Barbur Blvd) at SW Capitol Hwy	ODOT
OR99W (Barbur Blvd): MP 8.01 to MP 11.50	Tigard
OR8 at River Rd	ODOT
I-205 Exits Ramps at SE Division St	ODOT
I-5 Over 26th Avenue Bridge	ODOT
North Dakota Street: Fanno Creek Bridge	Tigard
NE Cleveland Ave.: SE Stark St - NE Burnside	Gresham
Brentwood Darlington Bike/Ped Improvements	Portland
NE Halsey Street Bike/Ped/Transit Improvements	Portland
Jade and Montavilla Multi-modal Improvements	Portland
OR210: SW Scholls Ferry Rd to SW Hall ITS	Beaverton
US26/OR213 Curb Ramps	ODOT
NE 12th Ave Over I-84 & Union Pacific RR Bridge (Portland)	Portland
OR99W/Barbur Blvd Area: Sidewalk Infill Projects	Portland
OR212/224 Arterial Corridor Management	ODOT
NE Airport Way Arterial Corridor Management	ODOT
Cornelius Pass Road Arterial Corridor Management	ODOT

Investment Highlights and Outcomes of the 2021-2024 MTIP

The 2021-2024 MTIP presents a wide array of investments across the 216 projects and programs totaling a little over $1.2 billion. Included in the 2021-2024 MTIP are:

- a mix of capital investments to enhance and fill gaps on the transportation system across all forms of travel,
- maintenance investments to take care of the transportation infrastructure already in place,
- operations investments to use technologies to make the system run smoother and safer, and
- programs that educate about travel options, support kids in walking and rolling to school safely, and reinforcing the connection between housing and transit.

Compared to previous MTIP cycles, the 2021-2024 MTIP presents a more balanced mix of capital and maintenance investments where maintenance and operations investment make up a little over half (52%) of total investments. While capital investments in the transportation system can often dominate the investment profile of the MTIP because of the short-term infusion of funds to construct a project, the balance of the 2021-2024 MTIP with a greater composition of maintenance and operations investment shows further commitment towards taking care of existing assets while also trying to fill in network gaps. In particular, the level of maintenance and operations investment in the transit system illustrates this well as the oldest part of the region's light rail system is reaching nearly 35 years and maintenance of such a large system is and remains a significant endeavor. Nonetheless, as described, the MTIP does not always show the full amount of monies going into maintenance and operations as states and local governments make the majority of those investments with local dollars which are not reported in the MTIP.

Another highlight of the 2021-2024 MTIP investment package is the focus on investing across all parts of the transportation system. While roadway and transit investments tend to dominate the 2021-2024 MTIP, the region is also investing into building out the active transportation network, into the equipment and infrastructure to manage the demand on the transportation system, and into transportation programs which educate and encourages travel options or leverages land use and transportation. These complimentary investments are necessary to maximize the most of the existing transportation network and the new facilities getting built. While these other areas combined investment level comprises of just over 17 percent of the 2021-2024 MTIP investment profile, the additional value they bring to transportation projects leverages every dollar spent towards rebuilding roadways or making a new high capacity transit line successful.

Lastly, some projects to note in the 2021-2024 MTIP include:

- U.S. 26: SE 99th to Portland City Limits – This project will widen Powell boulevard from three to four lanes (inclusive of a center turn lane) with sidewalks and buffered bike lanes or other enhanced bike facility. The project will also add enhanced pedestrian and bike crossings. This project provides active transportation facilities along an urban arterial which has long been underinvested.
- Regional Safe Routes to School – Continues the newly established regional program to promote planning, funding, and outreach activities for youth to safely affordably and efficiently access school by walking biking and transit.
- Monroe Greenway – The project will construct bicycle and pedestrian improvements on Washington and Monroe from SE Oak to SE Railroad Ave up to Washington to Ada Lane and then to Home Ave and on Home Ave to Monroe St and on Monroe St east to Linwood Ave. The project will fill an active transportation network gap, connecting Clackamas Regional Center to downtown Milwaukie, and connect to the Trolly Trail multiuse path.
- Electric buses – TriMet will continue to advance the electrification of its bus fleet.

The 2021-2024 MTIP is expected to advance the region towards the goals and vision outlined in the 2018 RTP. Chapter 3 of the 2021-2024 MTIP describes in more detail the anticipated outcomes of the 2021-2024 MTIP investments specifically for the priorities the 2018 RTP identified: addressing safety, addressing equity, addressing climate change, and managing congestion. The chapter also describes how the investments helps the region move forward to achieve the region's federal performance targets. Overall, the 2021-2024 MTIP continues to make progress towards its vision for the transportation system in a balanced manner.

Chapter sections

- Summary of 2021-2024 MTIP performance evaluation results and key findings
- Methodology to analysis
- Analysis results by performance measure
- Moving ahead towards progress in the 21st century (MAP-21) – Federal performance measures and targets
- Discussion: How our regional system performs

Chapter 3: MTIP Performance assessment results

A performance evaluation was conducted to understand the effects of the 2021-2024 MTIP investment package. The following section includes an overview of the performance assessment methodology and key takeaways from the analysis. Further detail about the technical approach used in the performance evaluation can be found in Appendix II.

Summary of 2021-2024 MTIP performance evaluation results and findings

Overall, the 2021-2024 MTIP package of investments makes progress towards the desired outcomes and shared priorities identified in the Regional Transportation Plan, which include managing congestion, addressing equity, addressing climate change and addressing safety. The analysis shows greater regional progress toward some outcomes, such as addressing climate change, than others. For other outcomes, such as accessibility, the investments make more progress at a more localized scale. Each investment in the 2021-2024 MTIP brings value whether that is locally or system-wide. These results illustrate that the 2021-2024 MTIP investments are helping the region reach its long-term goals for the

transportation system, but there remains opportunities for improvement.

The region's near-term investment in the transit system – particularly in transit service and addressing the operational improvement at Gateway Transit Center – shows promise in helping the region attain its climate change, managing congestion, and addressing equity goals.

Methodology to analysis

Assessment framework

Adopted by the Metro Council in December 2018, the 2018 Regional Transportation Plan (RTP) sets the long-range vision, goals, and outcomes for the regional transportation network. Therefore, the 2018 RTP is the guiding policy and system performance framework for the investments defined in the 2021-2024 MTIP. The approach to evaluating the 2021-2024 MTIP centers on the four policy priorities that emerged from the 2018 RTP process – safety, equity, climate, and congestion. Additionally, the analysis of the 2021-2024 MTIP, like the RTP, is system-wide, meaning transportation projects programmed in the MTIP are not evaluated independently.[1] Using this approach allows Metro to demonstrate consistency with the region's long-range transportation plan and show progress towards advancing the goals and outcomes identified in the RTP.[2] Table 3-1 illustrates the crosswalk between the 2018 RTP priorities, outcomes being measured, and performance measures and targets (if applicable).[3] A short summary explaining each individual performance measure are provided in Tables 3-2 – 3.8. More detailed methodology sheets are included as part of Appendix II.

1 Transportation investments can also be referred to as transportation projects.

2 Per federal regulations, the content of the MTIP must demonstrate consistency with the adopted Regional Transportation Plan from a policy and a fiscal manner.

3 The 2018 RTP did not have a performance target associated with every performance measure.

Table 3-1. Crosswalk Between 2018 RTP Priorities and 2021-2024 MTIP Performance Measures

2018 RTP Priority	Outcome Being Measured	Performance Measure Proposed for 2021-2024 MTIP	2018 RTP Performance Target
Equity	Accessibility Affordability (as a pilot, if possible	Access to jobs (emphasis on middle-wage) Access to community places System completeness of active transportation network in equity focus areas Housing and transportation cost expenditure and cost burden	No
Safety[4]	Safety investment level Investment on high injury corridors	Level of investment to address fatalities and serious injuries Level of safety investment on high injury corridors	Yes/No[5]
Address Climate Change	Emissions reduction Active transportation system completion	Percent reduction of greenhouse gases per capita System completeness of active transportation network	Yes
Traffic Congestion	Multimodal travel times	Evaluates mid-day and pm peak travel time between regional origin-destination pairs by mode of travel (e.g. transit, bicycle)	No

4 Because crashes cannot be projected, this performance measure will take an observed approach looking at the level of safety investment and location of safety investment.

5 The 2018 RTP established a Vision Zero target of fatalities and serious injuries on the region's transportation system by 2035. The specific performance measures identified for the 2021-2024 MTIP performance assessment do not have an associated performance target, but serve as forward-looking measures to look at safety considerations.

Table 3-2. Performance measure summary – Access to jobs

Name of Performance Measure	**Access to Jobs**
What is this measuring?	The number of jobs by different wage profiles (i.e. low, medium, high) the average household can reach within a certain travel times, adjusted by form of travel. Travel times by form of travel below: • Automobile – 30 minutes* • Transit – 45 minutes* • Bicycle – 30 minutes • Walk – 20 minutes *Includes access and egress times.
What is reported out?	• The number of jobs (by wage profiles) which the average household can reach in the region, sub-regions, equity focus areas, and non-equity focus areas • The percent (%) change of jobs (by wage profiles) which the average household can reach in the region, sub-regions, equity focus areas, and non-equity focus areas
Datasets used	Land use distribution (jobs), transportation network
Tools used	Travel demand model
Geographies applicable	Metropolitan Planning Area (Region), Sub-Regions, and Equity Focus Areas

Table 3-3. Performance measure summary – Access to community places

Name of Performance Measure	**Access to Community Places**
What is this measuring?	The number of community places the average household can reach within a certain travel times, adjusted by form of travel. Travel times by form of travel below: • Automobile – 20 minutes* • Transit – 30 minutes* • Bicycle – 15 minutes • Walk – 20 minutes *Includes access and egress times.
What is reported out?	• The number of community places the average household can reach in the region, sub-regions, equity focus areas, and non-equity focus areas • The percent (%) change of community places the average household can reach in the region, sub-regions, and equity focus areas
Datasets used	North American Industry Classification System (NAICS) geocoded data, transportation network
Tools used	Travel demand model, geographic information systems
Geographies applicable	Metropolitan Planning Area (Region), Sub-Regions, and Equity Focus Areas

Table 3-4. Performance measure summary – Multimodal travel times

Name of Performance Measure	**Multimodal Travel Times**
What is this measuring?	The travel times between different origin-destination pairs (i.e. start and end locations). Origin and destination pairs are different based on form of travel. (i.e. different origin-destination pairs for bike, transit, and automobile based on bike network, transit routes, etc.)
What is reported out?	• Travel times between origin-destination pairs during the peak (i.e. rush hour) and non-peak (i.e. all other times) travel period • Change in travel time between origin-destination pairs
Datasets used	Transportation network
Tools used	Travel demand model
Geographies applicable	Metropolitan Planning Area (Region), origin-destination pairs corridors

Table 3-5. Performance Measure Summary – Mode Share and Miles Traveled

Name of Performance Measure	**Mode Share & Miles Traveled**
What is this measuring?	The number and overall share of trips by each form of travel (e.g. driving, transit, biking, walking, etc.). The length of each trip and total miles traveled by each form of travel.
What is reported out?	• Total number of trips by form of travel • Change in the number of trips by form of travel • The share of trips by form of travel (% and total) • Change in the share of trips by the form of travel • The total number of miles traveled by form of travel (i.e. vehicle, bicycle, transit miles traveled) and passenger • The per capita miles traveled by form of travel and passenger
Datasets used	Transportation network
Tools used	Travel demand model
Geographies applicable	Metropolitan Planning Area (Region) and sub-regions

Table 3-6. Performance Measure Summary – Greenhouse Gas Emissions Reduction

Name of Performance Measure	**Greenhouse Gas Emissions Reduction**
What is this measuring?	The total and the change in greenhouse gas emissions in metric tons
What is reported out?	• The total tons of greenhouse gas emissions and • The change in greenhouse gas emissions per capita from 2015
Datasets used	Transportation network
Tools used	Travel demand model, emissions model
Geographies applicable	Metropolitan Planning Area (Region)

Table 3-7. Performance Measure Summary – Level of Investment Focused on Safety

Name of Performance Measure	**Level of Investment Focused on Safety**
What is this measuring?	The level of investment focused on reducing crashes that results in fatalities and serious injuries.
What is reported out?	• The total amount of investment focused on safety regionwide, sub-regions, and in equity focus areas • The total number of safety projects regionwide, sub-regions, and in equity focus areas • The total amount of investment focused on safety on high injury corridors regionwide, sub-regions, and in equity focus areas • The total number of safety projects on high injury corridors regionwide, sub-regions, and in equity focus areas
Datasets used	Transportation network, high injury corridors and intersections
Tools used	Geographic information systems (GIS)
Geographies applicable	Metropolitan Planning Area (Region), sub-regions, equity focus areas

Table 3-8. Performance Measure Summary – Active Transportation System Completeness

Name of Performance Measure	**Active Transportation System Completeness**
What is this measuring?	The miles and percent change (%) in the completeness of the active transportation network by active transportation facility type and travel area. Facility types include sidewalks, on-street bike network, and trails. Travel area includes arterials and near frequent service transit.
What is reported out?	The total miles in completeness of the sidewalk, on-street bicycle, and trail networks: • regionwide, equity focus areas, and non-equity focus areas•arterials regionwide, equity focus areas, and non-equity focus areas • near frequent transit regionwide, equity focus areas, and non-equity focus areas The percentage in completeness of the sidewalk, on-street bicycle, and trail networks: • regionwide, equity focus areas, and non-equity focus areas • arterials regionwide, equity focus areas, and non-equity focus areas • near frequent transit regionwide, equity focus areas, and non-equity focus areas
Datasets used	Regional Land Inventory System (RLIS), transit stops and stations, motor vehicle facility classifications
Tools used	Geographic information systems (GIS)
Geographies applicable	Metropolitan Planning Area (Region), sub-regions, equity focus areas

Key assumptions, inputs, and tools

Evaluation tools

The 2021-2024 MTIP performance evaluation uses three main tools to evaluate the 2021-2024 MTIP investment package. These tools are:

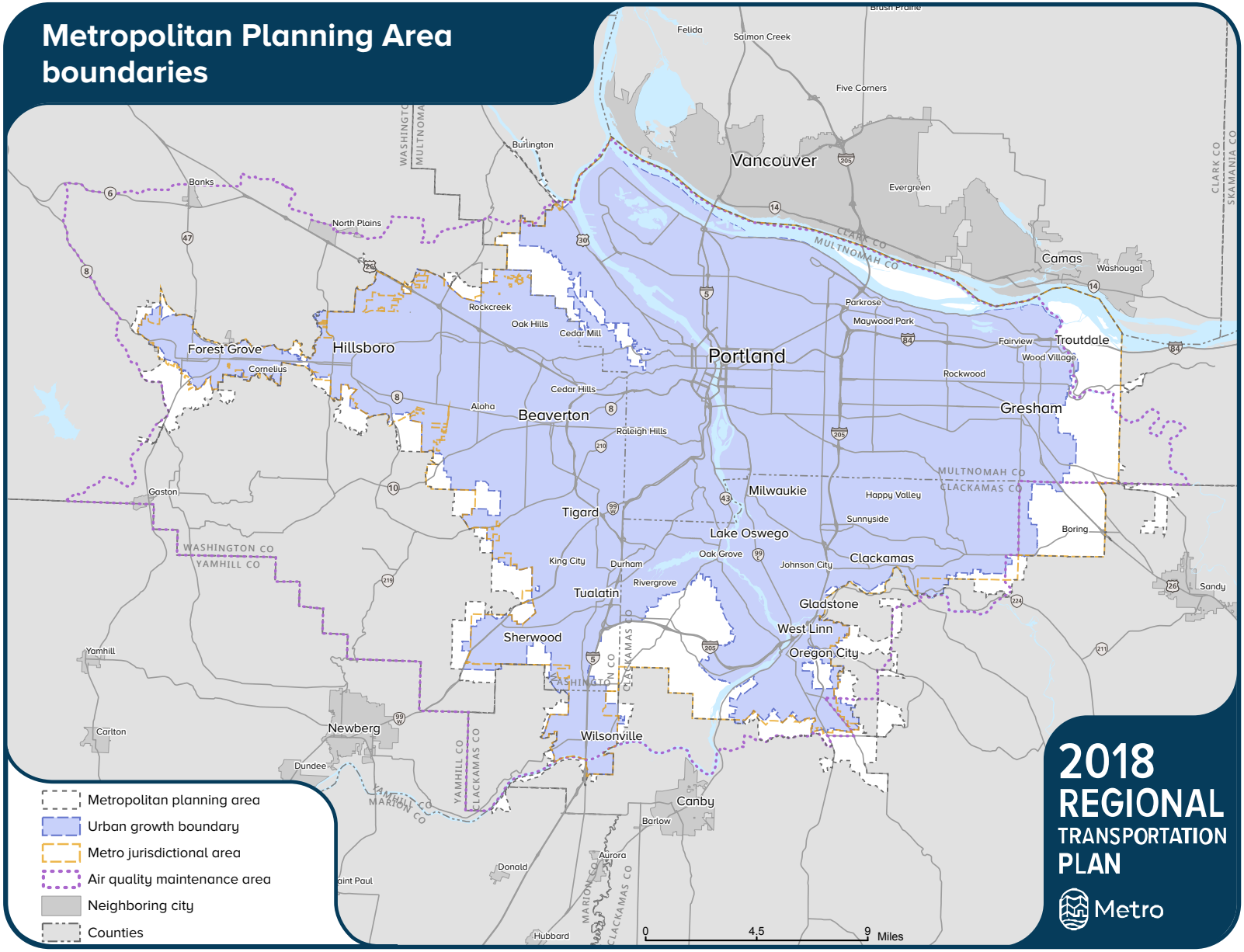
- Travel Demand Model
- Motor Vehicle Emissions Simulator (MOVES) Model
- Geographic Information Systems (GIS)

These tools were also the primary tools used for the 2018 RTP system performance analysis. The travel demand model and the MOVES model primarily help explain the impacts of the proposed package of investments on travel behaviors and transportation emissions. The GIS tool supports geospatial analysis of investments. A short description of each tool is in Appendix II. Further details of the tools can also be found on Metro's website.

Geography of analysis

Region: The 2021-2024 MTIP focuses on the near-term investments into the regional transportation system within the metropolitan planning area (MPA). The MPA is the defined geography for Metro's metropolitan planning organization (MPO) activities. Therefore, region, region-wide, or system-wide figures reported are for the MPA. Figure 3-1 illustrates the MPA.

Figure 3-1. Metropolitan Planning Area boundary map

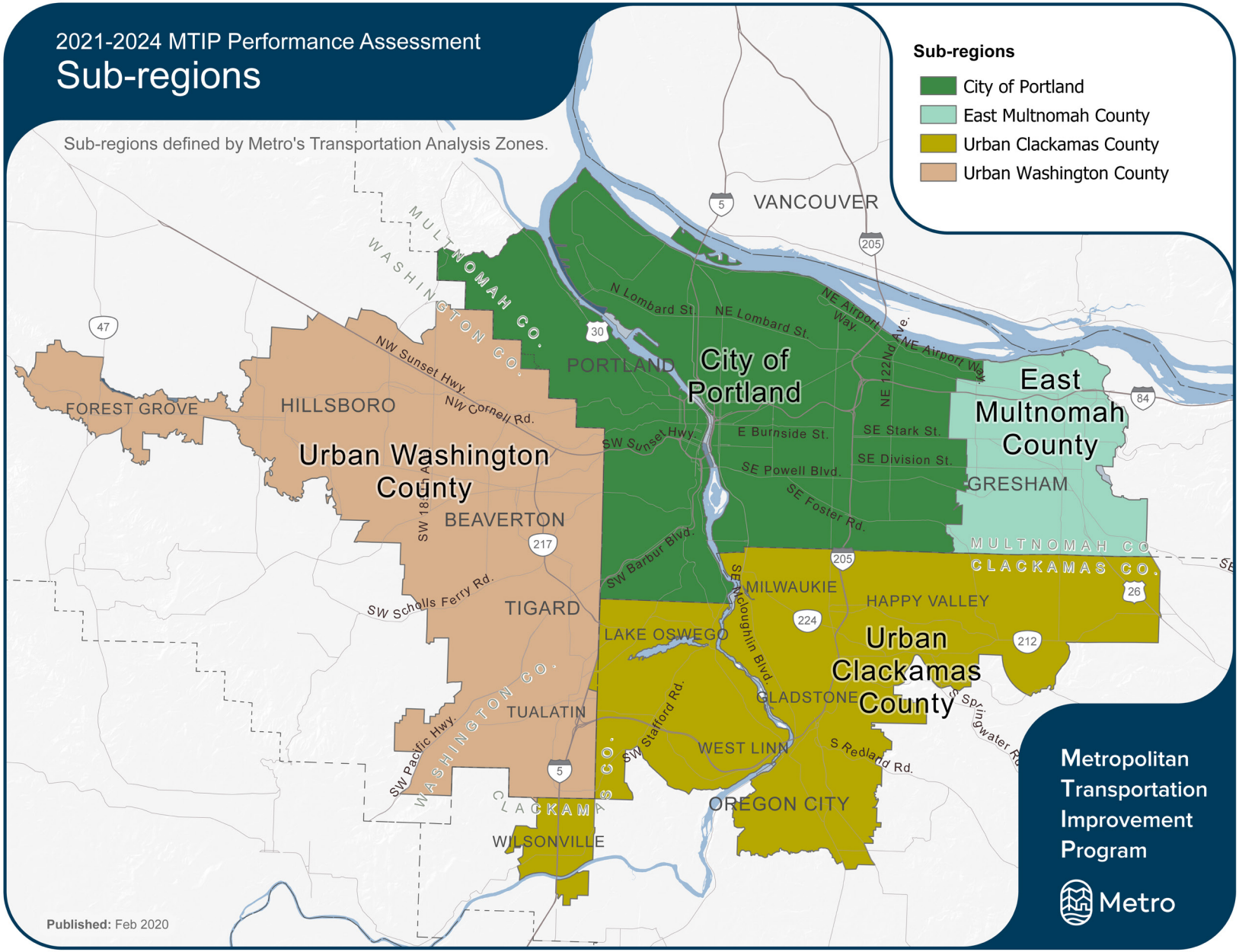


Sub-Regions: Throughout the 2018 RTP, Metro staff received feedback that a system-wide technical analysis cannot always meaningfully measure the performance of transportation investments for individual communities. Additionally, a system-wide assessment can mask high performance in certain areas and underperformance in others. In recognition of this feedback and the nature of the 2021-2024 MTIP as a near-term investment package, the evaluation approach includes a sub-regional analysis as part of the overall system analysis. The assessment of the package of investments in the 2021-2024 MTIP examines how projects perform in the following sub-regions, in addition to the metropolitan planning area region.

- City of Portland
- Clackamas County
- Multnomah County (excludes city of Portland)
- Washington County

The urbanized portion of Clackamas, Multnomah, and Washington counties within the metropolitan planning area were part of the sub-regional assessment. Rural areas, which are outside of the metropolitan planning area, were not included as part of the sub-region. Figure 3-2 illustrates sub-region geographies.

Figure 3-2. Sub-regions map



Equity focus areas: In addition to sub-regional geographies, the assessment measured performance within equity focus areas. Equity focus areas represent geographic areas where there is a concentration of historically marginalized persons and communities. This assessment looks at how the 2021-2024 MTIP investments progress towards outcomes that address transportation priorities expressed by historically marginalized communities in those communities. The development of the equity focus areas are based on demographic information collected from the U.S. Census Bureau. The demographic characteristics included as part of the equity focus areas include:

- People of Color
- People with Lower-Incomes
- People with Limited English Proficiency

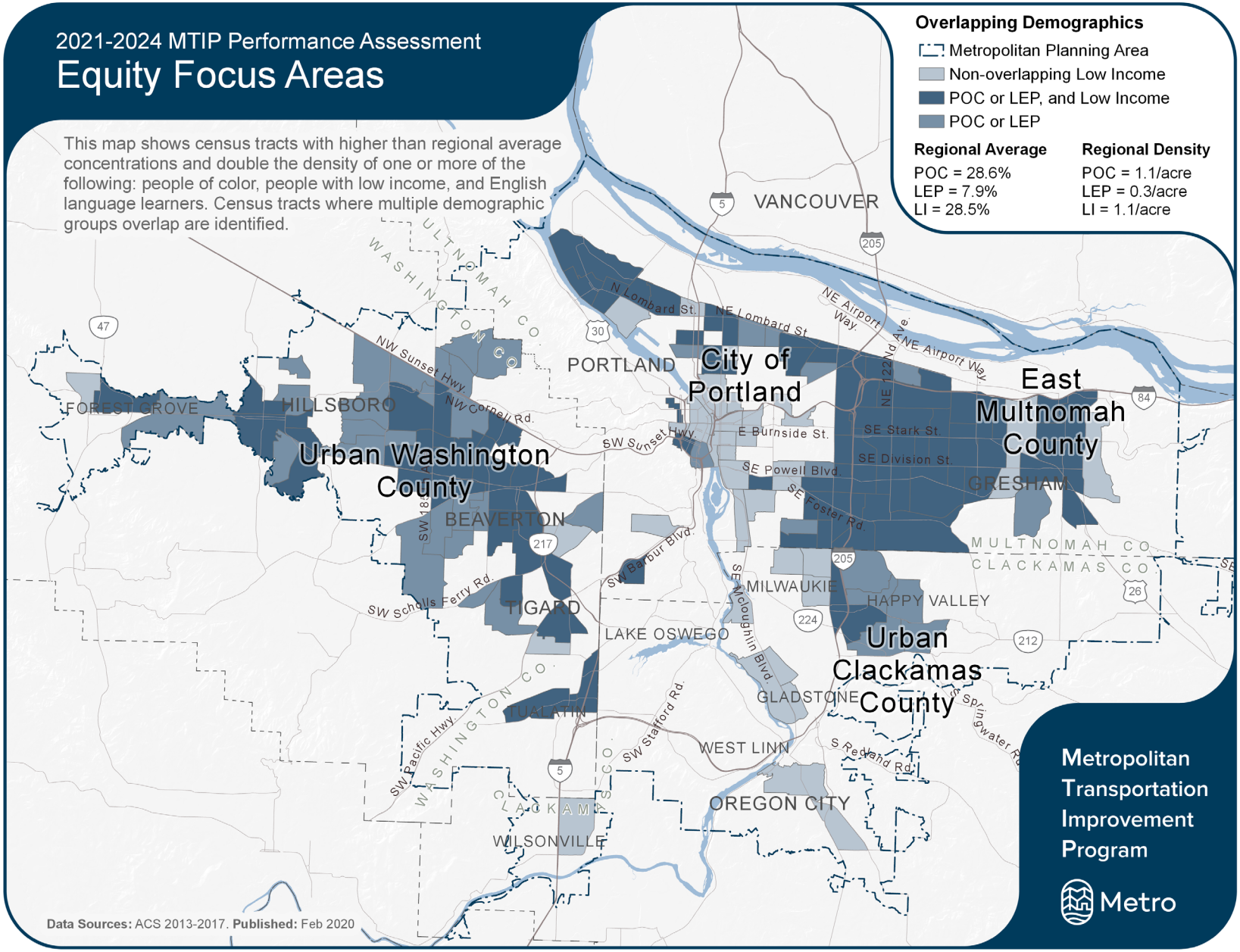
The equity focus areas are similar to those used as part the 2018 RTP performance assessment. The equity focus areas identify the locations of people of color, people with limited English proficiency, and people in poverty at population rates above certain thresholds. The equity focus areas used as part of the 2018 RTP have recently undergone modification based on updated demographic data from the U.S. Census Bureau's American Community Survey (ACS) 5-year estimates. A total of 15 census tracts changed status, based on the density of certain demographic populations. The rates identified in Table 3-9 illustrates the updated equity focus areas with the most recent demographic data. Figure 3-3 illustrates the equity focus areas.

Table 3-9. Equity focus areas definitions

Community	Geography Threshold
People of Color	The census tracts which are above the regional rate for people of color (28.6%) AND the census tract has twice (2x) the population density of the regional average (regional average is 1.1 person per acre).
People in Poverty	The census tracts which are above the regional rate for low-income households (28.5%) AND the census tract has twice (2x) the population density of the regional average (regional average is 1.1 person per acre).
People with Limited English Proficiency	The census tracts which are above the regional rate for people with limited proficiency (7.9%) AND the census tract has twice (2x) the population density of the regional average (regional average is .3 person per acre)

Source: Metro, 2018 RTP transportation equity work group & U.S. Census Bureau American Community Survey, 2013-2017 5-year average

Figure 3-3. Equity focus areas



In addition, the equity focus areas within each sub-region are aggregated and evaluated to understand how the package of investments in the 20214-2024 MTIP performs in equity focus areas at both a regional and at a sub-regional scale.

Transportation investments evaluated as part of the assessment

The 2021-2024 MTIP evaluation includes 150 transportation programs or capital project investments programmed for federal fiscal years 2021 through 2024.[6] A list of the transportation projects and programs evaluated in the 2021-2024 MTIP assessment can be found in Appendix II. Of the 150 transportation programs and projects, 37 are programmatic in nature, meaning the investment is generally region-wide (e.g. bus purchases and replacements) or are not capital investments (e.g. Regional Travel Options education and outreach, or system and corridor planning). The analysis tools deployed as part of the 2021-2024 MTIP evaluation are not granular enough to assess these types of programmatic projects. As a result, these 37 programmatic projects are excluded from the analysis. (A project list showing which projects not included is in the Appendix II.)

Additionally, capital transportation investments which only program funds for project development were not assessed as part of the 2021-2024 MTIP performance evaluation. This is because at the project development phase of a capital transportation investment, details such as the alignment, type, size, and location have not been identified. The lack of details make it challenging for the evaluation tools to capture the investment.

Further development work is needed before the capital project is able to move forward into the next phases and is programmed accordingly.

Definition: program & programming

Refers to the schedule of when transportation projects or programs expect to expend funds. Assumed in the programming, transportation projects or programs meet the necessary eligibility requirements.

6 As of December 2019. The public comment draft of the 2021-2024 MTIP programming tables reflect updates of other projects that were added to the programming from December 2019 through March 2020. A project list is provided as part of the appendix to illustrate the differences in the programming tables and what was not evaluated as part of the 2021-2024 MTIP performance evaluation.

Major transportation investments assumed in the 2021-2024 MTIP performance assessment

The analysis, programming and adoption of investments in the 2021-24 MTIP is a process that takes almost a year. To conduct the analysis in the timeframe of the adoption schedule, Metro staff must anticipate which projects are likely to be in the final 2021-2024 MTIP. As a result the list of investments assessed as part of the 2021-2024 MTIP performance analysis is often has several differences from the list of investments presented as part of the public comment draft.

In developing the list of investments to evaluate for the 2021-2024 MTIP performance assessment, two factors – the project's development schedule and the securing of funding commitments – play a role of determining whether an investment is included or not.

Three major capital projects were included in the 2021-2024 MTIP performance analysis, because initial screening based on the factors indicted these projects would likely be in the 2021-2024 MTIP. These are:

- Division Transit Project
- Interstate 5 Rose Quarter Improvements
- MAX Red Line Extension

Due to other factors and changes in programming these projects are not in the 2021-2024 MTIP public comment draft.

Further information and clarifications regarding the status of these capital projects included can be found in Appendix II.

Key assumptions

Embedded within the 2021-2024 MTIP performance assessment are several key assumptions. The assumptions can be broken down into two analytical areas: model assumptions and geospatial assumptions. To the degree possible, the key assumptions are consistent with assumptions used in the evaluation of the 2018 RTP.

Model assumptions: The 2021-2024 MTIP performance evaluation included three scenarios which were modeled using the travel demand modeling tool. These scenarios include:

- Base Year (2015)
- No Build (2024)
- Build (2024)

Each modeled scenario serves as a reference point for understanding the effect of the 2021-2024 MTIP package of transportation investments, which is reflected in the Build (2024) scenario. The No Build (2024) scenario assumes only those investments with committed funding plan through construction in 2020 and the Base Year (2015) scenario represents the regional transportation network as of 2015. The Base Year scenario helps to provide context as to how the region is performing relative to the 2018 RTP, which used the same Base Year scenario.

Geospatial assumptions: For the 2021-2024 MTIP performance measures which primarily use geospatial analysis to evaluate the package of investments, the main assumption is the base network used as the underlying existing transportation network. This primarily applies to the system completion assessment and the safety assessment. The underlying base network used is Metro's published Regional Land Information System (RLIS) data as the existing features. For the system completeness measures, specifically sidewalks, other datasets were explored as RLIS sidewalks have not been updated recently. The most likely candidate was Open Street Map (OSM) and Metro staff did a verification analysis using OSM sidewalks data to confirm the sidewalk completeness measure. From the verification analysis, the amount of gaps filled (i.e. the increase in system completeness) was similar using both RLIS and OSM sidewalk data. Despite OSM having significantly higher baseline completeness, due to its more recent vintage, Metro staff decided to use the RLIS data in order to keep consistent with datasets used as part of the 2018 RTP analysis in addition to having a clear understanding of the data nuances and limitations.

The other key assumption used for geospatial analysis of the 2021-2024 MTIP investments is the definition of the high injury corridors and intersections. The high injury corridors and intersections were defined as part of the development of the Regional Transportation Safety Plan, adopted as a topical plan as part of the 2018 RTP. The high injury corridors and intersections for the Portland metropolitan region are based on analysis of crash data and other information.

Table 3-10. Scenario and Network Assumptions

Scenario	Investment Profile	Land Use	Transit Service
Base Year (2015)	The base year includes the transportation investments built and open for service as of 2015. This is the same base year used as part of the 2018 RTP.	Land use assumptions pertaining to population growth, employment, and development will follow according to what was assumed in the 2018 RTP.[7]	The base year includes transit service which were in effect as of 2015. This is the same base year used as part of the 2018 RTP.
No Build (2024)	The 2024 no build assumes no additional transportation investments aside from those projects" 1) completed since 2015 and open for service; 2) funded projects expected to be completed by end of calendar year 2020; and 3) future roadway and bicycle facility projects with committed funding and projected to be complete by 2024.[8]	The land use forecast will follow according to what was assumed in the 2018 RTP. For year 2024, population and employment are interpolated in a straight line to 2024.[9]	The 2024 no build includes transit service which are in effect as of Spring or Fall 2019. (Spring or Fall dates are based on availability of information)
Build (2024)	The 2024 build scenario reflects all the investments identified in the 2021-2024 MTIP. These investments include capital investments and as modeling capabilities allow, maintenance and operations investments. Those investments which are unable to be quantitatively assessed because of a lack of spatial detail will be identified as part of analysis documentation.[10]		The 2024 build assumes transit service levels to be in effect as of the end of calendar year 2024. (Based on assumptions discussed with transit providers)

7 The adopted 2016 growth forecast was used as part of the 2018 RTP.

8 Fully committed funding would need to be reflected in the 2021-2024 MTIP programming and financial plan.

9 This means the land use forecast is estimated based on an interpolation from the base year (2015) forecast to the out year forecast (2027).

10 These programs may be assessed qualitatively in how these investments play a role in making progress towards the 2018 RTP priorities and/or the MAP-21 federal performance targets.

Analysis results by performance measure

Across all the 2021-2024 MTIP performance evaluation measures, the package of investments show progress towards the implementation of the 2018 RTP and the outcomes projected by the implementation of the RTP. Overall the mixture of capital, operational, and programmatic investments identified in the 2021-2024 MTIP show improved outcomes as well as opportunities for future investment to increase performance.

Managing congestion

Performance Measures: Multimodal travel times, mode share, mode shift, trips, and miles traveled

Mode share and mode shift

With the 2021-2024 MTIP investments:

- The share of drive alone trips decreased by nearly one percent out of the seven million daily trips projected by 2024.
- Of the seven million trips, over 70,000 vehicle trips – 68,000 single occupancy vehicle trips and 1,900 shared ride trips – shift to transit, biking, and walking.
- Region-wide, the walking, biking, and transit mode share increases slightly, with transit mode share increasing the most, at .8% for all trips. There is an even greater increase for work trips with transit mode share gaining 1.5%.
- At the sub-regional level, mode share differs. For example, walking mode share increases in Clackamas County while transit mode share increases in the City of Portland and Washington County.

3-11. Model share and mode shift results

Average Weekday Trips by Mode - Region				
	2024 No Build		2024 Build	
	trips	share	trips	share
Drive Alone	3,135,442	44.4%	3,067,356	43.5%
work	1,466,157	66.8%	1,425,650	65.0%
non-work	1,669,284	34.3%	1,641,706	33.8%
Shared Ride	2,599,076	36.8%	2,597,093	36.8%
work	250,109	11.4%	250,292	11.4%
non-work	2,348,967	48.3%	2,346,801	48.2%
Transit	343,929	4.9%	402,226	5.7%
work	179,319	8.2%	212,486	9.7%
non-work	164,610	3.4%	189,740	3.9%
Walk	525,509	7.4%	534,417	7.6%
work	170,811	7.8%	173,816	7.9%
non-work	354,698	7.3%	360,602	7.4%
Bike	276,185	3.9%	281,983	4.0%
work	128,911	5.9%	131,833	6.0%
non-work	147,274	3.0%	150,150	3.1%
School Bus	214,162	3.0%	214,212	3.0%
Total Person Trips	7,060,280		7,057,943	
Total Work Trips	2,195,307		2,194,077	
Total Non-Work Trips	4,864,973		4,863,866	
Non-SOV trips*	3,744,698	**54.4%**	3,815,719	**55.4%**
Bike + Walk + Transit*	1,145,622	**16.7%**	1,218,626	**17.7%**
% PM-2hr Work Trips		**41.4%**		**41.3%**
% PM-2hr Non-Work Trips		**58.6%**		**58.7%**

*Does not include School Bus trips in calculations

Average Weekday Trips by Mode - City of Portland				
	2024 No Build		2024 Build	
	trips	share	trips	share
Drive Alone	885,886	37.7%	860,564	36.7%
work	377,252	52.4%	363,002	50.6%
non-work	508,634	31.2%	497,562	30.5%
Shared Ride	795,821	33.9%	788,886	33.6%
work	70,848	9.8%	69,760	9.7%
non-work	724,973	44.5%	719,126	44.1%
Transit	192,557	8.2%	218,359	9.3%
work	90,199	12.5%	102,127	14.2%
non-work	102,357	6.3%	116,232	7.1%
Walk	283,428	12.1%	285,094	12.1%
work	101,350	14.1%	101,948	14.2%
non-work	182,078	11.2%	183,146	11.2%
Bike	179,923	7.7%	181,849	7.7%
work	80,063	11.1%	81,037	11.3%
non-work	99,860	6.1%	100,812	6.2%
School Bus	33,335	1.4%	33,312	1.4%
Total Person Trips	2,350,370		2,347,075	
Total Work Trips	719,712		717,873	
Total Non-Work Trips	1,630,658		1,629,202	
Non-SOV trips*	1,451,728	**62.1%**	1,474,188	**63.1%**
Bike + Walk + Transit*	655,907	**28.1%**	685,302	**29.4%**
% PM-2hr Work Trips		**40.8%**		**40.8%**
% PM-2hr Non-Work Trips		**59.2%**		**59.2%**

*Does not include School Bus trips in calculations

Average Weekday Trips by Mode - Clackamas County				
	2024 No Build		2024 Build	
	trips	share	trips	share
Drive Alone	323,729	44.3%	317,977	43.6%
work	131,325	74.3%	128,407	72.9%
non-work	192,405	34.7%	189,570	34.3%
Shared Ride	288,903	39.5%	289,426	39.7%
work	19,666	11.1%	19,663	11.2%
non-work	269,237	48.6%	269,763	48.8%
Transit	6,040	0.8%	8,768	1.2%
work	2,275	1.3%	3,622	2.1%
non-work	3,765	0.7%	5,146	0.9%
Walk	66,070	9.0%	68,490	9.4%
work	17,911	10.1%	18,598	10.6%
non-work	48,158	8.7%	49,892	9.0%
Bike	13,849	1.9%	14,336	2.0%
work	5,611	3.2%	5,765	3.3%
non-work	8,238	1.5%	8,572	1.6%
School Bus	42,583	5.8%	42,514	5.8%
Total Person Trips	730,506		728,769	
Total Work Trips	176,787		176,055	
Total Non-Work Trips	553,719		552,714	
Non-SOV trips*	374,861	**53.7%**	381,021	**54.5%**
Bike + Walk + Transit*	85,958	**12.3%**	91,595	**13.1%**
% PM-2hr Work Trips		**33.3%**		**33.2%**
% PM-2hr Non-Work Trips		**66.7%**		**66.8%**

*Does not include School Bus trips in calculations

Average Weekday Trips by Mode - Washington County				
	2024 No Build		2024 Build	
	trips	share	trips	share
Drive Alone	888,064	46.5%	870,225	45.6%
work	403,405	74.7%	392,644	72.9%
non-work	484,659	35.3%	477,582	34.9%
Shared Ride	759,907	39.8%	765,998	40.2%
work	61,565	11.4%	61,634	11.5%
non-work	698,342	50.9%	704,364	51.4%
Transit	27,512	1.4%	38,453	2.0%
work	13,338	2.5%	20,036	3.7%
non-work	14,174	1.0%	18,416	1.3%
Walk	139,753	7.3%	143,648	7.5%
work	42,813	7.9%	44,309	8.2%
non-work	96,940	7.1%	99,339	7.3%
Bike	41,663	2.2%	42,988	2.3%
work	19,213	3.6%	19,666	3.7%
non-work	22,450	1.6%	23,322	1.7%
School Bus	97,865	5.1%	97,888	5.1%
Total Person Trips	1,911,516		1,907,364	
Total Work Trips	540,334		538,289	
Total Non-Work Trips	1,371,182		1,369,075	
Non-SOV trips*	968,834	**52.2%**	991,086	**53.2%**
Bike + Walk + Transit*	208,927	**11.3%**	225,089	**12.1%**
% PM-2hr Work Trips		**38.1%**		**38.1%**
% PM-2hr Non-Work Trips		**61.9%**		**61.9%**

*Does not include School Bus trips in calculations

Average Weekday Trips by Mode - East Multnomah County				
	2024 No Build		2024 Build	
	trips	share	trips	share
Drive Alone	142,289	42.3%	138,680	41.5%
work	52,351	72.5%	50,553	70.8%
non-work	89,938	34.0%	88,127	33.5%
Shared Ride	139,579	41.5%	139,870	41.8%
work	7,771	10.8%	7,730	10.8%
non-work	131,808	49.9%	132,140	50.2%
Transit	4,712	1.4%	5,834	1.7%
work	1,805	2.5%	2,499	3.5%
non-work	2,907	1.1%	3,335	1.3%
Walk	30,159	9.0%	30,943	9.3%
work	7,083	9.8%	7,275	10.2%
non-work	23,076	8.7%	23,668	9.0%
Bike	9,818	2.9%	10,162	3.0%
work	3,248	4.5%	3,340	4.7%
non-work	6,570	2.5%	6,822	2.6%
School Bus	20,700	6.2%	20,695	6.2%
Total Person Trips	336,511		334,438	
Total Work Trips	72,257		71,398	
Total Non-Work Trips	264,253		263,040	
Non-SOV trips*	184,267	**56.4%**	186,809	**57.4%**
Bike + Walk + Transit*	44,688	**13.7%**	46,939	**14.4%**
% PM-2hr Work Trips		**29.9%**		**29.8%**
% PM-2hr Non-Work Trips		**70.1%**		**70.2%**

*Does not include School Bus trips in calculations

Based on the performance assessment of the 2021-2024 MTIP, the region's continued investment to build out a multimodal transportation system will help to manage travel demand on the system. The positive signs of vehicle trips shifting over to other modes of travel means the investments are targeting gaps and providing services to give the region's travelers more options for getting to and from their destination. The shift in trips towards transit is not surprising, recognizing two major capital transit projects will open during the 2021 through 2024 time frame. These projects – Division Transit Project and MAX Red Line Extension – will increase service frequency for those lines. For the MAX Red Line, the project will also fix operational bottlenecks at the Gateway Transit Center to allow the light rail system to perform more efficiently. In addition, the performance of the 2021-2024 MTIP investments are bolstered by the transit service improvements from the revenues provided by state transportation package, House Bill 2017.

While a near one percent decrease of drive alone trips region-wide may seem minor, the 2021-2024 MTIP investments tend to perform at a greater impact locally. For example, region-wide the walking mode share for all trips increased by 0.2 percent, translating to a little over 8,900 new walk trips, which is a very small shift in mode. However, when looking at Clackamas County, the walking mode share increased by 0.4 percent resulting in over 2,400 walk trips daily. Another local impact example, the combination of transit capital projects opening and transit service improvements show over 25,800 and 10,900 new transit trips taken daily in the City of Portland and Washington County respectively. This translates into a 1.1 percent and 0.6 percent increase in transit mode share for all trips. This increase also contributes greatly to the overall regional performance of 0.8 transit mode share increase.

Miles traveled

With the 2021-2024 MTIP investments:

- Region-wide, vehicle miles traveled per capita decreases slightly from 12.9 miles to 12.8 miles; vehicle miles traveled per employee decreases slightly more from 22.9 miles to 22.6 miles.
- Person miles traveled per capita and per employee increases from 19.1 miles to 19.2 miles and 33.9 miles to 34.1 miles as vehicle miles traveled per capita and employee decreases.
- Bicycle miles traveled and walking miles traveled remained steady per capita and per employee.
- Transit miles traveled increased region-wide from 1.3 miles to 1.5 miles per capita and 2.4 miles to 2.7 miles per employee. At the same time, the average transit trip length in the region's suburbs – Washington, Clackamas, and East Multnomah County – decreased. In the cases of Washington and Clackamas County, the decrease in average transit trip length was a half mile or greater.

3-12. Miles traveled results

Region - per Capita		
	Without 2021-2024 MTIP Investments	**With 2021-2024 MTIP Investments**
Person Miles Traveled (PMT)	19.1	19.2
Vehicle Miles Traveled (VMT)	12.9	12.8
Bicycle Miles Traveled (BMT)	0.5	0.5
Pedestrian Miles Traveled	0.2	0.2
Freight Miles Traveled	0.2	0.2
Transit Miles Traveled	1.3	1.5

Region - per Employee		
	Without 2021-2024 MTIP Investments	**With 2021-2024 MTIP Investments**
Person Miles Traveled (PMT)	33.9	34.1
Vehicle Miles Traveled (VMT)	22.9	22.6
Bicycle Miles Traveled (BMT)	0.9	0.9
Pedestrian Miles Traveled	0.3	0.3
Freight Miles Traveled	0.4	0.4
Transit Miles Traveled	2.4	2.7

Region - Average Trip Length		
	Without 2021-2024 MTIP Investments	**With 2021-2024 MTIP Investments**
Person Average Trip Length	4.9	5.0
Vehicle Average Trip Length	5.6	5.6
Bicycle Average Trip Length	3.4	3.4
Pedestrian Average Trip Length	0.6	0.6
Freight Average Trip Length	13.8	13.8
Transit Average Trip Length	7.0	7.0

City of Portland - Average Trip Length		
	Without 2021-2024 MTIP Investments	With 2021-2024 MTIP Investments
Person Average Trip Length	3.2	3.3
Vehicle Average Trip Length	3.7	3.7
Bicycle Average Trip Length	2.7	2.7
Pedestrian Average Trip Length	0.6	0.6
Freight Average Trip Length	6.9	6.9
Transit Average Trip Length	4.4	4.5

MPA Clackamas County - Average Trip Length		
	Without 2021-2024 MTIP Investments	With 2021-2024 MTIP Investments
Person Average Trip Length	3.2	3.2
Vehicle Average Trip Length	3.7	3.8
Bicycle Average Trip Length	2.6	2.7
Pedestrian Average Trip Length	0.5	0.5
Freight Average Trip Length	8.8	8.8
Transit Average Trip Length	5.0	4.4

MPA Washington County - Average Trip Length		
	Without 2021-2024 MTIP Investments	With 2021-2024 MTIP Investments
Person Average Trip Length	3.5	3.5
Vehicle Average Trip Length	3.9	3.9
Bicycle Average Trip Length	2.9	2.9
Pedestrian Average Trip Length	0.6	0.6
Freight Average Trip Length	9.6	9.6
Transit Average Trip Length	5.7	5.2

East Multnomah County - Average Trip Length		
	Without 2021-2024 MTIP Investments	With 2021-2024 MTIP Investments
Person Average Trip Length	2.2	2.2
Vehicle Average Trip Length	2.4	2.5
Bicycle Average Trip Length	2.2	2.2
Pedestrian Average Trip Length	0.6	0.6
Freight Average Trip Length	3.3	3.3
Transit Average Trip Length	3.0	2.8

While the changes are slight, the increase in person miles traveled and the decrease in vehicle miles traveled means overall people are using a combination of different modes of travel for their trips as a result of the 2021-2024 MTIP investments. The slight decrease in vehicle miles traveled per capita is also a positive accomplishment recognizing the region's expected growth of 19,000 additional people per year and up to 1.8 million people by 2024. For the region's transportation system to be able to handle the additional daily demand without significantly increasing vehicle miles traveled per person shows how the gradual investment in multimodal options will have returns over time.

Interestingly, the greater decreases in vehicle miles traveled are observed in the work commute trips, where the miles traveled for commuting tend to be longer. While capital investments provide the physical infrastructure to travel by different modes to facilitate the decrease in vehicle miles traveled, programmatic investments work in tandem to result in the decreases in miles traveled. One specific programmatic investment is the Regional Travel Options (RTO) program, which coordinates travel options education and outreach efforts, operates an employer outreach program, runs a safe routes to schools program, and runs a grant program. RTO has long supported the region's multimodal capital investments. Initial results from the 2015-2019 RTO program evaluation demonstrates 275,000 people participated in RTO program activities – whether that was a neighborhood event, a specific marketing campaign, or received individualized marketing – that translated into 2.7 million impressions and 3.8 million vehicle trips reduced. In the four year span, the RTO program supported 7 million transit trips, 1 million walk trips, and 1.6 million bike trips while also awarding a total of $4.6 million, through 35 grant projects. All-in-all, the 2021-2024 MTIP investments continue to make progress towards managing the exponential travel demand on the region's transportation system in a multifaceted manner. Nonetheless, with the region growing and a strong economy, making investments which continues to manage travel demand while allowing for people and goods getting to their destinations will remain an area with room for continual improvement.

Multimodal travel times

With the 2021-2024 MTIP investments:

- Region-wide travel times improved for automobiles and transit in the peak (i.e. morning and evening commutes) and the off-peak travel period (i.e. all other times). In general, small travel time improvements are observed for every corridor.
- While region-wide travel time improvement for auto and transit were often minor – less than a minute saved in most cases – certain corridors saw significant travel time improvements either for automobiles or for transit, but no corridor saw significant travel time improvements in both.
    - Corridors expected to experience noteworthy improvements in travel time for driving includes: Beaverton to Washington Square to Tigard/Tigard to Washington Square to Tigard, Hillsboro to Tualatin/Tualatin to Hillsboro.
    - Corridors expected to experience significant improvements in transit travel times includes: Clackamas Town Center to Oregon City/Oregon City to Clackamas Town Center, Oregon City to Tualatin/Tualatin to Oregon City, Hillsboro to Forest Grove/Forest Grove to Hillsboro, Oregon City to Portland Downtown/Portland Downtown to Oregon City, Lents to Gresham, and Clackamas Town Center to Milwaukie/Milwaukie to Clackamas Town Center.
- Travel times savings topped out at nearly eight minutes saved on transit to nearly a minute saved driving.

Tables 3-13. Multimodal travel times results

Auto travel time (minutes) between locations (walk + in-vehicle time)	2024 No Build			2024 Build			Percent Change Improvement		
Origin --> Destination	**12-1pm**	**4-5pm**	**5-6pm**	**12-1pm**	**4-5pm**	**5-6pm**	**Off-Peak**	**Early Peak**	**Late Peak**
CBD to Vancouver CBD (SOV)	26.0	31.3	31.9	25.6	30.9	31.4	1%	1%	2%
CBD to Vancouver CBD (HOV)	26.0	26.5	26.8	25.6	26.1	26.4	1%	2%	2%
CBD to Tigard	25.4	28.4	28.8	25.2	28.1	28.5	1%	1%	1%
Tigard to Tualatin	12.1	13.4	13.4	12.0	13.2	13.3	1%	2%	1%
Tigard to Wilsonville	19.9	23.2	23.5	19.9	23.2	23.4	0%	0%	0%
CBD to Gateway	21.6	24.8	25.3	21.5	24.4	24.9	1%	1%	2%
Gateway to Gresham	18.7	19.9	20.1	18.7	19.8	20.0	0%	0%	0%
Gateway to Troutdale	18.3	19.1	19.3	18.3	19.1	19.3	0%	0%	0%
CBD to PDX	30.6	32.9	33.2	30.5	32.6	32.8	0%	1%	1%
Gateway to Vancouver Mall	20.7	22.5	22.7	20.7	22.4	22.6	0%	0%	0%
Gateway to Oregon City	23.6	28.6	29.4	23.5	28.4	29.1	0%	1%	1%
Oregon City to Canby	17.5	18.4	18.7	17.5	18.4	18.7	0%	0%	0%
Tualatin to Oregon City	18.9	25.2	26.2	18.9	25.2	26.2	0%	0%	0%
Tigard to Sherwood	16.2	18.6	19.1	16.0	18.3	18.7	1%	2%	2%
Beaverton to Washington Square	10.9	12.0	12.0	10.7	11.6	11.6	2%	4%	4%
Washington Square to Tigard	8.8	9.5	9.6	8.8	9.3	9.3	0%	2%	3%
Beaverton to Tigard	14.1	15.9	16.0	13.5	15.1	15.1	4%	6%	6%
CBD to Beaverton	22.6	27.0	27.7	22.5	26.7	27.4	0%	1%	1%
Beaverton to Hillsboro	22.7	24.9	25.3	22.4	24.7	25.1	1%	1%	1%
Amberglen to Hillsboro	15.1	15.8	15.9	15.1	15.8	15.9	0%	0%	0%
CBD to Hillsboro	37.1	42.8	43.8	36.9	42.3	43.3	1%	1%	1%
Hillsboro to Forest Grove	16.0	17.2	17.4	16.0	17.1	17.4	0%	0%	0%
CBD to Sauvie Island	28.5	29.0	29.0	28.5	28.9	28.9	0%	0%	0%
Rivergate to I-205/Sandy	21.7	23.0	23.1	21.7	22.9	23.0	0%	0%	0%
CBD to Lents	26.2	30.5	30.7	26.0	30.1	30.5	1%	1%	1%
Lents to Gresham	22.9	23.7	23.8	22.8	23.6	23.7	0%	0%	0%
CBD to Oregon City	35.4	41.6	42.7	35.3	41.3	42.4	0%	1%	1%
Milwaukie to Clackamas Town Center	12.3	13.2	13.2	12.2	13.2	13.2	0%	0%	0%
Clackamas Town Center to Happy Valley	12.2	14.0	14.2	12.1	13.9	14.1	0%	1%	1%
Wood Village to Gresham	11.3	11.7	11.8	11.3	11.7	11.7	0%	0%	0%
Gresham to Happy Valley	21.5	22.7	22.8	21.5	22.7	22.8	0%	0%	0%
Tualatin to Hillsboro	37.9	42.8	43.8	37.4	41.7	42.6	2%	3%	3%

Auto travel time (minutes) between locations (walk + in-vehicle time)	2024 No Build			2024 Build			Percent Change Improvement		
Origin --> Destination	12-1pm	4-5pm	5-6pm	12-1pm	4-5pm	5-6pm	Off-Peak	Early Peak	Late Peak
Vancouver CBD to CBD (SOV)	23.9	23.9	23.4	24.0	24.0	23.4	0%	0%	0%
Vancouver CBD to CBD (HOV)	23.9	23.9	23.4	24.0	24.0	23.4	0%	0%	0%
Tigard to CBD	24.5	26.7	26.8	24.5	26.7	26.9	0%	0%	0%
Tualatin to Tigard	12.3	14.0	14.0	12.1	13.9	13.9	1%	1%	1%
Wilsonville to Tigard	20.6	23.4	23.5	20.5	23.3	23.4	0%	1%	0%
Gateway to CBD	22.0	22.9	22.8	21.9	22.7	22.7	0%	1%	1%
Gresham to Gateway	18.9	19.4	19.3	18.9	19.3	19.3	0%	0%	0%
Troutdale to Gateway	18.7	19.3	19.3	18.7	19.4	19.3	0%	0%	0%
PDX to CBD	30.7	31.7	31.7	30.7	31.5	31.5	0%	1%	0%
Vancouver Mall to Gateway	19.8	20.0	19.9	19.8	20.0	19.8	0%	0%	0%
Oregon City to Gateway	23.0	26.0	26.0	22.9	25.8	25.8	0%	1%	1%
Canby to Oregon City	17.4	17.7	17.8	17.4	17.7	17.8	0%	0%	0%
Oregon City to Tualatin	19.1	22.1	22.5	19.1	22.0	22.5	0%	0%	0%
Sherwood to Tigard	16.0	18.4	18.5	15.8	18.2	18.3	1%	1%	1%
Washington Square to Beaverton	10.7	11.8	11.9	10.7	11.8	11.9	0%	0%	0%
Tigard to Washington Square	8.4	8.7	8.7	8.3	8.6	8.5	2%	2%	2%
Tigard to Beaverton	14.4	16.3	16.4	14.3	16.1	16.2	1%	1%	1%
Beaverton to CBD	22.8	25.9	26.2	22.8	25.7	26.0	0%	1%	1%
Hillsboro to Beaverton	22.3	24.2	24.4	22.2	23.9	24.1	0%	1%	1%
Hillsboro to Amberglen	15.0	15.6	15.7	15.0	15.6	15.7	0%	0%	0%
Hillsboro to CBD	37.7	42.0	42.7	37.6	41.6	42.3	1%	1%	1%
Forest Grove to Hillsboro	17.2	17.5	17.5	17.2	17.5	17.5	0%	0%	0%
Sauvie Island to CBD	27.5	28.0	28.0	27.5	28.0	28.0	0%	0%	0%
I-205/Sandy to Rivergate	21.9	22.1	22.0	21.7	22.0	21.9	1%	1%	1%
Lents to CBD	26.8	28.5	28.4	26.7	28.3	28.3	0%	1%	1%
Gresham to Lents	22.8	23.4	23.5	22.8	23.4	23.5	0%	0%	0%
Oregon City to CBD	34.8	37.4	37.3	34.7	37.1	37.1	0%	1%	1%
Clackamas Town Center to Milwaukie	12.1	13.0	13.0	12.1	12.9	12.9	0%	1%	1%
Happy Valley to Clackamas Town Center	12.1	12.5	12.4	12.1	12.5	12.4	0%	0%	0%
Gresham to Wood Village	11.2	11.4	11.3	11.2	11.4	11.3	0%	0%	0%
Happy Valley to Gresham	21.6	23.0	23.2	21.5	23.0	23.2	0%	0%	0%
Hillsboro to Tualatin	37.4	41.4	42.1	36.9	40.2	40.9	1%	3%	3%

Transit travel time (minutes) between locations (walk + wait + in-vehicle time)		2024 No Build		2024 Build		Percent Change Improvement	
Mobility Corridor	Origin --> Destination	12-1pm	4-6pm	12-1pm	4-6pm	Off-Peak	Peak
1	CBD to Vancouver CBD	55.8	36.3	55.7	35.6	0%	2%
2	CBD to Tigard	44.4	37.6	44.2	37.1	0%	1%
2	CBD to Tualatin	51.1	50.8	50.7	50.2	1%	1%
2	Tigard to Tualatin	29.1	29.5	29.0	29.5	0%	0%
3	Tigard to Wilsonville	77.2	53.2	77.1	53.2	0%	0%
4	CBD to Rose Quarter	18.3	16.8	18.3	16.8	0%	0%
5	CBD to Gateway	33.8	32.3	33.8	32.3	0%	0%
6	Gateway to Gresham	35.1	31.1	35.1	31.1	0%	0%
6	Gateway to Troutdale	56.2	55.7	53.1	55.3	6%	1%
7	CBD to PDX	49.0	47.5	49.0	47.5	0%	0%
7	Gateway to Vancouver Mall	95.4	88.1	95.4	87.6	0%	1%
8	Gateway to Oregon City	68.2	70.3	68.1	68.8	0%	2%
8	Gateway to Clackamas Town Center	30.2	30.2	30.2	30.2	0%	0%
8	Clackamas Town Center to Oregon City	42.6	44.8	42.5	43.2	0%	4%
9	Oregon City to Canby	54.3	41.1	54.3	41.1	0%	0%
10	Tualatin to Oregon City	112.1	103.2	97.5	89.0	15%	16%
11	Tigard to Sherwood	43.7	39.6	43.5	39.2	1%	1%
11	Tualatin to Sherwood	72.6	45.6	72.2	44.6	1%	2%
12	Beaverton to Washington Square	25.6	26.6	25.5	26.2	0%	1%
12	Washington Square to Tigard	18.1	18.9	18.1	18.6	0%	2%
12	Beaverton to Tigard	32.0	30.2	31.8	30.1	0%	0%
13	CBD to Beaverton	29.8	28.2	29.8	28.2	0%	0%
14	Beaverton to Hillsboro	36.4	32.4	36.4	32.4	0%	0%
14	Amberglen to Hillsboro	42.3	36.6	41.3	36.9	2%	-1%
14	CBD to Hillsboro	59.1	55.1	59.1	55.1	0%	0%
15	Hillsboro to Forest Grove	36.1	37.5	34.9	36.2	3%	3%
16	CBD to Sauvie Island	74.5	72.7	74.3	72.3	0%	1%
16	CBD to St Johns	55.0	52.3	56.2	52.1	-2%	0%
19	CBD to Lents	49.4	49.2	49.4	49.2	0%	0%
20	Lents to Gresham	53.1	49.1	44.5	49.1	20%	0%
21	CBD to Oregon City	71.0	67.3	64.8	66.7	10%	1%
22	Milwaukie to Clackamas Town Center	28.0	28.7	27.1	27.9	3%	3%
23	Clackamas Town Center to Happy Valley	38.7	35.7	38.7	40.6	0%	-12%
24	Wood Village to Gresham	32.5	25.4	32.5	25.4	0%	0%
24	Gresham to Happy Valley	91.5	84.5	91.4	89.4	0%	-5%
24	Gresham to Sandy	44.9	45.5	44.9	45.5	0%	0%

Transit travel time (minutes) between locations (walk + wait + in-vehicle time)		2024 No Build		2024 Build		Percent Change Improvement	
Mobility Corridor	Origin --> Destination	12-1pm	4-6pm	12-1pm	4-6pm	Off-Peak	Peak
1	Vancouver CBD to CBD	58.5	34.9	58.1	34.3	1%	2%
2	Tigard to CBD	45.2	41.2	45.2	41.1	0%	0%
2	Tualatin to CBD	51.0	47.9	51.0	47.7	0%	0%
2	Tualatin to Tigard	32.5	29.8	32.3	29.8	1%	0%
3	Wilsonville to Tigard	81.7	54.8	81.6	54.8	0%	0%
4	Rose Quarter to CBD	15.9	14.6	15.9	14.6	0%	0%
5	Gateway to CBD	31.7	30.4	31.7	30.4	0%	0%
6	Gresham to Gateway	35.4	31.4	35.4	31.4	0%	0%
6	Troutdale to Gateway	55.2	53.2	53.1	53.1	4%	0%
7	PDX to CBD	47.4	45.9	47.4	45.9	0%	0%
7	Vancouver Mall to Gateway	97.3	89.1	97.3	89.0	0%	0%
8	Oregon City to Gateway	68.4	69.5	68.3	67.8	0%	2%
8	Clackamas Town Center to Gateway	30.1	30.1	30.1	30.1	0%	0%
8	Oregon City to Clackamas Town Center	41.8	42.8	41.7	41.2	0%	4%
9	Canby to Oregon City	54.8	40.4	54.7	40.4	0%	0%
10	Oregon City to Tualatin	109.3	103.0	106.6	95.7	3%	8%
11	Sherwood to Tigard	43.8	39.1	43.6	38.7	1%	1%
11	Sherwood to Tualatin	72.3	44.1	72.0	43.3	0%	2%
12	Washington Square to Beaverton	23.9	25.2	23.9	25.1	0%	0%
12	Tigard to Washington Square	17.4	17.7	17.3	17.4	1%	1%
12	Tigard to Beaverton	30.6	29.1	30.4	29.1	0%	0%
13	Beaverton to CBD	31.0	29.1	30.2	28.7	3%	1%
14	Hillsboro to Beaverton	36.5	32.5	36.5	32.5	0%	0%
14	Hillsboro to Amberglen	42.8	37.2	41.8	37.1	2%	0%
14	Hillsboro to CBD	60.1	56.1	60.1	56.1	0%	0%
15	Forest Grove to Hillsboro	40.5	40.8	39.0	39.3	4%	4%
16	Sauvie Island to CBD	74.9	72.7	74.7	72.3	0%	0%
16	St Johns to CBD	56.0	55.0	55.8	54.7	0%	1%
19	Lents to CBD	48.4	48.4	48.4	48.4	0%	0%
20	Gresham to Lents	52.7	48.7	52.7	48.7	0%	0%
21	Oregon City to CBD	69.1	70.3	67.0	68.7	3%	2%
22	Clackamas Town Center to Milwaukie	28.3	28.9	27.3	27.9	4%	3%
23	Happy Valley to Clackamas Town Center	37.3	32.7	37.3	32.7	0%	0%
24	Gresham to Wood Village	32.4	25.0	32.4	25.0	0%	0%
24	Happy Valley to Gresham	90.9	82.3	82.1	82.3	11%	0%
24	Sandy to Gresham	43.7	43.8	43.6	43.8	0%	0%

The result of improved travel times by automobile and by transit with the addition 2021-2024 MTIP investments is not a surprise in light of the other trends observed in mode shifting and vehicle miles traveled. The shift of vehicle trips to other modes opens capacity in corridors allowing for vehicles and buses to travel more freely, which can explain the generalized improvement of travel times across the region. In addition, the increase in transit service, as well as some transit network rerouting in the 2021-2024 MTIP entices some of the vehicle trips to shift over to transit and improves the overall efficiency of the transit system. Thus the transit travel time experienced by a transit rider is faster. While only making up $52 million of the overall the 2021-2024 MTIP, the programmatic investments into transportation system management and operations (TSMO) by both ODOT and Metro are likely providing small improvements in travel times. The TSMO investments are constructing variable message-real time traveler information signs on roadways, upgrading signals, adding transit and bicycle signal priority, and deploying other active traffic management tools to make the roadway network run more effectively.

At the corridor level, the 2021-2024 MTIP investment program included a handful of large scale capital projects, which likely had significant localized impact to the travelers in those corridors. For example, driving travel times improved in the corridor between Beaverton to Washington Square to Tigard. The main roadway in this corridor is OR 217, where there is northbound and southbound auxiliary lanes project in the 2021-2024 MTIP. This project is the likely cause for the improvements seen in corridor in the performance analysis. Other notable corridors include Downtown Portland to Oregon City and Tualatin to Oregon City by transit. While the transit travel time is substantial – over an hour from door-to-door – the decrease of eight minutes is significant and is likely due to headway improvements on 23 transit lines. The transit travel time improvement observed in the corridor between Forest Grove and Hillsboro is likely due to the transit line 57 headway improvements where peak and off peak travel time was reduced from 15 minutes to 12 minutes.

Addressing equity

Performance measures: Access to travel options – Active transportation system completeness, access to jobs, and access to community place.

Access to travel options – Active transportation system completeness

With the 2021-2024 MTIP investments:

- The region continues to complete gaps in the regional active transportation network, with the trail network seeing the greatest increases in completion.
    - Region-wide sidewalk completion reaches 58 percent, on-street and off-street bicycle network completion reaches 55 percent and 39 percent respectively, and trail completion reaches 43 percent.
    - Sidewalk completion on arterials remains one of the lowest rates of completion reaching only 37 percent.
    - The completion of sidewalk, on-street bicycle, and trail gaps around high capacity transit and frequent transit service lines reach some of the higher levels of system completion.
- The completion of sidewalk, bike, and trail gaps on the active transportation network is greater in equity focus areas and outpaces the percentage of system completion for the region and non-equity focus areas.
    - In particular, sidewalk completion near transit in equity focus areas reaches 74 percent.
- Nonetheless, the region remains far from its goal of reaching 100 percent completion and build out of the regional active transportation network.

Tables 3-14. Active transportation system completeness results

System Completeness - Region-wide		Base Year		MTIP 2021-2024	
		miles	% complete	miles	% complete
Sidewalks	Regional	580	57%	589	58%
	Equity Focus Area	361	69%	368	70%
	Non-Equity Focus Area	219	44%	221	45%
On-street bike	Regional	603	52%	632	55%
	Equity Focus Area	345	60%	363	63%
	Non-Equity Focus Area	258	45%	269	47%
Off-street bike	Regional	224	37%	234	39%
	Equity Focus Area	97	44%	105	48%
	Non-Equity Focus Area	127	33%	129	34%
Trails	Regional	216	41%	228	43%
	Equity Focus Area	86	45%	96	50%
	Non-Equity Focus Area	130	39%	132	40%

System Completeness - On Arterials		Base Year		MTIP 2021-2024	
		miles	% complete	miles	% complete
Sidewalks	Regional	536	36%	552	37%
	Equity Focus Area	323	52%	335	54%
	Non-Equity Focus Area	213	25%	217	25%
On-street bike	Regional	562	38%	590	40%
	Equity Focus Area	310	50%	329	53%
	Non-Equity Focus Area	252	29%	261	30%

System Completeness - Around Transit		Base Year		MTIP 2021-2024	
		miles	% complete	miles	% complete
Sidewalks	Regional	555	63%	563	64%
	Equity Focus Area	351	72%	357	74%
	Non-Equity Focus Area	204	52%	206	52%
On-street bike	Regional	539	58%	564	60%
	Equity Focus Area	325	62%	342	65%
	Non-Equity Focus Area	213	52%	222	54%
Off-street bike	Regional	160	46%	169	48%
	Equity Focus Area	80	51%	87	56%
	Non-Equity Focus Area	81	42%	82	42%
Trails	Regional	148	48%	159	52%
	Equity Focus Area	69	50%	78	56%
	Non-Equity Focus Area	79	47%	81	49%

The investments in the 2021-2024 MTIP will help build out infrastructure to make it safer for pedestrians and bicyclists to get to transit stops.

The 2021-2024 MTIP investments continue to make gradual progress towards completing the active transportation network. Additional system completion as a result of the 2021-2024 MTIP investments ranges from one to five percent region-wide. The 2021-2024 MTIP investments make the greatest strides toward system completion in the trail network, with a five percent increase in trail completion.

The 2021-2024 MTIP investments make relatively small increases in active transportation system completion regionwide, but in equity focus areas there are higher levels of completion relative to non-equity focus areas and the region. Sidewalk, on-street and off-street bicycle, and trail network completion reaches 50 percent or greater in equity focus areas. Sidewalk completion is the greatest in equity focus areas reaching 70 percent. The higher completion level in equity focus areas reflects the policy direction set forth in the 2018 RTP and reinforced by the 2021-2024 MTIP policy direction to prioritize the needs and desired outcomes of historically marginalized communities. Active transportation system completion has and remains a priority for historically marginalized communities, as heard through public outreach and engagement with these communities. Additionally, the need to complete the active transportation network in historically marginalized communities is supported through travel survey data. The Oregon Household Activity Survey show people of color and lower income households tend to use active transportation and transit more for work and non-work trips.

Figure 3-4. Completeness of Regional Sidewalk Network

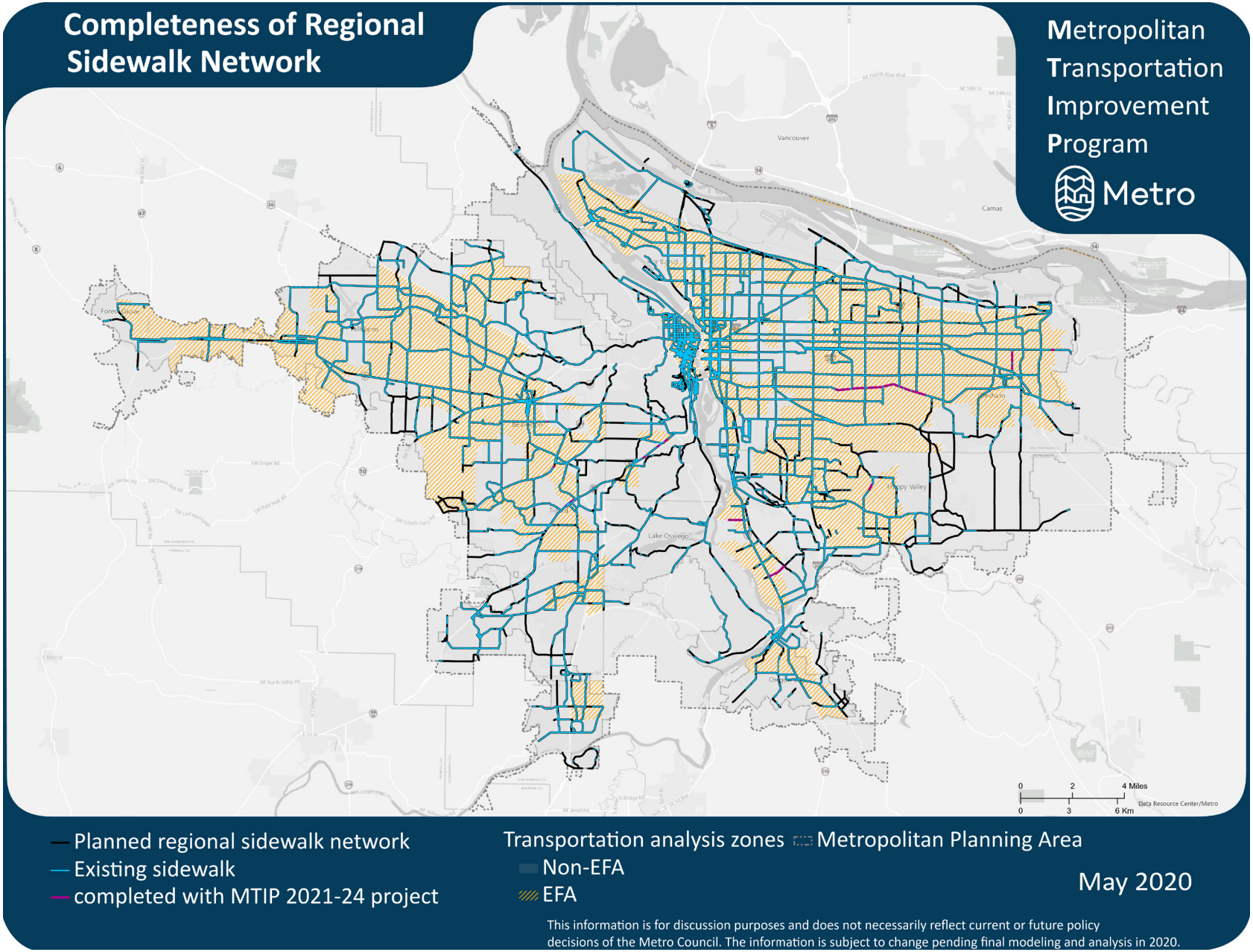
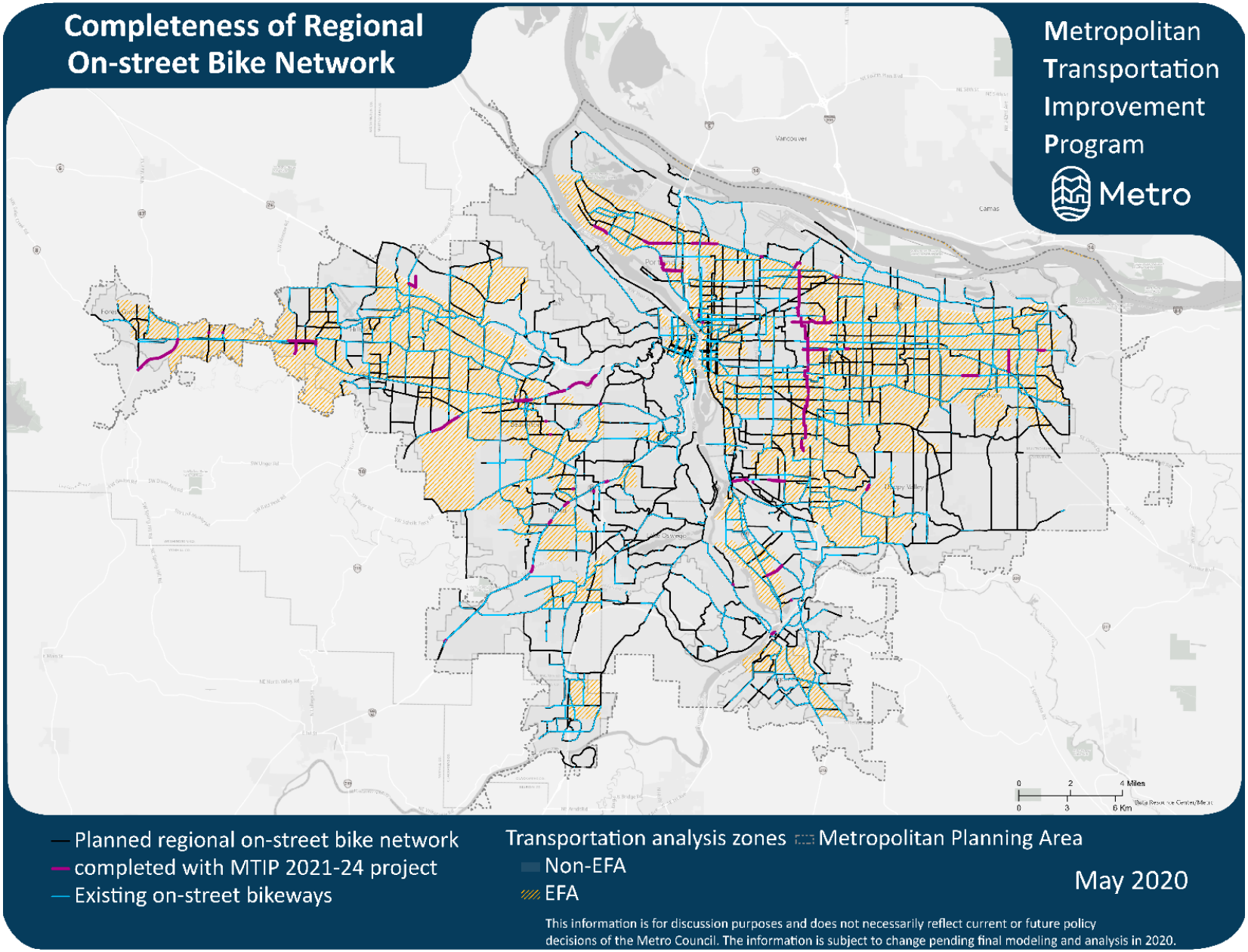


Figure 3.5. Completeness of Regional On-Street Bicycle Network



In addition to equity focus areas, the level of sidewalk and on-street bicycle network completion near transit also outpace the regionwide rates of network completion. This emphasis on the active transportation network near transit recognizes transit trips often start and end by active transportation. These investment are aligned with the region's significant investment in the transit system. The rates of sidewalk and on-street bicycle network completion near transit are 64 percent and 60 percent respectively, compared to the regional system completion of sidewalks and on-street bicycle network at 58 percent and 55 percent respectively. The most significant network completion is around transit in equity focus areas where, sidewalk, on-street bicycle, and trail network completion with the 2021-2024 MTIP investments reaches 74 percent, 65 percent, and 56 percent respectively.

Additional 2021-2024 MTIP active transportation system completeness maps can be found in Appendix II.

Performance measure: Access to jobs and community

With the 2021-2024 MTIP investments:

- Region-wide access to jobs and community places by transit and automobile (i.e. driving) increases.
  - The increase in access is primarily by transit, while the increase in access by automobiles (i.e. driving) is slight – ranging from one to three percent.
  - Access to low and middle wage jobs by transit increases between nine and 16 percent
  - The increase in access to jobs and community places by transit during the peak travel period (i.e. rush hour) is often two to five percent less than the increase in access to jobs and community places by transit during the off-peak travel period.
- Access to jobs and community places by bicycling and walking remains the same region-wide, but bicycling access does change in Clackamas County.
- In equity focus areas, access to jobs and community places is mixed.
  - While the rate of access to jobs by transit generally increases in equity focus areas, the rate of increase is less than the rate of increases in non-equity focus areas, regardless of time of day.
  - There is a greater increase in access to community places by transit in equity focus areas during the peak and off-peak travel periods than non-equity focus areas.
  - The most significant increases in access to community places by transit was seen during the off-peak period in equity focus areas and particularly equity focus areas in suburbs.
  - While slight, the access to jobs and community places by automobile (i.e. driving) varied whether the increase was greater in equity focus areas compared to non-equity focus areas.
- In general, Washington, Clackamas, and East Multnomah County see significant increases in access to community places by transit, particularly in the off-peak travel period (i.e. not during rush hours)

Entire MPA Weighted Average Accessibility

All values are averaged by total # of TAZs meeting criteria AND weighted by # of households in those TAZs

Job Access -- All Jobs							Job Access -- All Jobs							Job Access -- All Jobs
	% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments						
	AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W	
Region	2%	1%	10%	13%	0%	0%	City of Portland	2%	1%	11%	14%	0%	0%	Washington County
Non-Equity Focus Areas	2%	1%	11%	13%	0%	0%	City of Portland Non-Equity Focus Areas	2%	1%	10%	13%	0%	0%	Washington County Non-Equity Focus Areas
Equity Focus Areas	2%	1%	10%	13%	0%	0%	City of Portland Equity Focus Areas	1%	1%	13%	15%	0%	0%	Washington County Equity Focus Areas

Job Access -- Low-Wage Jobs							Job Access -- Low-Wage Jobs							Job Access -- Low-Wage Jobs
	% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments						
	AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W	
Region	2%	1%	10%	13%	0%	0%	City of Portland	2%	1%	11%	14%	0%	0%	Washington County
Non-Equity Focus Areas	2%	1%	11%	13%	0%	0%	City of Portland Non-Equity Focus Areas	2%	1%	10%	13%	0%	0%	Washington County Non-Equity Focus Areas
Equity Focus Areas	2%	1%	10%	13%	0%	0%	City of Portland Equity Focus Areas	1%	1%	13%	14%	0%	0%	Washington County Equity Focus Areas

Job Access -- Medium-Wage Jobs							Job Access -- Medium-Wage Jobs							Job Access -- Medium-Wage Jobs
	% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments						
	AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W	
Region	2%	1%	10%	13%	0%	0%	City of Portland	2%	1%	11%	14%	0%	0%	Washington County
Non-Equity Focus Areas	2%	1%	11%	13%	0%	0%	City of Portland Non-Equity Focus Areas	2%	1%	10%	13%	0%	0%	Washington County Non-Equity Focus Areas
Equity Focus Areas	2%	1%	10%	13%	0%	0%	City of Portland Equity Focus Areas	1%	1%	13%	15%	0%	0%	Washington County Equity Focus Areas

Job Access -- High-Wage Jobs							Job Access -- High-Wage Jobs							Job Access -- High-Wage Jobs
	% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments						
	AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W	
Region	2%	1%	10%	13%	0%	0%	City of Portland	2%	1%	11%	14%	0%	0%	Washington County
Non-Equity Focus Areas	2%	1%	11%	14%	0%	0%	City of Portland Non-Equity Focus Areas	2%	1%	10%	13%	0%	0%	Washington County Non-Equity Focus Areas
Equity Focus Areas	2%	1%	10%	13%	0%	0%	City of Portland Equity Focus Areas	1%	1%	13%	15%	0%	0%	Washington County Equity Focus Areas

ss to jobs results

Job Access -- All Jobs

% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments					
AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W
2%	1%	7%	13%	0%	0%	Clackamas County	4%	2%	11%	14%	-1%	0%	East Multnomah County	1%	0%	8%	13%	0%	0%
2%	1%	7%	15%	0%	0%	Clackamas County Non-Equity Focus Areas	4%	2%	14%	15%	0%	0%	East Multnomah County Non-Equity Focus Areas	1%	1%	2%	7%	0%	0%
2%	1%	8%	7%	0%	0%	Clackamas County Equity Focus Areas	3%	2%	9%	13%	-1%	0%	East Multnomah County Equity Focus Areas	1%	0%	9%	13%	0%	0%

Job Access -- Low-Wage Jobs

% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments					
AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W
2%	1%	7%	13%	0%	0%	Clackamas County	3%	2%	11%	14%	-1%	0%	East Multnomah County	1%	0%	8%	13%	0%	0%
2%	1%	7%	15%	0%	0%	Clackamas County Non-Equity Focus Areas	4%	2%	14%	15%	0%	0%	East Multnomah County Non-Equity Focus Areas	1%	1%	2%	6%	0%	0%
2%	1%	7%	7%	0%	0%	Clackamas County Equity Focus Areas	3%	2%	9%	13%	-1%	0%	East Multnomah County Equity Focus Areas	1%	0%	9%	13%	0%	0%

Job Access -- Medium-Wage Jobs

% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments					
AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W
2%	1%	7%	13%	0%	0%	Clackamas County	4%	2%	11%	14%	-1%	0%	East Multnomah County	1%	0%	8%	13%	0%	0%
2%	1%	7%	15%	0%	0%	Clackamas County Non-Equity Focus Areas	4%	2%	14%	15%	0%	0%	East Multnomah County Non-Equity Focus Areas	1%	1%	2%	7%	0%	0%
2%	1%	8%	7%	0%	0%	Clackamas County Equity Focus Areas	3%	2%	9%	14%	-1%	0%	East Multnomah County Equity Focus Areas	1%	0%	9%	13%	0%	0%

Job Access -- High-Wage Jobs

% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments							% Change in Jobs with 2021-2024 MTIP Investments					
AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W		AP	AOP	TP	TOP	B	W
2%	1%	7%	13%	0%	0%	Clackamas County	4%	2%	11%	14%	-1%	0%	East Multnomah County	1%	0%	8%	13%	0%	0%
2%	1%	7%	15%	0%	0%	Clackamas County Non-Equity Focus Areas	4%	2%	14%	15%	0%	0%	East Multnomah County Non-Equity Focus Areas	1%	1%	2%	7%	0%	0%
2%	1%	8%	7%	0%	0%	Clackamas County Equity Focus Areas	3%	2%	9%	13%	-1%	0%	East Multnomah County Equity Focus Areas	1%	0%	9%	13%	0%	0%

Tables 3-16. Access community spaces

Entire MPA Weighted Average Accessibility

All values are averaged by total # of TAZs meeting criteria AND weighted by # of households in those TAZs

Access to Community Places -- All	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Region	2%	1%	11%	13%	0%	0%
Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
Equity Focus Areas	2%	1%	12%	15%	0%	0%

Access to Community Places -- All Community Places	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
City of Portland	2%	1%	11%	13%	0%	0%
City of Portland Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
City of Portland Equity Focus Areas	2%	1%	12%	14%	0%	0%

Access to Community Places -- Food	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Region	2%	1%	12%	16%	0%	0%
Non-Equity Focus Areas	3%	1%	12%	15%	0%	0%
Equity Focus Areas	2%	1%	12%	16%	0%	0%

Access to Community Places -- Food	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
City of Portland	2%	1%	12%	15%	0%	0%
City of Portland Non-Equity Focus Areas	3%	1%	12%	14%	0%	0%
City of Portland Equity Focus Areas	2%	1%	12%	15%	0%	0%

Access to Community Places -- Medical	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Region	3%	1%	11%	13%	0%	0%
Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
Equity Focus Areas	2%	1%	11%	15%	0%	0%

Access to Community Places -- Medical	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
City of Portland	3%	1%	11%	13%	0%	0%
City of Portland Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
City of Portland Equity Focus Areas	2%	1%	11%	13%	0%	0%

Access to Community Places -- All Others	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Region	2%	1%	11%	14%	0%	0%
Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
Equity Focus Areas	2%	1%	12%	16%	0%	0%

Access to Community Places -- All Others	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
City of Portland	2%	1%	11%	13%	0%	0%
City of Portland Non-Equity Focus Areas	3%	1%	10%	12%	0%	0%
City of Portland Equity Focus Areas	2%	1%	12%	15%	0%	0%

Access to Community Places -- All Community Places	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Washington County	2%	1%	11%	21%	0%	0%
Washington County Non-Equity Focus Areas	3%	1%	10%	26%	0%	0%
Washington County Equity Focus Areas	2%	1%	12%	5%	0%	0%

Access to Community Places -- All Community Places	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Clackamas County	2%	2%	11%	20%	0%	0%
Clackamas County Non-Equity Focus Areas	3%	2%	10%	15%	0%	0%
Clackamas County Equity Focus Areas	2%	2%	12%	23%	0%	0%

Access to Community Places -- All Community Places	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
East Multnomah County	2%	1%	11%	15%	0%	0%
East Multnomah County Non-Equity Focus Areas	3%	0%	10%	4%	0%	0%
East Multnomah County Equity Focus Areas	2%	1%	12%	16%	0%	0%

Access to Community Places -- Food	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Washington County	2%	1%	12%	21%	0%	0%
Washington County Non-Equity Focus Areas	3%	1%	12%	27%	0%	0%
Washington County Equity Focus Areas	2%	1%	12%	6%	0%	0%

Access to Community Places -- Food	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Clackamas County	2%	2%	12%	21%	0%	0%
Clackamas County Non-Equity Focus Areas	3%	2%	12%	18%	0%	0%
Clackamas County Equity Focus Areas	2%	2%	12%	22%	0%	0%

Access to Community Places -- Food	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
East Multnomah County	2%	0%	12%	16%	0%	0%
East Multnomah County Non-Equity Focus Areas	3%	0%	12%	2%	0%	0%
East Multnomah County Equity Focus Areas	2%	0%	12%	19%	0%	0%

Access to Community Places -- Medical	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Washington County	3%	1%	11%	21%	0%	0%
Washington County Non-Equity Focus Areas	3%	1%	10%	27%	0%	0%
Washington County Equity Focus Areas	2%	1%	11%	5%	0%	0%

Access to Community Places -- Medical	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Clackamas County	3%	2%	11%	21%	0%	0%
Clackamas County Non-Equity Focus Areas	3%	2%	10%	14%	0%	0%
Clackamas County Equity Focus Areas	2%	2%	11%	24%	0%	0%

Access to Community Places -- Medical	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
East Multnomah County	3%	1%	11%	10%	0%	0%
East Multnomah County Non-Equity Focus Areas	3%	0%	10%	1%	0%	0%
East Multnomah County Equity Focus Areas	2%	1%	11%	11%	0%	0%

Access to Community Places -- All Others	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Washington County	2%	1%	11%	21%	0%	0%
Washington County Non-Equity Focus Areas	3%	1%	10%	25%	0%	0%
Washington County Equity Focus Areas	2%	1%	12%	6%	0%	0%

Access to Community Places -- All Others	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
Clackamas County	2%	2%	11%	20%	0%	0%
Clackamas County Non-Equity Focus Areas	3%	2%	10%	15%	0%	0%
Clackamas County Equity Focus Areas	2%	2%	12%	22%	0%	0%

Access to Community Places -- All Others	% Change in Community Places with 2021-2024 MTIP Investments					
	AP	AOP	TP	TOP	B	W
East Multnomah County	2%	0%	11%	17%	0%	0%
East Multnomah County Non-Equity Focus Areas	3%	0%	10%	6%	0%	0%
East Multnomah County Equity Focus Areas	2%	1%	12%	19%	0%	0%

Similar to the results of the 2018 RTP transportation equity evaluation, access to jobs and community places increases with the 2021-2024 MTIP package of investments more so for transit and slightly for automobiles. The 2021-2024 MTIP produced minimal to no change in access to jobs and community places by bicycles, and walking. The increase in access to jobs and community places by transit is likely a result of the significant transit investments in the 2021-2024 MTIP. In the upcoming four federal fiscal years, two major transit capital investments are expected to open: the MAX Red Line Extension and the Division Transit Project. These two capital projects will add and improve existing transit service in the region. Additionally, the MAX Red Line Extension project will fix a major light rail operational bottleneck at the Gateway Transit Center, which will increase the service and capacity of the entire light rail network.

As noted the 2021-2024 MTIP made very minor changes in people's ability to access jobs and community places by bicycle and walking despite over $120 million in investment. This held true region-wide and in equity focus areas and sub-regions, with the exception of Clackamas County. Part of this result is likely due to the limited granularity of travel demand model and features like a pedestrian crossing or neighborhood greenway treatments not well captured in the tool. Therefore, a number of bicycle investments were not modeled and assessed as part of this accessibility measure. (See Appendix II). Of the bicycle investments modeled in the 2021-2024 MTIP assessment, the investments managed to make an impact in bicycle access in Clackamas County. The Monroe Street Greenway, included in the 2021-2024 MTIP, is likely the reason for the increase in access by bicycle in Clackamas County. This bicycle greenway will fill a gap in the bicycle network in the southern portion of the region as well as create a new connection between two major bicycle facilities. The Monroe Street Greenway creates a continuous connection to the Trolley Trail (heading south) and the Springwater Trail (heading north and heading east), linking two of the region's highly used multiuse pathways for cyclists. Despite the new bicycle connectivity, the assessment shows a decrease in bicycle access in Clackamas County. While a decrease in access may appear negative or counterintuitive, this change is likely a sign of new bicycle facilities attracting more bicycle travel. This performance measure assesses the number of jobs and places reached within a certain travel time. Well-designed bicycle facilities may not be the fastest and straight-forward way to reach jobs and community places, but an enticing enough tradeoff that people traveling by bike may ride a little longer to reach jobs and community places. Therefore, any change in accessibility by bicycle should be seen generally as a positive result.

The 2021-2024 MTIP investments produced mixed results in increasing access to jobs and community places for equity focus areas. The mixed results of 2021-2024 MTIP investments point to opportunities for improvements. Specifically, for access to jobs by transit, during the peak and off-peak travel period, non-equity focus areas see a greater increase in access to jobs by transit compared to equity focus areas. For access to community places by transit, non-equity focus areas see a greater increase in access only for the peak travel period However, the percent change may not tell the complete story. The total number of jobs accessible to the average household in an equity focus area is overall much greater than in non-equity focus areas. (See jobs and community places total tables in Appendix II). This means additional access to five jobs for an equity focus area may only have marginal impact to those households because the total number of accessible jobs is very abundant. Whereas compared to a non-equity focus area the additional access to five jobs has a larger impact since the total number of accessible jobs is less abundant.

With 2021-2024 MTIP investments, access to community places by transit see a similar pattern as access to jobs where the non-equity focus areas see a greater increase in access to places like libraries, grocery stores, and hospitals compared to equity focus areas. However, this is only during the peak travel period (i.e. morning and evening rush hour), where during the non-peak travel period, the equity focus areas see greater increases access to community places by transit compared to non-equity focus areas. The improvements in accessing community places by transit during the

off-peak travel period in equity focus areas reflects a priority identified by historically marginalized communities. Better transit service during the off-peak period serves people who need to access jobs outside of traditional work hours and run errands in the middle of the day.

When looking down at the sub-regional scale, there was increased transit access to jobs and community places during the peak and off-peak travel periods in the equity focus areas in City of Portland and East Multnomah County, both at rates greater than the region and non-equity focus areas. East Multnomah County has particularly high increases in access to community places in its equity focus areas, which ranged from 12 percent increases to 17 percent increases.

In Washington County, access to jobs and community places by transit increases at greater rates than the non-equity focus areas, but only during the peak travel period, when transit service levels are highest. When looking at the off-peak period, the non-equity focus areas in Washington County see greater increases in access. In Clackamas County regardless of time of day, the increase in access to jobs is lower in equity focus areas than non-equity focus areas. However, the increased access to community places in equity focus areas in Clackamas County is greater than in non-equity focus areas. Some of these sub-regional results may possibly be attributed to anticipated service improvements on specific transit lines between 2021 through 2024. For example, headway improvements for TriMet transit line 57 are anticipated in both the peak and off-peak period. This line serves a number of equity focus areas along the Tualatin Valley Highway in Forest Grove, Cornelius, Hillsboro, and Beaverton. This service improvement can partially explain some of the access results seen with the 2021-2024 MTIP investments in Washington County.

Ultimately, the 2021-2024 MTIP investment program's mixed results of the access to jobs and community places performance measures reflects both progress and opportunities for additional work. Increased access within equity focus areas and sub-regions are results of transit agencies and local jurisdictions working together to prioritize and focus service to best serve community needs. It also reflects jurisdictions following the adopted policy direction to focus and prioritize investments that advance equitable outcomes for historically marginalized communities. Nonetheless, it is important to recognize that the 2021-2024 MTIP investment package results in a greater increase in access to jobs by transit all times of day in non-equity focus areas than in equity focus areas. The results may indicate providing focused transit service may not be enough to be able to service historically marginalized communities. For example, the lesser performance of transit access to jobs in equity focus areas in Clackamas County during the peak period – despite five transit lines in Clackamas County with improved headways – points to a need for a combination of strategies and partner agencies to work creatively and collaboratively to help make transit successful in serving the historically marginalized communities in Clackamas County. Continuing to advance this policy direction and meet regional goals will take time and a combination of different efforts. This presents both challenge and opportunity for implementing the 2021-2024 MTIP investment program and future MTIP cycles.

Addressing climate

Performance measure: Greenhouse gas emissions reduction

With the 2021-2024 MTIP investments:

- Greenhouse gas emissions decreases by volume (metric tons) and per person.
- The region is on track to meet its greenhouse gas emissions reduction targets per capita from light duty vehicles for 2035 and 2040.

Figure 3-6. Greenhouse gas emissions reduction by volume

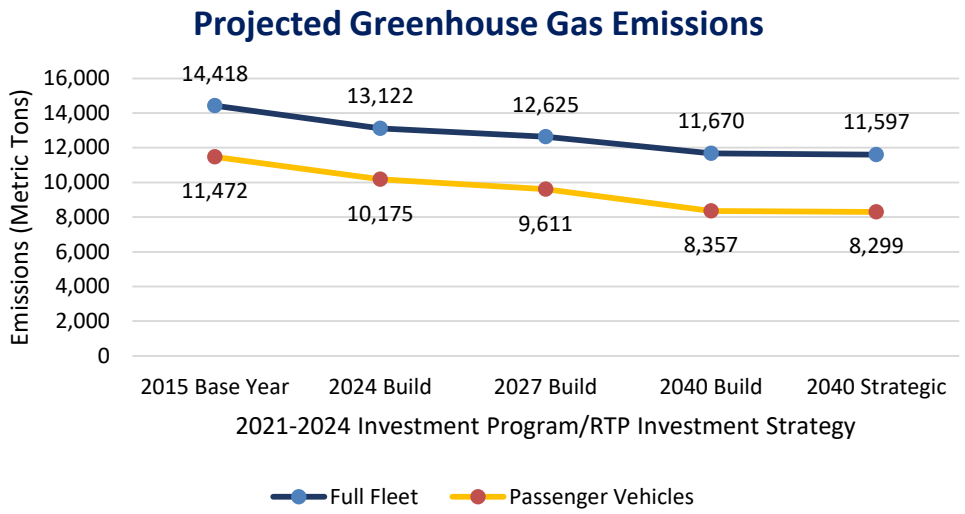
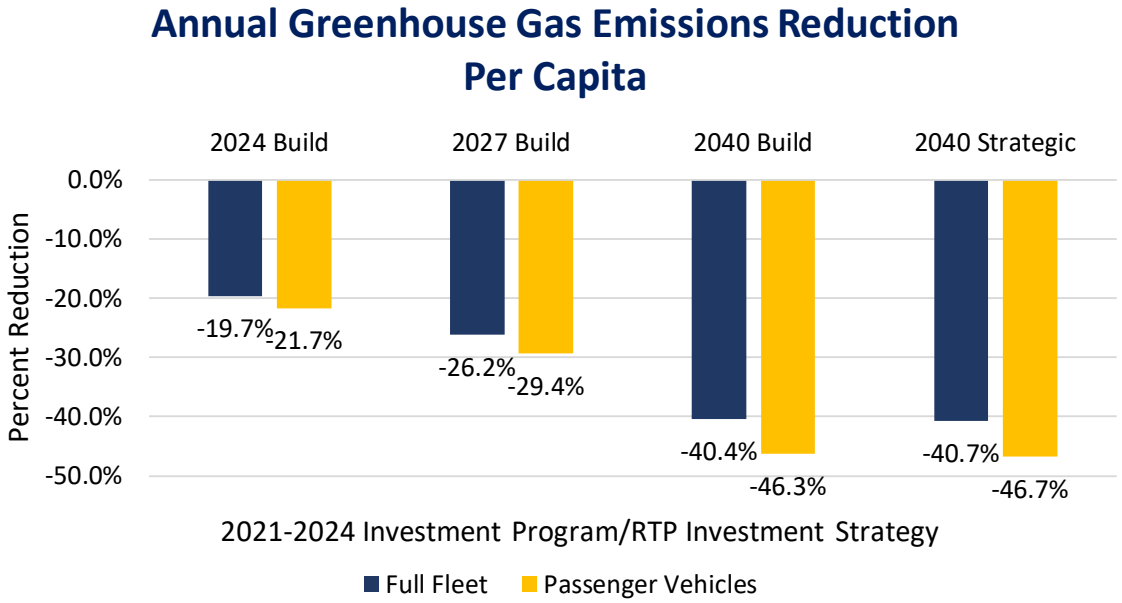


Figure 3-7. Greenhouse gas emissions reduction per capita



The analysis of the 2021-2024 MTIP package of investments show greenhouse gas emissions decreasing by volume (metric tons) and the reduction at a per person level is on pace to meet the region's greenhouse gas emissions reduction targets. When looking at the greenhouse gas emissions reduction as a result of the 2021-2024 MTIP investments in comparison to the 2018 RTP investment strategies, the 2021-2024 MTIP aligns with the decreasing emission trajectory shown by the RTP. The charts show a comparison of the projected greenhouse gas emissions reductions by volume and per capita for the 2021-2024 MTIP investment package, the 2018 RTP investment packages for 2027 and 2040 under a financially constrained environment, and an investment package in 2040 that is not financially constrained. The charts show the 2021-2024 MTIP investments on pace towards the projected 2027 and 2040 greenhouse gas emissions reduction. The analysis also shows the contribution the 2021-2024 MTIP investment package is making towards the region's greenhouse gas emission reduction target of 29 percent per capita by 2035, per state legislative mandate.

Greenhouse gas emissions reductions from passenger vehicles and full fleet (i.e. heavy and medium duty trucks) both show promising trends. The decrease in emissions from the full fleet show that emissions from trucks are also trending downward. This is important because diesel trucks emit not only greenhouse gases but also other harmful air pollutants, including fine particulate matter, that cause of respiratory illnesses. Recent increased interventions in the passenger vehicle realm to promote fuel efficiency and economy are also contributing to greater reduction in emissions for passenger vehicles.

The progress the 2021-2024 MTIP investment package is making toward reducing emissions and meeting the region's climate goals is not surprise, considering the mix of active transportation, transit, system management and operations, and supportive programmatic investments included in the 2021-2024 MTIP. The major transit investments likely play a large role in the emissions reductions due to vehicle trips shifting. Additionally, several of the region's programmatic investments – such as Safe Routes to School, Transit Oriented Development, and Regional Travel Options – play a role in encouraging walking, biking, and transit as viable options for getting around. A gradual mix of diversified investments continue to show progress towards achieving the region's goals and desired outcomes to reduce emissions of greenhouse gases from transportation.

Addressing safety

Performance measures: Level of investment in safety projects by cost and percentage and subdivided by equity focus areas and high injury corridors.

With the 2021-2024 MTIP investments:

- The region's level of investment to address crashes that result in fatalities and serious injuries is a little over $458 million.
- Nearly half of the projects (69 of 150) focus on the safety of the system and reducing crashes that result in fatalities and serious injuries.
- Of the 69 safety projects, 48 projects address safety issues on the region's high injury corridors and intersections. All 48 projects that address safety issues on the region's high injury corridors and intersections are in equity focus areas.
- A total of $440 million of the region's safety investment is directed in the region's equity focus areas. A little over $385 million of the $440 million is focused on the high injury corridors in the equity focus areas.
- At a sub-regional scale, the City of Portland and Clackamas County have proportionately the greatest level of investment dedicate to addressing crashes that result in fatalities and serious injuries. Both sub-regions have also focused their investment to address safety issues on high injury corridors in equity focus areas.

Tables 3-17. Level of investment in safety results

	Region						
	Total Projects: All 2021-2024 MTIP Projects*	Number of Safety Projects	Number of Safety Projects on High Injury Corridors	Percent of Safety Projects out of all 2021-2024 MTIP Projects	Percent Sub-Region Share of Safety Projects out of 2021-2024 MTIP Safety Projects	Percent of Safety Projects on High Injury Corridors out of all 2021-2024 MTIP Projects	Percent of Safety Projects on High Injury Corridors out of all 2021-2024 MTIP Safety Projects
Number of Projects	150	69	48	46%		32%	70%
City of Portland	73	38	29	52%	55%	40%	76%
Washington County	39	16	13	41%	23%	33%	81%
Clackamas County	29	13	8	45%	19%	28%	62%
East Multnomah County	17	7	5	41%	10%	29%	71%

Some projects are in multiple sub-regions. Summing the subregions will exceed the total projects for the region.

	Region						
	Total Programming: All MTIP Projects***	Total Programming of Safety Projects	Total Programming of Safety Projects on High Injury Corridors	Percent of Safety Programming out of all 2021-2024 MTIP Programming	Percent of Sub-Region Safety Programming out of 2021-2024 MTIP Safety Programming	Percent of Safety Programming on HIC out of all 2021-2024 MTIP Programming	Percent of Sub-Region Safety Programming on HIC out of all 2021-2024 MTIP SafetyProgramming
Total Programming**	$ 1,491,674,573	$ 458,818,447	$ 385,524,891	31%	N/A	26%	N/A
City of Portland	$ 559,273,989	$ 278,262,605	$ 259,877,964	50%	61%	46%	67%
Washington County	$ 641,540,721	$ 88,984,359	$ 66,579,083	14%	19%	10%	17%
Clackamas County	$ 109,182,877	$ 74,219,886	$ 52,259,455	68%	16%	48%	14%
East Multnomah County	$ 36,748,982	$ 16,237,352	$ 6,808,389	44%	4%	19%	2%

**Total Programming does not include the cost for "Columbia Bus Base" and "Division Transit Project" as these numbers were not provided at the time of the analysis.

***Two ODOT projects ("US30: Sandy River - OR35" and "OR213: I-205 - OR211") lie outside of the analysis subareas. Totaling the subareas will therefore be less than the "Total Programming."

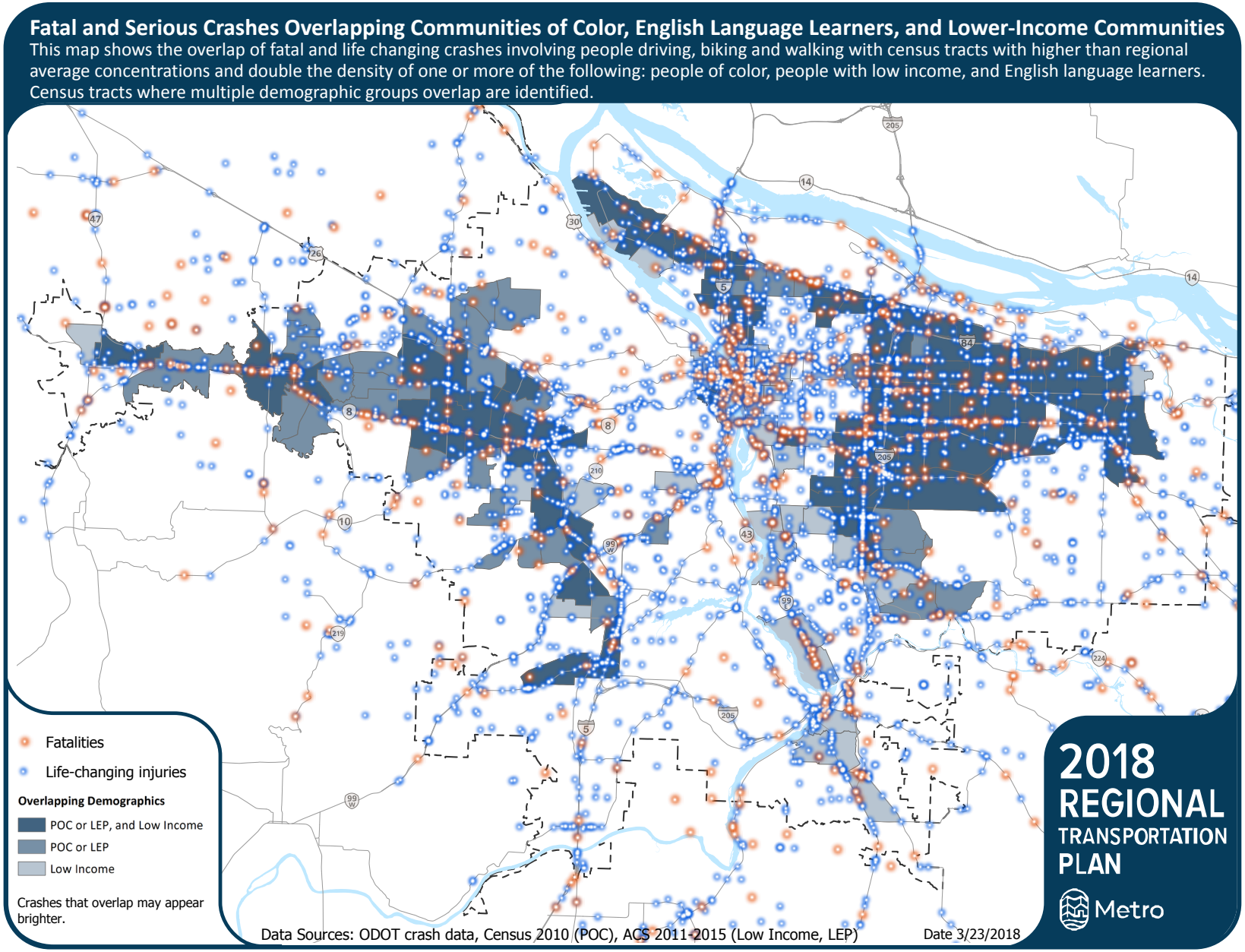
Total Programming - The amount of funding anticipated to be spent in the 2021 through 2024 timeframe. Does not always reflect total cost if the project started prior to 2021 or expected to be completed after 2024.

Total Cost - The entire amount spent to deliver the project

Equity Focus Areas						
Total 2021-2024 MTIP Projects in Equity Focus Areas*	Percent of 2021-2024 MTIP Projects in Equity Focus Areas	Number of Safety Projects in Equity Focus Areas	Number of Safety Projects on High Injury Corridors in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Projects in Equity Focus Areas out of All Projects in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Projects on High Injury Corridors in Equity Focus Areas out of All Projects in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Projects on High Injury Corridors in Equity Focus Areas out of All Safety Projects in Equity Focus Areas
122	81%	62	48	51%	39%	77%
63	86%	37	29	59%	46%	78%
32	82%	15	13	47%	41%	87%
21	72%	10	8	48%	38%	80%
15	88%	7	5	47%	33%	71%

Equity Focus Areas						
Total 2021-2024 MTIP Programming in Equity Focus Areas***	Percent of 2021-2024 MTIP Programming in Equity Focus Areas	Total Programming of Safety Projects in Equity Focus Areas	Total Programming of Safety Projects on High Injury Corridors in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Programming of all Programming in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Programming on High Injury Corridors in Equity Focus Areas of all Programming in Equity Focus Areas	Percent of 2021-2024 MTIP Safety Programming on High Injury Corridors in Equity Focus Areas out of all Safety Programming in Equity Focus Areas
$ 1,321,447,147	89%	$ 440,187,386	$ 385,524,891	33%	29%	88%
$ 502,093,477	90%	$ 277,125,854	$ 259,877,964	55%	52%	94%
$ 566,710,823	88%	$ 87,901,089	$ 66,579,083	16%	12%	76%
$ 78,325,145	72%	$ 58,923,091	$ 52,259,455	75%	67%	89%
$ 30,503,943	83%	$ 16,237,352	$ 6,808,389	53%	22%	42%

Figure 3-8. High injury corridors map



The 2021-2024 MTIP investments continues to emphasize investments that address the crashes that result in fatalities and serious injuries. At a little over $458 million, these investments account for nearly one-third (1/3) of the 2021-2024 MTIP investment profile and a little under half the projects (69 out of 150) evaluated as part of the analysis.[11] A significant portion of the region's investment in safety, $385 million, is focused on addressing the crashes on the region's most problematic crash prone facilities – the high injury corridors and intersections (see Figure 3-6). Across the four sub-regions – the City of Portland, Washington County, Clackamas County, and East Multnomah County – the majority of the sub-region's safety projects and investments are focused on the high injury corridors.

The reduction of crashes that result in fatalities and serious injuries has been expressed by historically marginalized communities as a significant concern. Crash history data shows people living in equity focus areas appear to suffer from a higher number of serious injury crashes and pedestrian fatalities.[12] Of the $458 million in safety investments in the 2021-2024 MTIP, a little over $440 million is focused in equity focus areas. Furthermore, a significant portion safety investment in equity focus areas, $385 million, is directed to high injury corridors and intersections within those areas. At the sub-regional level, a significant portion of safety investment is directed towards the high injury corridors within equity focus areas. The City of Portland and Clackamas County are putting forward over half of all the investments within their jurisdictions towards safety.

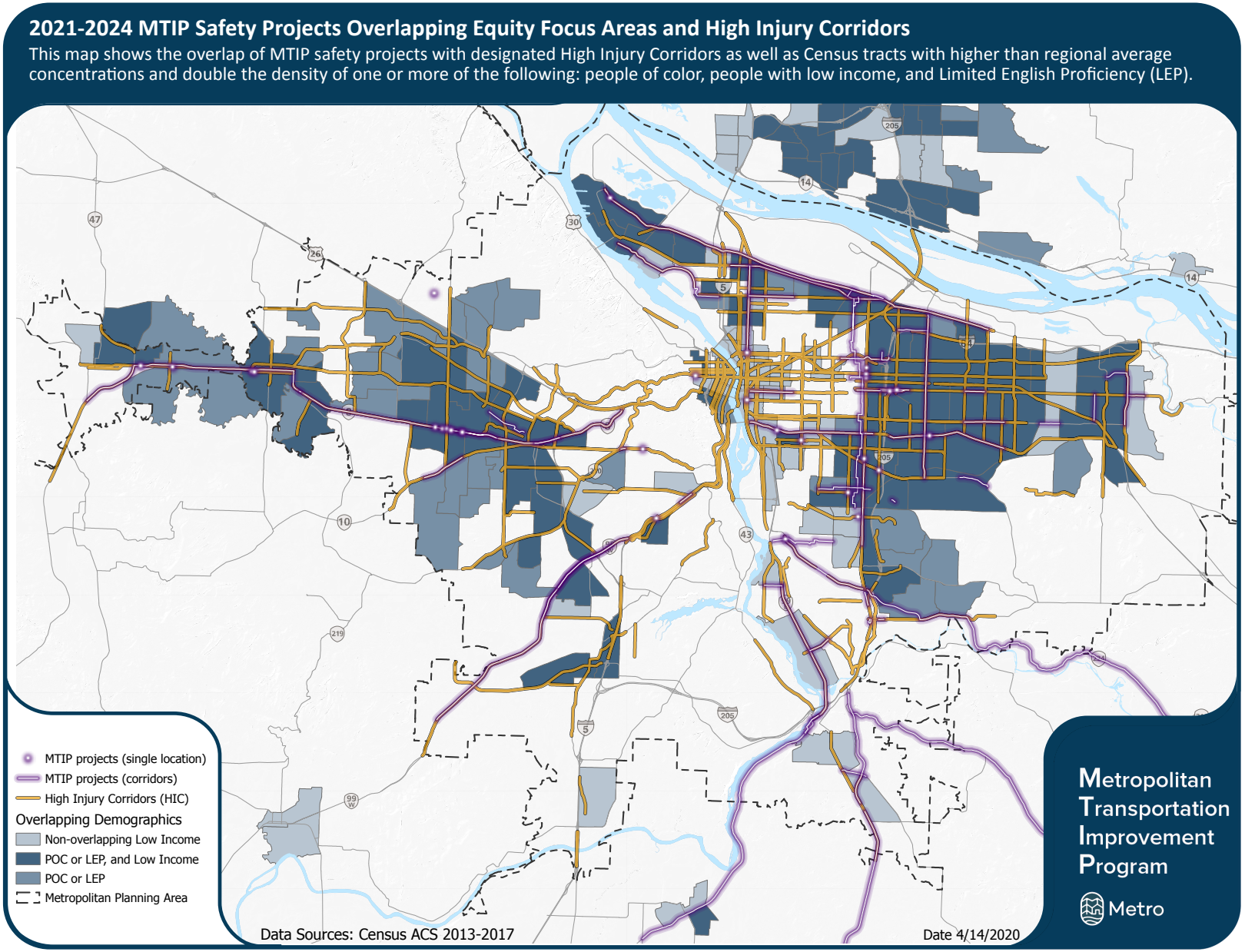
While the analysis of the 2021-2024 MTIP investment cannot forecast whether crashes will ultimately be reduced as a result of the safety investments, the greater level of investment towards safety is a proactive step towards addressing a regional priority. Despite the region's focus on safety, the region is trending in the opposite direction towards its Vision Zero goal. As described in the region's annual safety performance report, the rate of crashes continue to increase. The annual average number of fatalities increased from 62 in 2015 to 75 in 2018, an increase of 17 percent. Forty-one percent of people killed were pedestrians, up from 35 percent in 2015.[13] Whether the 2021-2024 MTIP investment level in safety is adequate to change the trajectory of the trend is yet to be determined. However, the greater investment in safety in the 2021-2024 MTIP investments is a reflection of the region's acknowledgment of the urgency of the issue and the effort to advance the regional policy direction to address safety, particularly for the most vulnerable communities.

11 2021-2024 MTIP investment profile presented based on programming provided to partners as of December 2019.

12 Annual Safety Performance Report, Metro.

13 Annual safety performance report, Metro.

Figure 3-9. 2021-2024 MTIP Safety Investments Overlapping Equity Focus Areas and High Injury Corridors



Moving ahead towards progress in the 21st century (MAP-21) – Federal performance measures and targets

In 2012, the transportation reauthorization known as Moving Ahead towards Progress in the 21st Century (MAP-21) was passed by Congress and ratified by President Obama. In addition to outlining the federal spending program for transportation, MAP-21 established eleven national performance measures for metropolitan planning organizations (MPOs), state departments of transportation, and transit agencies to assess and monitor the performance of the system. The following transportation reauthorization, Fixing America's Surface Transportation (FAST) Act in 2015 continues the implementation of MAP-21 performance measures. As a result of MAP-21, MPOs, state DOTs, and transit agencies were required to set performance targets associated with the eleven national performance measures in a cooperative and coordinated manner by the end of 2018. Once agency, regional, and state performance targets were set for two and four year cycles, MPOs, State DOT's, and transit agencies are expected to monitor and report on progress towards the performance targets.

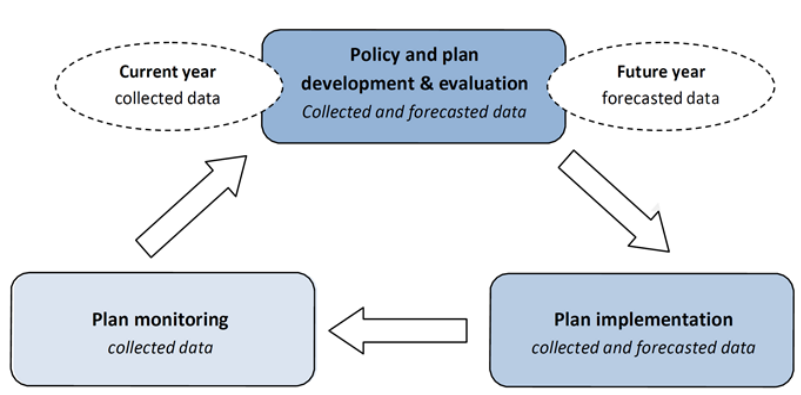
The Portland metropolitan region developed its MAP-21 performance targets in 2018 and the targets were adopted as part of the Regional Transportation Plan. As part of the target development, the region

MAP-21 performance targets and the cycle of performance-based planning

- Safety
  - Fatalities and Serious Injuries
- Asset Management – Pavement
  - Percentage of pavements of the Interstate System in Good condition
  - Percentage of pavements of the Interstate System in Poor condition
  - Percentage of pavements of the non-Interstate NHS in Good condition
  - Percentage of pavements of the non-Interstate NHS in Poor condition
- Asset Management – Bridge
  - Percentage of NHS bridges classified as in Good condition
  - Percentage of NHS bridges classified as in Poor condition
- Asset Management – Transit
  - Rolling stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark
  - Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark
  - Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)
  - Infrastructure – Percent of track segments with performance restrictions
- National Highway System Performance
  - Percentage of person-miles traveled on the Interstate that are reliable
  - Percentage of person-miles traveled on the non-Interstate NHS that are reliable
- Freight Movement on the Interstate System
  - Truck Travel Time Reliability (TTTR) Index
- Congestion Mitigation and Air Quality
  - Total emission reductions for applicable criteria pollutants
  - Peak hour excessive delay
  - Percent of non-single occupancy vehicle travel

The MAP-21 performance targets differ from the system performance assessment conducted on the MTIP investments to understand the performance of the region's transportation system. The MAP-21 federal performance measures requires 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 5. RTP performance measurement system



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.[14]

Discussion: How our regional system performs

In general, the region's near-term investments in the transportation system show mixed progress towards meeting the 2020 and/or 2022 federal performance targets. In certain areas, such as system performance, the greater strategic investment across all parts of the system shows progress towards greater reliability on the system. Whereas, crashes resulting in fatalities and serious injuries are on the rise, despite greater investment into safety. The 2021-2024 MTIP has a diverse investment profile. Investments in the 2021-2024 MTIP reflect a range of investment priorities, including federal funding dedicated towards asset management as well as state funding dedicated towards bicycle and pedestrian infrastructure on the state system, which will help make progress towards the region's targets set for 2022.

The mix of investment represented in the 2021-2024 MTIP brings both benefits and challenges. The benefit of the diverse investment profile includes the progress towards many different goals for the transportation system – from system reliability, management of assets, and reduced emissions. The challenge of a diverse investment profile is the limited focus and therefore limited impact the package of investments can make towards one goal or outcome. A clear example of this is with safety, where crash data show a trend in the opposite trajectory the region's Vision Zero target. While nearly one-third of the 2021-2024 MTIP investment is focused on addressing crashes and the investment level is greater than the

14 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.

previous MTIP cycle, the focus may still not be enough to reverse the trend.

The 2021-2024 MTIP investments are aimed at making progress towards the region's performance targets established by MAP-21. There are greater advancements toward some targets than others. The 2021-2024 MTIP was the first metropolitan transportation improvement program subject to the MAP-21 performance target and monitoring process. The results provide new information that will inform an approach toward developing the investments for the 2024-2027 MTIP as well as the next target setting process for the federal performance measures. The 2021-2024 MTIP results raise the question of whether a balanced, limited progress approach towards all performance targets should continue or if an aggressive focused approach is necessary for certain targets.

The following sections look at each of the individual MAP-21 performance target areas. The regional targets are provided for each performance measure with the most recent performance reporting data. The section concludes with a discussion of the 2021-2024 MTIP investments progress towards 2020 and 2022 targets.

Asset management – Pavement

Table 3-18. Asset management – Pavement conditions

Asset management – Pavement Conditions Targets				
Performance measure	**2016 Baseline**	**2018 Monitoring**	**2020Target**	**2022 Target**
Percent of pavement on the Interstate System in good condition	31%	46%	None	35%
Percent of pavement on the Interstate System in poor condition	0.4%	0.8%	None	0.5%
Percent of pavement on the non-Interstate NHS in good condition	32%	34%	32%	32%
Percent of pavement on the non-Interstate NHS in poor condition	25%	25%	25%	25%

Source: Oregon Department of Transportation

Based on the most recent data, the region has and/or continues to make progress towards the pavement asset management performance targets for 2020 and 2024. Since establishing the baseline in 2016 for the national interstate system (NHS) and non-interstate national interstate system, the region has already met or exceeded its target for percentage of the interstate system in good condition. This is likely due to the Oregon Transportation Commission's policy direction to maintain the existing system first and 2021-2024 STIP funding allocation strategy dedicating more funding towards fixing existing assets. This is demonstrated in the 2021-2024 MTIP through the split between operations and maintenance versus capital of ODOT investments. Within ODOT's investments nearly $200 million is for operations and maintenance where $159 million is for capital projects. In addition, the 2021-2024 MTIP includes an infusion of new state funding specifically dedicated for pavement and bridge conditions, which was passed by the Oregon legislature in 2017. With 2020 pavement condition data expected in early 2021, this policy direction and new infusion of dedicated funding, the region can expect to see further progress and likely meet its pavement conditions performance targets for 2020 and 2024.

Asset management – Bridge

Table 3-19. Asset Management – Bridge Condition Targets

Asset management – Bridge Condition Targets					
Performance measure	**2017 Baseline**	**2018 Monitoring**	**2019 Monitoring**	**2020 Target**	**2022 Target**
Percent of NHS bridges classified in good condition	6%	6%	6%	None	5%
Percent of NHS bridges classified in poor condition	1%	1%	1%	None	1%

Source: Oregon Department of Transportation

Based on the 2019 data available on bridge condition, the region has made miniscule progress towards the 2022 target to reach five percent of the region's national highway system (NHS) bridges classified in good condition and one percent of the region's NHS bridges in poor condition. Since establishing the bridge condition baseline in 2017, the region's bridge condition has not budged despite investments into maintaining bridges in the 2018-2021 MTIP cycle. While the results from the monitoring data are grim, the 2021-2024 MTIP investment package presents some potential to move the region closer to the 2022 target. The 2021-2024 MTIP investment package reflects new state revenues dedicated towards bridge maintenance and condition as a result of the state transportation package. The2021-2024 MTIP reflects the results of ODOT's policy direction to leverage any discretionary capital investments with existing or near-term maintenance and operations investments. This policy direction, in effect since the 2018-2021 MTIP-STIP cycle, may begin to show more promise in meeting the region's MAP-21 bridge asset management performance targets.

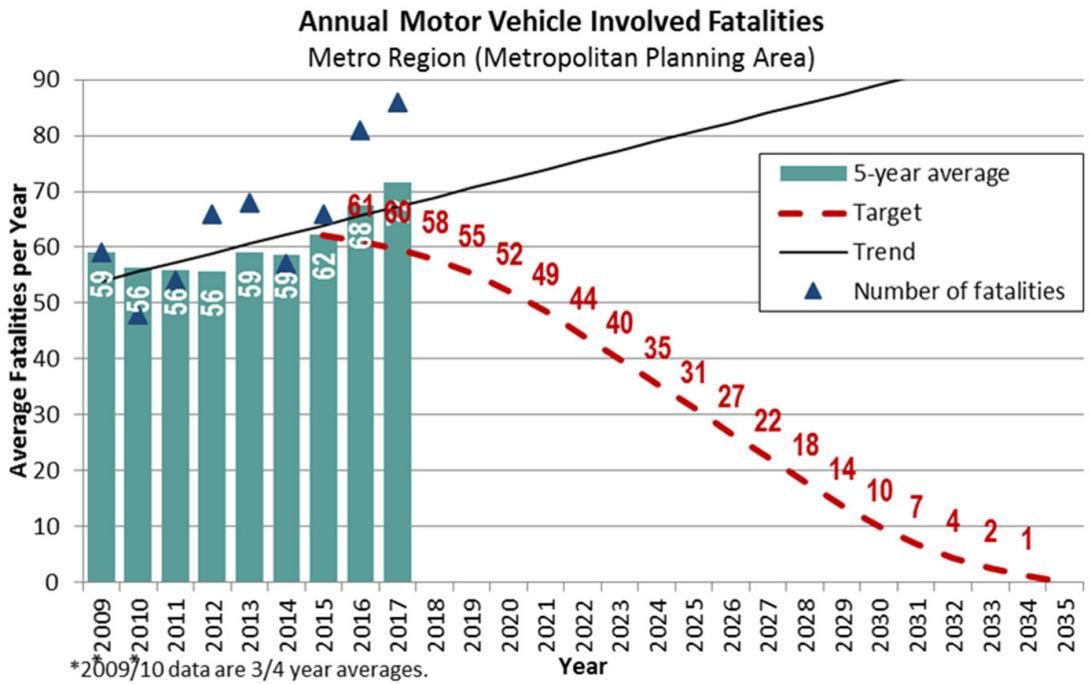
Safety

Table 3-20. Safety Targets – Fatalities and Serious Injuries

Safety – Fatalities and Serious Injuries (Regional Targets only)*					
Reporting Year (based on a 5- year rolling average)	**Fatalities (People)**	**Fatality Rate (People per 100 Million VMT)**	**Serious Injuries (People)**	**Serious Injury Rate (People per 100 Million VMT)**	**Non-motorized Fatalities and Serious Injuries (People)**
2011-2015 (Base)	62	0.6	458	4.5	113
2014-2018 (Target)	58	0.5	426	4.0	105
2014-2018 (Actuals)	75	0.7	512	4.9	129
The 2018 Regional Transportation Plan and 2018 Regional Transportation Safety Strategy set a target of zero traffic deaths and serious injuries by 2035. 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.					

Source: Oregon Department of Transportation

Figure 3-10. Annual Motor Vehicle Involved Fatalities



The region set ambitious safety targets in the 2018 Regional Transportation Plan: a 16 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 7 percent from the base year (2015) to the target year (2018). However, fatalities increased 17 percent, and serious injuries increased 10 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. Based on the results of the performance measures, the region is not on track for achieving its Vision Zero goal.

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 2021-2024 MTIP reflects further investments towards safety projects and projects which have a strong safety benefit.

Definition of a safety project and safety benefit

Safety Project - Has the primary purpose of reducing fatal and severe injury crashes or reducing crashes by addressing a documented safety problem at a documented high injury or high risk location with one or more proven safety countermeasures.

Safety Benefit Project – Projects with design features to increase safety for one or more roadway users. These projects may not necessarily address an identified safety issue at an identified high injury or high risk location, but they do include design treatments known to increase safety and reduce serious crashes. Examples include adding sidewalks, bikeways, medians, center turn lanes and intersection or crossing treatments.

In addition, both the prioritization criteria for allocating federal and state discretionary funding in the STIP and the Regional Flexible Funds reflect the significant emphasis on reducing crashes. In particular, the 2022-2024 regional flexible funds allocation prioritized those transportation investments in the system that included countermeasures on the region's high injury corridors or intersections. The allocation of funds for the 2022-2024 STIP also saw a small infusion of funds dedicated towards safety, funded by House Bill 2017, which earmarked a portion of revenues towards safety. Roughly, $458 million of the 2021-2024 MTIP is dedicated towards safety, which is greater than previous MTIP cycles. While reducing crashes is predicated on numerous strategies, the diverse set of investments in the 2021-2024 MTIP looks to reverse the recent data trends and get back on track towards the region's ambitious safety goal of Vision Zero and the metrics.

Further discussion about the safety trends and projections can be found in Metro's 2018 State of Safety and Annual Safety Performance Report on Metro's website.

System performance

Table 3-21. National Highway System performance targets

National Highway System Performance Targets					
Performance measure	**2017 Baseline**	**2018**	**2019**	**2020 Target**	**2022 Target**
Percent of person-miles traveled on	43%	46.3%	49.6%	43%	43%
Percent of person-miles	66%	73.8%	77.2%	66%	66%

Source: National Performance Management Research Dataset (NPMRDS) for the period Jan. to Dec. 2017.

Table 3-22. Freight movement on the interstate system – Freight reliability targets

Freight Movement on the Interstate System – Freight Reliability Targets					
Performance measure	**2017 Baseline**	**2018**	**2019**	**2020 Target**	**2022 Target**
Truck Travel Time Reliability (TTTR) Index	3.17	2.88	2.82	3.10	3.10

Source: National Performance Management Research Dataset (NPMRDS) for the period Jan. to Dec. 2017.

Monitoring data for 2018 and 2019 show the region either meeting, exceeding, and/or making progress towards the region's MAP-21 system performance targets for 2020 and 2022. The results of the monitoring data is not surprising, since the development of the 2017 baseline, the region has seen the opening of a couple of major capital investments, including the Interstate 5 south auxiliary lanes near Lower Boones Ferry Road and the Interstate 205 auxiliary lanes from Glen Jackson Bridge to Johnson Creek Boulevard. These investments, included in the 2018-2021 MTIP, were likely significant contributors to the percent of person-miles traveled on the interstate and non-interstate NHS that are reliable. Additionally, truck time reliability, remains an area of system performance where the region continues to make progress towards its 2020 and 2022 targets. The progress shown in the monitoring data for 2018 and 2019 is notable, recognizing the region is growing at a projected 19,000 persons per year. Being able to improve person-miles traveled reliability as more trips are made in the region is a testament to a diversified system. However, Metro acknowledges the shifts in the underlying national performance management research data management system (NPMRDS) may skew the performance observed in 2018 and 2019.

The 2021-2024 MTIP has several large capital investments that are likely to make an impact on the reliability of the interstate and non-interstate NHS and make improvements to the truck travel index.

These investments include the Interstate 5 Rose Quarter improvement project, Oregon 217 auxiliary lanes, the MAX Red Line extension, and the opening of Division Transit project. The two high capacity transit projects will likely shift the mode of some vehicle trips to transit, opening up interstate and non-interstate NHS capacity for truck throughput. The two major auxiliary lane projects address known bottlenecks in the region's freeway and roadway network and create more efficient operations.

Air quality

Table 3-23. Congestion Mitigation and Air Quality Program – On-road mobile source emissions targets

Congestion Mitigation and Air Quality – On-Road Mobile Source Emissions Targets					
Performance measure	**2014-2017 Baseline**	**2018-2019 CMAQ Obligations**	**2021 – 2024 CMAQ Funded Projects**	**2020 Target**	**2022 Target**
Annual average reduction emissions reduction per day (by pollutant) for all CMAQ-funded projects (Kg/day)					
Particulate matter less than 2.5 microns (PM2.5)	N/A	N/A	N/A	N/A	N/A
Particulate matter less than 10 microns (PM10)	N/A	N/A	N/A	N/A	N/A
Carbon monoxide (CO)	2476.73*	2380.72**	2094.82***	2000	1840
Volatile organic compounds (VOC)	N/A	N/A	N/A	N/A	N/A
Nitrogen oxides(NOx)	N/A	N/A	N/A	N/A	N/A
*Calculations based on obligations of CMAQ funded projects for federal fiscal years (FFY) 2014-2017 and included in baseline.**Calculations based on obligations of CMAQ funded projects for FFY 2018 and 2019 which were available at the time of the 2021-2024 MTIP performance assessment. FFY 2020 obligations will be determined by July 2020. ***Calculations include the CMAQ funded projects for FFY 2021-2024.					

Source: Portland area CMAQ obligated projects.

The 2021-2024 MTIP congestion mitigation and air quality (CMAQ) investments continues to meet and exceed the region's 2020 and 2022 performance targets for emissions reduction of air pollution. The 2021-2024 MTIP continued investment in the region's high capacity transit system makes up the bulk of air pollution emissions reduction and further complimented by investments in active transportation, funded with CMAQ dollars. The 2021-2024 MTIP investments also see new investments in transit service through revenues provided through an annual increase in employer tax and a new employee tax. The emphasis the 2021-2024 MTIP places into providing transportation options continue to encourage and shift single occupancy vehicle trips to other forms of travel with lower or zero emissions (see the managing congestion discussion previously in this chapter). Recognizing in 2016 the region renewed its long-term commitment to invest into the transit system and the region's goal to complete the regional active transportation network, these two directives will continue to facilitate the region meeting its air pollution reduction targets.

Table 3-24. Transit Asset Management Targets

Transit Asset Management Targets			
Performance measure	**2018 Baseline Performance**	**2019 Actual Performance**	**2020 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%
CU – Cutaway (used for LIFT paratransit)	9.02%	16.6%	45%
LR – Light rail vehicles	0%	0%	18%
RP – Commuter rail passenger coach	0%	0%	0%
RS – Commuter rail self-propelled passenger car	0%	0%	0%
VN – Van (used for LIFT paratransit)	0%	0%	0%
TriMet Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)			
Automobiles	26%	33.3%	17%
Trucks and other rubber tire vehicles	34%	22.5%	23%
Steel wheel vehicles	30%	Not applicable	Not applicable
TriMet Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)			
Passenger/Parking facilities	1.03%	2.13%	1%
Administrative/Maintenance facilities	0%	0%	0%
TriMet Infrastructure – Percent of track segments with performance restrictions			
LR – light rail	4.7%	4.2%	4.0%
YR – Hybrid rail	3.0%	0.4%	3.0%

Transit Asset Management Targets			
Performance measure	**2018 Baseline Performance**	**2019 Actual Performance**	**2020 Target**
SMART Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)	33%	35%	33%
SMART Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)	20%	38%	20%
SMART Facilities – Percent of facilities rated below 3 on the condition scale (1=Poor to 5=Excellent)	0%	0%	0%
C-TRAN Rolling Stock – Percent of revenue vehicles that have met or exceeded their useful life benchmark (ULB)	14.5%	18%	20%
C-TRAN Equipment – Percent of service vehicles that have met or exceeded their useful life benchmark (ULB)	17.1%	25%	30%
C-TRAN Facilities – Percent of facilities rated below 2.5 on the condition scale (1=Poor to 5=Excellent)	0%		30%
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 covering a horizon period of at least 4 years. TriMet's performance measures and targets are monitored and reported in TriMet's TAM Plan. SMART's performance measures and targets are monitored and reported in ODOT's Group TAM Plan. C-TRAN's performance measures and targets are monitored and reported in C-TRAN's TAM Plan.			

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 whether there is need to update the targets.

In general, the region's transit agencies – TriMet and SMART – are making progress towards their TAM targets. In some cases the TAM targets are being met or maintaining with the 2020 targets. In the cases where the TAM targets are being maintained, the 2020 target may be anticipating a wave of assets which by 2020 will reach the threshold of meeting or exceeding their useful life and therefore the target reflects accordingly. For example, TriMet, the region's largest transit provider, saw a slight increase in 2019 for its bus rolling stock meeting or exceeding useful life compared to the 2018 baseline. While disappointing, the bus rolling stock 2020 TAM target reflects this likelihood that a few more buses each year will like meet useful life thresholds in the near-term.

Nonetheless, the 2021-2024 MTIP package includes investments to address the asset conditions of the transit system. In total, approximately $376 million is programmed in the four-year program across all transit agencies to address rolling stock, infrastructure, and facilities. In addition, the 2021-2024 MTIP reflects new revenues to become available to transit agency with the passage of the state transportation package in 2017. While a majority of the new local revenues went towards providing enhanced transit service, particularly for historically marginalized communities, the influx of funds have helped to balance funding across all different needs areas for transit agencies, including asset management, but also emphasizes additional work to do to maintain the system.

Chapter 4: Building the 2021-2024 MTIP: Financial forecasting and project and program selection for funding

A core part of the development of the 2021-2024 MTIP is the formation of the four year investment package. While the first year of the investment package (i.e. federal fiscal year 2021) overlaps with the current 2018-2021 MTIP, the process of deciding what transportation projects and programs to fund from federal fiscal years 2022 through 2024 can take upwards of two or three years to make the final decisions. The decision process, undertaken by each MTIP partner – Metro, ODOT, SMART, and TriMet – involves several steps, including:

- a financial analysis to determine the estimated funding available;
- a policy setting component to establish the criteria for the allocation of funding;

Chapter sections

- a selection process;
- a public involvement component at various points and responding to public involvement; and
- a final action component to ratify the final decisions.

As described in detail in the following sections, a financial analysis sets the stage for funding allocation discussions to determine the investments that make up the 2021-2024 MTIP. The revenue forecasts and project cost estimates are completed by each partner agency looking at its revenue streams, existing financial commitments and federal and/or state laws or guidance related to budgets and cost estimating. Projects are then programmed so that estimated project costs by project phase do not exceed forecasted revenues in any year. The description of the process and methods used to demonstrate fiscal constraint of project funding is in Chapter 5.

The section following discussion of the financial analysis describes the decision process each agency uses to prioritize and select transportation investments programmed in the 2021-2024 MTIP. The processes described primarily focuses on federal fiscal years 2022 through 2024, since the decision process for investments programmed for federal fiscal year 2021 (and prior years) is described in the 2018-2021 MTIP.

Metro 2022-2024 Regional Flexible Funds

Financial analysis

Financial forecast

Every Regional Flexible Fund allocation (RFFA) process begins with a forecast of funding available for distribution to projects and programs in the next cycle. A forecast of available funds must be made three to five years in advance of fund expenditures to allow the awarded agencies time to staff up, secure matching funds and enter into agreements with the Oregon Department of Transportation to incur costs legally that will be reimbursed by USDOT. Thus, the forecast for awarding this cycle, federal fiscal year 2022-2024 regional flexible funds, was determined in spring of 2019.

The forecast begins with an assessment of any carry-over surplus or deficit of existing project allocation funding commitments relative to updated revenue forecasts for those years of the current MTIP. In this cycle, the actual and expected RFFA revenues for the years 2015 through 2018 were projected to be less than the RFFA allocation commitments for those years by approximately $914,000. This was primarily because the USDOT was funded by continuing resolutions in 2015 that resulted in flat revenues for a significant amount of this time period, while the previous forecast had assumed modest revenue growth consistent with historical trends and the Congressional Budget Office growth forecast for the Highway Trust Fund. With subsequent years authorized under the FAST ACT, historical rates of modest growth have resumed and the RFFA process for 2019-2021 is projected to have under-allocated funding relative to revenues.

To forecast funding available in years beyond the revenues that had been apportioned in 2018, Metro staff worked with ODOT finance staff and other Oregon MPOs in the transportation improvement program (TIP) coordinators committee to agree cooperatively on a forecast methodology for the federal RFFA funding programs (Surface Transportation Block Grant (STBG) – including the Transportation Alternatives (TA) Program set-aside, and the Congestion Mitigation – Air Quality (CMAQ) funding program). The committee agreed, consistent with the ODOT forecast, to use a limitation rate of 93 percent of the authorization amount for all years that have approved federal authority, through federal fiscal year 2020. For fiscal years 2021 through 2024, which are beyond the federal authorization bill, a compounding 2.2 percent growth rate to the federal fiscal year 2020 limitation amount is assumed. This growth rate is consistent with historical trends of growth of federal transportation funds. Utilizing this methodology, a total of $143.98 million was forecast to be available in the years 2022 through 2024 for allocation to new projects.

Estimating project costs

Agencies applying for regional flexible funds for their projects estimate and manage their project costs, with review and approval by Metro. In order to establish realistic project budgets for any project with a right-of-way acquisition or construction phase, applicants are required to submit a cost estimate performed by a certified engineer. Applicants are instructed to inflate costs to year of expenditure dollars per their requested project schedule.

For the first time in this funding cycle, Metro hired a project management consulting firm with extensive experience in delivering federal aid projects to work with ODOT and Metro staff to review project applications and assess them for risks related to costs, potential schedule delays, and missing project scope elements that may be needed to successfully deliver the project. The risk assessment was shared with project applicants prior to project selection so that applicants could modify their application to address identified risks, if they chose. A summary of the risk assessment was also provided to inform project selection, to help decision makers understand the level of risk associated with selecting a particular project and to adopt conditions of approval of funding that mitigate risks.

Once a project is awarded funds, the agency administering the project is responsible for implementing the scope of the project applied for within budget. Cost overruns must be covered by the agency or the agency must apply for additional funds or request a reduction in project scope.

Policy direction and criteria for allocation

The 2022-2024 RFFA began in January 2019 under an expedited process.[1] The Metro Council had directed Metro staff to delay beginning the 2022-2024 RFFA process to allow the adoption of 2018 RTP in December 2018 to guide the allocation, and to provide the new Council coming into office in 2019 ownership of the entire process. Recognizing this delay and the need to meet the timeline for adoption of the 2021-2024 MTIP, Metro had only a year to complete the RFFA process (January – December 2019). As a result, the 2022-2024 RFFA cycle began immediately following adoption of the 2018 RTP. In response to the time constraints, JPACT and Metro Council directed the region to use the four investment objectives adopted in the RTP as the policy objectives guiding the RFFA. Reaffirmed in the 2021-2024 MTIP policy direction, those objectives are equity, safety, climate and congestion. The RTP directs that further policy, planning and funding outcomes should advance the region toward its goals in these four areas.

In addition to the direction to advance the four RTP objectives, JPACT and Metro Council in further policy discussions reaffirmed the same two-step process used to award funding since the 2012-2013 RFFA cycle:

- Step 1 continued the region's commitment to repayment of bonds used to develop and construct high-capacity transit and active transportation projects. It also continued investments in region-wide programs to fund system and demand management activities and to invest in transit-oriented development projects near high-capacity transit lines.
- Step 2 focused funding on capital projects. Eligible applicants included cities and counties, and regional and state agencies. The project focus categories remained the same as in previous RFFA cycles (active transportation and freight). Criteria for proposed projects emphasized on-street improvements to make bicycling, walking and transit access easier and safer, building regional trails, or improving freight access to commercial sites.

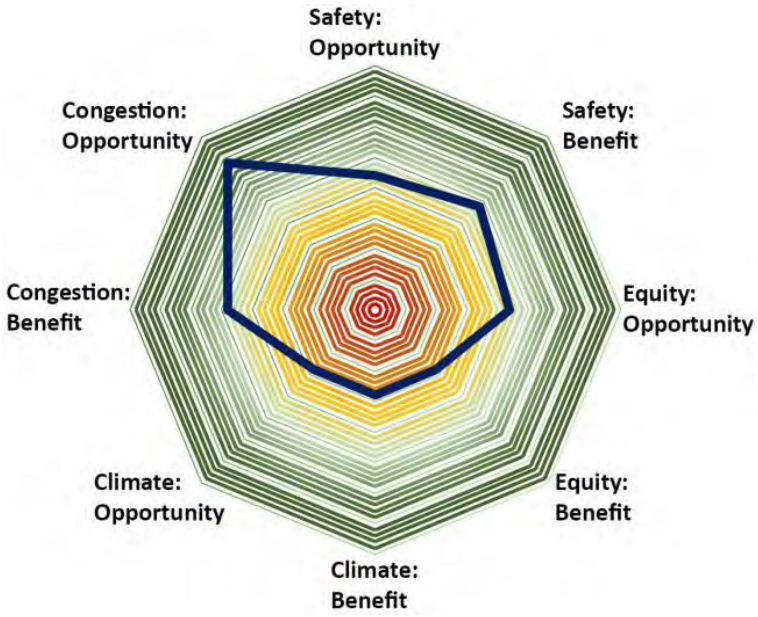
1 Typically, a RFFA cycle incorporates an initial six to nine month phase of working with regional stakeholders and decision-makers to review and adopt policy direction to guide investment of the regional funding. This is followed by another 9 month period to finalize criteria and application materials, initiate a call for projects, perform technical analysis and risk assessment on submitted proposed projects, and conduct and incorporate input gathered through public outreach. This information is used by the JPACT and Metro Council to reach a final selection of projects to be funded.

A new feature in the 2022-2024 allocation process was the ability to evaluate benefits of proposed projects in both categories and for them to be considered for funding in either category. This change was requested by TPAC and the region's agencies eligible to apply for funding. Thus, a single application form was created and improved the region's ability to more deeply consider projects' policy merits. This enabled an "apples to apples" technical analysis to measure and compare all projects' policy outcomes, regardless in which category(ies) the applicant requested consideration. Through the selection process, five projects (of 23 total) originally requesting to be considered for funding in the active transportation category were identified as having benefits in both focus areas and were ultimately funded through the freight category. This resulted in the region selecting a group of projects that achieved an overall higher technical rating – and therefore best achieved policy outcomes – than would have occurred following the previous selection methodology.

In addition, increased emphasis was placed on ensuring that projects selected for funding had undergone a sufficient level of planning and project development to ensure that they could be built on-time, per the scope in the RFFA application, and within the available local and RFFA funding. Metro hired an outside consultant firm to conduct an analysis of each project's risk factors.

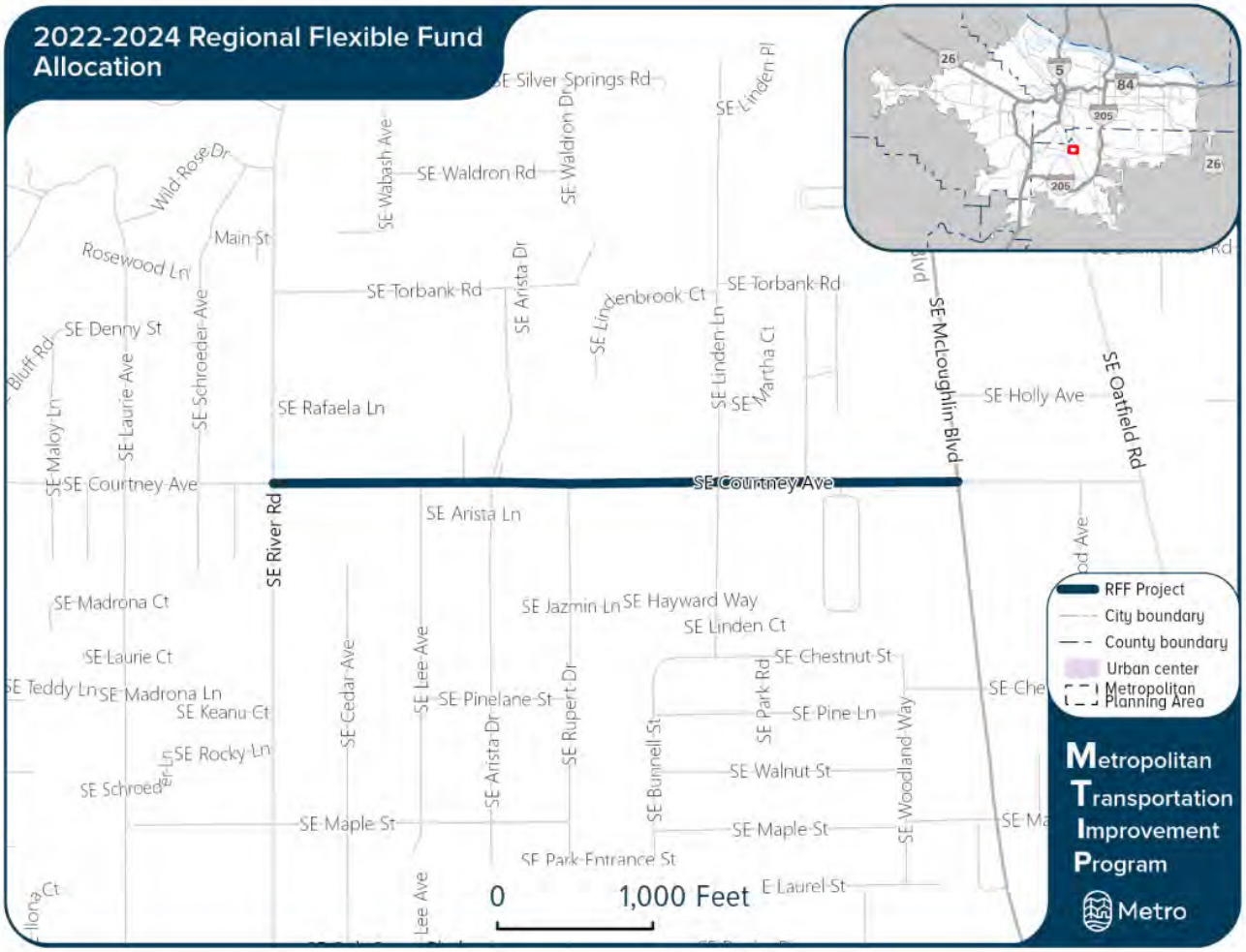
Figure 4-1-1. An example of the technical analysis visualization for each candidate project for the 2022-2024 Regional Flexible Fund Allocation process.

Evaluation



Points further from the center of the chart show greater opportunity or benefit in the four policy priority areas

Figure 4-1-2. An example of the technical analysis visualization for each candidate project for the 2022-2024 Regional Flexible Fund Allocation process.



Clackamas Industrial Area intelligent transportation systems

Sponsor: Clackamas County

Requested amount: $1,768,040

Total project cost: $1,970,400

Purpose: Construction

Description: Builds intelligent transportation system technological improvements to improve freight movement, reliability and safety

The consultant used a "Red/Yellow/Green" method to illustrate each project's level of risk – high, medium or low. The risk assessment ratings were not used to disqualify a project or diminish its standing; rather, they were used to gather additional risk mitigation information from the applicants prior to the final project selection as well as to inform the funding agreements of the selected projects.

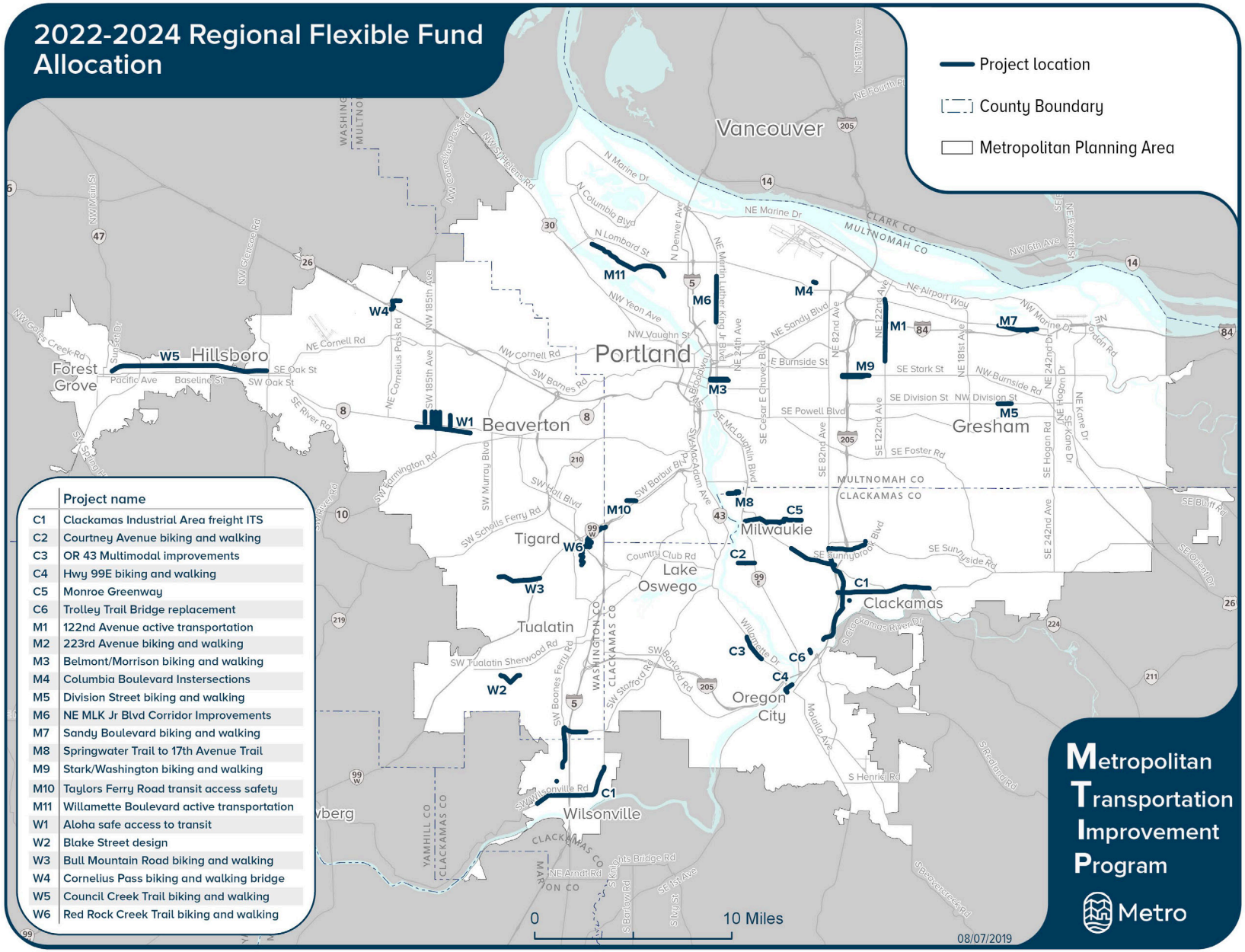
Public involvement

In previous RFFA cycles, public involvement activities took place at two key steps in the process: 1) during the development of the policy direction and setting the criteria for the allocation; and 2) after transportation projects and programs had been nominated for funding. Applying the RTP policy objectives as directed by JPACT and Metro Council allowed Metro to recognize the extensive input gathered through the 2018 RTP development and adoption process. The 2018 RTP received over 19,000 points of input in athree-year timespan. This enabled the region to conduct a shorter policy review from January to April 2019 and elect to defer a formal public comment as policy review took place immediately following the adoption of the 2018 RTP.

After the application submission period closed for Step 2 funds and a technical and project readiness review took place, Metro held a public comment period from September 6 to October 7, 2019 to ask the region's residents to help decide how Step 2 funding should be spent. Input was gathered primarily via an online comment tool. The tool provided information on the 23 projects under consideration, and respondents were able to indicate their level of support for any or all of the projects. Input was also received via email, postal mail, and phone calls. On September 26, Metro Council held a public hearing to gather direct testimony. Thirteen people provided input on various projects and indicated why they should be considered for funding.

In total, over 3,000 points of input were gathered through the public comment period. The public input was used to shape the final project selection, by illustrating through percentages the relative support each project had received.

Figure 4-2. A map of candidate projects for the 2022-2024 Regional Flexible Fund allocation provided on the Metro website with the public comment survey



Final allocation outcome

The 2022-2024 RFFA was completed in January 2020 with the adoption of a package of programmatic and capital transportation investments focused on reducing crashes, addressing transportation disparities, reducing greenhouse gas emissions, and managing travel demand (reflecting the 2018 RTP priority areas – safety, equity, climate and congestion). The 2022-2024 RFFA funding estimate totaled $143,981,465. Per regional policy, nearly $99 million was directed to bond commitments, regional planning and programmatic investments through Step 1 of the RFFA framework. Step 2 was directed toward capital projects and totaled a little more than $45 million.

Further detail on the 2022-2024 RFFA can be found in Appendix III.

ODOT Region 1: 2021-2024 State Transportation Improvement Program (STIP) funding allocation

Financial analysis

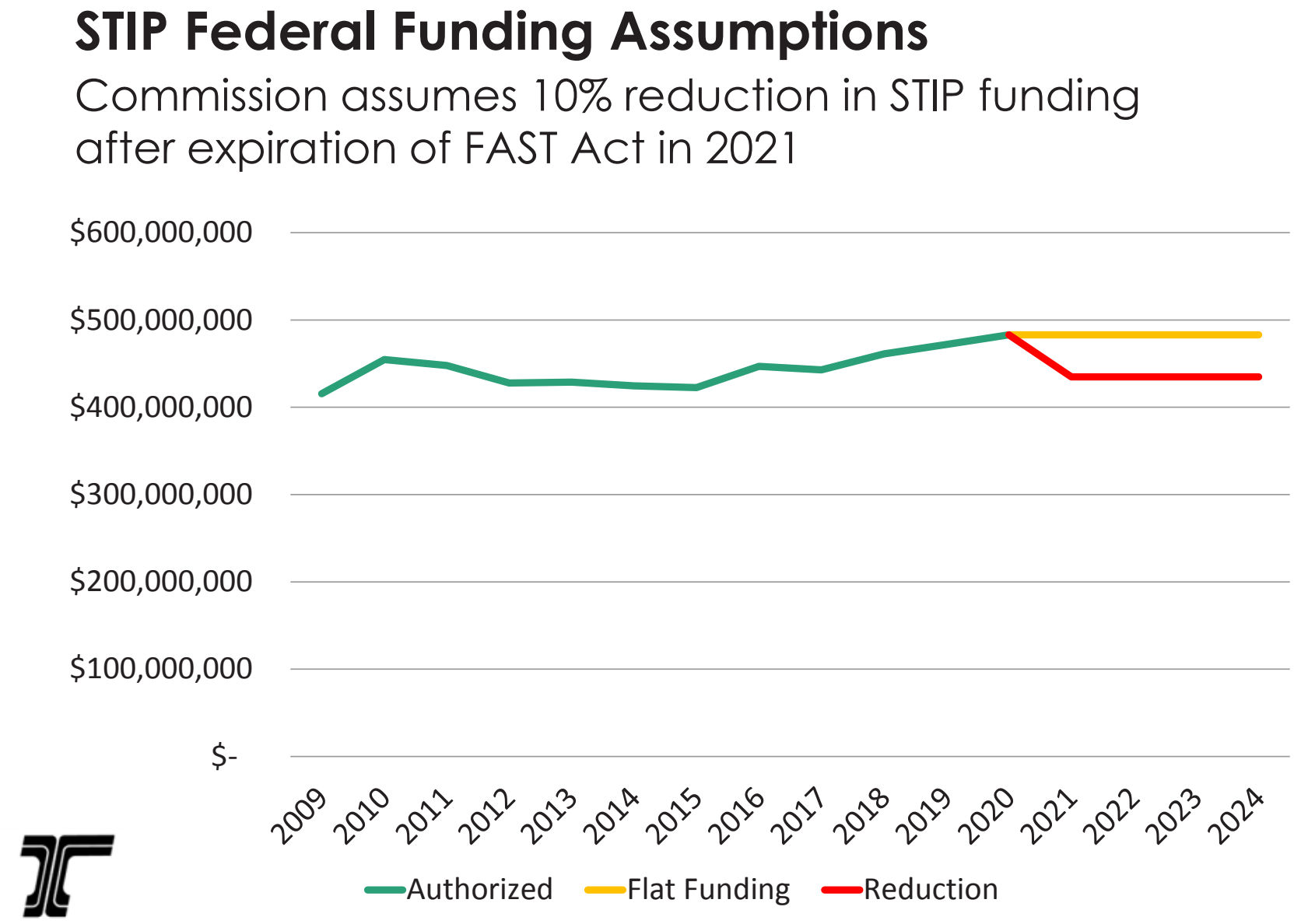
Financial forecast

ODOT forecasts revenues available from their federal and state fund sources, as well as revenue sources that they are required or choose to pass through to other transportation agencies for the 2021-2024 STIP period. Sources of available funding include federal, state, local, and other transportation funds. Federal funding levels are based on the current federal funding transportation legislation, Fixing America's Surface Transportation Act (FAST Act), enacted December 4, 2015. State funding levels are based on the current state legislation, House Bill 2017, effective October 6, 2017. Oregon is slated to program approximately $563 million each year 2022 through 2024.

ODOT staff then works with the Oregon Transportation Commission (OTC) to assign forecasted available funding to their various funding allocation programs. The funding allocation programs each have distinct policy objectives and allocation processes, also approved by the OTC, that are used to select projects or programs to receive funds. The detailed policy objectives and selection processes of the funding programs must be consistent with the legal and policy restrictions associated with the revenue sources that will be used to fund them. MPOs participate in this portion of the ODOT process by providing comments to the OTC as they consider the options provided by ODOT staff.

The OTC made its allocation of forecasted revenues for federal fiscal years 2022 through 2024 to the ODOT funding programs in December 2017. The OTC decided to contingently hold back 10 percent of federal funding, not assigning it to a specific funding allocation program. If those funds are apportioned by the USDOT, then ODOT staff will bring forward the funds to the OTC for allocation.

Figure 4-3. A slide confirming the Commission's direction of forecasted federal revenues for fiscal years 2022-2024. Oregon Transportation Commission meeting November 2017



The OTC allocated funding among the following major categories:

- Fix-It programs fund projects that fix or preserve the state's transportation system, including bridges, pavement, culverts, traffic signals, and others. ODOT uses data about the conditions of assets to choose the highest priority projects. In recent STIPs the Commission has allocated most funding to Fix-It programs. For fiscal years 2022-2024, the allocated total is $850 million.
- Enhance programs fund projects that enhance or expand the transportation system. In this STIP cycle, this is predominantly House Bill 2017 named projects but also includes funding for state highway leverage, active transportation leverage, and safety leverage projects. Leverage program projects are limited to enhancements of ODOT Fix-It projects. For fiscal years 2022-2024 the allocated total is $687 million.
- Safety programs reduce deaths and injuries on Oregon's roads. This includes the All Roads Transportation Safety program, which selects projects through a data-driven process to ensure resources have maximum impact on improving the safety of Oregon's state highways and local roads. For fiscal years 2022-2024 the allocated total is $147 million.
- Non-highway programs fund bicycle and pedestrian projects and public transportation. Area Commissions on Transportation often help recommend these projects to the Commission. For fiscal years 2022-2024 the allocated total is $158 million.
- Local government programs direct funding to local governments so they can fund priority projects. For fiscal years 2022-2024 the allocated total is $407 million.

The project selection process for ODOT funding allocation programs is administered at either the statewide level or the ODOT region level, depending on the allocation program. Metro utilizes the cooperative long-range (RTP) funding forecast to develop a rough estimate of ODOT administered funding that could be expected to be made available in the Metro region early in the policy development process to provide context for communicating MPO policy priorities to ODOT for allocating ODOT administered funds.

ODOT then releases a forecast of funding available to the funding programs whose project selection is administered at the ODOT region level, including ODOT Region 1 which encompasses the Portland MPO area as well as rural areas of Clackamas county and Hood River county. Depending on how much of those targeted funds will be selected for projects inside the Portland MPO boundary, as opposed to the areas of ODOT Region 1 located outside the MPO boundary, this provides a general range of estimated funds available.

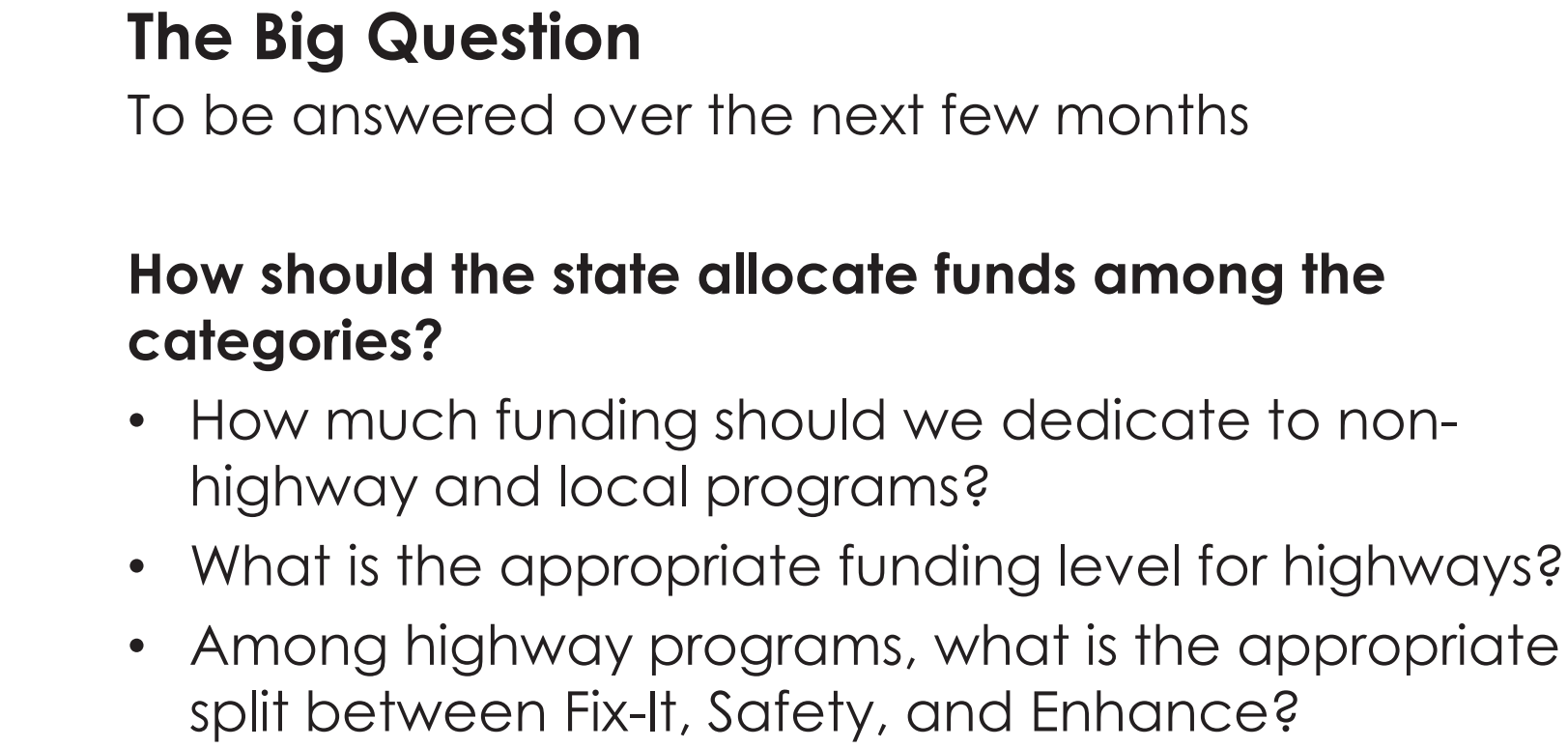
Estimating project costs

ODOT technical staff develops cost estimates by reviewing the project scope and applying engineering and financial assumptions based on the various work elements associated with the project. Using current financial and engineering information, costs are developed to determine project design, right of way acquisition, construction, contingencies and engineering estimates.

Policy direction and criteria

The 2021-2024 STIP process focused on system and asset preservation; these types of investments are consistent with policy guidance established by the Oregon Transportation Plan (OTP). The OTP specifies that under a constrained funding scenario, investment should "support Oregonians' most critical transportation needs, broadly considering return on investment and asset management." Efforts are focused on preservation and operational improvements to maximize condition performance and safety of the transportation system at the least cost possible. The STIP is developed in cooperation with Metro and other MPOs throughout Oregon.

Figure 4-4. A slide from a presentation at the Oregon Transportation Commission meeting in July 2017, where a discussion of the policy direction for the 2021-2024 STIP and the allocation of federal and state funding begins



At the end of a six-meeting process, the Oregon Transportation Commission approved the allocation of $2.4 billion in funding in the 2021-2024 Statewide Transportation Improvement Program (STIP). The Commission's approved allocation directs most discretionary funding to Fix-It programs that preserve roads, bridges, and other assets.[2]

However, the Commission also put a significant amount of funding into Enhance Highway projects that improve roads to address growing congestion and freight mobility concerns. In addition to over $600 million in funding directed by the Legislature in House Bill 2017 for Enhance projects, $24 million will go to a State Highway Leverage program that will allow Area Commissions on Transportation (ACTs) to recommend the addition of Enhance features to Fix-It projects.

If federal funding comes in above the anticipated level, the OTC also directed first $40 million of additional funding to go to a Strategic Investments program that would allow the Commission to target funding to high priority needs on the state highway system. The Commission also provided funding to safety, non-highway and local government programs based on direction in state and federal law and on agreements with local governments.

For funding programs that the OTC has approved and restricted to ODOT facilities, (e.g. Enhance Leverage, preservation programs) in lieu of a solicitation process, ODOT Region 1 staff shares with the MPO and local transportation agencies a draft project list of the ODOT Region 1 recommendations for funding. The project list represents 150 percent more project costs than forecasted available funds as a means to foster a trade-off discussion. For the 2022-2024 funding programs of this type, ODOT hosted field visits and opportunities for input on project scope with local agency staff on these draft project lists. Project scopes and budgets were refined based on this input, and further ODOT investigation and project lists that represented a balance of project costs to forecasted revenues were proposed.

For funding programs not restricted to ODOT facilities, a more traditional selection process took place. For example, in the All Roads Transportation Safety funding allocation program, local agencies, along with ODOT, were eligible to apply for funding for projects that address safety needs regardless of the ownership of the roadway facility. Based on a technical evaluation of the candidate projects, ODOT Region 1 staff proposed a 150 percent priority projects list within this funding category. Metro staff participated on the evaluation committee of the Region 1 ARTS selection program as a means of coordinating Metro safety policy priorities into this allocation process.

Some funding allocation programs are administered at the state level and targeted to ODOT facilities, such as the state bridge program. Each of these programs has a somewhat unique project nomination and selection process, but they are typically driven by ODOT staff or an appointed committee utilizing asset management data, project scope costs relative to the program's available revenues and other considerations relative to their program purpose. Most of these allocation programs are considered part of the broader Fix-It category.

Finally, there are some funding allocation programs administered at the statewide level that are open to all transportation agencies and are competitive application based. The prioritization process and criteria are unique to each statewide funding program. The Safe Routes to School project allocation program is an example of this type of program. Often, staff from an Oregon MPO is asked to participate in the evaluation committees of these funding programs as a means of obtaining MPO input. MPOs are also typically eligible to apply for these funds if appropriate.

Public involvement

ODOT Region 1 took public comment on the initial draft programming of new projects for 2022-2024 in late spring – early

2 A full list of all programs and the funding allocated to them is available online at: https://www.oregon.gov/odot/STIP/Documents/2021-2024-STIP-Allocations-Framework.pdf

summer 2019. Subsequently, statewide ODOT held open houses around the state — including an online open house in mid-February 2020 — providing the chance to make final comments on the program for all projects across the state.[3] The proposed programming of funding to projects for ODOT administered allocation programs is holding a public comment period through April 6, 2020.

Final allocation outcome

ODOT Region 1 has allocated nearly $415 million, in the Portland metropolitan area in the 2021-2024 MTIP. From the Oregon Transportation Commission's direction, motor vehicle capacity expansion projects are mostly limited to those that were directed by state funding legislation. Maintenance and operations investments, with limited multimodal enhancements attached to them, is a significant portion of the investments by ODOT in the 2021-2024 MTIP. Targeted safety projects on ODOT facilities, identified by the All Roads Transportation Safety (ARTS) program, is also a significant portion of the investments by ODOT in the near-term investment plan. Finally, some programmatic investment into curb ramp upgrades in response to a settlement agreement are also included in the 2021-2024 MTIP as investments by ODOT.

Further information about ODOT's 2021-2024 STIP can be found in Appendix III.

SMART annual budget process

Financial analysis

Financial forecast

To estimate the amount of available revenue for fiscal years 2021-2024, SMART used a methodology that is consistent with Metro's projections, based on historical trends and updated with actual appropriations and limitations. SMART collaborates with other regional transit agencies to estimate shares of the Urbanized Area Formula Funds from the Federal Transit Administration.

Local programs: SMART's predominant source of ongoing funding is the local payroll tax levied on businesses performing work in Wilsonville assessed on gross payroll and/or self-employment earnings. The payroll tax on local businesses covers employment within city limits and in 2008 the tax rate was raised to its current level of .5 percent (.005). Transit tax funds are used to pay for SMART operations and to leverage funding from federal and state grants. Payroll tax amounts collected by the city typically increase year to year, as companies increase their payroll through wage adjustments or by adding to their payroll and as the economy grows with new businesses relocating to the city.

A much smaller component of local funding includes charges for services, such as fare box and transit pass sale revenue. Currently, SMART charges fares for all routes that travel outside of the city of Wilsonville. Additional sources of local funding include investment income and miscellaneous revenues.

Federal programs: Nearly all federal funds received directly by SMART are subject to the policies and regulations of the Federal Transit Administration (FTA), with only minimal potential for Federal Highway Administration (FHWA) funding. There are seven federal funding programs that directly and indirectly come to SMART that support regular operations and capital purchases.

FTA Section 5307 Urbanized Formula Funds are distributed to urbanized areas with population greater than 50,000. The program divides urbanized areas into two primary categories that are determined by the size of the metropolitan area where the transit service area is located. Given that Wilsonville is within the Portland Metro region, SMART is within the category of "large urbanized areas with a population above 200,000." For large urbanized areas, these funds may only be used for capital expenditures as defined by the FTA. This funding source has been relied upon by SMART and other public transit agencies in large urban areas.

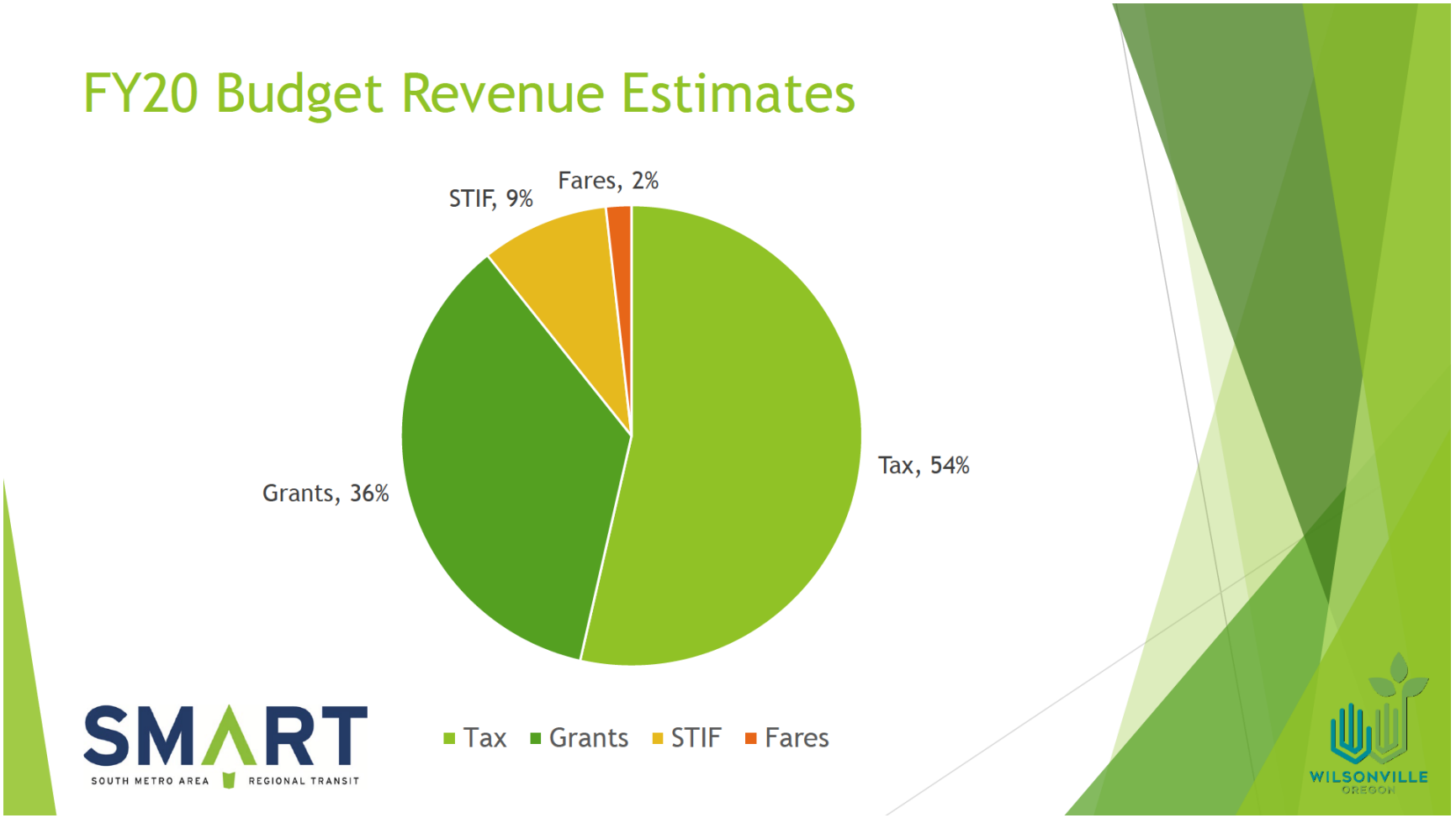
3 More details can be found at: https://www.oregon.gov/odot/STIP/Pages/2021-2024-STIP.aspx

FTA Section 5339 Bus and Bus Facility program funds are distributed through a competitive process by the FTA. These funds can be used only for the purchase of rolling stock or the construction of transit facilities that support transit bus operations. These funds are allocated through a highly competitive process. Future awards are dependent on the specific process outlined by the FTA and the strength of other project proposals competing against SMART's requests for funding. SMART has had a fairly successful track record in securing these and other FTA grant funds for replacement buses, and has been able to modernize the fleet in recent years.

FTA Section 5310 Elderly and Disabled Capital program funds are funds to be used to make purchases of capital equipment or construction of small facilities. The expenditures must be used to support transportation services for seniors and persons with disabilities. The funds are provided through a competitive grant program on a biennial cycle. As FTA funds they follow all federal requirements associated with the program. Projects funded with this program are intermittent and on an as-needed basis. A relatively small amount of additional 5310 funds comes to SMART as a result of Wilsonville's status as a "direct recipient" of FTA monies. Those funds actually come to the region and SMART's share is determined through a negotiated process involving SMART, TriMet and C-Tran (Clark County Transit, Washington).

The Surface Transportation Block Grant (STBG) source of revenue is Federal Highway Administration (FHWA) funds that can be transferred into other U.S. Department of Transportation administrations (e.g. Federal Transit Administration) and funding programs. Once the funds have been transferred, they take on the same program requirements as the program into which they were transferred. ODOT transfers these funds, either at their discretion or in accordance with a legislative directive. SMART has also been awarded these funds by the Metro RFFA process to support its transportation options (TO) program.

Figure 4-5. A graphic breaking down the revenue sources of SMART's annual budget for fiscal year 2020 from the annual transit budget process presentation. (See Appendix IV)



State revenue sources: There are three important sources of funding available through the State of Oregon: the State Transit Improvement Fund (STIF), the Special Transportation Fund (STF) and Connect Oregon. The STIF and the STF are two state revenues sources are relevant to transit agencies budgets, where Connect Oregon is a statewide program to invest in non-highway modes of transportation, with current focus on aviation, rail, and marine projects.

The STIF program was created by legislative action in 2017. Derived from an employee tax, these funds are primarily directed to transit agencies in the state to support operations. To be eligible to receive these funds, transit agencies must complete a plan that is approved by the OTC.

The STF program is funded by a combination of cigarette tax, the non-highway use portion of gas tax, and fees for personal identification cards issued by the Driver and Motor Vehicle Division (DMV) of ODOT. These funds may be used to support operations, capital purchases, and planning for services that provide transportation to seniors and persons with disabilities. These funds are distributed through a combination of formulas and competitive grants. The formula takes approximately 75 percent of the annual fund and distributes it on a population basis to a designated STF agency. SMART engages in the competitive process to determine the allocation of the funds to projects within the region.

Public transit costs

Costs for SMART are determined through the city's five year financial forecast (FY 2016-2021). These expenses are anticipated to increase by at least an annual inflation rate of 2 percent per year for the foreseeable future, while maintaining roughly comparable levels of service. The most volatile components of SMART's expenses are public employees retirement system (PERS) related costs, salaries, health insurance costs, and fuel. Salaries and wages will grow in general at roughly a 2.5 percent rate while benefits are projected to increase approximately 4 percent to 6 percent.

Policy direction and criteria

SMART's Transit Master Plan provides a tool for local implementation of transit and transportation options related provisions in the Oregon Transportation Plan (OTP), the Oregon Transportation Planning Rule (TPR), the Regional Transportation Plan (RTP), Americans with Disabilities Act (ADA), and the Tri-County Coordinated Transportation Plan for Seniors and Persons with Disabilities (CTP). Goals, objectives, and implementation measures of SMART's transit plan must support the City's overall goals as well as the county, regional, state, and federal goals. The TMP also builds on previous local plans, studies and reports and provides a clear direction for the agency until 2022.

To prioritize projects for the MTIP 2022-2024 cycle, SMART refers to the goals and implementation measures listed in the Transit Master Plan adopted by City Council. The goals were created by a citizen task force from which SMART staff developed implementation measures and projects to coincide.

SMART allocates its formula funding through the annual City of Wilsonville budget and Capital Improvements Program (CIP) processes. Nearly all federal funds – formula and discretionary – are received directly by SMART and are subject to the policies and regulations of the Federal Transit Administration (FTA). The use of FTA funds reflects the shared goals of the region and is consistent with FTA regulations. For example, providing safe, reliable and efficient public transportation by replacing diesel buses with compressed natural gas (CNG) and electric buses aligns with the Regional Transportation Plan, the Climate Smart Strategy, and the FTA's goal to support the transition of the nation's fleet to the lowest polluting and most energy efficient transit vehicles.

Public involvement

SMART carries out a robust local public process that includes print advertising, ad hoc committees, and public meetings. For example,

the programming of projects (POP) is advertised in the local Wilsonville Spokesman; an ad hoc committee informs SMART's Dial-a-Ride services; and public comment opportunity is made available at public workshops (as was the case with the TMP) and city council meetings. As part of SMART's development of its annual budget and POP, these public involvement strategies were used.

In addition, TriMet and SMART do a joint presentation of their annual budget. As part of the annual budget presentation, both transit agencies discuss the capital investments expected to continue on throughout the new MTIP. The annual budget presentation provided opportunity throughout the development of the 2021-2024 MTIP for the MPO to provide input on the transit investments anticipated for the region. (See Appendix III for the 2019 presentation)

Final allocation outcome

SMART has approximately $1.68 million programmed in the 2021-2024 MTIP across several different program areas, operations, and transit service. The bulk of SMART's programmed funds are for the maintenance and asset management of the system. The remainder is for the delivery of transportation options, particularly for the elderly and persons with disabilities. With local funds, SMART provides other transportation options services and continues to transition its equipment and vehicles to alternative fuels.

Further information about SMART annual budget process can be found in Appendix III.

TriMet annual budget process

Financial analysis

Financial forecast

TriMet performed a revenue estimation process for development of long-term future plans, projects, and programs in support of the 2018 Regional Transportation Plan (RTP). This process ensures that future costs will not exceed anticipated revenues over time, and seeks to match future investments with anticipated revenues. This process includes scenarios to reflect both financially constrained resources, as well as a strategic list of projects that are not financially constrained. All future projects listed in the RTP also were assigned appropriate RTP project numbers. Future revenues reflect resources that can reasonably be expected to occur based upon historical projections and future forecasts.[4]

TriMet's strategic financial plan outlines the financial and operational policies that guide TriMet forward in navigating near-term challenges and achieving a sustainable future. TriMet considers the budget balanced under one of three scenarios: 1) total expenditures are equal to total revenues, 2) total expenditures are less than total revenues resulting in increases to fund balance, or 3) expenditures exceed revenues, but there is unappropriated fund balances from previous year's spending. For fiscal year 2021, TriMet's budget is balanced under scenario three.[5] The TriMet budget document demonstrates the following financial strategic policies to guide financial decision making including:

- Fiscal policy – One-time-only revenues support one-time-only expenditures including capital additions, startup costs, one-time maintenance efforts and other costs that are non-recurring. Continuing revenues pay for continuing expenditures and one-time expenditures.
- Unrestricted fund balance – Begin each fiscal year with an unrestricted fund balance equal to 2.0 to 2.5 times average monthly operating expenditures.
- Debt management – Debt service on senior lien payroll tax revenue bonds must be no more than 7.5 percent of continuing revenues.

4 More information, and a full project list, can be found here: https://www.oregonmetro.gov/regional-transportation-plan.

5 More information on the TriMet budgeting and forecasting process can be found at: https://trimet.org/budget/

- Fare policy – Sustainable system that encourages and supports ridership and ensures broad access to transit services.
- Capital asset management – Maintaining assets in a state of good repair throughout their useful life to help ensure a safe, reliable and convenient service for customers.
- Pension funding plan – Provide a process to fully fund the pension benefit plans and OPEB benefits.

TriMet relies on a significant amount of revenues from the Federal Transit Administration (FTA), an agency within the USDOT that supports local public transit systems including buses, light and commuter rails. FTA also supports safety measures and helps develop next generation technology research. FTA is one of USDOT's modal based transportation agencies, headquartered in Washington, D.C. and assisted by 10 regional offices.

The Fixing America's Surface Transportation (FAST) Act, the current transportation authorization law, supports transit funding through FY 2020. The Act's five years of predictable formula funding (an increase of approximately $1 billion per year) enables TriMet to better manage long-term assets and State of Good Repair. Federal transit revenues in the 2021-2024 MTIP cycle will be supported by a new authorization bill that forecasts a 2% annual growth rate of revenues, consistent with historical patterns of revenue authority.

The current Act is largely supported by dollars transferred from the government's Highway Trust Fund as well as the General Fund. The current Act also includes funding for new competitive grant programs for buses and bus facilities, innovative transportation coordination, workforce training and public transportation research activities; TriMet has applied for and received some of these types of funding.

Traditional Formula Funds supported under this Act that TriMet has historically benefited from and are reflected in this MTIP, include Sections: 5307 (Urbanized Area Formula Grants), 5337 (State of Good Repair Grants), 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities Grants) and 5339 (Grants for Buses and Bus Facilities).

Formula funding is made available annually to Urbanized Areas (UZA). TriMet, a designated recipient, receives an assigned amount directly, then sub-apportes the funding to two different public bodies (C-Tran in Vancouver and SMART in Wilsonville) based on an agreed upon method. Funding sources for each of TriMet's eligible Formula Grant Programs are described as follows:

1. Section 5307 (Urbanized Area Formula Grants):
   Funds are to be used for transit capital and operating assistance in urbanized areas (population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census) and for transportation-related planning. For areas with populations of 200,000 and more, formula funding is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles and fixed guideway route miles as well as population and population density. The FAST Act increased the total amount allotted for Urbanized Area Formula Grant funding by 2.01 to 2.13 percent per year. FTA also apportions Section 5340 (Growing States) funds to qualifying UZAs. These amounts are added to the Urbanized Area's Section 5307 apportionment. The FAST Act has also had a positive impact on this revenue source, growing 2.51 percent for FY 2017-FY 2020. Similar growth rates are forecasted for authorization levels beyond the timeframe of the FAST Act.

2. Section 5337 (State of Good Repair Grants (SGR)):
   Funds provide 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 can be used for developing and implementing Transit Asset Management plans. Funds allocated to UZAs by statutory formula for high intensity fixed guideway systems are based on revenue and route miles reported to the National Transit Database (NTD) and what the UZA would have received in the fiscal year 2011 fixed guideway

modernization formula. Funds allocated to UZAs by statutory formula for high intensity motorbuses are based on revenue and route miles reported to the NTD. TriMet sub-apportions the High Intensity Motorbus State of Good Repair formula funds with C-Tran and SMART as they provide services in the UZA; however, only TriMet provides fixed guideway services in the area; therefore, no sub-apportionment of funds is needed.

3. Section 5339 (Grants for Bus and Bus Facilities):
   Funds provide, through a statutory formula, for replacement, rehabilitation and purchase of buses and related equipment and to construct bus-related facilities. In addition to the formula allocation, this program now includes two discretionary components: The Bus and Bus Facilities and Low or No Emissions grant programs.

4. Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities):
   This program provides formula funding 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 those needs. This program also aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. Funds are apportioned based on each state's share of the population for these two groups.

5. Regional Flexible Fund Allocation (Urban STBG and CMAQ funds):
   TriMet continues to receive pass-through funds from Metro, as the MPO, via the RFFA process. Flexible funds from either the Surface Transportation Block Grant (STBG) or Congestion Mitigation and Air Quality Program (CMAQ) revenue source are transferred from the Federal Highway Administration to FTA go to one of three programs: Section 5307, Section 5311 or Section 5310. Once they are transferred to FTA for a transit project, funds are administered as FTA funds and take on all the requirements of the FTA program.

   TriMet has issued Capital Grant Receipt Revenue Bonds to finance a portion of capital costs and improvements of the transit system, including: Washington County Commuter Rail and Interstate 205/Portland Mall Light Rail Project, Portland Streetcar Extension, Portland Milwaukie Light Rail Project and purchase of new buses. The Grant Receipt Revenue Bonds are payable from and secured by a pledge of STBG and CMAQ funds, or replacement grant programs and amounts credited to a debt service account.

   TriMet has also been awarded STBG funding in the past for Rail/Bus Preventive Maintenance, RTO Program and other construction costs. TriMet's Regional Transportation Options (RTO) Program promotes transportation services via outreach and marketing and educates employers about the range of commute options available to their employees. The program also facilitates the coordination of services of employer-oriented transportation management associations, other public transit agencies, regional government and employer based transportation coordinators to promote access to and use of transportation services

6. Section 5309 Capital Investment Grants (CIG) Program:
   FTA also provides discretionary funding in competitive processes. FTA's primary grant program for funding major transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit, is the Section 5309 Capital Investment Grants (CIG) Program. Unlike most other discretionary grant programs, instead of an annual call for applications and selection of awardees by the FTA, the law requires that projects seeking CIG funding complete a series of steps over several years to be eligible. There are four categories of eligible projects under the CIG program: New Starts, Small Starts, Core Capacity, and Programs of Interrelated Projects. New Starts projects are new fixed guideway projects or extensions to existing fixed guideway systems with a total

estimated capital cost of $300 million or more, or that are seeking $100 million or more in Section 5309 CIG program funds. For New Starts projects, the law requires completion of two phases in advance of receipt of a construction grant agreement – Project Development and Engineering.

To prepare to apply for CIG funding, Metro and TriMet jointly develop major transit projects in the early stages of project development. Both agencies work together through the project concept, alternatives analysis and identification of final alternative/alignment for the project. Metro and TriMet jointly work together on the environmental scoping, National Environmental Protection Act (NEPA) classification, and the NEPA documents. Metro also plays a role in executing the outreach and engagement strategy. TriMet takes over responsibility of a transit project after project planning has been completed by Metro and the Locally Preferred Alternative has been selected. TriMet will apply to the FTA for entry into project development phase and for a project rating. The FTA reviews the financial capacity, cost estimates, scope, schedule, budget and capability and capacity of TriMet to construct and operate the project. As part of FTA's review, FTA hires a project management and financial management oversight consultant to conduct these detailed reviews and completed before entry into the engineering phase and the issuance of a Full Funding Grant Agreement.

TriMet works with local, regional and state partners to secure local matching funds and any CMAQ/STGB funds that may be used for projects seeking CIG funds. These funding discussions occur during the development of the Draft Environmental Impact Statement and continue during the Final Environmental Impact Statement through to the issuance of the Full Funding Grant Agreement. Non-Capital Investment Grant funding commitments are documented through intergovernmental agreement (IGA). These IGAs document the amount of funding and when funds will be provided to TriMet. TriMet is then responsible for managing the construction, schedule and cash flow for these projects.

TriMet, in partnership with Metro and the FTA, amends CIG projects into the MTIP at the appropriate time and as appropriate project development thresholds are reached. This has already occurred with the Division Transit Project, and is in progress for the Better Red Project. The MAX Red Line provides vital connections within the region, including service to Portland International Airport. This project will make the Red Line more reliable and extend service to the Fair Complex Center in Hillsboro. This wide-ranging project is currently in the engineering phase, with work to be completed over multiple years.[6]

Going forward, TriMet and partners will also work to complete project development and a financial plan for the Southwest Corridor Light Rail Project.

Public transit costs

TriMet's forecast cost projections assume the current cost structures remain in place and cost trends continue. Projections (also known as baseline projections) are designed to serve as a benchmark that can be used to evaluate and adjust revenues and expenditures. This allows TriMet to balance accounts, add service, pay down debt service, and invest in capital projects or fund liabilities. After the projections are updated, TriMet creates a proposed forecast that includes cost savings and revenues needed to achieve financial stability, meet requirements for TriMet's State-of-Good-Repair needs and service commitments to the region, and aligns with the strategic financial plan.

TriMet views its capital projects as either additions to the capital plan or as rehabilitation and replacement of the existing capital. TriMet plans and budgets replacement projects as follows:

- Each department maintains an inventory and condition assessment of capital items. The purpose of the inventory is to estimate the life expectancy, condition and replacement costs of TriMet's existing capital assets, whether or not they will be

6 More information can be found at: https://trimet.org/betterred/

programmed for replacement during the next five years. With this information, TriMet plans for future expenditures, sets replacement schedules and establishes infrastructure standards.

- This inventory is updated and refined each year prior to the budget process, with another year added for planning purposes.
- During the annual budget process, replacement projects must be justified based on the actual condition or repair history of the facility or equipment.

Policy direction and criteria

Annually, TriMet conducts the allocation of FTA formula and discretionary funds, State Transportation Investment Fund, and TriMet local revenues through the annual budget process. Beginning in the autumn each year and adopted in the spring the following year, the annual budget process is guided by federal and state laws, as well as regional and local plans (TriMet's service enhancement plans). In particular, local government budgeting law plays a significant role in the allocation of federal and state funding in TriMet's budgeting process.[7] The law has two major objectives: 1) Provide standard procedures for preparing, presenting, and administering local budgets; and 2) Ensure citizen involvement in the preparation of the budget. Development of the TriMet budget is an effort shared by riders as well as the broader community, with consideration of safety, equity, and other long-term concerns and issues. The Tax Supervising and Conservation Commission (TSCC), a five-member citizen board appointed by the Governor, reviews the budgets of all governmental jurisdictions in Multnomah County. The TSCC, together with the state department of revenue, is responsible for ensuring the TriMet budget complies with local budget law.

7 Oregon Revised Statues Chapter 294, Local Budget Law.

Figure 4-6. A slide outlining the major themes from TriMet's fiscal year 2020 budget from the annual transit budget process presentation (See Appendix IV)

Concurrent with the development of the annual budget, TriMet develops the proposed program of projects (POP). These projects outline how federal funding is proposed to be allocated across a range of projects and programs. These projects outline funding sources including: Section 5307 Urbanized Area Formula; Section 5337 State of Good Repair; Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities; Section 5339 (a) Bus & Bus Facilities; Section 5312 Innovations in Transit Public Safety; Section 20005(b) Pilot Program for Transit-Oriented Development Planning; Surface Transportation Block Grants; and Congestion Mitigation & Air Quality. These funds include Bus & Rail Preventive Maintenance: Labor and materials/services used for on-going maintenance of Bus and Rail fleets in TriMet's service district of Clackamas, Multnomah and Washington Counties. In addition, the annual program of projects also highlights any project awarded FTA Capital Investment Grants (CIG) from the previous year, after the budget has been adopted.

Lastly, for high capacity transit investments, projects are identified through regional planning efforts that include Metro's High Capacity Transit Plan, the Regional Growth Concept and the Regional Transportation Plan. TriMet also develops a Capital Improvement Plan and Service Enhancement Plans that guide transit investments. These plans are guided by technical analysis, are subject to significant policy overview by MPO committees and local governments, and go through extensive public involvement efforts.

Public involvement – annual budget process

To give the public ample opportunity to participate in the budget process, local budget law requires that a budget officer be appointed and a budget committee formed. The budget officer prepares the proposed budget under direction of the TriMet general manager. The board of directors also serves as the budget committee, then reviews and, if needed, revises the proposed budget before it is formally adopted. For TriMet, the budget officer is the TriMet chief financial officer, Executive Director of Finance & Administrative Services and Budget & Grants Administration Department, which is responsible for preparing and publishing the budget document. Notices are published, budgets are made available for public review, and opportunities for public comment are provided. These actions enable public participation in the budget decision-making process and give public exposure to budget programs and fiscal policies before adoption. TriMet divisions prepare budget modification requests in accordance with direction given by the board of directors and general manager. These are submitted to the general manager, who then analyzes and approves the requests. The proposed budget is the culmination of an extensive process of budget development, analysis, and revision.

TriMet engages in a proactive public outreach effort throughout the year by holding public meetings to gather feedback on service changes and services for seniors and people on a low income. The budget development process includes management, labor, riders, and internal and external experts. In advance of the proposed annual budget, TriMet held two general community meetings (one in the fall and one in spring), four culturally specific outreach meetings, and three liaison meetings in non-English speaking communities. Community members may directly contact TriMet with input for the budget during public outreach meetings described above or online. In addition, community members also have opportunity to personally testify on the TriMet budget at the budget hearing of the board of directors.

TriMet maintains a community budget web page.[8] The site contains TriMet's proposed, approved and adopted budgets, along with TriMet's audited financial statements, strategic financial plan, Pension/OPEB Valuations, and board approved policies.[9]

Each year, TriMet provides an opportunity to submit comments or request a public hearing on the proposed program of projects and issues public notice. The public hearing is an opportunity to submit

8 www.trimet.org/about/accountability.htm#financial

9 More information about the TriMet budgeting process can be found at: https://trimet.org/budget/

comments in person rather than via the email link federalfunding@trimet.org. If requested, the public hearing will be held at TriMet's offices. If no request for a public hearing is received, the proposed program of projects will become the final program of projects.[10]

Lastly, as part of TriMet's public involvement process, TriMet and SMART do a joint presentation of their annual budget. As part of the annual budget presentation, both transit agencies discuss the long-term capital investments expected to continue on throughout the new MTIP. The annual budget presentation provided opportunity throughout the development of the 2021-2024 MTIP for the MPO to provide input on the transit investments anticipated for the region.

Final allocation outcome

TriMet has $513 million programmed in the 2021-2024 MTIP across a mix of capital projects, maintenance projects, operations for transit service for the elderly and persons with disabilities, and alternative fuel vehicles. Additionally, TriMet's programming includes several fund exchanges of Metro's federal funds.

Further information about TriMet's budget process and program of projects can be found in Appendix III.

TriMet Special Transportation Fund allocation (STF)

Policy, public involvement, allocation, and performance reporting

The Special Transportation Fund Advisory Committee (STFAC) is appointed by the TriMet Board of Directors to advise TriMet by making informed recommendations about the distribution of grants funded by the State of Oregon's Special Transportation Fund (STF) and the Federal Transit Administration's Enhanced Mobility of Seniors and Individuals with Disabilities - Section 5310. The three-county STF area receives approximately $10–15 million in STF formula, supplemental, and discretionary funds each biennium. STF funds have played an important role in the expansion of community-based services for seniors and persons with disabilities as well as in the preservation of fixed route and complementary paratransit services.

The STFAC includes a broad representation of users of transportation services and providers including all interested members of the Committee on Accessible Transportation (CAT), as well as representatives from Clackamas, Multnomah and Washington Counties aging and disabilities service agencies, out-of-district transit providers, seniors and persons with disabilities from the three Counties, seniors and persons with disabilities representing out-of-district consumers, Ride Connection, and TriMet.

The STFAC allocates funds through a solicitation process in which applications are scored on criteria derived from the Coordinated Transportation Plan for Seniors and People with Disabilities (CTP). The CTP must be updated and approved by the TriMet Board of Directors every four years. Eligible applicants for STF funds are public transit providers, not for profit private transportation organizations, and local jurisdictions. All applications must focus on providing transportation for seniors and/or people with disabilities. All STFAC meetings follow Oregon's Public Meeting Law. The final recommendations for STF funds are forwarded to the TriMet Board of Directors for approval. Once approved, TriMet enters an inter-governmental agreement with ODOT for the funds and passes them through to the awardees through sub-recipient contracts. Per its IGA with ODOT, TriMet ensures contract compliance by the individual sub-recipients.

By following indicators in Monthly Performance Reports, program managers and the STFAC can identify under or outperforming STF & 5310-funded projects, watch for trends, and help ensure that tax dollars are being allocated most efficiently. All supporting materials

10 More information can be found at: https://trimet.org/pdfs/notices/FY21%20Proposed%20POP%20Comment%20Meeting%20-%20TriMet.org.pdf

are hosted on TriMet's public website, including STFAC membership, grant opportunities, allocation awards, and performance reports.

Chapter 5: Demonstrating federal regulatory compliance: MTIP development requirements and other miscellaneous federal regulations

The following sections describe the 2021-2024 MTIP compliance with federal regulations.

Fiscal constraint

Fiscal constraint is maintained by balancing revenues available in a fiscal budget year with the project costs incurred in that year. For the 2021-2024 MTIP, four years of revenues are

Chapter sections

forecasted and four years project costs are estimated. Fiscal constraint is demonstrated by showing the total programming of projects costs by project phase do not exceeding forecasted revenues in any year in the MTIP. The tables below show for each of the agencies administering federal funding within the Portland metropolitan area – ODOT, transit agencies TriMet and SMART, and Metro – programmed project costs in fact do not exceed revenues available in each year of the MTIP.

Revenue streams and project cost estimates are then actively managed through the life of the MTIP and adjustments made to ensure fiscal constraint is maintained. The specific administrative rules and process utilized to actively manage the project cost element of fiscal constraint are described in Chapter 8. More detailed fiscal constraint calculations by agency and for the overall 2021-2024 MTIP can be found in Appendix IV.

Fiscal constraint of the Metro Regional Flexible Fund Allocation

Regional Flexible Fund Project costs, by phase of each project (planning, project development, preliminary engineering, right-of-way acquisition, construction) are programmed (see tables in Chapter 6) for the year in which they are anticipated to obligate. This includes project phases carrying over from the previous 2018-2021 MTIP, and new projects funded with new revenue capacity expected in years 2022-2024.

Table 5-1 on the following page demonstrates more revenue is forecasted as available to the RFFA program during the four-year period of the MTIP as has been scheduled for obligation and spending of funds on projects and programs. This demonstrates fiscal constraint of RFFA funds for the current 2021-2024 MTIP.

Two new management tools are being implemented this funding cycle to help maintain financial constraint of the MTIP. First, Metro is implementing a six-year programming framework of RFFA funding to selected projects, rather than the traditional four-year programming framework. Per federal regulations, the fifth and sixth year of programming are informational only and are not recognized as approved programming by USDOT. However, a six-year programming schedule allows for more realistic scheduling of more complex projects that need to progress through project development, engineering, right-of-way acquisition and construction phases. Often this process, especially when needing to document and obtain federal regulatory approval associated with federal aid projects, may take longer than the four years of programming offered by the traditional four-year MTIP programming framework. The six-year programming option provides the opportunity to match programming with a realistic project schedule, improving both transparency and the need to later amend the MTIP programming to match actual project delivery schedules.

A second new management tool being used in this MTIP is the result of a collaborative effort of ODOT and Oregon's large MPOs to establish obligation targets each year to improve the on-time delivery of federal aid projects in Oregon. Based on programming agreed to between the MPOs and ODOT, the MPOs will need to actively manage delivery of projects to meet a target percentage of programmed funds. Failure to meet targets will result in funding penalties, while meeting targets makes the MPO eligible for additional funding capacity based on a percentage of any federal redistribution funds that may come to Oregon. The establishment of targets also increases the collaboration between ODOT and the large MPOs in cooperatively managing the financial constraint of metropolitan STBG, Transportation Alternatives (TA) set-aside, and CMAQ funding at a statewide level. For example, if one MPO wants to build up funding capacity for a large expenditure in a future year, ODOT or another MPO can utilize that funding capacity in the early years and then provide an equivalent amount of funding capacity in the future year when needed by the MPO. This allows Oregon to fully obligate all available funds in each year, keeping the state eligible for federal redistribution, while providing flexibility needed for the lumpy nature of funding capacity across project schedules.

In total, $143.98 million of revenues are forecasted as available for allocation in the 2022-2024 RFFA process. These revenues are added to the revenues forecasted for federal fiscal year (FFY) 2021 as a part of the 2021-2024 MTIP that were already allocated to projects as a part of the 2019-2021 RFFA process. Funds available in FFY 2021 include unobligated funds from FFY 2020 that ODOT makes available to Metro area projects through an exchange of obligation authority. A total of $207.6 million in RFFA revenues is currently forecast as available during the 2021-2024 period. This forecast will be updated with a more certain understanding of what funding will not obligate during the current FFY 2020 and will be carried forward to FFY 2021.

Table 5-1. Demonstration of fiscal constraint – Metro regional flexible funds allocation

Demonstration of Fiscal Constraint Metro Regional Flexible Funding Allocation (By Federal Fiscal Year)					
	2021	2022	2023	2024	Total: 2021-24
Programmed Project Costs	$147,702,001	$52,172,192	$42,602,274	$45,188,622	$287,665,089
Federal MPO Revenue*	$79,199,433	$46,684,936	$47,852,277	$58,187,643	$231,924,289
State & Local Fund Sources	$68,865,476	$5,998,420	$4,555,023	$5,835,305	$85,254,224
Difference	$362,908	$511,164	$9,805,026	$18,834,326	$29,513,424

*Includes estimated annual allocations of Urban CMAQ, STBG and TA funds. Federal revenue in 2021 includes $34 million in prior year carry-over funds.

Note: The region has committed $32.5 million federal and local funds for the 2022-2024 RFFA projects that are currently scheduled to obligate in 2025 and 2026.

Fiscal constraint of the ODOT funding allocation programs

Programming of the ODOT funding allocation programs to projects located in the Portland metropolitan area are in the same amount of revenue as authorized by the OTC for projects located in this region. FHWA approves ODOT and the OTC fiscally constraining their funding revenues to their funding allocation programs at a statewide level. Therefore, if the OTC authorizes funding to ODOT administered funding allocation programs and on to projects funded through those programs, Metro considers that a commitment of funding to the project that meets the requirement of fiscal constraint.

Table 5-2 demonstrates that the funding commitments approved by the OTC are equal to the programming of funds to project costs.

Table 5-2. Demonstration of fiscal constraint – ODOT funding allocation programs

Demonstration of Fiscal Constraint ODOT Funding Allocation Programs (By Federal Fiscal Year)					
	2021	2022	2023	2024	Total: 2021-2024
Programmed Project Costs	$315,158,524	$97,009,262	$37,993,249	$30,462,386	$480,623,421
Federal Fund Sources	$274,531,721	$87,202,418	$34,666,654	$27,497,818	$423,898,611
State & Local Fund Sources	$40,626,803	$9,806,844	$3,326,595	$2,964,568	$56,724,810
Difference	$0	$0	$0	$0	$0

Fiscal constraint of the SMART funding programs

SMART has proposed programming of federal funds to programs in the exact amount they are forecasted to receive revenues. Table 5-3 below demonstrates that SMART's programming is fiscally constrained.

Table 5-3. Demonstration of fiscal constraint – SMART program

Demonstration of Fiscal Constraint SMART Funding Programs (By Federal Fiscal Year)					
	2021	2022	2023	2024	Total: 2021-24
Programmed Project Costs	$524,698	$524,698	$524,698	$524,698	$2,098,792
Federal Fund Sources	$419,758	$419,758	$419,758	$419,758	$1,679,032
State & Local Fund Sources	$104,940	$104,940	$104,940	$104,940	$419,760
Difference	$0	$0	$0	$0	$0

Fiscal constraint of the TriMet funding programs

TriMet has proposed programming of federal funds to programs in the exact amount they are forecasted to receive revenues. Table 5-4 below demonstrates that TriMet's programming is fiscally constrained.

Table 5-4. Demonstration of fiscal constraint – TriMet programs

Table 5.4 Demonstration of Fiscal Constraint TriMet Funding Programs (By Federal Fiscal Year)					
	2021	2022	2023	2024	Total: 2021-24
Programmed Project Costs	$125,953,737	$91,032,700	$92,767,526	$94,537,051	$404,291,014
Federal Fund Sources	$91,929,800	$72,826,160	$74,214,021	$75,629,640	$314,599,621
State & Local Fund Sources	$34,023,937	$18,206,540	$18,553,505	$18,907,411	$89,691,393
Difference	$0	$0	$0	$0	$0

Fiscal constraint demonstration conclusion

Table 5.5 below displays all of the funding programmed in the 2021-2024 MTIP. As all of the funding allocation programs have adequate funding available in each fiscal year to meet the programming of funds to projects, fiscal constraint of the 2021-2024 MTIP is met.

Table 5-5. Demonstration of fiscal constraint – all 2021-24 MTIP programming

Demonstration of Fiscal Constraint All 2021-24 MTIP Progamming (By Federal Fiscal Year)					
	2021	2022	2023	2024	Total: 2021-24
Programmed Project Costs	$589,338,960	$240,738,852	$173,887,747	$170,712,757	$1,174,678,316
Federal Fund Sources*	$446,080,712	$207,133,272	$157,152,710	$161,734,859	$972,101,553
State & Local Fund Sources	$143,621,156	$34,116,744	$26,540,063	$27,812,224	$232,090,187
Difference	$362,908	$511,164	$9,805,026	$18,834,326	$29,513,424

*Includes estimated annual allocations of Urban CMAQ, STBG and TA funds. Federal revenue in 2021 includes $34 million in prior year carry-over funds.

Note: The region has committed $32.5 million federal and local funds for 2022-2024 RFFA projects that are currently scheduled to obligate in 2025 and 2026.

2021-2024 MTIP policy direction cover

Regional Transportation Plan (RTP) consistency

The 2021-2024 MTIP employed a variety of techniques to ensure the investments within the 2021-2024 MTIP are consistent with the adopted 2018 RTP. The process of vetting and determining consistency takes place throughout the development of the 2021-2024 MTIP, starting at the initial policy direction to help guide the different funding allocation processes being led by ODOT, SMART, and TriMet and continuing through the preparation of final programming for the 2021-2024 MTIP. Through this continual process of vetting consistency, the region is able to ensure the investments put forward in the 2021-2024 MTIP make progress toward addressing one or more of the region's goals for the transportation system and are consistent with the region's long-range financial forecast. The next sections describe in further detail the main mechanism used as part of the 2018 RTP consistency vetting process for the development of the 2021-2024 MTIP.

Policy direction and priorities

During the development of the 2021-2024 MTIP, Metro staff drafted a set of policies to guide the development of the investment package. The draft policies were informed by the recently adopted 2018 RTP as well as federal regulations pertaining to the development of the MTIP. The policies were then taken through the regional committee process – TPAC and JPACT – and reviewed with main MTIP partners – ODOT, SMART, and TriMet – to gather feedback. After robust discussion on the draft policies at the regional committees, the 2021-2024 MTIP policy direction was adopted by the Metro Council in April 2019. (See Appendix IV) The 2021-2024 MTIP policy direction provides partners with four key areas of direction to guide their funding allocations and grant applications. The policies are as follows:

- Implement the policy priorities: safety, equity, addressing climate change, and managing congestion through the investments identified in the adopted 2018 Regional Transportation Plan; and
- Comply with federal regulations pertaining to the development of the transportation improvement program (TIP) as outlined in the Code of Federal Regulations (CFR) 23 CFR 450.300 – 450.340 as well as addressing corrective actions, compliance actions, and recommendations to emerge from Transportation Management Association (TMA) certifications and/or State Transportation Improvement Program (STIP) approvals; and
- Pursue and implement the regional finance approach; and
- In looking at opportunities to take advantage of leveraging funding opportunities, do so in an open and coordinated manner.

MTIP partners – Metro, ODOT, SMART, and TriMet – applied the 2021-2024 MTIP policy direction in different manners to balance against agency priorities as well as considering the funding restrictions of certain federal or state funds. For example, as part of the 2022-2024 Regional Flexible Fund Allocation (RFFA), the 2018 RTP policy priorities served as the criteria for prioritization in the technical scoring. As another example, during the transit agencies' annual budget presentations to regional committees, the transit agencies discussed and contextualized how the proposed transit budgets reflected and addressed the 2018 RTP policy priorities as well as reflected the priorities of the federal performance targets, particularly for asset management. (More detailed discussion of the funding allocation processes can be found in Chapter 4 and Appendix III.) These examples illustrate how the policy direction set forth in the development of the 2021-2024 MTIP were factored into and influenced the outcomes of funding decisions and consistency with the region's long-range transportation blueprint.

In addition to applying the 2021-2024 MTIP policy direction into funding decision-making process, Metro worked closely with partners – ODOT, SMART, and TriMet – during the funding allocation processes to help ensure 2018 RTP consistency. Staff took opportunities to remind the agencies in committee and stakeholder settings to prioritize investments which are consistent with adopted regional policy. Metro staff also worked with partner staff in the background of the funding allocation process to help point to potential RTP consistency issues with proposed investments. For example, Metro staff identified whether candidate projects for funding were included in the 2018 RTP financially constrained project list or if candidate project scope descriptions were inconsistent with regional policy and needed further refinement.

The results of the 2021-2024 MTIP performance analysis show the package of investments makes progress toward the majority the four 2018 RTP policy priorities and many of the MAP-21 performance targets. However, there are opportunities for improvement in safety and accessibility. The region is currently experiencing an increase in fatal and serious injury crashes and increasing accessibility by bicycling and walking in historically marginalized communities can be improved. Overall, the investment program is having an effect and making progress toward implementing the adopted regional transportation plan.

Programming development

As part of developing the programming tables for the 2021-2024 MTIP, partners ODOT, SMART, and TriMet were asked to provide a suite of project data to help develop the 2021-2024 MTIP. As part of the data request, partners were asked to provide the appropriate RTP identification number for each transportation investment – whether a project or program. For those projects or programs where partners were unable to supply an RTP identification number, Metro staff worked directly with the partner to determine whether the project is considered exempt from having a RTP identification number or helping the partner find the identification number. Metro staff then verified the 2021-2024 MTIP investment matched in scope, general schedule, and costs to the RTP identification number provide. This exercise ensured projects and programs were consistent with the financial plan outlined in the 2018 RTP. The exercise also helped to define a next set of steps for the project or program to move forward if a verified RTP was not determined or where there were discrepancies in scope, general schedule, and costs.

Congestion management process and MAP-21 performance measures

Traffic congestion occurs when the number of users on a transportation facility approaches or exceeds the capacity of that facility. Congestion has many causes, but mostly results from too much traffic for the physical capacity of a road to handle 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 categories:

- Routine congestion – typically occurs daily during somewhat

predictable timeframes

- Traffic incidents – unexpected situations and difficult to predict

At the outset, traffic congestion may appear as a negative outcome that needs to be eliminated. But congestion is an indicator of growth and economic vitality, as is the case in the greater Portland region. Transportation research has demonstrated congestion cannot be eliminated, but needs active management in order to provide a reliable transportation system for users, better connect goods to market and support travel across the region.

For the Portland metropolitan region, the efforts to address congestion in a growing region focuses on improving reliability. Reliability is about predictability and dependability – being able to count on knowing about how long it will take to get to school, work or other activities. This form of active management is why the region's transportation investments, as reflected in the 2021-2024 MTIP, are a diverse array of investments that include expanding active transportation and transit options, ensuring a well-connected surface street network through complete streets projects, managing system demand through technology and operations, and implementing education, outreach, and marketing programs to encourage the use of travel options, as well as some limited interstate and roadway expansion projects primarily in the form of auxiliary lanes.

As part of the development of the 2021-2024 MTIP investments, the congestion management process and approach was applied throughout the creation of the package of investments. The summary of the region's approach to the congestion management process is as follows.[1]

- 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.

The region applied the congestion management process in both explicit and implicit ways. The congestion management process approach was another factor used to inform the development of the investment package. The array of other factors included agency roles and responsibilities within the regional transportation system, agency policy direction, and funding restrictions – whether federal or local directives – as the agencies deliberated through funding allocation and annual budget processes. A short description of how the congestion management process was applied by each MTIP partner in the development of the 2021-2024 MTIP is provided in the following sections.

Metro

Guided by the recently adopted 2018 RTP and the policy direction for the 2021-2024 MTIP, the 2022-2024 Regional Flexible Fund Allocation was able to provide data on existing conditions and structure its funding allocation process to encourage grant applications that recommend cost-effective strategies to manage congestion. This helped place into context how the 2022-2024 RFFA makes progress towards actively managing traffic congestion.

Regional Flexible Funds are allocated to support the regional planning and data management systems. These funds help ensure an adequate traffic data monitoring and analysis capacity for the Congestion Management Process that informs transportation planning and spending decisions in the region by state, regional and local agencies.

The region continues to honor prior commitments to a bonded payment stream of regional flexible funds for the expansion of high capacity transit. This is a key strategy of the region's growth management and travel demand strategy to increase access to jobs and services and reduce per capital motor vehicle travel through the development of mixed-use centers around high capacity transit

1 More detail on the Portland metropolitan region's Congestion Management Process approach can be found in Appendix L of the 2018 RTP.

stations.

Leaning heavily on the 2018 RTP existing conditions data, system performance results, as well as the newly adopted federal performance targets and baseline data, was made available to Step 1 and Step 2 funding applicants to help shape grant applications and presentations. For example, the regional programs (i.e. Regional Travel Options, Transit-Oriented Development) under funding consideration for Step 1 in the 2022-2024 RFFA gave presentations at the regional committees (i.e. TPAC and JPACT) discussing their program's purpose, performance, and roles within the broader implementation of the 2018 RTP and for the regional transportation system.[2]These presentations provided information to facilitate deliberations on the region's recommendation for continued funding of the programs and one-time regional investments (in the case of the Oregon Household Activity Survey). Consideration of the programs purpose and performance in contribution to meeting performance targets led to the decision to continue to provide dedicated RFFA funding to support transportation demand and system management and transit oriented land development. These are key strategies and investment priorities to reduce the need for costly and impactful expansion of motor vehicle capacity to provide for travel access needs. This investment strategy to support these programs is itself part of the region's compliance with the Congestion Management Process.

The 2022-2024 RFFA Step 2 competitive grant allocation was slightly more explicit in consideration of the congestion management process. In the application criteria, managing congestion was part of the technical evaluation looking at the potential for the proposed project to manage demand on the system.

The technical evaluation in conjunction with other elements, such as the public comment, helped to inform deliberations on which projects to propose for funding.

2 September 2019 TPAC meeting https://www.oregonmetro.gov/events/transportation-policy-alternatives-committee-meeting/2019-09-06

Lastly, with the 2022-2024 RFFA adopted and incorporated into the 2021-2024 MTIP, the investments were evaluated against the 2018 RTP policy priorities to understand how well the investments are being made toward implementing the 2018 RTP. Managing congestion is one of the key areas evaluated, where the results tend to show progress. The investments show single occupancy vehicle trips shift to transit, bicycling and walking resulting in decreased travel times in certain travel corridors.[3] While discussed specifically in the 2022-2024 RFFA section, it should be acknowledged the evaluation of the 2021-2024 MTIP and MAP-21 performance target reporting also serves as part of the analysis, recommendation and monitoring of the system in the overarching congestion management process for the entire set of investments in the 2021-2024 MTIP.

ODOT

ODOT implements the congestion management process in several ways. In ODOT's role managing the freeway system for safety and efficient and reliable operations, Oregon Highway Plan Policy 1G.1 guides improvements. The policy prioritizes the preservation and improvement of existing system functionality over additional capacity or new facilities. Advancements in traffic data collection methods have enabled ODOT to systematically collect, store, evaluate, and monitor traffic conditions on all of its freeway corridors in the metro area. By monitoring key transportation performance indicators, ODOT can identify problems and effectively manage the system to better enable the movement of people, goods and services.

Data Collection, Analysis, and Monitoring (on-going): As part of ODOT's data collection and monitoring, the agency collects and evaluates data about existing congestion and publishes that data and an analysis of it in a bi-annual congestion report. The report looks at the following key traffic performance areas that relate to urban mobility.

- Congestion and bottlenecks

3 See 2021-2024 MTIP performance assessment results.

- Hours of congestion
- Vehicle hours of delay
- Travel time
- Speeds
- Recurring bottlenecks
- Reliability - AM, Mid-day, PM Safety
- Frequency of crashes and non-crash incidents
- Crashes and non-crash incidents by time of day and type

In addition, ODOT uses of the region's travel demand model of forecasted future congestion to assess potential strategies to manage the system.

Development of Cost Effective Strategies: Consistent with the OHP 1.F hierarchy policy, ODOT considers demand and system management options to address congestion. In ODOT's approach to evaluating and applying cost effective strategies to manage system demand, ODOT looks at a diverse arrange of strategies including

- Providing funding to demand management programs and Transportation System Management solutions such as ITS projects, traveler information systems, and incident response.
- Providing funding to complete facilities for walking, bicycling and transit access as a part of its capital projects.[4]
- Implementing ODOT Region 1 prioritized smaller-scale Congestion Bottleneck & Operations Study (CBOS) projects as an affordable means to address congestion bottlenecks in the metropolitan area.
- ODOT Region 1 participating in the development of and/or funding of major transit capital projects in the region as a means of managing congestion in the region.

As a result of this application of the congestion management process, ODOT continues to implement cost-effective improvements that reduce crashes and delay, and relieve congestion at recurring bottlenecks on the freeway system. These are reflected in the 2021-2024 MTIP as individual projects or as part of Region 1 ODOT operations. Some examples include:

- ODOT Corridor Bottleneck Operations Study (CBOS) projects, such as auxiliary lanes on freeways, to address safety and operations problems at specific, localized bottlenecks.
- ODOT's Real-time strategy of active traffic management technologies, designed to improve safety and reliability by providing variable advisory speed, queue warning, and traveler information to manage congestion.
- The Transportation Management and Operations Center (TMOC) provides a single, regional point of contact for around-the-clock monitoring of transportation system operations and coordination of transportation related communications and services. TMOC specially trained personnel monitor freeway corridors and work in partnership with law enforcement, fire rescue and medical teams, and tow operators to provide safe and efficient traffic flow around an incident.
- Traffic Incident Management (TIM) directly addresses traffic congestion and incident delay, and improves safety on the freeway system by deploying ODOT's Incident Response team to perform the functions of incident prevention, motorist assistance and incident management in specially equipped vehicles. Incident Response staff monitor freeways before, during and after peak commute periods removing hazards and abandoned vehicles from travel lanes, medians and shoulders. Responders also assist motorists and clear disabled vehicles from travel lanes.

4 As mandated through state legislation to build facilities and dedicate revenues from gas taxes for active transportation.

Figure 5-1. ODOT's Incident Response and Transportation Incident Management (TIM) in action

An ODOT Incident Response team performing functions to assist travelers and clear incidents from causing a significant backlog of congestion on the region's freeways.

Congestion Management and Relief in Development: The Portland metro area has the most severe freeway system congestion in the state. Traffic congestion commonly occurs at I-5 the Rose Quarter, I-5 at Interstate Bridge, I-5 at the Terwilliger curves, I-5 at Lower Boones/Tualatin-Sherwood Road and I-205 at Airport Way.

House Bill 2017 – Keep Oregon Moving – is the statewide transportation package enacted by the Oregon legislature in 2017. As part of the $5.3 billion package, the legislature directed ODOT to address and relieve congestion at key bottlenecks at: I-5 in the Rose Quarter area, OR 217 and I-205 at the Abernathy Bridge to Stafford road. The legislature set aside funding from the package to implement the designed congestion relief projects. These projects are currently under development, refining cost estimates, working through the environmental process, and design. Phases of these congestion relief projects are reflected in the 2021-2024 MTIP.[5]

5 With the exception of the I-5 Rose Quarter project as the design and right-of-way phases have been advanced to fiscal year 2020 and the project is identifying its funding strategy for the construction phase.

Figure 5-2. Portland region's proposed tolling projects

A conceptual drawing of the Portland region's proposed tolling projects on Interstate 5 (I-5) and Interstate 205 (I-205), currently in project development

HB 2017 also directed ODOT to study value/congestion pricing as a viable solution to the congestion problem in Portland, particularly on I-5 and I-205. Throughout 2018, ODOT led a stakeholder process to identify potential pricing application on these two facilities. An application was submitted to FHWA at the end of 2018 with a proposal to explore further tolling on all lanes in both directions at:

- I-5 from about Alberta St to Multnomah Blvd
- I-205 on or near the Abernethy Bridge

FHWA approved the application and further project development work is underway for both projects.[6]

6 At this time, the tolling projects on I-5 and I-205 are not reflected in the 2021-2024 MTIP.

Transit agencies – SMART and TriMet

Investments in transportation made throughout the metropolitan region are crucial to managing congestion in our growing region. Specifically, transit investments are one of the best ways to manage congestion and accommodate growth, connecting people with their community while easing traffic congestion and reducing air pollution.

SMART

South Metro Area Regional Transit (SMART) is the city of Wilsonville's public transit department, serving residents since 1989. SMART has a fleet of 33 vehicles and 35 full and part-time bus drivers. SMART operates nine fixed-route services within the city and to Canby, Tualatin, Salem, and Portland. SMART also provides Dial-a-Ride (DAR), non-emergency medical trips, and special shuttle services for older adults and people with disabilities.

In addition to being a public transit provider, SMART operates a number of transportation options programs that connect people to transportation choices, in an effort to reduce single occupancy vehicles trips, traffic congestion, and greenhouse gas emissions. SMART provides information and resources to help people learn about their travel options for all types of trips. The core components of SMART's transportation options program include:

- Emergency ride home program
- Transportation fairs and lunchtime presentations – SMART hosts information tables to worksites of 100 employees or more to provide one-on-one assistance on transportation choices
- Trip Reduction Plan (TRP) and survey design/analysis – an individualized plan per worksite, which aims to reduce single occupancy trips made to the worksite. SMART assists companies with guidance through the survey process, analyzing data and writing a successful TRP
- Walk Smart/Bike Smart – Walk Smart is a free program that encourages participants to walk more and drive less for those short trips. Bike Smart is a one-stop shop for information about bicycling in and around the Wilsonville area. Wilsonville offers the use of free covered bike storage at the Wilsonville Transit Center
- Individualized marketing campaigns – individualized marketing programs provide education and outreach efforts that encourage voluntary travel behavior change tailored to the travel needs of individuals

Additionally, through a collaboration between SMART and Ride Connection, RideWise Travel Training is available in Wilsonville for older adults (60+) and people with disabilities at no cost. Participants in the RideWise program receive access to information, public transportation training, and support centered on the safe, independent use of public transit.

SMART also works collaboratively with regional partners (including local jurisdictions, Metro, and ODOT) to carry out its functions in providing transit service efficiently and effectively.

TriMet

As outlined in the 2018 RTP Appendix L, TriMet is a key partner in the region's congestion management process (CMP) to implement selected strategies that manage the transportation system. TriMet also contributes data related to transit ridership, revenue hours, and boarding rides per revenue hour, on-time performance measures, transit assets State of Good Repair, live vehicle tracking of bus, MAX light rail, and WES commuter rail arrival time and monitoring to help inform the region about the performance of the transit system and its ability to manage demand on roadways. Beyond TriMet's role as a public transit provider, the agency also administers transit pass programs for employers – nearly 1,200 employer worksites in the Portland area offer transit passes as a benefit to their employees to support travel options and manage demand during the most congested times, work commute hours. In these roles and capacities, TriMet works collaboratively with regional partners (including local jurisdictions, Metro, and ODOT) to provide transit service efficiently and effectively, as demonstrated by enhanced transit collaborations.

Figure 5-3. A sample of transit performance data collected and provide by TriMet

TRIMET

Audited*	TRIMET SERVICE AND RIDERSHIP INFORMATION											
Key Indicator	**FY2000**	**FY2001**	**FY2002**	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**	**FY2009**	**FY2010**	**FY2011**
Originating Rides												
Bus	45,956,400	47,905,200	48,148,800	47,790,000	48,394,800	48,373,200	47,732,400	47,463,600	48,186,000	49,970,400	45,492,000	43,622,926
MAX	17,652,000	18,579,600	21,218,400	21,801,600	22,890,000	26,641,200	27,214,800	28,406,400	29,396,400	29,370,000	32,037,600	34,373,474
WES **(1)**	NA	NA	NA	NA	NA	NA	NA	NA	NA	97,180	239,519	289,980
Fixed Route:	**63,608,400**	**66,484,800**	**69,367,200**	**69,591,600**	**71,284,800**	**75,014,400**	**74,947,200**	**75,870,000**	**77,582,400**	**79,437,580**	**77,769,119**	**78,286,380**
LIFT/Cab	735,792	781,956	845,496	918,948	958,248	1,026,156	1,050,144	1,084,056	1,122,036	1,088,446	1,072,704	1,063,942
Total System:	**64,344,192**	**67,266,756**	**70,212,696**	**70,510,548**	**72,243,048**	**76,040,556**	**75,997,344**	**76,954,056**	**78,704,436**	**80,526,026**	**78,841,823**	**79,350,322**
Boarding Rides												
Bus	60,072,000	62,667,600	63,208,800	62,743,200	63,640,800	63,906,000	63,129,600	62,882,400	63,880,800	66,153,600	60,640,800	58,431,700
MAX	21,165,600	22,279,200	25,424,400	26,120,400	27,430,800	31,920,000	32,606,400	34,035,600	35,217,600	35,188,800	38,390,400	41,200,160
WES **(1)**	NA	NA	NA	NA	NA	NA	NA	NA	NA	124,346	305,844	370,800
Fixed Route:	**81,237,600**	**84,946,800**	**88,633,200**	**88,863,600**	**91,071,600**	**95,826,000**	**95,736,000**	**96,918,000**	**99,098,400**	**101,466,746**	**99,337,044**	**100,002,660**
LIFT/Cab	735,792	781,956	845,496	918,948	958,248	1,026,156	1,050,144	1,084,056	1,122,036	1,088,446	1,072,704	1,063,942
Total System:	**81,973,392**	**85,728,756**	**89,478,696**	**89,782,548**	**92,029,848**	**96,852,156**	**96,786,144**	**98,002,056**	**100,220,436**	**102,555,192**	**100,409,748**	**101,066,602**
Avg. Wkd. Originating Rides												
Bus	153,600	159,900	160,100	157,900	159,000	159,000	157,600	156,000	157,400	163,400	148,600	142,900
MAX	53,800	57,700	64,500	65,800	69,300	80,200	82,500	86,100	88,800	88,900	96,800	104,800
WES	NA	NA	NA	NA	NA	NA	NA	NA	NA	918	938	1,133
Fixed Route:	**207,400**	**217,600**	**224,600**	**223,700**	**228,300**	**239,200**	**240,100**	**242,100**	**246,200**	**253,218**	**246,338**	**248,833**
LIFT/Cab	2,559	2,731	2,931	3,146	3,248	3,476	3,570	3,677	3,786	3,685	3,643	3,612
Total System:	**209,959**	**220,331**	**227,531**	**226,846**	**231,548**	**242,676**	**243,670**	**245,777**	**249,986**	**256,903**	**249,981**	**252,445**
Avg. Wkd. Boarding Rides												
Bus	200,200	208,700	209,400	206,600	208,400	209,200	207,400	205,700	207,600	215,300	196,900	190,300
MAX	65,100	69,800	78,000	79,600	83,800	97,000	99,800	104,200	107,400	107,600	117,100	126,700
WES	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,175	1,200	1,449
Fixed Route:	**265,300**	**278,500**	**287,400**	**286,200**	**292,200**	**306,200**	**307,200**	**309,900**	**315,000**	**324,075**	**315,200**	**318,449**
LIFT/Cab	2,559	2,731	2,931	3,146	3,248	3,476	3,570	3,677	3,786	3,685	3,643	3,612
Total System:	**267,859**	**281,231**	**290,331**	**289,346**	**295,448**	**309,676**	**310,770**	**313,577**	**318,786**	**327,760**	**318,843**	**322,061**
Vehicle Hours												
Bus	2,009,148	2,032,944	2,048,484	2,049,156	2,047,932	2,033,544	1,953,420	1,967,016	1,984,560	2,010,600	1,919,724	1,768,620
MAX (train)	143,100	144,672	183,648	192,516	201,240	245,256	238,704	239,400	246,504	255,180	270,732	264,276
WES	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,269	5,478	5,496
Fixed Route:	**2,152,248**	**2,177,616**	**2,232,132**	**2,241,672**	**2,249,172**	**2,278,800**	**2,192,124**	**2,206,416**	**2,231,064**	**2,268,049**	**2,195,934**	**2,038,392**
LIFT/Cab **(2)**	397,216	422,812	456,389	485,659	513,625	554,507	578,184	601,674	623,150	619,204	593,030	582,804
Total System:	**2,549,464**	**2,600,428**	**2,688,521**	**2,727,331**	**2,762,797**	**2,833,307**	**2,770,308**	**2,808,090**	**2,854,214**	**2,887,253**	**2,788,964**	**2,621,196**

							04/28/2020
FY2012	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**FY2017**	**FY2018**	**FY2019**
44,512,567	45,220,800	45,131,280	47,023,200	45,061,200	44,538,000	43,704,000	43,515,600
35,203,333	32,638,800	30,254,400	29,870,400	31,766,400	31,668,000	31,035,600	30,963,600
326,910	345,510	393,880	366,830	351,520	287,520	265,668	244,812
80,042,810	**78,205,110**	**75,779,560**	**77,260,430**	**77,179,120**	**76,493,520**	**75,005,268**	**74,724,012**
1,062,874	1,037,700	1,036,824	1,042,272	1,064,568	1,017,648	1,009,080	962,220
81,105,684	**79,242,810**	**76,816,384**	**78,302,702**	**78,243,688**	**77,511,168**	**76,014,348**	**75,686,232**
59,626,800	59,768,310	60,034,200	62,488,800	60,002,000	57,820,520	56,737,466	56,492,524
42,193,180	39,036,500	38,228,800	37,746,000	40,019,560	39,699,760	38,906,694	38,817,600
418,090	442,120	512,270	476,976	457,210	448,530	414,432	377,700
102,238,070	**99,246,930**	**98,775,270**	**100,711,776**	**100,478,770**	**97,968,810**	**96,058,592**	**95,687,824**
1,062,874	1,037,700	1,036,824	1,042,272	1,064,562	1,017,647	1,009,080	962,220
103,300,944	**100,284,630**	**99,812,094**	**101,754,048**	**101,543,332**	**98,986,457**	**97,067,672**	**96,650,044**
145,500	147,900	147,100	153,200	146,000	143,700	141,400	140,600
107,400	100,000	94,000	92,700	98,100	97,800	96,100	96,000
1,282	1,359	1,544	1,438	1,368	1,128	1,046	963
254,182	**249,259**	**242,644**	**247,338**	**245,468**	**242,628**	**238,546**	**237,563**
3,606	3,556	3,566	3,587	3,655	3,514	3,473	3,288
257,788	**252,815**	**246,210**	**250,925**	**249,123**	**246,142**	**242,019**	**240,851**
193,800	194,000	194,800	202,800	193,592	186,800	183,800	182,800
130,000	121,000	118,400	116,800	123,700	123,200	121,100	120,900
1,639	1,739	2,008	1,869	1,779	1,759	1,632	1,503
325,439	**316,739**	**315,208**	**321,469**	**319,071**	**311,759**	**306,532**	**305,203**
3,606	3,556	3,566	3,587	3,655	3,514	3,473	3,288
329,045	**320,295**	**318,774**	**325,056**	**322,726**	**315,273**	**310,005**	**308,491**
1,758,936	1,753,944	1,806,744	1,898,292	1,988,100	2,034,432	2,098,248	2,216,460
268,512	266,676	271,476	271,800	310,920	311,832	320,688	327,732
5,460	5,436	5,460	5,457	5,498	5,460	5,496	5,460
2,032,908	**2,026,056**	**2,083,680**	**2,175,549**	**2,304,518**	**2,351,724**	**2,424,432**	**2,549,652**
577,709	567,202	572,866	580,777	612,565	605,422	593,280	570,117
2,610,617	**2,593,258**	**2,656,546**	**2,756,326**	**2,917,083**	**2,957,146**	**3,017,712**	**3,119,769**

Other federal regulations

In addition to addressing the requirements set forth in the Code of Federal Regulations related to the development of the transportation improvement program (TIP), the 2021-2024 MTIP also ensures compliance with other overarching federal rules. Explicitly, the 2021-2024 MTIP addresses the following regulations:

- Title II – Americans with Disabilities Act
- Title VI – Civil Rights & Environmental Justice
- Clean Air Act

A summary of how the 2021-2024 MTIP and its development process complied with the overarching federal regulations is described below. Further details can be found in the Appendix IV.

Title II – Americans with Disabilities Act

The 2021-2024 MTIP investment program makes progress in complying with Title II of the Americans with Disabilities Act (ADA) 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. Compared to previous MTIP cycles (e.g. 2018-2021 and 2015-2018), the 2021-2024 MTIP cycle made more explicit the consideration of Americans with Disabilities Act within the investment program. For capital-oriented investments, as allocated through the regional flexible fund and the ODOT administered funding allocation programs, the consideration of ADA occurred in the project scoping and grant application processes. For example, in the 2022-2024 regional flexible fund application, a project readiness analysis was undertaken with each project application. With the assistance of an outside transportation engineering consultant review, the applications were assessed to see whether proposed transportation investments incorporated the necessary scope elements, including Americans with Disabilities Act. In the ODOT administered funding allocation process, the funding proposals underwent a more significant project scoping exercise. During this process, missing scope elements were identified, and a review of proposed cost estimates was undertaken. Missing ADA elements or insufficient cost estimates for ADA were incorporated and refined to reflect the ADA in the proposed project.

Moreover, ODOT has completed an inventory of ADA compliant curb ramps throughout all its facilities and developed near and long-term implementation strategy to construct missing curb ramps or deficient curb ramps. As reflected in the MTIP, ODOT has investments focused on the design and construction of curb ramps on priority facilities and most project descriptions include ADA components.[7]

In addition, as the public transit service providers in the region, TriMet and SMART both operate programs that implement the Americans with Disabilities Act. While not explicit, the transit agencies' investment profile represented in the 2021-2024 MTIP includes capital and operating funds to address the Americans with Disabilities Act. TriMet and SMART's 2021-2024 MTIP investments include funds allocated through the Special Transportation Fund (STF) allocation as well other investments in bus purchases, including paratransit, and traveler education to support mobility services and paratransit for people with disabilities. In the most recent two-year STF allocation, TriMet, as the lead, awarded the nearly $18.5 million available to activities including:

- TriMet paratransit LIFT services
- Wilsonville SMART medical transportation for the elderly and people with disabilities
- Ride Connection-operated services, including door-to-door rides
- Special service for seniors and persons with disabilities in rural area Sandy, Canby, and Molalla, and
- A range of services provided by Clackamas County Consortium for those with special needs.

7 More information on ODOT's accessibility efforts can be found at: https://www.oregon.gov/odot/Engineering/Pages/Accessibility.aspx

The Coordinated Transportation Plan (CTP) for seniors and persons with disabilities guided the allocation of the Special Transportation Fund, which comprises a mix of State Special Transportation Formula (STF) Funds, Statewide Transportation Improvement Funds (STIF) allocated via the State of Oregon, and federal Section 5310 grant programs. The CTP is the central regional coordinating document for both federal and state funded transportation efforts serving people with disabilities and the elderly and describes the region's vision of a continuum of transportation services that takes into account an individual's abilities as they transition through various stages of age and/or disability.

Title VI – Civil rights & environmental justice

The Civil Rights Act of 1964 and the Executive Order 12989 on Environmental Justice are federal laws to ensure programs and services delivered by the federal government or the agencies that receive federal money do not discriminate against or deny benefits on the basis of race, color or national origin (Title VI) and conduct analysis and engagement to identify and address disproportionately high and adverse human health and environmental effects of federal or federally funded activities on minority populations and low-income populations (environmental justice).[8]

For the 2021-2024 MTIP, complying with Title VI of the Civil Rights Act and the Executive Order on Environmental Justice means: 1) engaging with historically marginalized communities, particularly people of color, people with low incomes, and people with limited English proficiency; and 2) conducting an analysis of the funding program to understand the effects of the investments for these historically marginalized communities. Therefore, as part of the development of the 2021-2024 MTIP, engagement was conducted throughout the building of the investment program and a performance analysis of investments was undertaken in the lead-up to the public review draft. Through these two activities and the results of the analysis, the 2021-2024 MTIP is in compliance with the requirements of Title VI of the Civil Rights Act and the Executive Order 12898 on Environmental Justice. A short discussion on engagement and the evaluation of the investments is provided in the following sections.[9]

Outreach and engagement

As part of building the investment package for the 2021-2024 MTIP, each of the MTIP partners undertook a process to allocate federal and matching locals funds to projects and programs that serve the regional transportation system. Each agency conducted public involvement, outreach, and engagement activities to gather feedback and input from historically marginalized communities and other affected stakeholders. The level of public involvement, outreach, and engagement is scaled and tailored for each funding allocation process according to policy direction and agency public participation procedures as outlined in their public participation plan or agency guidelines. Engagement tools most frequently used include public comment periods, public hearings, outreach through various social media, community forums, workshops, and web surveys. The public involvement processes for the funding allocations, in addition to providing opportunity to comment on investments that eventually comprise the 2021-2024 MTIP, also served as opportunities to continue relationship building with historically marginalized communities.

Further description about the public involvement process deployed for each MTIP partner's funding allocation process can be found in Chapter 4 of this document.

8 Under Title VI, people not proficient in English are entitled to assistance to access critical information.

9 Further discussions about the public involvement and engagement for the funding allocations undertaken by each MTIP partner can be found in Chapter 4 of this document. Additional information about the 2021-2024 MTIP performance assessment and the transportation equity evaluation can be found in Chapter 3 of this document and Appendix II.

Transportation equity evaluation

Historically marginalized communities identified three transportation system outcome areas of greatest importance: safety, accessibility and affordability.[10] In taking direction from the 2018 RTP, the evaluation of the 2021-2024 MTIP investment package examined how the investments address these desired outcomes. As a result, the 2021-2024 MTIP performance evaluation did a comparison analysis as to how the following metrics perform in areas with a high concentration of historically marginalized communities compared to those areas with lesser concentrations of historically marginalized communities. The 2021-2024 MTIP transportation equity evaluation is made up of a subset of the performance measures that reflect the priorities of historically marginalized communities, and analysis of how the investment programs performed in these areas. The included performance measures are:

- Level of investment in safety
- System completion of the active transportation network
- Access to jobs and community places within a timely commute

In summation, the results of the 2021-2024 MTIP transportation equity evaluation illustrated the following:

Level of investment in safety – Of the total 2021-2024 MTIP safety investments, a significant portion is being focused into historically marginalized communities and addressing the higher crash facilities within these communities. The level of safety investment is in response to an alarming increase in crashes on the region's roadways. While it remains to be determined whether the level of investment presented in the 2021-2024 MTIP can reverse the crash trend, the increased level of funding and focus on transportation safety in historically marginalized communities is a positive response.

System completion of the active transportation network – The 2021-2024 MTIP investments make progress to complete the gaps in the active transportation network, particularly in historically marginalized communities. The highest rates of active transportation network completion with the 2021-2024 MTIP investments are in historically marginalized communities near frequent service transit stops and stations.

Access to jobs and community places in a timely commute – The 2021-2024 MTIP investments typically only increase access to jobs and community for those using transit; the level of access by automobile, bicycle, and walking may increase slightly or does not change. With the increase in access by transit, the results are mixed for historically marginalized communities. Overall access to jobs and community places by transit increases for historically marginalized communities, but depending on the time of day (i.e. the rush hour commute versus all other times) the rate of increase in access is lower in historically marginalized communities than the region and in non-historically marginalized communities.

The results of the 2021-2024 MTIP transportation equity evaluation show the region's investments do not have a disproportionate or disparate impact for people of color, people with low incomes, and people with limited English proficiency. Nonetheless, the performance assessment demonstrated areas of improvement needed to bridge the gaps and to better serve historically marginalized communities' transportation needs. Further recommendations and follow-up are outlined as part of the formal findings to the 2021-2024 MTIP transportation equity evaluation.

More detail on the analysis of the 2021-2024 MTIP investment program can be found in Chapter 3 of this document. The formal determination of disproportionate and disparate impact can be found as part of Appendix IV.

10 Due to resource and capacity constraints, the pilot launch of the combined housing and transportation expenditure tool for the purposes of evaluating affordability was not deployed with the 2021-2024 MTIP evaluation as originally proposed for the technical evaluation.

Clean Air Act

In 1991 Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), making dramatic changes to the federal transportation funding program to states and metropolitan planning organizations. A hallmark of ISTEA was its extension of transportation serving other goals beyond the traditional aims of safety and mobility. Occurring in a similar timeframe as the Clean Air Act Amendments of 1990, the new transportation reauthorization bill explicitly acknowledged the role of automobile travel in undesirable environmental impacts, particularly to air quality. As a result, ISTEA established the linkage between the Clean Air Act and the transportation sector, where areas designated as having air pollution levels beyond national standards must demonstrate how transportation investments would reduce air pollution and/or not worsen already poor air quality.

The Portland metropolitan region was designated as a poor air quality region in the 1990s and as a result the Oregon Department of Environmental Quality developed federally required air pollution reduction plans to get the region back on track. Metro, and more broadly regional partners, played a significant role in the development and implementation of air pollution reduction plans. As part of the commitment, the region needed to demonstrate transportation plans and investments would not exceed regionally specific thresholds for emissions of air pollutants and would implement any defined transportation control measures (TCMs) or contingency plans.

In October 2017, the region completed its commitments, demonstrating the region's plans and investments do not exceed the region's air pollution thresholds. In completing its commitments, the U.S. Environmental Protection Agency (EPA) provided Metro, as the MPO for the Portland region, a letter congratulating and confirming the region had completed its requirements, and that the analysis to demonstrate plans and investments would not exceed thresholds was no longer necessary. (See Appendix IV)

Figure 5-4. Portland area air quality – circa 1970s

Figure 5-5. A clear day in Portland circa 2014

In addition, the region successfully completed its transportation control measures with the development and implementation of the 2018-2021 MTIP. The region committed to three TCMs to be completed from 2007-2017: 1) increase transit service; 2) build bicycle infrastructure; and 3) build pedestrian infrastructure in employment and population centers. With the investments allocated as part of the development of the 2018-2021 MTIP, the TCMs were completed.[11]

The region's 2021-2024 MTIP is in compliance with the Clean Air Act. The region completed the implementation of TCMs and received confirmation that the region no longer needs to demonstrate planned or programmed investments will not exceed emission thresholds for federally regulated pollutants. The region remains committed and continues to comply with all other elements of the State Implementation Plan (SIP). As part of the region's SIP obligations, the region continues to monitor vehicle miles traveled annually, and commits to enact air pollution reduction contingency measures if the region's vehicle miles traveled rise above a certain threshold.

11 The development of the 2018-2021 MTIP took place between 2015 through 2017.

Chapter 6: MTIP programming

Programming of funds refers to the assignment of transportation investments by project phase (e.g. planning, project development, final design, right-of-way and construction) to the types of federal funds and expected years of expenditure. Metro works in cooperation with all of the region's transportation agencies to select which transportation priority investments will be funded with federal transportation discretionary funds. To manage equitable access to federal funds, Metro staff coordinates with sponsoring agencies to determine the expected timing of project phases and seeks to schedule expected revenue to planned work phases in each year of the program. The goal is to assure that all federally funded projects are able to advance in a timely, logical fashion.

The transit agencies bases their programming of funds in the MTIP using the annual Adopted Budget single, upcoming year programming and the annual Financial Forecast for multi-year programming. The federal transportation reauthorization plays a significant role in the financial forecast to develop multi-year programming. With the adoption of the Fixing America's Surface Transportation (FAST) Act in 2015, the transit agencies assume an increase generally around 2% annually under the transit formula program funding levels established by the Act throughout the legislation's final year and future years thereafter for the purposes of multi-year programming.

For Metro, and specifically for the projects and programs awarded regional flexible funds, which is using a six-year programming framework, this involves transportation funding being split into different fiscal years with preliminary engineering in years one and two, right-of-way acquisition in years three and four and construction in years five and six as a typical programming approach.[1] It is very rare that a project can execute more than one phase of work in a single year.

Balancing project expenditures with annual revenue limits becomes more difficult when a single project requires a large sum to

1 ODOT and TriMet continue to use a four-year programming framework and as a result, the funding being split into different fiscal year by phase is condensed.

complete one or more phases of work in one year. A project that requires more than $5 to $6 million can make it difficult for other more modest projects to proceed in a given year. The volume of project work that can proceed in any one year must fall within the revenue that is available that year, including conditional access to statewide resources. (See fiscal constraint discussion in Chapter 5.)

The regional flexible funds are awarded by Metro to a lead agency, which then contracts with ODOT to obtain access to the funds. The lead agencies are ultimately responsible for the operation and maintenance of newly constructed facilities.

ODOT's process for scheduling and programming projects in the MTIP and STIP varies depending on the project delivery method. For ODOT delivered projects, the draft list of scoped projects included in the STIP are given to the region project delivery team so they can analyze the list with ongiong and planned projects. Schedules are determined to identify efficiencies, distribute funds and workloads as evenly as possible, and to avoid negative impacts to the travelling public in construction. For local agency delivered projects, ODOT double-checks and accpets the local agency determined schedule for programming in the MTIP and STIP. The ODOT STIP is on a 4-year cycle, so if funding is programmed in the MTIP beyond the fourth year of the STIP, it simply will not show those funds until the next STIP is developed.

The next several pages include the programming for projects scheduled to receive federal funds in the Portland Metropolitan region during federal fiscal years 2021-2024.[2] The transportation investments are organized by lead agency and are in alphabetical order.

The following table describes the frequently used terms in the MTIP programming tables.

Table 6-1. Frequently used terms in the 2021-2024 MTIP programming

To view the programming tables for federal fiscal years 2021 through 2026, rotate the document from landscape view to portrait view.

2 With the exception of those projects awarded 2022-2024 regional flexible funds, where programming is shown through federal fiscal year 2026 as described in Chapter 5.

Table 6-1. Frequently used terms in the 2021-2024 MTIP programming tables

ODOT Key Number	This is a unique identification number assigned to a program or a project by the ODOT to organize all transportation projects within the State Transportation Improvement Program (STIP)
MTIP ID	This is a unique identification number assigned to a program or project by the MPO (Metro) to organize all transportation projects within the Metropolitan Transportation Improvement Program (MTIP).
RTP ID	This is a unique identification number assigned to a program or project by the MPO (Metro) to organize all transportation projects within the long range Regional Transportation Plan.
Project Name	The name of each project, which typically indicates the project location.
Project Type	This indicates the primary travel mode(s) the project will serve.
Lead Agency	The agency that is contractually responsible for managing and delivering the project.
Phase	The type of work being completed on the project. Includes: **Planning:** activities associated with preparing for projects for implementation, from broad systems planning to project development activities. **Preliminary engineering:** work to create construction and environmental documents. **Right of way:** activities associated with investigating needs for use of land for the construction or operation of a project. **Construction:** activities associated with the physical construction of a project. **Other:** Activities for programs or projects not defined by one of the other phase activities defined above.
Year	The programming year is the federal fiscal year funds are expected to be available for the project. The federal fiscal year begins October 1st of the year prior to the identified year (FFY 2021 is October 1, 2020 through September 30, 2021).
Fund Type	Description of the federal, state or local funds assigned to a project phase. See the List of Acronyms for more information on individual fund types.
Federal Amount	Federal funding authority made available to a project to reimburse eligible project related expenses.
Minimum Local Match	Funding required to be provided by the lead agency to qualify for the federal funding authority programmed to the project.
Other Amount	Additional funding from non-federal sources identified as available to the project.
Total Amount	The amount of funding programmed as available to the project within the timeframe of the 2021-2024 Metropolitan Transportation Improvement Program.
Estimated Total Project Cost	This includes cost of the project spent prior to 2021 and costs that may be necessary to complete the project after 2024.
YOE$	All funds programmed in the FY21-24 MTIP are represented in year of expenditure (YOE) dollars.

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Beaverton				
PROJECT NAME		**OR210: SW Scholls Ferry Rd to SW Hall ITS**				
Project IDs		Project Description				Project Type
ODOT KEY	**21121**	Implement Adaptive Signal Control Technologies (ASCT) to adjust traffic signal to actual conditions. ASCT continuously distributes green light time equitably to all traffic movement and therefore helps to reduce congestion.				Transportation System Management Operations
MTIP ID	71018					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	STP - Urban	$134,595	$15,405	$0	$150,000
Construction		2021	STP - Urban	$304,939	$34,902	$0	$339,841
			FY 21-26 Totals	$439,534	$50,307	$0	$489,841
			Prior Years' Totals	$310,466	$35,534	$0	$346,000
			Estimated Project Cost (YOE$)	**$750,000**	**$85,841**	**$0**	**$835,841**

LEAD AGENCY		Beaverton				
PROJECT NAME		**Pedestrian & Bike improvements (Beaverton)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21625**	Install lighting pedestrian signal modifications green conflict markings and advance warning signs to improve safety for pedestrians and bicycle riders.				Roadway and bridge
MTIP ID	71179					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	HSIP (92.22)	$67,927	$5,731	$0	$73,658
Construction		2023	HSIP (92.22)	$623,868	$52,632	$0	$676,500
			FY 21-26 Totals	$691,795	$58,363	$0	$750,158
			Estimated Project Cost (YOE$)	**$691,795**	**$58,363**	**$0**	**$750,158**

LEAD AGENCY		Beaverton				
PROJECT NAME		**Systemic Signals and Illumination (Beaverton)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20374**	Improvements at various intersections in the City of Beaverton including signals lighting signing and curb ramp upgrades to improve safety.				Roadway and bridge
MTIP ID	70956					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	HSIP (92.22)	$32,277	$2,723	$0	$35,000
Other		2021	HSIP (92.22)	$225,939	$19,061	$0	$245,000
Construction		2021	HSIP (92.22)	$1,025,349	$86,502	$0	$1,111,851
			FY 21-26 Totals	$1,283,565	$108,286	$0	$1,391,851
			Prior Years' Totals	$626,865	$52,885	$0	$679,750
			Estimated Project Cost (YOE$)	**$1,910,430**	**$161,171**	**$0**	**$2,071,601**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Clackamas County					
PROJECT NAME		**232nd Drive at MP 0.3**					
Project IDs		Project Description					Project Type
ODOT KEY	**21221**	On SE 232nd Dr in Clackamas County South of Damascus north of the OR224/SE232nd Dr intersection Emergency Relief Response to stabilize reconstruct and reinforce roadway					Roadway and bridge
MTIP ID	71038						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	Emergency Relief	$264,704	$30,297	$0	$295,001
			FY 21-26 Totals	$264,704	$30,297	$0	$295,001
			Prior Years' Totals	$251,244	$28,756	$0	$280,000
			Estimated Project Cost (YOE$)	**$515,948**	**$59,053**	**$0**	**$575,001**

LEAD AGENCY		Clackamas County					
PROJECT NAME		**Clackamas County Regional Freight ITS - Phase 2B**					
Project IDs		Project Description					Project Type
ODOT KEY	**22129**	Complete Freight ITS Action Plan improvements including installation of truck signal priorities signal UPS battery back-up traffic surveillance camera systems count stations travel time measurement sensors and deployment of portable monitoring trailer					Transportation System Management Operations
MTIP ID	71101						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	STBG-URBAN	$200,000	$22,891	$0	$222,891
Construction		2024	STBG-URBAN	$1,019,815	$116,722	$610,972	$1,747,509
			FY 21-26 Totals	$1,219,815	$139,613	$610,972	$1,970,400
			Estimated Project Cost (YOE$)	**$1,219,815**	**$139,613**	**$610,972**	**$1,970,400**

LEAD AGENCY		Clackamas County					
PROJECT NAME		**Courtney Ave Complete Street: River Rd - OR99E**					
Project IDs		Project Description					Project Type
ODOT KEY	**22131**	On Courtney Ave from River Rd to OR99E construct separated sidewalks bike lanes storm water management rain gardens ADA improvements and crosswalk enhancements.					Active Transportation
MTIP ID	71097						
RTP ID	11525						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	CMAQ - URBAN	$921,814	$105,506	$0	$1,027,320
Purchase right of way		2024	CMAQ - URBAN	$608,818	$69,682	$0	$678,500
Other		2024	CMAQ - URBAN	$89,730	$10,270	$0	$100,000
Construction		2026	CMAQ - URBAN	$3,459,630	$395,970	$0	$3,855,600
			FY 21-26 Totals	$5,079,992	$581,428	$0	$5,661,420
			Estimated Project Cost (YOE$)	**$5,079,992**	**$581,428**	**$0**	**$5,661,420**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Clackamas County				
PROJECT NAME		**Jennings Ave: OR 99E to Oatfield Rd**				
Project IDs		Project Description				Project Type
ODOT KEY	**19276**	Construct sidewalk on the north side of the road and bike lanes on both sides of the road to provide safe bicycle and pedestrian facilities to connect local residents with nearby schools businesses and transportation options.				Pedestrian
MTIP ID	70674					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STP - Urban	$403,785	$46,215	$0	$450,000
Construction		2021	STP - Urban	$2,638,253	$301,960	$0	$2,940,213
			FY 21-26 Totals	$3,042,038	$348,175	$0	$3,390,213
			Prior Years' Totals	$583,245	$66,755	$0	$650,000
			Estimated Project Cost (YOE$)	**$3,625,283**	**$414,930**	**$0**	**$4,040,213**

LEAD AGENCY		Clackamas County				
PROJECT NAME		**S Redland Rd: OR213 - Springwater Rd (Clackamas County)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21621**	Install high friction surface treatment (HFST) signs and edgeline/fog line markings on curves to improve driver control in this area.				Roadway and bridge
MTIP ID	71175					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	HSIP (92.22)	$35,117	$2,963	$0	$38,080
Construction		2023	HSIP (92.22)	$273,228	$23,050	$0	$296,278
			FY 21-26 Totals	$308,345	$26,013	$0	$334,358
			Estimated Project Cost (YOE$)	**$308,345**	**$26,013**	**$0**	**$334,358**

LEAD AGENCY		Clackamas County				
PROJECT NAME		**SE Johnson Creek Blvd: 79th Pl - 82nd Ave (Clackamas County)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21636**	Install a signal at 79th Ave. Allow only right-in right-out movement at 80th Ave and the Fred Meyer driveway to increase safety at these locations.				Roadway and bridge
MTIP ID	71190					
RTP ID	11763					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$110,690	$9,338	$0	$120,028
Purchase right of way		2022	HSIP (92.22)	$127,539	$10,760	$0	$138,299
Construction		2024	HSIP (92.22)	$1,222,207	$103,110	$0	$1,325,317
			FY 21-26 Totals	$1,460,436	$123,208	$0	$1,583,644
			Estimated Project Cost (YOE$)	**$1,460,436**	**$123,208**	**$0**	**$1,583,644**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Clackamas County					
PROJECT NAME		**Systemic Signals and Illumination (Clackamas)**					
Project IDs		Project Description					Project Type
ODOT KEY	**20336**	Safety projects at various locations. Work may include illumination; intersection work; bike and pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements.					Roadway and bridge
MTIP ID	70951						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (100%)	$830,810	$0	$70,090	$900,900
			FY 21-26 Totals	$830,810	$0	$70,090	$900,900
			Prior Years' Totals	$182,595	$0	$15,405	$198,000
			Estimated Project Cost (YOE$)	**$1,013,405**	**$0**	**$85,495**	**$1,098,900**

LEAD AGENCY		Clackamas County					
PROJECT NAME		**Trolley Tr Bridge: Portland Ave-Clack River Greenway Tr**					
Project IDs		Project Description					Project Type
ODOT KEY	**22139**	Complete project development NEPA environmental engineering plans specifications and cost estimates to construct a new Trolley Trail Bridge across the Clackamas River					Active Transportation
MTIP ID	71089						
RTP ID	10151						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2022	STBG-URBAN	$1,228,800	$140,642	$0	$1,369,442
			FY 21-26 Totals	$1,228,800	$140,642	$0	$1,369,442
			Estimated Project Cost (YOE$)	**$1,228,800**	**$140,642**	**$0**	**$1,369,442**

LEAD AGENCY		Forest Grove					
PROJECT NAME		**Council Creek Tr: Douglas St-Hatfield Govt Ctr**					
Project IDs		Project Description					Project Type
ODOT KEY	**22130**	Complete Project activities to construct the future 6-mile Council Creek Trail along the PNWR corridor from Douglas St in Forest Grove east to Hillsboro Hatfield Government Center Max					Active Transportation
MTIP ID	71096						
RTP ID	10806						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2022	STBG-URBAN	$1,345,950	$154,050	$0	$1,500,000
			FY 21-26 Totals	$1,345,950	$154,050	$0	$1,500,000
			Estimated Project Cost (YOE$)	**$1,345,950**	**$154,050**	**$0**	**$1,500,000**

LEAD AGENCY		Gresham				
PROJECT NAME		**Lighting and Rectangular Rapid Flash Beacons (Gresham)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21628**	Install lighting and rectangular rapid flash beacons (RRFBs) with warning signs to increase visibility and improve safety for pedestrians				Roadway and bridge
MTIP ID	71182					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$62,095	$5,239	$0	$67,334
Purchase right of way		2022	HSIP (92.22)	$5,821	$491	$0	$6,312
Construction		2023	HSIP (92.22)	$511,070	$43,116	$0	$554,186
			FY 21-26 Totals	$578,986	$48,846	$0	$627,832
			Estimated Project Cost (YOE$)	**$578,986**	**$48,846**	**$0**	**$627,832**

LEAD AGENCY		Gresham				
PROJECT NAME		**NE Cleveland Ave.: SE Stark St - NE Burnside**				
Project IDs		Project Description				Project Type
ODOT KEY	**20808**	Complete phase two of the project by improving substandard section of Cleveland Ave between Stark and Burnside. Project will fill gap in by providing bike lanes sidewalks curbs and gutters to improve safety and accessability.				Roadway and bridge
MTIP ID	70878					
RTP ID	11096					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	CMAQ - URBAN	$2,313,096	$264,744	$687,528	$3,265,368
			FY 21-26 Totals	$2,313,096	$264,744	$687,528	$3,265,368
			Prior Years' Totals	$828,060	$94,775	$0	$922,835
			Estimated Project Cost (YOE$)	**$3,141,156**	**$359,519**	**$687,528**	**$4,188,203**

LEAD AGENCY		Gresham				
PROJECT NAME		**NW Division Complete St Phase I: Wallula Ave-Birdsdale Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**16986**	Phase 1 (of 2 phases) to extend NW Division St between NW Wallula Ave and NW Birdsdale Ave with active transportation improvements to include ADA improvements sidewalks (gap fills) curbs curb ramps and bike lanes				Active Transportation
MTIP ID	70542					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2022	CMAQ - URBAN	$1,076,760	$123,240	$0	$1,200,000
Other		2022	CMAQ - URBAN	$89,730	$10,270	$0	$100,000
Construction		2024	CMAQ - URBAN	$3,361,733	$384,765	$720,172	$4,466,670
			FY 21-26 Totals	$4,528,223	$518,275	$720,172	$5,766,670
			Prior Years' Totals	$891,997	$102,093	$100,000	$1,094,090
			Estimated Project Cost (YOE$)	**$5,420,220**	**$620,368**	**$820,172**	**$6,860,760**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Happy Valley				
PROJECT NAME		**SE 129th Avenue - Bike Lane and Sidewalk Project**				
Project IDs		Project Description				Project Type
ODOT KEY	**19280**	The project will build a sidewalk and add bike lanes along SE 129th Avenue.				Active Transportation
MTIP ID	70683					
RTP ID	10081					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2021	TAP Metro	$318,740	$36,481	$0	$355,221
Construction	2021	OTHER	$0	$0	$1,015,372	$1,015,372
Construction	2021	STP - Urban	$1,738,727	$199,005	$0	$1,937,732
		FY 21-26 Totals	$2,057,467	$235,486	$1,015,372	$3,308,325
		Prior Years' Totals	$1,048,173	$119,969	$0	$1,168,142
		Estimated Project Cost (YOE$)	**$3,105,640**	**$355,455**	**$1,015,372**	**$4,476,467**

LEAD AGENCY		Metro				
PROJECT NAME		**Corridor and Systems Planning (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20889**	Corridors and Systems Planning Program conducts planning level work in corridors. Emphasizes the integration of land use and transportation. Determines regional system needs functions desired outcomes performance measures investment strategies.				System/corridor planning
MTIP ID	70871					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2021	STBG-URBAN	$571,070	$65,362	$0	$636,432
		FY 21-26 Totals	$571,070	$65,362	$0	$636,432
		Estimated Project Cost (YOE$)	**$571,070**	**$65,362**	**$0**	**$636,432**

LEAD AGENCY		Metro				
PROJECT NAME		**Freight and Economic Development Planning (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22145**	Regional planning to support freight systems planning and economic development planning activities.				Freight
MTIP ID	71118					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2022	STBG-URBAN	$74,263	$8,500	$0	$82,763
		FY 21-26 Totals	$74,263	$8,500	$0	$82,763
		Estimated Project Cost (YOE$)	**$74,263**	**$8,500**	**$0**	**$82,763**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Freight and Economic Development Planning (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22146**	Regional planning to support freight systems planning and economic development planning activities.				Freight
MTIP ID	71119					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2023	STBG-URBAN	$76,491	$8,755	$0	$85,246
		FY 21-26 Totals	$76,491	$8,755	$0	$85,246
		Estimated Project Cost (YOE$)	**$76,491**	**$8,755**	**$0**	**$85,246**

LEAD AGENCY		Metro				
PROJECT NAME		**Freight and Economic Development Planning (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22147**	Regional planning to support freight systems planning and economic development planning activities.				Freight
MTIP ID	71120					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2024	STBG-URBAN	$78,786	$9,017	$0	$87,803
		FY 21-26 Totals	$78,786	$9,017	$0	$87,803
		Estimated Project Cost (YOE$)	**$78,786**	**$9,017**	**$0**	**$87,803**

LEAD AGENCY		Metro				
PROJECT NAME		**Next Corridor Planning (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22154**	Funds to contribute toward development of prioritized transportation improvements and funding strategy for the region's next priority corridor.				System/corridor planning
MTIP ID	71111					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2022	STBG-URBAN	$588,202	$67,322	$0	$655,524
		FY 21-26 Totals	$588,202	$67,322	$0	$655,524
		Estimated Project Cost (YOE$)	**$588,202**	**$67,322**	**$0**	**$655,524**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Next Corridor Planning (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22155**	Funds to contribute toward development of prioritized transportation improvements and funding strategy for the region's next priority corridor.				System/corridor planning
MTIP ID	71112					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2023	STBG-URBAN	$605,848	$69,342	$0	$675,190
			FY 21-26 Totals	$605,848	$69,342	$0	$675,190
			Estimated Project Cost (YOE$)	**$605,848**	**$69,342**	**$0**	**$675,190**

LEAD AGENCY		Metro				
PROJECT NAME		**Next Corridor Planning (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22156**	Funds to contribute toward development of prioritized transportation improvements and funding strategy for the region's next priority corridor.				System/corridor planning
MTIP ID	71113					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2024	STBG-URBAN	$624,024	$71,422	$0	$695,446
			FY 21-26 Totals	$624,024	$71,422	$0	$695,446
			Estimated Project Cost (YOE$)	**$624,024**	**$71,422**	**$0**	**$695,446**

LEAD AGENCY		Metro				
PROJECT NAME		**Portland Metro Planning SFY22**				
Project IDs		Project Description				Project Type
ODOT KEY	**20597**	Portland Metro MPO planning funds for Federal fiscal year 2021. Projects will be selected in the future through the MPO process.				Other
MTIP ID	70986					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2021	Metro PL (5303)	$618,917	$70,838	$0	$689,755
Planning		2021	Metro Planning (Z450)	$1,907,827	$218,359	$0	$2,126,186
			FY 21-26 Totals	$2,526,744	$289,197	$0	$2,815,941
			Estimated Project Cost (YOE$)	**$2,526,744**	**$289,197**	**$0**	**$2,815,941**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Regional MPO Planning (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20877**	Funding for Metro to meet Metropolitan Planning Organization mandates established through the federal regulations.				Other
MTIP ID	70872					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2021	STBG-URBAN	$1,359,877	$155,644	$0	$1,515,521
		FY 21-26 Totals	$1,359,877	$155,644	$0	$1,515,521
		Estimated Project Cost (YOE$)	**$1,359,877**	**$155,644**	**$0**	**$1,515,521**

LEAD AGENCY		Metro				
PROJECT NAME		**Regional MPO Planning (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22151**	Funding to support transportation planning activities and maintain compliance with federal planning regulations.				Regional Program
MTIP ID	71131					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2022	STBG-URBAN	$1,400,673	$160,313	$0	$1,560,986
		FY 21-26 Totals	$1,400,673	$160,313	$0	$1,560,986
		Estimated Project Cost (YOE$)	**$1,400,673**	**$160,313**	**$0**	**$1,560,986**

LEAD AGENCY		Metro				
PROJECT NAME		**Regional MPO Planning (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22152**	Funding to support transportation planning activities and maintain compliance with federal planning regulations.				Regional Program
MTIP ID	71132					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2023	STBG-URBAN	$1,442,694	$165,123	$0	$1,607,817
		FY 21-26 Totals	$1,442,694	$165,123	$0	$1,607,817
		Estimated Project Cost (YOE$)	**$1,442,694**	**$165,123**	**$0**	**$1,607,817**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Regional MPO Planning (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22153**	Funding to support transportation planning activities and maintain compliance with federal planning regulations.				Regional Program
MTIP ID	71133					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2024	STBG-URBAN	$1,485,975	$170,076	$0	$1,656,051
		FY 21-26 Totals	$1,485,975	$170,076	$0	$1,656,051
		Estimated Project Cost (YOE$)	**$1,485,975**	**$170,076**	**$0**	**$1,656,051**

LEAD AGENCY		Metro				
PROJECT NAME		**Regional Travel Options (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20880**	The Regional Travel Options (RTO) program implements strategies to help diversify trip choices reduce pollution and improve mobility.				Regional travel options
MTIP ID	70873					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2021	STBG-URBAN	$2,676,405	$306,327	$0	$2,982,732
		FY 21-26 Totals	$2,676,405	$306,327	$0	$2,982,732
		Estimated Project Cost (YOE$)	**$2,676,405**	**$306,327**	**$0**	**$2,982,732**

LEAD AGENCY		Metro				
PROJECT NAME		**Regional Travel Options (RTO) program (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22157**	The Regional Travel Options (RTO) program implements strategies to help diversify trip choices reduce pollution and improve mobility.				Regional Program
MTIP ID	71106					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2022	STBG-URBAN	$2,756,697	$315,516	$0	$3,072,213
		FY 21-26 Totals	$2,756,697	$315,516	$0	$3,072,213
		Estimated Project Cost (YOE$)	**$2,756,697**	**$315,516**	**$0**	**$3,072,213**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Regional Travel Options (RTO) program (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22158**	The Regional Travel Options (RTO) program implements strategies to help diversify trip choices reduce pollution and improve mobility.				Regional Program
MTIP ID	71107					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2023	STBG-URBAN	$2,839,398	$324,982	$0	$3,164,380
			FY 21-26 Totals	$2,839,398	$324,982	$0	$3,164,380
			Estimated Project Cost (YOE$)	**$2,839,398**	**$324,982**	**$0**	**$3,164,380**

LEAD AGENCY		Metro				
PROJECT NAME		**Regional Travel Options (RTO) program (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22159**	The Regional Travel Options (RTO) program implements strategies to help diversify trip choices reduce pollution and improve mobility.				Regional Program
MTIP ID	71108					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2024	STBG-URBAN	$2,924,580	$334,731	$0	$3,259,311
			FY 21-26 Totals	$2,924,580	$334,731	$0	$3,259,311
			Estimated Project Cost (YOE$)	**$2,924,580**	**$334,731**	**$0**	**$3,259,311**

LEAD AGENCY		Metro				
PROJECT NAME		**Safe Routes to Schools program (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22160**	Promotes through planning funding and outreach activities the ability for youth to safely affordably and efficiently access school by walking biking and transit.				Regional Program
MTIP ID	71109					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$530,450	$60,712	$0	$591,162
			FY 21-26 Totals	$530,450	$60,712	$0	$591,162
			Estimated Project Cost (YOE$)	**$530,450**	**$60,712**	**$0**	**$591,162**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro					
PROJECT NAME		**Safe Routes to Schools program (FFY 2023)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22161**	Promotes through planning funding and outreach activities the ability for youth to safely affordably and efficiently access school by walking biking and transit.					Regional Program
MTIP ID	71114						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2023	STBG-URBAN	$546,364	$62,534	$0	$608,898
			FY 21-26 Totals	$546,364	$62,534	$0	$608,898
			Estimated Project Cost (YOE$)	**$546,364**	**$62,534**	**$0**	**$608,898**

LEAD AGENCY		Metro					
PROJECT NAME		**Safe Routes to Schools program (FFY 2024)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22162**	Promotes through planning funding and outreach activities the ability for youth to safely affordably and efficiently access school by walking biking and transit.					Regional Program
MTIP ID	71110						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2024	STBG-URBAN	$562,754	$64,410	$0	$627,164
			FY 21-26 Totals	$562,754	$64,410	$0	$627,164
			Estimated Project Cost (YOE$)	**$562,754**	**$64,410**	**$0**	**$627,164**

LEAD AGENCY		Metro					
PROJECT NAME		**Statewide Travel Survey**					
Project IDs		Project Description					Project Type
ODOT KEY	**22172**	Contribution to statewide travel survey to inform travel forecasting models.					Other
MTIP ID	71105						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$350,000	$40,059	$0	$390,059
			FY 21-26 Totals	$350,000	$40,059	$0	$390,059
			Estimated Project Cost (YOE$)	**$350,000**	**$40,059**	**$0**	**$390,059**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Transit Oriented Development (TOD) program (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22163**	Partner with developers and local jurisdictions to attract private development near transit stations to reduce auto trips and improve the cost-effectiveness of regional transit investments.				Transit oriented development
MTIP ID	71102					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$3,495,507	$400,076	$0	$3,895,583
			FY 21-26 Totals	$3,495,507	$400,076	$0	$3,895,583
			Estimated Project Cost (YOE$)	**$3,495,507**	**$400,076**	**$0**	**$3,895,583**

LEAD AGENCY		Metro				
PROJECT NAME		**Transit Oriented Development (TOD) program (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22164**	Partner with developers and local jurisdictions to attract private development near transit stations to reduce auto trips and improve the cost-effectiveness of regional transit investments.				Transit oriented development
MTIP ID	71103					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2023	STBG-URBAN	$3,600,373	$412,079	$0	$4,012,452
			FY 21-26 Totals	$3,600,373	$412,079	$0	$4,012,452
			Estimated Project Cost (YOE$)	**$3,600,373**	**$412,079**	**$0**	**$4,012,452**

LEAD AGENCY		Metro				
PROJECT NAME		**Transit Oriented Development (TOD) program (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22165**	Partner with developers and local jurisdictions to attract private development near transit stations to reduce auto trips and improve the cost-effectiveness of regional transit investments.				Transit oriented development
MTIP ID	71104					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2024	STBG-URBAN	$3,708,384	$424,441	$0	$4,132,825
			FY 21-26 Totals	$3,708,384	$424,441	$0	$4,132,825
			Estimated Project Cost (YOE$)	**$3,708,384**	**$424,441**	**$0**	**$4,132,825**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Transit Oriented Development Program (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20883**	The TOD program works directly with developers and local jurisdictions to create vibrant downtowns main streets and station areas by helping to change land use patterns near transit.				Transit oriented development
MTIP ID	70874					
RTP ID	10855					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	LOCAL	$0	$0	$3,393,696	$3,393,696
			FY 21-26 Totals	$0	$0	$3,393,696	$3,393,696
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$3,393,696**	**$3,393,696**

LEAD AGENCY		Metro				
PROJECT NAME		**Transportation System Management & Operations (TSMO) Program 2018**				
Project IDs		Project Description				Project Type
ODOT KEY	**19289**	The Transportation System Management & Operations (TSMO) program coordinates both the planning and implementation of the regions system management and operations strategies to enhance multi-modal mobility for people and goods.				Transportation System Management Operations
MTIP ID	70671					
RTP ID	11104					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	STP - Urban	$200,000	$22,891	$0	$222,891
			FY 21-26 Totals	$200,000	$22,891	$0	$222,891
			Estimated Project Cost (YOE$)	**$200,000**	**$22,891**	**$0**	**$222,891**

LEAD AGENCY		Metro				
PROJECT NAME		**Transportation System Mgmt Operations/ITS (2019)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20884**	Provide strategic and collaborative program management including coordination of activities for TransPort TSMO committee;				Transportation System Management Operations
MTIP ID	70875					
RTP ID	11104					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	STBG-URBAN	$1,693,574	$193,837	$0	$1,887,411
			FY 21-26 Totals	$1,693,574	$193,837	$0	$1,887,411
			Estimated Project Cost (YOE$)	**$1,693,574**	**$193,837**	**$0**	**$1,887,411**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro				
PROJECT NAME		**Transportation System Mgmt Operations/ITS (2020)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20885**	Provide strategic and collaborative program management including coordination of activities for TransPort TSMO committee;				Transportation System Management Operations
MTIP ID	70875					
RTP ID	11104					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	STBG-URBAN	$1,744,598	$199,677	$0	$1,944,275
			FY 21-26 Totals	$1,744,598	$199,677	$0	$1,944,275
			Estimated Project Cost (YOE$)	**$1,744,598**	**$199,677**	**$0**	**$1,944,275**

LEAD AGENCY		Metro				
PROJECT NAME		**Transportation System Mgmt Operations/ITS (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20886**	Provide strategic and collaborative program management including coordination of activities for TransPort TSMO committee;				Transportation System Management Operations
MTIP ID	70875					
RTP ID	11104					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	STBG-URBAN	$1,801,828	$206,227	$0	$2,008,055
			FY 21-26 Totals	$1,801,828	$206,227	$0	$2,008,055
			Estimated Project Cost (YOE$)	**$1,801,828**	**$206,227**	**$0**	**$2,008,055**

LEAD AGENCY		Metro				
PROJECT NAME		**TSMO Administration (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22169**	Administration of the regional TSMO program; providing program strategy and direction administration of grant allocations and staffing of the Transport committee.				Transportation System Management Operations
MTIP ID	71124					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$188,707	$21,598	$0	$210,305
			FY 21-26 Totals	$188,707	$21,598	$0	$210,305
			Estimated Project Cost (YOE$)	**$188,707**	**$21,598**	**$0**	**$210,305**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Metro					
PROJECT NAME		**TSMO Administration (FFY 2023)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22170**	Administration of the regional TSMO program; providing program strategy and direction administration of grant allocations and staffing of the Transport committee.					Transportation System Management Operations
MTIP ID	71125						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2023	STBG-URBAN	$194,369	$22,246	$0	$216,615
			FY 21-26 Totals	$194,369	$22,246	$0	$216,615
			Estimated Project Cost (YOE$)	**$194,369**	**$22,246**	**$0**	**$216,615**

LEAD AGENCY		Metro					
PROJECT NAME		**TSMO Administration (FFY 2024)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22171**	Administration of the regional TSMO program; providing program strategy and direction administration of grant allocations and staffing of the Transport committee.					Transportation System Management Operations
MTIP ID	71126						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2024	STBG-URBAN	$200,200	$22,914	$0	$223,114
			FY 21-26 Totals	$200,200	$22,914	$0	$223,114
			Estimated Project Cost (YOE$)	**$200,200**	**$22,914**	**$0**	**$223,114**

LEAD AGENCY		Metro					
PROJECT NAME		**TSMO Program Sub-allocation Funds (FFY 2022)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22166**	Regional Transportation System Management & Operations (TSMO) program.					Transportation System Management Operations
MTIP ID	71115						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$1,667,158	$190,814	$0	$1,857,972
			FY 21-26 Totals	$1,667,158	$190,814	$0	$1,857,972
			Estimated Project Cost (YOE$)	**$1,667,158**	**$190,814**	**$0**	**$1,857,972**

LEAD AGENCY		Metro				
PROJECT NAME		**TSMO Program Sub-allocation Funds (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22167**	Regional Transportation System Management & Operations (TSMO) program.				Transportation System Management Operations
MTIP ID	71116					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2023	STBG-URBAN	$1,717,173	$196,538	$0	$1,913,711
		FY 21-26 Totals	$1,717,173	$196,538	$0	$1,913,711
		Estimated Project Cost (YOE$)	**$1,717,173**	**$196,538**	**$0**	**$1,913,711**

LEAD AGENCY		Metro				
PROJECT NAME		**TSMO Program Sub-allocation Funds (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22168**	Regional Transportation System Management & Operations program.				Transportation System Management Operations
MTIP ID	71117					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2024	STBG-URBAN	$1,768,688	$202,434	$0	$1,971,122
		FY 21-26 Totals	$1,768,688	$202,434	$0	$1,971,122
		Estimated Project Cost (YOE$)	**$1,768,688**	**$202,434**	**$0**	**$1,971,122**

LEAD AGENCY		Metro				
PROJECT NAME		**Willamette Greenway Trail: Columbia Blvd Bridge**				
Project IDs		Project Description				Project Type
ODOT KEY	**18832**	Construct a bicycle and pedestrian bridge over Columbia Boulevard and an extension of the Willamette Greenway Trail to provide a connection from the existing termini in Chimney Park to the south end of the landfill bridge over the south Columbia Slough.				Trail
MTIP ID	70774					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way	2021	OTHER	$0	$0	$20,000	$20,000
Construction	2021	State STP (M240)	$1,131,861	$129,547	$830,973	$2,092,381
		FY 21-26 Totals	$1,131,861	$129,547	$850,973	$2,112,381
		Prior Years' Totals	$448,650	$51,350	$0	$500,000
		Estimated Project Cost (YOE$)	**$1,580,511**	**$180,897**	**$850,973**	**$2,612,381**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Milwaukie				
PROJECT NAME		**Washington/Monroe: SE Oak St - SE Linwood Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**22141**	Construct bicycle and pedestrian improvements (segments D and E) on Washington and Monroe from SE Oak to SE Railroad Ave up to Washington to Ada Lane and then to Home Ave and on Home Ave to Monroe St and on Monroe St east to Linwood Ave				Active Transportation
MTIP ID	71087					
RTP ID	10099					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	STBG-URBAN	$712,387	$81,536	$861,233	$1,655,156
Purchase right of way	2023	LOCAL	$0	$0	$100,344	$100,344
Other	2023	LOCAL	$0	$0	$100,000	$100,000
Construction	2025	STBG-URBAN	$3,148,401	$360,349	$0	$3,508,750
		FY 21-26 Totals	$3,860,788	$441,885	$1,061,577	$5,364,250
		Estimated Project Cost (YOE$)	**$3,860,788**	**$441,885**	**$1,061,577**	**$5,364,250**

LEAD AGENCY		Multnomah County				
PROJECT NAME		**Hawthorne Bridge Ramps**				
Project IDs		Project Description				Project Type
ODOT KEY	**21882**	Replace the bridge driving surface and repair the joints on the east and west approaches to repair vehicle damage				Roadway and bridge
MTIP ID	71201					
RTP ID	12092					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2022	STBG - STATE	$7,118,759	$814,774	$0	$7,933,533
		FY 21-26 Totals	$7,118,759	$814,774	$0	$7,933,533
		Prior Years' Totals	$1,454,036	$166,421	$0	$1,620,457
		Estimated Project Cost (YOE$)	**$8,572,795**	**$981,195**	**$0**	**$9,553,990**

LEAD AGENCY		Multnomah County				
PROJECT NAME		**Morrison St.: Morrison (Willamette River) Bridge (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21884**	Strengthen the Morrison and Belmont Viaducts on the east side of the Willamette River to avoid posting bridge for less then legal loads.				Roadway and bridge
MTIP ID	71202					
RTP ID	12092					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2022	STBG - STATE	$1,604,929	$183,691	$0	$1,788,620
Construction	2024	STBG - STATE	$6,477,527	$741,382	$0	$7,218,909
		FY 21-26 Totals	$8,082,456	$925,073	$0	$9,007,529
		Estimated Project Cost (YOE$)	**$8,082,456**	**$925,073**	**$0**	**$9,007,529**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Multnomah County				
PROJECT NAME		**Sandy Blvd: Gresham to 230th Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**22137**	Complete project development activities including design and engineering to reconstruct Sandy Blvd to minor arterial standards with bike lanes sidewalks and drainage improvements to close an east-west gap in the regional active transportation network				Active Transportation
MTIP ID	71093					
RTP ID	10399					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2022	STBG-URBAN	$1,275,985	$146,042	$0	$1,422,027
			FY 21-26 Totals	$1,275,985	$146,042	$0	$1,422,027
			Estimated Project Cost (YOE$)	**$1,275,985**	**$146,042**	**$0**	**$1,422,027**

LEAD AGENCY		Multnomah County				
PROJECT NAME		**SW 257th Dr at Sturges Dr/Cherry Park Rd (Multnomah County)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21623**	Install green painted bike boxes at the approaches of SW Sturges Drive and SW Cherry Park Road to the intersection of SW 257th Drive to increase safety and visibility for vulnerable road users.				Roadway and bridge
MTIP ID	71177					
RTP ID	11684					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$3,763	$317	$0	$4,080
Construction		2021	HSIP (92.22)	$40,382	$3,407	$0	$43,789
			FY 21-26 Totals	$44,145	$3,724	$0	$47,869
			Estimated Project Cost (YOE$)	**$44,145**	**$3,724**	**$0**	**$47,869**

LEAD AGENCY		ODOT				
PROJECT NAME		**Central Systemic Signals and Illumination (ODOT)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20335**	Illumination; intersection work; bike and pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements at various locations. (PGB-ARTS)				Roadway and bridge
MTIP ID	70950					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	HSIP (92.22)	$286,066	$24,134	$0	$310,200
Construction		2021	HSIP (92.22)	$2,607,807	$220,004	$0	$2,827,811
			FY 21-26 Totals	$2,893,873	$244,138	$0	$3,138,011
			Prior Years' Totals	$1,136,417	$95,872	$0	$1,232,289
			Estimated Project Cost (YOE$)	**$4,030,290**	**$340,010**	**$0**	**$4,370,300**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**City of Gresham Safety Project**					
Project IDs		Project Description					Project Type
ODOT KEY	**20303**	Intersection improvements; upgrade to ADA; utility relocation; signal work; medians; traffic separators; striping; signing; warnings; and other safety improvements.					Roadway and bridge
MTIP ID	70943						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (92.22)	$997,083	$84,117	$0	$1,081,200
			FY 21-26 Totals	$997,083	$84,117	$0	$1,081,200
			Prior Years' Totals	$474,749	$0	$40,051	$514,800
			Estimated Project Cost (YOE$)	**$1,471,832**	**$84,117**	**$40,051**	**$1,596,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**Columbia Bottomlands Mitigation/Conservation**					
Project IDs		Project Description					Project Type
ODOT KEY	**22075**	Develop a long term mitigation/conservation bank in the Lower Willamette Watershed that generates credits for aquatic resources to be used by the greatest number of Endangered Species Act (ESA) listed fish species					Other
MTIP ID	71150						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STATE-GEN	$0	$0	$1,000,000	$1,000,000
			FY 21-26 Totals	$0	$0	$1,000,000	$1,000,000
			Prior Years' Totals	$0	$0	$400,000	$400,000
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$1,400,000**	**$1,400,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**Cornelius Pass Road Arterial Corridor Management**					
Project IDs		Project Description					Project Type
ODOT KEY	**21500**	Implement a variety of ITS treatments to enhance safety and mobility in rural and suburban Washington County and Multnomah County (Cornelius Pass Road from US 30 to OR8 TV Highway) (ATCMTD child)					Transportation System Management Operations
MTIP ID	71078						
RTP ID	11104						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	Local (Wash Co)	$0	$0	$800,700	$800,700
Construction		2021	ATCMTD (100%)	$1,160,000	$0	$295,200	$1,455,200
			FY 21-26 Totals	$1,160,000	$0	$1,095,900	$2,255,900
			Prior Years' Totals	$440,000	$0	$104,100	$544,100
			Estimated Project Cost (YOE$)	**$1,600,000**	**$0**	**$1,200,000**	**$2,800,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**East Systemic Signals and Illumination (ODOT)**					
Project IDs		Project Description					Project Type
ODOT KEY	**20339**	Projects at locations in east jurisdictions of Portland. Work may include illumination; intersection work; bike/pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements (ART					Roadway and bridge
MTIP ID	70953						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (92.22)	$2,388,567	$201,508	$0	$2,590,075
			FY 21-26 Totals	$2,388,567	$201,508	$0	$2,590,075
			Prior Years' Totals	$613,795	$5,205	$0	$619,000
			Estimated Project Cost (YOE$)	**$3,002,362**	**$206,713**	**$0**	**$3,209,075**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-205 Exits Ramps at SE Division St**					
Project IDs		Project Description					Project Type
ODOT KEY	**20480**	Safety improvements on NB and SB I-205 exit ramps at SE Division street. Work includes lane adjustments; ramp widening; safety islands; signal work; illumination; signing; and ADA improvements as necessary.					Roadway and bridge
MTIP ID	71006						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (100%)	$2,643,117	$0	$0	$2,643,117
			FY 21-26 Totals	$2,643,117	$0	$0	$2,643,117
			Prior Years' Totals	$1,056,142	$0	$13,705	$1,069,847
			Estimated Project Cost (YOE$)	**$3,699,259**	**$0**	**$13,705**	**$3,712,964**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5 Bridges: Multnomah Blvd Capital Hwy Ramp Barbur Blvd**					
Project IDs		Project Description					Project Type
ODOT KEY	**20465**	On Multnomah Blvd and Capital Highway ramp bridges place an overlay on the bridge driving surface replace or repair leaking joints and retrofit the bridge rails to meet current safety standards. On Barbur Blvd bridge remove rust paint replace parts.					
MTIP ID	70998						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$4,628,131	$529,710	$0	$5,157,841
			FY 21-26 Totals	$4,628,131	$529,710	$0	$5,157,841
			Prior Years' Totals	$308,420	$35,300	$0	$343,720
			Estimated Project Cost (YOE$)	**$4,936,551**	**$565,010**	**$0**	**$5,501,561**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5 Over 26th Avenue Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**20486**	Replace the bridge to ensure connectivity. Complete a Value Engineering study which will evaluate the functions of the project with the objective of enhancing the total project value.					Roadway and bridge
MTIP ID	70977						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (92.22%)	$26,793,259	$2,260,373	$0	$29,053,632
			FY 21-26 Totals	$26,793,259	$2,260,373	$0	$29,053,632
			Prior Years' Totals	$4,885,234	$412,135	$0	$5,297,369
			Estimated Project Cost (YOE$)	**$31,678,493**	**$2,672,508**	**$0**	**$34,351,001**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5 Over NE Hassalo St and NE Holiday St (BR#08583)**					
Project IDs		Project Description					Project Type
ODOT KEY	**21219**	On I-5 over NE Hassalo St and SE Holladay St (BR#08583) replace the current structural overlay (HB2017 Awarded Project $5000000 Original Award)					Roadway and bridge
MTIP ID	71043						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	AC-HB2017 (92.22%)	$3,688,800	$311,200	$0	$4,000,000
			FY 21-26 Totals	$3,688,800	$311,200	$0	$4,000,000
			Prior Years' Totals	$922,200	$77,800	$0	$1,000,000
			Estimated Project Cost (YOE$)	**$4,611,000**	**$389,000**	**$0**	**$5,000,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5: E Burnside St - Marquam Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**21799**	Study to determine the construction method for a future pavement resurfacing project to eliminate ruts and prevent future failures.					Roadway and bridge
MTIP ID	71199						
RTP ID	12094						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2021	NHPP (92.22%)	$645,540	$54,460	$0	$700,000
			FY 21-26 Totals	$645,540	$54,460	$0	$700,000
			Estimated Project Cost (YOE$)	**$645,540**	**$54,460**	**$0**	**$700,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5: Boone (Willamette River) Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**21218**	On I-5 at the Boone Bridge over the Willamette River prepare shelf ready plans for future deck overlay joint repairs and seismic retrofit					Roadway and bridge
MTIP ID	71049						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (92.22%)	$2,951,040	$248,960	$0	$3,200,000
			FY 21-26 Totals	$2,951,040	$248,960	$0	$3,200,000
			Prior Years' Totals	$230,550	$19,450	$0	$250,000
			Estimated Project Cost (YOE$)	**$3,181,590**	**$268,410**	**$0**	**$3,450,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5: I-205 Interchange - Willamette River**					
Project IDs		Project Description					Project Type
ODOT KEY	**20411**	Remove and replace asphalt surface to repair rutted pavement Includes driving surface on bridges #17995 #17996 #09743B #09743C & #09743A					Roadway and bridge
MTIP ID	70968						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (92.22%)	$8,309,670	$701,033	$0	$9,010,703
			FY 21-26 Totals	$8,309,670	$701,033	$0	$9,010,703
			Prior Years' Totals	$899,677	$75,900	$0	$975,577
			Estimated Project Cost (YOE$)	**$9,209,347**	**$776,933**	**$0**	**$9,986,280**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-5: Marquam Bridge - Capitol Highway (2)**					
Project IDs		Project Description					Project Type
ODOT KEY	**21602**	Install Variable Advisory Speed (VAS) and truck warning signs to improve safety by informing drivers of expected downstream conditions.					Transportation System Management Operations
MTIP ID	71156						
RTP ID	11104						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (92.22%)	$845,192	$71,303	$0	$916,495
Purchase right of way		2022	NHPP (92.22%)	$18,544	$1,564	$0	$20,108
Other		2023	NHPP (92.22%)	$61,810	$5,215	$0	$67,025
Construction		2023	NHPP (92.22%)	$6,361,843	$536,707	$0	$6,898,550
			FY 21-26 Totals	$7,287,389	$614,789	$0	$7,902,178
			Estimated Project Cost (YOE$)	**$7,287,389**	**$614,789**	**$0**	**$7,902,178**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**I-84: Fairview - Marine Drive**					
Project IDs		Project Description					Project Type
ODOT KEY	**20298**	Repave a section of I-84 between Fairview and Marine Dr to repair rutting damage and keep roadway safe. Install a full signal upgrade (including ADA) at NE 238th Ave					Roadway and bridge
MTIP ID	70939						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STBG - STATE	$2,366	$271	$0	$2,637
Construction		2022	NHPP (92.22%)	$4,289,147	$361,847	$0	$4,650,994
Construction		2022	STBG - STATE	$260,222	$29,784	$0	$290,006
			FY 21-26 Totals	$4,551,735	$391,902	$0	$4,943,637
			Prior Years' Totals	$481,324	$40,606	$0	$521,930
			Estimated Project Cost (YOE$)	**$5,033,059**	**$432,508**	**$0**	**$5,465,567**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-84: I-205 - NE 181st Avenue**					
Project IDs		Project Description					Project Type
ODOT KEY	**20410**	On Iâ€84 remove/replace asphalt surface to repair rutted pavement & seal the driving surface of four bridges (#07088A #07044A #07043A & #13514F) (HB2017 Project)					
MTIP ID	70967						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (92.22%)	$7,657,518	$646,015	$0	$8,303,533
			FY 21-26 Totals	$7,657,518	$646,015	$0	$8,303,533
			Prior Years' Totals	$479,083	$40,417	$0	$519,500
			Estimated Project Cost (YOE$)	**$8,136,601**	**$686,432**	**$0**	**$8,823,033**

LEAD AGENCY		ODOT					
PROJECT NAME		**I-84: NE Martin Luther King Jr Blvd - I-205**					
Project IDs		Project Description					Project Type
ODOT KEY	**21800**	Design for a future pavement resurfacing project to repair ruts and surface wear.					Roadway and bridge
MTIP ID	71200						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (92.22%)	$922,200	$77,800	$0	$1,000,000
			FY 21-26 Totals	$922,200	$77,800	$0	$1,000,000
			Estimated Project Cost (YOE$)	**$922,200**	**$77,800**	**$0**	**$1,000,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**NE Airport Way Arterial Corridor Management**					
Project IDs		Project Description					Project Type
ODOT KEY	**21496**	ATCMTD child project to deploy ITS infrastructure along Airport Way from 82nd Ave to Riverside Parkway. Install message signs update signal collectors CCTV cameras fiber communication etc.					Transportation System Management Operations
MTIP ID	71076						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	ATCMTD (100%)	$50,000	$0	$0	$50,000
Construction		2021	ATCMTD (100%)	$1,040,000	$0	$0	$1,040,000
			FY 21-26 Totals	$1,090,000	$0	$0	$1,090,000
			Prior Years' Totals	$110,000	$0	$0	$110,000
			Estimated Project Cost (YOE$)	**$1,200,000**	**$0**	**$0**	**$1,200,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR120: Columbia Slough Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**21709**	Study to determine the alignment and construction method for a future bridge replacement of the existing timber structure that is obsolete costly to continuously repair and can no longer support heavier loads.					Roadway and bridge
MTIP ID	71195						
RTP ID	12092						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2021	STBG - STATE	$448,650	$51,350	$0	$500,000
			FY 21-26 Totals	$448,650	$51,350	$0	$500,000
			Estimated Project Cost (YOE$)	**$448,650**	**$51,350**	**$0**	**$500,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR212/224 Arterial Corridor Management**					
Project IDs		Project Description					Project Type
ODOT KEY	**21495**	The project will implement a variety of treatments to improve safety mobility and reliability along the congested industrial OR212/224 corridor in Clackamas County (ATCMTD child)					Transportation System Management Operations
MTIP ID	71075						
RTP ID	11104						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	ATCMTD (100%)	$75,000	$0	$0	$75,000
Construction		2021	ATCMTD (100%)	$2,425,000	$0	$0	$2,425,000
			FY 21-26 Totals	$2,500,000	$0	$0	$2,500,000
			Prior Years' Totals	$300,000	$0	$0	$300,000
			Estimated Project Cost (YOE$)	**$2,800,000**	**$0**	**$0**	**$2,800,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR213 (82nd Ave): SE Foster Rd - SE Thompson Rd**					
Project IDs		Project Description					Project Type
ODOT KEY	**21177**	On OR213 (82nd Ave) from SE Foster Rd to SE Thompson Rd repave/rehab road upgrade ADA ramps address drainage add bridge surface projection and enhance ped crossings (HB2017 $9.2 million original award)					Roadway and bridge
MTIP ID	71035						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	AC-HB2017 (92.22%)	$2,914,111	$245,845	$0	$3,159,956
Construction		2021	STBG - STATE	$10,572,662	$1,210,088	$0	$11,782,750
			FY 21-26 Totals	$13,486,773	$1,455,933	$0	$14,942,706
			Prior Years' Totals	$5,971,536	$683,469	$0	$6,655,005
			Estimated Project Cost (YOE$)	**$19,458,309**	**$2,139,402**	**$0**	**$21,597,711**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR213 at NE Glisan St and NE Davis St**					
Project IDs		Project Description					Project Type
ODOT KEY	**21607**	Upgrade the signal at the Glisan St intersection and modify the Davis St intersection to increase safety.					Roadway and bridge
MTIP ID	71161						
RTP ID	11844						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (Z001)	$703,899	$80,564	$0	$784,463
Purchase right of way		2022	NHPP (Z001)	$444,410	$50,865	$0	$495,275
Other		2023	NHPP (Z001)	$130,919	$14,984	$0	$145,903
Construction		2023	NHPP (Z001)	$3,060,959	$350,340	$0	$3,411,299
			FY 21-26 Totals	$4,340,187	$496,753	$0	$4,836,940
			Estimated Project Cost (YOE$)	**$4,340,187**	**$496,753**	**$0**	**$4,836,940**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR213: I-205 - OR211**					
Project IDs		Project Description					Project Type
ODOT KEY	**21638**	Improvements including signals reflectorized back plates advance intersection warning signs flashing lights radar detection units and stop bars to increase safety on this section of highway.					Roadway and bridge
MTIP ID	71191						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	HSIP (92.22)	$44,501	$3,754	$0	$48,255
Preliminary engineering		2021	HSIP (92.22)	$59,261	$4,999	$0	$64,260
Other		2022	HSIP (92.22)	$13,916	$1,174	$0	$15,090
Construction		2022	HSIP (92.22)	$377,311	$31,831	$0	$409,142
			FY 21-26 Totals	$494,989	$41,758	$0	$536,747
			Estimated Project Cost (YOE$)	**$494,989**	**$41,758**	**$0**	**$536,747**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR217 Southbound: OR10 to OR99W**				
Project IDs		Project Description				Project Type
ODOT KEY	**18841**	On OR217: OR10 to OR99W construct lane segments between existing aux lanes providing a NB & SB 3rd through lane bridges refit road rehab and Hall Blvd widening (Combines Key 21179 and 20473 into Key 18841) (HB2017 $44 million award)				Roadway and bridge
MTIP ID	70782					
RTP ID	12019					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$21,912,819	$2,508,020	$0	$24,420,839
Construction		2021	AC-HB2017 (89.73%)	$74,655,360	$8,544,640	$2,000,000	$85,200,000
			FY 21-26 Totals	$96,568,179	$11,052,660	$2,000,000	$109,620,839
			Prior Years' Totals	$19,751,749	$1,952,094	$3,096,158	$24,800,001
			Estimated Project Cost (YOE$)	**$116,319,928**	**$13,004,754**	**$5,096,158**	**$134,420,840**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR224 at SE Monroe St**				
Project IDs		Project Description				Project Type
ODOT KEY	**21606**	Full signal upgrade to replace the signal that is outdated and intersection modifications to increase safety for pedestrians and cyclists.				Roadway and bridge
MTIP ID	71160					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	AC-HSIP (92.22%)	$553,161	$46,667	$0	$599,828
Preliminary engineering		2021	NHPP (Z001)	$298,728	$34,191	$0	$332,919
Purchase right of way		2022	AC-HSIP (92.22%)	$13,081	$1,104	$0	$14,185
Other		2023	NHPP (Z001)	$17,660	$2,021	$0	$19,681
Other		2023	AC-HSIP (92.22%)	$19,976	$1,685	$0	$21,661
Construction		2024	NHPP (Z001)	$1,910,059	$218,615	$0	$2,128,674
Construction		2024	AC-HSIP (92.22%)	$2,251,062	$189,907	$0	$2,440,969
			FY 21-26 Totals	$5,063,727	$494,190	$0	$5,557,917
			Estimated Project Cost (YOE$)	**$5,063,727**	**$494,190**	**$0**	**$5,557,917**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR224: SE 17th Ave - OR213**				
Project IDs		Project Description				Project Type
ODOT KEY	**21598**	Design for a future pavement resurfacing project to repair cracking rutting and wear to keep this section safe for travel.				Roadway and bridge
MTIP ID	71153					
RTP ID	12094					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (Z001)	$2,348,893	$268,841	$0	$2,617,734
			FY 21-26 Totals	$2,348,893	$268,841	$0	$2,617,734
			Estimated Project Cost (YOE$)	**$2,348,893**	**$268,841**	**$0**	**$2,617,734**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT				
PROJECT NAME		**OR224: SE 17th Ave - Rainbow Campground**				
Project IDs		Project Description				Project Type
ODOT KEY	**21612**	Improvements including signs stop bars rumble strips signals reflectorized back plates and lighting to increase safety on this section of highway.				Roadway and bridge
MTIP ID	71166					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	HSIP (92.22)	$303,067	$25,568	$0	$328,635
Purchase right of way		2023	HSIP (92.22)	$12,341	$1,041	$0	$13,382
Other		2023	HSIP (92.22)	$38,484	$3,247	$0	$41,731
Construction		2024	HSIP (92.22)	$1,366,197	$115,257	$0	$1,481,454
			FY 21-26 Totals	$1,720,089	$145,113	$0	$1,865,202
			Estimated Project Cost (YOE$)	**$1,720,089**	**$145,113**	**$0**	**$1,865,202**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR8 at 174th Ave Armco Ave Main St and A&B Row**				
Project IDs		Project Description				Project Type
ODOT KEY	**21608**	Full signal rebuild and sidewalk installations at the Main St intersection. Install flashing lights at the other intersections to increase safety at these locations.				Roadway and bridge
MTIP ID	71162					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (Z001)	$452,448	$51,785	$0	$504,233
Preliminary engineering		2021	AC-HSIP (92.22%)	$293,635	$24,772	$0	$318,407
Purchase right of way		2022	AC-HSIP (92.22%)	$117,735	$9,933	$0	$127,668
Purchase right of way		2022	NHPP (Z001)	$161,621	$18,498	$0	$180,119
Other		2022	AC-HSIP (92.22%)	$13,081	$1,104	$0	$14,185
Other		2022	NHPP (Z001)	$59,455	$6,805	$0	$66,260
Construction		2023	AC-HSIP (92.22%)	$1,338,111	$112,888	$0	$1,450,999
Construction		2023	NHPP (Z001)	$2,267,849	$259,565	$0	$2,527,414
			FY 21-26 Totals	$4,703,935	$485,350	$0	$5,189,285
			Estimated Project Cost (YOE$)	**$4,703,935**	**$485,350**	**$0**	**$5,189,285**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR8 at River Rd**					
Project IDs		Project Description					Project Type
ODOT KEY	**20451**	On OR8 at River Rd from MP 11.17 to MP 11.75 construct full signal upgrade with illumination and ADA improvements at the intersectionof OR8 and River Rd in the City of Hillsboro.					Roadway and bridge
MTIP ID	70996						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	NHPP (Z001)	$82,146	$9,402	$0	$91,548
Other		2021	Rail Safety (LS40/50)	$270,000	$0	$30,000	$300,000
Construction		2021	NHPP (Z001)	$988,974	$113,192	$0	$1,102,166
			FY 21-26 Totals	$1,341,120	$122,594	$30,000	$1,493,714
			Prior Years' Totals	$1,037,216	$118,533	$0	$1,155,749
			Estimated Project Cost (YOE$)	**$2,378,336**	**$241,127**	**$30,000**	**$2,649,463**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR8 Corridor Safety and Access to Transit II**					
Project IDs		Project Description					Project Type
ODOT KEY	**20328**	Improve safety and access to transit for pedestrians and cyclists along OR-8. Work includes: bike lane from SW 182nd Ave to SW 153rd Dr. pedestrian crossings and separated walkway and bike lane across Rock Creek Bridge.					Active Transportation
MTIP ID	70945						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	NHPP (Z001)	$89,730	$10,270	$0	$100,000
Construction		2021	NHPP (Z001)	$2,097,964	$240,121	$0	$2,338,085
			FY 21-26 Totals	$2,187,694	$250,391	$0	$2,438,085
			Prior Years' Totals	$1,170,812	$134,005	$0	$1,304,817
			Estimated Project Cost (YOE$)	**$3,358,506**	**$384,396**	**$0**	**$3,742,902**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR8: SE Brookwood Ave - OR217**					
Project IDs		Project Description					Project Type
ODOT KEY	**21617**	Install fiber optic cable where gaps exist in order to operate traffic control and monitoring systems and rapidly respond to incidents.					Roadway and bridge
MTIP ID	71171						
RTP ID	12013						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (Z001)	$403,930	$46,232	$0	$450,162
Purchase right of way		2022	NHPP (Z001)	$28,199	$3,228	$0	$31,427
Construction		2023	NHPP (Z001)	$3,091,714	$353,861	$0	$3,445,575
			FY 21-26 Totals	$3,523,843	$403,321	$0	$3,927,164
			Estimated Project Cost (YOE$)	**$3,523,843**	**$403,321**	**$0**	**$3,927,164**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR8: SW Hocken Ave - SW Short St**				
Project IDs		Project Description				Project Type
ODOT KEY	**18758**	Design and construct streetscape safety and operational improvements				
MTIP ID	70757					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2021	STP - Urban	$1,974,955	$226,042	$0	$2,200,997
Construction	2021	OTHER - LOCAL	$0	$0	$3,900,000	$3,900,000
Construction	2021	STBG - STATE	$1,615,497	$184,901	$0	$1,800,398
		FY 21-26 Totals	$3,590,452	$410,943	$3,900,000	$7,901,395
		Prior Years' Totals	$2,934,171	$335,828	$0	$3,269,999
		Estimated Project Cost (YOE$)	**$6,524,623**	**$746,771**	**$3,900,000**	**$11,171,394**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR8: SW Watson Ave - SW 110th Ave (Beaverton)**				
Project IDs		Project Description				Project Type
ODOT KEY	**18794**	Safety upgrades to install larger signal heads reflective backboards pedestrian countdown signals and left turn phasing where feasible				Roadway and bridge
MTIP ID	70766					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2021	HSIP (100%)	$1,723,407	$0	$0	$1,723,407
Construction	2021	STBG - STATE	$439,677	$50,323	$0	$490,000
		FY 21-26 Totals	$2,163,084	$50,323	$0	$2,213,407
		Prior Years' Totals	$816,500	$0	$0	$816,500
		Estimated Project Cost (YOE$)	**$2,979,584**	**$50,323**	**$0**	**$3,029,907**

LEAD AGENCY		ODOT				
PROJECT NAME		**OR99E Over UPRR at Baldwin Street Bridge**				
Project IDs		Project Description				Project Type
ODOT KEY	**20487**	Address the safety issues. Perform bridge rail retrofit and add protective screening to bring the bridge up to current standards.				Roadway and bridge
MTIP ID	70978					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2021	STBG - STATE	$3,663,863	$419,346	$0	$4,083,209
		FY 21-26 Totals	$3,663,863	$419,346	$0	$4,083,209
		Prior Years' Totals	$1,193,708	$136,626	$0	$1,330,334
		Estimated Project Cost (YOE$)	**$4,857,571**	**$555,972**	**$0**	**$5,413,543**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR99E: Clackamas River(McLoughlin) Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**20472**	Design for a future project to repaint the bridge. The paint is required to protect this steel structure from corrosion.					Roadway and bridge
MTIP ID	71000						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	NHPP (Z001)	$224,325	$25,675	$0	$250,000
			FY 21-26 Totals	$224,325	$25,675	$0	$250,000
			Estimated Project Cost (YOE$)	**$224,325**	**$25,675**	**$0**	**$250,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR99W (Barbur Blvd) at SW Capitol Hwy**					
Project IDs		Project Description					Project Type
ODOT KEY	**20438**	Prohibit NB left turns from OR99W onto I-5 ramp and redirect traffic flow through jug handle; Install EB right turn lane and new signal at Taylors Ferry; Address median gaps and striping; Add/improve signage; Install reflectorized backplates					Roadway and bridge
MTIP ID	70991						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (100%)	$2,116,600	$0	$0	$2,116,600
			FY 21-26 Totals	$2,116,600	$0	$0	$2,116,600
			Prior Years' Totals	$859,100	$0	$0	$859,100
			Estimated Project Cost (YOE$)	**$2,975,700**	**$0**	**$0**	**$2,975,700**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR99W : Rock Creek Bridge**					
Project IDs		Project Description					Project Type
ODOT KEY	**21712**	Install new bridge rail to meet current safety standards					Roadway and bridge
MTIP ID	71197						
RTP ID	12092						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (Z001)	$618,334	$70,771	$0	$689,105
			FY 21-26 Totals	$618,334	$70,771	$0	$689,105
			Prior Years' Totals	$66,471	$7,608	$0	$74,079
			Estimated Project Cost (YOE$)	**$684,805**	**$78,379**	**$0**	**$763,184**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**OR99W: I-5 - McDonald St**					
Project IDs		Project Description					Project Type
ODOT KEY	**20435**	Repave roadway; upgrade ADA ramps to current standards; improve access management; and address drainage as needed. Includes full signal upgrade at Johnson/Main.					Roadway and bridge
MTIP ID	70988						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (Z001)	$8,020,044	$917,930	$0	$8,937,974
Construction		2021	AC-HB2017 (89.73%)	$6,191,370	$708,630	$0	$6,900,000
			FY 21-26 Totals	$14,211,414	$1,626,560	$0	$15,837,974
			Prior Years' Totals	$4,686,144	$536,350	$0	$5,222,494
			Estimated Project Cost (YOE$)	**$18,897,558**	**$2,162,910**	**$0**	**$21,060,468**

LEAD AGENCY		ODOT					
PROJECT NAME		**OR99W: OR217 - SW Sunset Blvd & US30B: Kerby - 162nd Ave**					
Project IDs		Project Description					Project Type
ODOT KEY	**21616**	Upgrade signals replace or modify signs and road markings install lighting and bike lane conflict markings to improve safety on this section.					Roadway and bridge
MTIP ID	71170						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$429,860	$36,264	$0	$466,124
Purchase right of way		2022	HSIP (92.22)	$69,856	$5,893	$0	$75,749
Other		2023	HSIP (92.22)	$11,685	$986	$0	$12,671
Construction		2023	HSIP (92.22)	$1,790,224	$151,030	$0	$1,941,254
			FY 21-26 Totals	$2,301,625	$194,173	$0	$2,495,798
			Estimated Project Cost (YOE$)	**$2,301,625**	**$194,173**	**$0**	**$2,495,798**

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro & Surrounding Area Audible Crosswalk Signals**					
Project IDs		Project Description					Project Type
ODOT KEY	**21618**	Install audible crosswalk signals to assist accessibility for pedestrians crossing at various locations throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Roadway and bridge
MTIP ID	71172						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STATE-GEN	$0	$0	$200,000	$200,000
			FY 21-26 Totals	$0	$0	$200,000	$200,000
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$200,000**	**$200,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Area Operations**					
Project IDs		Project Description					Project Type
ODOT KEY	**21611**	Operational improvements as needed at various locations to improve traffic flow throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Other
MTIP ID	71165						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2024	STBG - STATE	$508,908	$58,247	$0	$567,155
			FY 21-26 Totals	$508,908	$58,247	$0	$567,155
			Estimated Project Cost (YOE$)	**$508,908**	**$58,247**	**$0**	**$567,155**

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Areas Pavement Marking**					
Project IDs		Project Description					Project Type
ODOT KEY	**21604**	Restriping and replacement of raised pavement markers to update road markings and ensure continued visibility throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Roadway and bridge
MTIP ID	71158						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STATE-GEN	$0	$0	$200,000	$200,000
			FY 21-26 Totals	$0	$0	$200,000	$200,000
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$200,000**	**$200,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Areas Signal Detection**					
Project IDs		Project Description					Project Type
ODOT KEY	**21605**	Signal detection upgrades and replacements to respond to the identified need throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Transportation System Management Operations
MTIP ID	71159						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STATE-GEN	$0	$0	$200,000	$200,000
			FY 21-26 Totals	$0	$0	$200,000	$200,000
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$200,000**	**$200,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Areas Traffic Monitoring Cameras**					
Project IDs		Project Description					Project Type
ODOT KEY	**21609**	Install and replace damaged and obsolete traffic monitoring cameras so that highway conditions are continually monitored and there is an appropriate and rapid response to incidents throughout the ODOT Region 1 area.					Transportation System Management Operations
MTIP ID	71163						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$578,759	$66,242	$0	$645,001
			FY 21-26 Totals	$578,759	$66,242	$0	$645,001
			Estimated Project Cost (YOE$)	**$578,759**	**$66,242**	**$0**	**$645,001**

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Areas Traffic Signal Upgrades**					
Project IDs		Project Description					Project Type
ODOT KEY	**21603**	Replace signal heads with Light Emitting Diode (LED) fittings to increase safety by enhancing visibility throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Transportation System Management Operations
MTIP ID	71157						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STATE-GEN	$0	$0	$200,000	$200,000
			FY 21-26 Totals	$0	$0	$200,000	$200,000
			Estimated Project Cost (YOE$)	**$0**	**$0**	**$200,000**	**$200,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro and Surrounding Areas Variable Message Signs**					
Project IDs		Project Description					Project Type
ODOT KEY	**21601**	Replacement and installation of Variable Message Signs (VMS) signs to improve operations and provide real time travel information throughout the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties.					Transportation System Management Operations
MTIP ID	71155						
RTP ID	11104						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	STBG - STATE	$294,707	$33,731	$0	$328,438
Construction		2024	STBG - STATE	$1,179,128	$134,956	$0	$1,314,084
			FY 21-26 Totals	$1,473,835	$168,687	$0	$1,642,522
			Estimated Project Cost (YOE$)	**$1,473,835**	**$168,687**	**$0**	**$1,642,522**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**Portland Metro/Surrounding Area Traffic Monitoring & Control**					
Project IDs		Project Description					Project Type
ODOT KEY	**21600**	Purchase traffic monitoring and control systems equipment such as cameras and communication infrastructure to improve incident response within the ODOT Region 1 area located in Clackamas Hood River Multnomah and Washington Counties					Transportation System Management Operations
MTIP ID	71154						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	STBG - STATE	$628,110	$71,890	$0	$700,000
			FY 21-26 Totals	$628,110	$71,890	$0	$700,000
			Estimated Project Cost (YOE$)	**$628,110**	**$71,890**	**$0**	**$700,000**

LEAD AGENCY		ODOT					
PROJECT NAME		**Region 1 Bike Ped Crossings**					
Project IDs		Project Description					Project Type
ODOT KEY	**20479**	Bike and pedestrian improvements at select locations on 82nd Ave (OR-213); McLoughlin (OR-99E) on Powell (US-26) and OR8 at Baseline. Includes RRFBs; medians; illumination; crosswalks; tree trimming/removal; ADA upgrades; and other safety improvements.					Active Transportation
MTIP ID	71005						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (100%)	$654,599	$0	$0	$654,599
Construction		2021	STBG - STATE	$1,329,666	$152,186	$0	$1,481,852
			FY 21-26 Totals	$1,984,265	$152,186	$0	$2,136,451
			Prior Years' Totals	$1,134,467	$33,610	$31,324	$1,199,401
			Estimated Project Cost (YOE$)	**$3,118,732**	**$185,796**	**$31,324**	**$3,335,852**

LEAD AGENCY		ODOT					
PROJECT NAME		**Regionwide ITS Improvements and Upgrades**					
Project IDs		Project Description					Project Type
ODOT KEY	**20474**	Install new or upgraded variable message signs (VMS); travel-time signs; network/communication technology; and other intelligent transportation system (ITS) functionality at various locations in Region 1					Transportation System Management Operations
MTIP ID	71002						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$1,410,017	$161,383	$0	$1,571,400
			FY 21-26 Totals	$1,410,017	$161,383	$0	$1,571,400
			Prior Years' Totals	$156,669	$17,931	$0	$174,600
			Estimated Project Cost (YOE$)	**$1,566,686**	**$179,314**	**$0**	**$1,746,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**Road Safety Audit Implementation**					
Project IDs		Project Description					Project Type
ODOT KEY	**20414**	Address unanticipated safety improvements as identified. 2018 RTP approved HSIP Safety and Operations PGB					Roadway and bridge
MTIP ID	70970						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	HSIP (100%)	$1,689,244	$0	$0	$1,689,244
			FY 21-26 Totals	$1,689,244	$0	$0	$1,689,244
			Estimated Project Cost (YOE$)	**$1,689,244**	**$0**	**$0**	**$1,689,244**

LEAD AGENCY		ODOT					
PROJECT NAME		**Seventies Neighborhood Greenway**					
Project IDs		Project Description					Project Type
ODOT KEY	**20333**	Traffic calming and way-finding elements on local streets; some paving; crossing improvements; and multi-use path through Rose City Golf Course to address a gap in north-south bicycle and pedestrian facilities near 82nd avenue.					Active Transportation
MTIP ID	70948						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$1,566,001	$179,236	$2,178,594	$3,923,831
			FY 21-26 Totals	$1,566,001	$179,236	$2,178,594	$3,923,831
			Prior Years' Totals	$433,821	$49,652	$603,402	$1,086,875
			Estimated Project Cost (YOE$)	**$1,999,822**	**$228,888**	**$2,781,996**	**$5,010,706**

LEAD AGENCY		ODOT					
PROJECT NAME		**Stark Street Multimodal Connections**					
Project IDs		Project Description					Project Type
ODOT KEY	**20330**	Close the existing east-west gap in bicycle and pedestrian travel by constructing sidewalks and bike lanes on the north side and part of the south side of SE Stark Street between SW 257th Ave and S Troutdale Rd.					Active Transportation
MTIP ID	70946						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$2,519,127	$288,325	$478,343	$3,285,795
			FY 21-26 Totals	$2,519,127	$288,325	$478,343	$3,285,795
			Prior Years' Totals	$635,251	$72,708	$120,625	$828,584
			Estimated Project Cost (YOE$)	**$3,154,378**	**$361,033**	**$598,968**	**$4,114,379**

LEAD AGENCY		ODOT				
PROJECT NAME		**US26 (Powell Blvd): SE 99th - East City Limits**				
Project IDs		Project Description				Project Type
ODOT KEY	**21178**	On US26 (Powell Blvd) in SE Portland widen from three to four lanes (inclusive of a center turn lane) with sidewalks and buffered bike lanes or other enhanced bike facility. Add enhanced pedestrian and bike crossings.				Roadway and bridge
MTIP ID	71033					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	AC-HB2017 (89.73%)	$2,691,900	$308,100	$0	$3,000,000
Construction		2022	AC-HB2017 (89.73%)	$55,453,140	$6,346,860	$0	$61,800,000
			FY 21-26 Totals	$58,145,040	$6,654,960	$0	$64,800,000
			Prior Years' Totals	$36,071,460	$4,128,540	$0	$40,200,000
			Estimated Project Cost (YOE$)	**$94,216,500**	**$10,783,500**	**$0**	**$105,000,000**

LEAD AGENCY		ODOT				
PROJECT NAME		**US26/OR213 Curb Ramps**				
Project IDs		Project Description				Project Type
ODOT KEY	**21255**	Design and construct curb ramps and pedestrian signals in compliance with the Americans with Disabilities Act (ADA) standards at multiple locations				Pedestrian
MTIP ID	71051					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$1,000,490	$114,511	$0	$1,115,001
			FY 21-26 Totals	$1,000,490	$114,511	$0	$1,115,001
			Prior Years' Totals	$439,678	$50,324	$0	$490,002
			Estimated Project Cost (YOE$)	**$1,440,168**	**$164,835**	**$0**	**$1,605,003**

LEAD AGENCY		ODOT				
PROJECT NAME		**US26: Glencoe Rd - Cornelius Pass Rd**				
Project IDs		Project Description				Project Type
ODOT KEY	**21597**	Pavement resurfacing and bridge work to repair rutting and wear in order to keep this section of roadway safe for travel.				Roadway and bridge
MTIP ID	71152					
RTP ID	12094					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	NHPP (Z001)	$1,627,675	$186,295	$0	$1,813,970
Construction		2024	NHPP (Z001)	$9,857,047	$1,128,183	$0	$10,985,230
			FY 21-26 Totals	$11,484,722	$1,314,478	$0	$12,799,200
			Estimated Project Cost (YOE$)	**$11,484,722**	**$1,314,478**	**$0**	**$12,799,200**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT					
PROJECT NAME		**US26: OR217 - Cornell Road**					
Project IDs		Project Description					Project Type
ODOT KEY	**20300**	Repave mainline of roadway to improve pavement condition and extend service life and maintain safety standards. Apply high friction surface pavement treatment and perform bridge maintenance.					Roadway and bridge
MTIP ID	70941						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (Z001)	$7,930,940	$907,732	$0	$8,838,672
Construction		2021	HSIP (92.22)	$396,825	$33,478	$0	$430,303
			FY 21-26 Totals	$8,327,765	$941,210	$0	$9,268,975
			Prior Years' Totals	$1,190,260	$132,815	$0	$1,323,075
			Estimated Project Cost (YOE$)	**$9,518,025**	**$1,074,025**	**$0**	**$10,592,050**

LEAD AGENCY		ODOT					
PROJECT NAME		**US26: SE 8th Ave - SE 87th Ave**					
Project IDs		Project Description					Project Type
ODOT KEY	**21614**	Update signals and improve intersection warning signage to improve safety on this section of highway.					Roadway and bridge
MTIP ID	71168						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$20,866	$1,760	$0	$22,626
Purchase right of way		2022	HSIP (92.22)	$5,821	$491	$0	$6,312
Construction		2022	HSIP (92.22)	$69,127	$5,832	$0	$74,959
			FY 21-26 Totals	$95,814	$8,083	$0	$103,897
			Estimated Project Cost (YOE$)	**$95,814**	**$8,083**	**$0**	**$103,897**

LEAD AGENCY		ODOT					
PROJECT NAME		**US30 at Bridge Ave Ramps**					
Project IDs		Project Description					Project Type
ODOT KEY	**20522**	Design for tree hazard removal and pinned mesh installation.					Roadway and bridge
MTIP ID	70983						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$2,518,003	$288,197	$0	$2,806,200
			FY 21-26 Totals	$2,518,003	$288,197	$0	$2,806,200
			Prior Years' Totals	$589,978	$67,526	$0	$657,504
			Estimated Project Cost (YOE$)	**$3,107,981**	**$355,723**	**$0**	**$3,463,704**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT				
PROJECT NAME		**US30: NW Saltzman Rd - NW Bridge Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**20208**	Repave roadway; upgrade ADA ramps to current standards; improve access management; and address drainage as needed.				Roadway and bridge
MTIP ID	70938					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	NHPP (Z001)	$5,397,862	$617,809	$0	$6,015,671
			FY 21-26 Totals	$5,397,862	$617,809	$0	$6,015,671
			Prior Years' Totals	$2,245,972	$257,061	$0	$2,503,033
			Estimated Project Cost (YOE$)	**$7,643,834**	**$874,870**	**$0**	**$8,518,704**

LEAD AGENCY		ODOT				
PROJECT NAME		**US30: Sandy River - OR35**				
Project IDs		Project Description				Project Type
ODOT KEY	**21613**	Signage and signal improvements to increase the visibility of intersections and improve safety along this highway.				Roadway and bridge
MTIP ID	71167					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	HSIP (92.22)	$128,470	$10,838	$0	$139,308
Purchase right of way		2023	HSIP (92.22)	$6,541	$552	$0	$7,093
Other		2024	HSIP (92.22)	$7,326	$618	$0	$7,944
Construction		2024	HSIP (92.22)	$390,231	$32,921	$0	$423,152
			FY 21-26 Totals	$532,568	$44,929	$0	$577,497
			Estimated Project Cost (YOE$)	**$532,568**	**$44,929**	**$0**	**$577,497**

LEAD AGENCY		ODOT				
PROJECT NAME		**US30: Troutdale (Sandy River) Bridge**				
Project IDs		Project Description				Project Type
ODOT KEY	**21710**	Repair significant bridge footing erosion to protect the structure from further damage.				Roadway and bridge
MTIP ID	71196					
RTP ID	12092					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STBG - STATE	$35,267	$4,036	$0	$39,303
Other		2023	STBG - STATE	$103,460	$11,841	$0	$115,301
Construction		2023	STBG - STATE	$3,717,578	$425,493	$0	$4,143,071
			FY 21-26 Totals	$3,856,305	$441,370	$0	$4,297,675
			Prior Years' Totals	$602,427	$68,950	$0	$671,377
			Estimated Project Cost (YOE$)	**$4,458,732**	**$510,320**	**$0**	**$4,969,052**

LEAD AGENCY		ODOT				
PROJECT NAME		**US30: Watson Rd - NW Hoge Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**21779**	Repair or replace culverts in poor condition along this corridor to ensure to prevent further damage and possible collapse.				Roadway and bridge
MTIP ID	71198					
RTP ID	12093					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	NHPP (Z001)	$410,246	$46,954	$0	$457,200
Construction	2023	NHPP (Z001)	$957,240	$109,560	$0	$1,066,800
		FY 21-26 Totals	$1,367,486	$156,514	$0	$1,524,000
		Estimated Project Cost (YOE$)	**$1,367,486**	**$156,514**	**$0**	**$1,524,000**

LEAD AGENCY		ODOT				
PROJECT NAME		**US30B: Bridge Over Private Driveway**				
Project IDs		Project Description				Project Type
ODOT KEY	**21704**	Repairs to prevent concrete fragments breaking off and falling from the structure and deck pavement repair to restore the traveling surface and extend the life of the structure.				Roadway and bridge
MTIP ID	71193					
RTP ID	12092					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2022	STBG - STATE	$238,143	$27,257	$0	$265,400
Purchase right of way	2023	STBG - STATE	$12,008	$1,374	$0	$13,382
Construction	2024	STBG - STATE	$1,494,233	$171,022	$0	$1,665,255
		FY 21-26 Totals	$1,744,384	$199,653	$0	$1,944,037
		Estimated Project Cost (YOE$)	**$1,744,384**	**$199,653**	**$0**	**$1,944,037**

LEAD AGENCY		ODOT				
PROJECT NAME		**US30B: St. Johns Bridge**				
Project IDs		Project Description				Project Type
ODOT KEY	**21707**	Repairs of the columns and arched concrete connection between the columns to prevent concrete fragments breaking off and falling from the structure. This project will increase safety for those below and extend the life of the structure.				Roadway and bridge
MTIP ID	71194					
RTP ID	12092					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way	2021	STBG - STATE	$222,765	$25,496	$0	$248,261
Construction	2022	STBG - STATE	$10,225,975	$1,170,409	$0	$11,396,384
		FY 21-26 Totals	$10,448,740	$1,195,905	$0	$11,644,645
		Prior Years' Totals	$1,471,587	$168,430	$0	$1,640,017
		Estimated Project Cost (YOE$)	**$11,920,327**	**$1,364,335**	**$0**	**$13,284,662**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		ODOT				
PROJECT NAME		**Washington County Safety Bike and Pedestrian Improvements**				
Project IDs		Project Description				Project Type
ODOT KEY	**21615**	Upgrade street lighting signals signs striping install stop approach activated warning system install bike lanes and flashing lights to increase safety at various locations.				Roadway and bridge
MTIP ID	71169					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	AC-HSIP (92.22%)	$156,750	$13,224	$0	$169,974
Preliminary engineering		2021	HSIP (92.22)	$511,677	$43,167	$0	$554,844
Purchase right of way		2022	AC-HSIP (92.22%)	$52,327	$4,414	$0	$56,741
Purchase right of way		2022	HSIP (92.22)	$34,928	$2,947	$0	$37,875
Other		2023	HSIP (92.22)	$51,349	$4,332	$0	$55,681
Other		2023	AC-HSIP (92.22%)	$13,913	$1,174	$0	$15,087
Construction		2023	HSIP (92.22)	$2,052,054	$173,118	$0	$2,225,172
Construction		2023	AC-HSIP (92.22%)	$514,179	$43,378	$0	$557,557
			FY 21-26 Totals	$3,387,177	$285,754	$0	$3,672,931
			Estimated Project Cost (YOE$)	**$3,387,177**	**$285,754**	**$0**	**$3,672,931**

LEAD AGENCY		ODOT				
PROJECT NAME		**West Systemic Signals and Illumination (ODOT)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20376**	Illumination intersection work bike and pedestrian improvements ADA upgrades signal work signs warnings striping medians utility relocation and other safety improvements at various locations (PGB-ARTS)				Roadway and bridge
MTIP ID	70958					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (92.22)	$4,808,674	$405,676	$0	$5,214,350
			FY 21-26 Totals	$4,808,674	$405,676	$0	$5,214,350
			Prior Years' Totals	$1,628,743	$137,406	$0	$1,766,149
			Estimated Project Cost (YOE$)	**$6,437,417**	**$543,082**	**$0**	**$6,980,499**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Oregon City				
PROJECT NAME		**Beavercreek Rd: Molalla Ave - S Maplelane Rd (Oregon City)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21619**	Improvements including signals signs flashing lights and signal connectivity improvements to increase safety on this road.				Roadway and bridge
MTIP ID	71173					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$197,016	$16,621	$0	$213,637
Construction		2023	HSIP (92.22)	$923,806	$77,935	$0	$1,001,741
			FY 21-26 Totals	$1,120,822	$94,556	$0	$1,215,378
			Estimated Project Cost (YOE$)	**$1,120,822**	**$94,556**	**$0**	**$1,215,378**

LEAD AGENCY		Oregon City				
PROJECT NAME		**Willamette Falls Path/OR 99E Enhance: 10th St - Railroad Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**22142**	Complete project development activities to develop future Willamette Falls Shared Use Path and OR99E (McLoughlin Blvd) pedestrian bicycle and streetscape enhancements between 10th Street and Railroad Ave.				Active Transportation
MTIP ID	71088					
RTP ID	10123					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2022	STBG-URBAN	$673,000	$77,028	$0	$750,028
			FY 21-26 Totals	$673,000	$77,028	$0	$750,028
			Estimated Project Cost (YOE$)	**$673,000**	**$77,028**	**$0**	**$750,028**

LEAD AGENCY		Port of Portland				
PROJECT NAME		**40 Mile Loop: Blue Lake Park - Sundial & Harlow Rd**				
Project IDs		Project Description				Project Type
ODOT KEY	**17270**	The project consists of two approved segments: (1) Blue Lake Park to Sundial Rd which 1.7 miles of mixed-trail improvements and (2) Harlow Rd which is SE of Segment 1 and includes 1900 ft running on the west Band of the Sandy River (2010-13 RFFA Award)				Trail
MTIP ID	70007					
RTP ID	10408					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STP - Urban	$2,004,083	$229,376	$0	$2,233,459
			FY 21-26 Totals	$2,004,083	$229,376	$0	$2,233,459
			Prior Years' Totals	$1,068,338	$122,276	$15,462	$1,206,076
			Estimated Project Cost (YOE$)	**$3,072,421**	**$351,652**	**$15,462**	**$3,439,535**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Port of Portland					
PROJECT NAME		**NE Columbia Blvd: Cully Blvd and Alderwood Rd**					
Project IDs		Project Description					Project Type
ODOT KEY	**18837**	Install or replace a signal and construct a taper on Columbia Blvd's east leg at Alderwood for future side-by-side left-turn lanes between Cully and Alderwood. Construct sidewalks at the Columbia/Alderwood intersection and on N side to Cully					Roadway and bridge
MTIP ID	70778						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$2,585,775	$295,954	$0	$2,881,729
			FY 21-26 Totals	$2,585,775	$295,954	$0	$2,881,729
			Prior Years' Totals	$1,953,081	$223,539	$0	$2,176,620
			Estimated Project Cost (YOE$)	**$4,538,856**	**$519,493**	**$0**	**$5,058,349**

LEAD AGENCY		Portland					
PROJECT NAME		**Brentwood Darlington Bike/Ped Improvements**					
Project IDs		Project Description					Project Type
ODOT KEY	**20812**	Connect to parks community gardens and shopping. Sidewalks fill gaps in the ped network. Greenway provides connections between bikeways in Springwater corridor(2019-21 RFFA Award)					Active Transportation
MTIP ID	70877						
RTP ID	11193						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	TA - URBAN	$153,025	$17,514	$135,511	$306,050
Other		2021	TA - URBAN	$44,865	$5,135	$0	$50,000
Construction		2021	TA - URBAN	$1,043,610	$119,446	$2,850,316	$4,013,372
			FY 21-26 Totals	$1,241,500	$142,095	$2,985,827	$4,369,422
			Prior Years' Totals	$918,500	$105,126	$813,374	$1,837,000
			Estimated Project Cost (YOE$)	**$2,160,000**	**$247,221**	**$3,799,201**	**$6,206,422**

LEAD AGENCY		Portland					
PROJECT NAME		**Central City in Motion**					
Project IDs		Project Description					Project Type
ODOT KEY	**19299**	The project will develop a strategy that identifies multimodal safety projects and prioritizes investments in the Portland Central City.					Bike
MTIP ID	70677						
RTP ID	10232						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	LOCAL	$0	$0	$111,445	$111,445
Construction		2021	LOCAL	$0	$0	$4,346,372	$4,346,372
			FY 21-26 Totals	$0	$0	$4,457,817	$4,457,817
			Prior Years' Totals	$852,000	$97,515	$722,166	$1,671,681
			Estimated Project Cost (YOE$)	**$852,000**	**$97,515**	**$5,179,983**	**$6,129,498**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**Central Systemic Signal and Illumination (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20334**	Illumination; intersection work; bike and pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements.				Roadway and bridge
MTIP ID	70949					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	HSIP (92.22)	$58,560	$4,940	$0	$63,500
Other		2021	HSIP (92.22)	$16,692	$1,408	$0	$18,100
Construction		2021	HSIP (92.22)	$735,233	$62,027	$0	$797,260
			FY 21-26 Totals	$810,485	$68,375	$0	$878,860
			Prior Years' Totals	$904,396	$76,298	$0	$980,694
			Estimated Project Cost (YOE$)	**$1,714,881**	**$144,673**	**$0**	**$1,859,554**

LEAD AGENCY		Portland				
PROJECT NAME		**City of Portland Safety Project**				
Project IDs		Project Description				Project Type
ODOT KEY	**20304**	Work may include intersection improvements upgrade to ADA; utility relocation; signal work; medians; traffic seperators; striping; signing; warnings and other safety improvements. (ARTS PGB)				Roadway and bridge
MTIP ID	70944					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	HSIP	$111,586	$9,414	$0	$121,000
Other		2021	HSIP	$57,176	$4,824	$0	$62,000
Construction		2021	HSIP	$5,311,273	$448,077	$0	$5,759,350
			FY 21-26 Totals	$5,480,035	$462,315	$0	$5,942,350
			Prior Years' Totals	$1,239,806	$104,594	$0	$1,344,400
			Estimated Project Cost (YOE$)	**$6,719,841**	**$566,909**	**$0**	**$7,286,750**

LEAD AGENCY		Portland				
PROJECT NAME		**Cully/Columbia & Columbia/Alderwood Improvements**				
Project IDs		Project Description				Project Type
ODOT KEY	**22132**	Construct intersection safety improvements on Columbia Cully and Alderwood including sidewalks curb and gutter improvements tree landscaping and new railroad crossing on Cully.				Roadway and bridge
MTIP ID	71092					
RTP ID	10336					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	STBG-URBAN	$1,016,176	$116,306	$0	$1,132,482
Purchase right of way		2023	STBG-URBAN	$193,304	$22,125	$0	$215,429
Other		2023	STBG-URBAN	$44,865	$5,135	$0	$50,000
Construction		2025	STBG-URBAN	$2,179,847	$249,493	$1,256,942	$3,686,282
			FY 21-26 Totals	$3,434,192	$393,059	$1,256,942	$5,084,193
			Estimated Project Cost (YOE$)	**$3,434,192**	**$393,059**	**$1,256,942**	**$5,084,193**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**East Portland Access to Employment and Education**				
Project IDs		Project Description				Project Type
ODOT KEY	**19297**	At various locations in east Portland build and improve sidewalks crossings bus stops bike facilities and other safety facilities to provide improved access to jobs businesses and education opportunities				Pedestrian
MTIP ID	70675					
RTP ID	11196					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	OTHER - LOCAL	$0	$0	$80,000	$80,000
Construction		2021	STBG-URBAN	$3,737,420	$427,764	$5,205,001	$9,370,185
			FY 21-26 Totals	$3,737,420	$427,764	$5,285,001	$9,450,185
			Prior Years' Totals	$1,529,579	$175,067	$613,298	$2,317,944
			Estimated Project Cost (YOE$)	**$5,266,999**	**$602,831**	**$5,898,299**	**$11,768,129**

LEAD AGENCY		Portland				
PROJECT NAME		**I-205 Undercrossing (Sullivans Gulch)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20332**	Provide safe access across I-205 for bicyclists and pedestrians by improving local street corridors on the west side of I-205 and constructing an east-west bicycle and pedestrian undercrossing.				Active Transportation
MTIP ID	70947					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	OTHER - LOCAL	$0	$0	$107,900	$107,900
Construction		2021	OTHER - LOCAL	$0	$0	$645,047	$645,047
Construction		2021	TA - STATE	$1,682,468	$192,566	$0	$1,875,034
			FY 21-26 Totals	$1,682,468	$192,566	$752,947	$2,627,981
			Prior Years' Totals	$0	$0	$962,209	$962,209
			Estimated Project Cost (YOE$)	**$1,682,468**	**$192,566**	**$1,715,156**	**$3,590,190**

LEAD AGENCY		Portland				
PROJECT NAME		**Jade and Montavilla Multi-modal Improvements**				
Project IDs		Project Description				Project Type
ODOT KEY	**20814**	Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers. (19-21 RFFA Award)				Active Transportation
MTIP ID	70884					
RTP ID	11572					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	TA - URBAN	$193,075	$22,098	$170,977	$386,150
Other		2021	OTHER - LOCAL	$0	$0	$50,000	$50,000
Construction		2021	STBG-URBAN	$1,768,475	$202,410	$3,069,907	$5,040,792
			FY 21-26 Totals	$1,961,550	$224,508	$3,290,884	$5,476,942
			Prior Years' Totals	$1,158,450	$132,590	$1,025,859	$2,316,899
			Estimated Project Cost (YOE$)	**$3,120,000**	**$357,098**	**$4,316,743**	**$7,793,841**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**N Willamette Blvd ATC: N Rosa Parks Ave - N Richmond Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**22133**	Construct/Enhance existing bike lanes along Willamette Blvd from Rosa Parks to Ida and extend bike lanes from Ida to Richmond. Intersection improvements to enhance pedestrian safety and transit access along the corridor.				Active Transportation
MTIP ID	71127					
RTP ID	11842					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	CMAQ - URBAN	$1,185,333	$135,667	$0	$1,321,000
Purchase right of way		2024	CMAQ - URBAN	$44,865	$5,135	$0	$50,000
Other		2024	CMAQ - URBAN	$44,865	$5,135	$0	$50,000
Construction		2026	CMAQ - URBAN	$3,180,937	$364,072	$1,139,991	$4,685,000
			FY 21-26 Totals	$4,456,000	$510,009	$1,139,991	$6,106,000
			Estimated Project Cost (YOE$)	**$4,456,000**	**$510,009**	**$1,139,991**	**$6,106,000**

LEAD AGENCY		Portland				
PROJECT NAME		**NE 122nd Ave Safety & Access: Beech - Wasco**				
Project IDs		Project Description				Project Type
ODOT KEY	**22134**	Construct new enhanced and marked crossings in the vicinity of NE Beech NE Sacramento/ NE Brazee NE Broadway/ NE Hancock St and NE Wasco St/NE Multnomah St. (Transit: ETC)				Active Transportation
MTIP ID	71098					
RTP ID	11868					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	STBG-URBAN	$908,740	$104,009	$713,627	$1,726,376
Other		2024	STBG-URBAN	$89,730	$10,270	$0	$100,000
Construction		2026	STBG-URBAN	$3,545,230	$405,767	$713,627	$4,664,624
			FY 21-26 Totals	$4,543,700	$520,046	$1,427,254	$6,491,000
			Estimated Project Cost (YOE$)	**$4,543,700**	**$520,046**	**$1,427,254**	**$6,491,000**

LEAD AGENCY		Portland				
PROJECT NAME		**NE 12th Ave Over I-84 & Union Pacific RR Bridge (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21283**	On NE 12th Ave over I-84 construct protective fencing for the 12th Ave bridge to provide safety to the traveling motorist and to meet currect safety standards as required by HB2017.				Roadway and bridge
MTIP ID	71054					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STBG - STATE	$1,589,049	$181,874	$0	$1,770,923
			FY 21-26 Totals	$1,589,049	$181,874	$0	$1,770,923
			Prior Years' Totals	$368,181	$42,140	$0	$410,321
			Estimated Project Cost (YOE$)	**$1,957,230**	**$224,014**	**$0**	**$2,181,244**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**NE Fremont St: 102nd Ave - 122nd Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21631**	Install speed bumps to reduce vehicle speeds to 30 MPH to improve safety on this section.				Roadway and bridge
MTIP ID	71185					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$30,869	$2,604	$0	$33,473
Construction		2023	HSIP (92.22)	$135,515	$11,433	$0	$146,948
			FY 21-26 Totals	$166,384	$14,037	$0	$180,421
			Estimated Project Cost (YOE$)	**$166,384**	**$14,037**	**$0**	**$180,421**

LEAD AGENCY		Portland				
PROJECT NAME		**NE Halsey Street Bike/Ped/Transit Improvements**				
Project IDs		Project Description				Project Type
ODOT KEY	**20813**	Signal improvements intersection redesigns bus stop improvements and high-priority crossings on NE Halsey between 65th and 92nd bikeway from 65th to 92nd path from the 82nd Ave. MAX station (19-21 FFFA Award)				Roadway and bridge
MTIP ID	70880					
RTP ID	11559					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STBG-URBAN	$147,320	$16,861	$0	$164,181
Other		2021	STBG-URBAN	$44,865	$5,135	$0	$50,000
Construction		2021	STBG-URBAN	$1,071,762	$122,668	$2,485,309	$3,679,739
Construction		2021	TA - URBAN	$250,598	$28,682	$0	$279,280
			FY 21-26 Totals	$1,514,545	$173,346	$2,485,309	$4,173,200
			Prior Years' Totals	$839,055	$96,034	$0	$935,089
			Estimated Project Cost (YOE$)	**$2,353,600**	**$269,380**	**$2,485,309**	**$5,108,289**

LEAD AGENCY		Portland				
PROJECT NAME		**NE Killingsworth St: MLK Jr Blvd - 33rd Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21626**	Install pedestrian crossing islands to improve safety by reducing crossing distances and allowing pedestrians to cross one direction of traffic flow at a time. Install advance pedestrian signals to increase visibility and safety.				Roadway and bridge
MTIP ID	71180					
RTP ID	11846					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$64,995	$5,483	$0	$70,478
Construction		2023	HSIP (92.22)	$314,834	$26,560	$0	$341,394
			FY 21-26 Totals	$379,829	$32,043	$0	$411,872
			Estimated Project Cost (YOE$)	**$379,829**	**$32,043**	**$0**	**$411,872**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**NE MLK Blvd Safety & Access to Transit: Cook-Highland**				
Project IDs		Project Description				Project Type
ODOT KEY	**22135**	Construct pedestrian crossing and intersection channelization improvements on NE MLK Blvd at various locations between Cook St and Highland St. Complete signal upgrades at NE Fremont and NE Killingsworth. Add protected left turn lane at both intersection				Active Transportation
MTIP ID	71090					
RTP ID	10302					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	STBG-URBAN	$987,030	$112,970	$0	$1,100,000
Purchase right of way		2024	STBG-URBAN	$78,065	$8,935	$0	$87,000
Other		2024	STBG-URBAN	$44,865	$5,135	$0	$50,000
Construction		2026	STBG-URBAN	$1,513,040	$173,174	$1,799,786	$3,486,000
			FY 21-26 Totals	$2,623,000	$300,214	$1,799,786	$4,723,000
			Estimated Project Cost (YOE$)	**$2,623,000**	**$300,214**	**$1,799,786**	**$4,723,000**

LEAD AGENCY		Portland				
PROJECT NAME		**NW Thurman St Over Macleay Park**				
Project IDs		Project Description				Project Type
ODOT KEY	**20384**	Paint the bridge to extend the life of the structure.				Roadway and bridge
MTIP ID	70960					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2022	STBG - STATE	$3,907,149	$447,191	$0	$4,354,340
			FY 21-26 Totals	$3,907,149	$447,191	$0	$4,354,340
			Prior Years' Totals	$476,421	$54,529	$0	$530,950
			Estimated Project Cost (YOE$)	**$4,383,570**	**$501,720**	**$0**	**$4,885,290**

LEAD AGENCY		Portland				
PROJECT NAME		**OR99W/Barbur Blvd Area: Sidewalk Infill Projects**				
Project IDs		Project Description				Project Type
ODOT KEY	**21407**	Complete sidewalk projects at multiple locations near and around OR99W (SW Barbur Blvd) install flashing lights at the intersection of SW 40th Ave and SW Huber St to create a safer environment for pedestrians along this section of transportation corridor				Pedestrian
MTIP ID	71060					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STP - Urban	$1,361,641	$155,846	$0	$1,517,487
			FY 21-26 Totals	$1,361,641	$155,846	$0	$1,517,487
			Prior Years' Totals	$377,763	$43,237	$0	$421,000
			Estimated Project Cost (YOE$)	**$1,739,404**	**$199,083**	**$0**	**$1,938,487**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**Red Electric Trail: SW Bertha - SW Capitol Hwy**				
Project IDs		Project Description				Project Type
ODOT KEY	**17268**	Provide east-west route for pedestrians and cyclists in SW Portland with an off-street trail and relocate water line as part of project scope.				Trail
MTIP ID	70005					
RTP ID	10354					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	CMAQ	$1,359,410	$155,591	$0	$1,515,001
Construction		2021	STP - Urban	$196,160	$22,451	$0	$218,611
Construction		2021	OTHER	$0	$0	$1,727,616	$1,727,616
			FY 21-26 Totals	$1,555,570	$178,042	$1,727,616	$3,461,228
			Prior Years' Totals	$576,644	$65,999	$428,271	$1,070,914
			Estimated Project Cost (YOE$)	**$2,132,214**	**$244,041**	**$2,155,887**	**$4,532,142**

LEAD AGENCY		Portland				
PROJECT NAME		**SE Belmont St: 7th Ave - 34th Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21627**	Install lighting at 21 intersections to improve visibility and safety.				Roadway and bridge
MTIP ID	71181					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$48,902	$4,126	$0	$53,028
Construction		2023	HSIP (92.22)	$214,467	$18,093	$0	$232,560
			FY 21-26 Totals	$263,369	$22,219	$0	$285,588
			Estimated Project Cost (YOE$)	**$263,369**	**$22,219**	**$0**	**$285,588**

LEAD AGENCY		Portland				
PROJECT NAME		**SE Division St: 148th Ave - 174th Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21629**	Convert existing two-way left turn lane to a raised median to improve safety on this section.				Roadway and bridge
MTIP ID	71183					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$444,883	$37,532	$0	$482,415
Construction		2023	HSIP (92.22)	$1,949,044	$164,428	$0	$2,113,472
			FY 21-26 Totals	$2,393,927	$201,960	$0	$2,595,887
			Estimated Project Cost (YOE$)	**$2,393,927**	**$201,960**	**$0**	**$2,595,887**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**SE Flavel St at 72nd Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21635**	Rebuild the traffic signal adding left turn capability and add lighting to improve safety at this intersection.				Roadway and bridge
MTIP ID	71189					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$164,154	$13,849	$0	$178,003
Construction		2023	HSIP (92.22)	$776,826	$65,536	$0	$842,362
			FY 21-26 Totals	$940,980	$79,385	$0	$1,020,365
			Estimated Project Cost (YOE$)	**$940,980**	**$79,385**	**$0**	**$1,020,365**

LEAD AGENCY		Portland				
PROJECT NAME		**SE Foster Rd: Barbara Welch Rd - Jenne Rd (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21622**	Install rumble strips on this section of road to improve safety on this section				Roadway and bridge
MTIP ID	71176					
RTP ID	11860					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$28,749	$2,425	$0	$31,174
Construction		2023	HSIP (92.22)	$128,434	$10,835	$0	$139,269
			FY 21-26 Totals	$157,183	$13,260	$0	$170,443
			Estimated Project Cost (YOE$)	**$157,183**	**$13,260**	**$0**	**$170,443**

LEAD AGENCY		Portland				
PROJECT NAME		**SE Gladstone St at Cesar Chavez Blvd (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21634**	Install left turn lanes and upgrade the signal with larger heads and backplates to improve safety at this intersection.				Roadway and bridge
MTIP ID	71188					
RTP ID	12095					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$167,598	$14,139	$0	$181,737
Construction		2023	HSIP (92.22)	$734,251	$61,944	$0	$796,195
			FY 21-26 Totals	$901,849	$76,083	$0	$977,932
			Estimated Project Cost (YOE$)	**$901,849**	**$76,083**	**$0**	**$977,932**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**SE Mt Scott Blvd: 101st Ave - 104th Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21620**	Install guardrail and reflective delineators. Improve curve signage to increase safety on this section.				Roadway and bridge
MTIP ID	71174					
RTP ID	12095					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	HSIP (92.22)	$16,492	$1,391	$0	$17,883
Construction	2023	HSIP (92.22)	$73,829	$6,228	$0	$80,057
		FY 21-26 Totals	$90,321	$7,619	$0	$97,940
		Estimated Project Cost (YOE$)	**$90,321**	**$7,619**	**$0**	**$97,940**

LEAD AGENCY		Portland				
PROJECT NAME		**SE Stark St: 148th Ave - 162nd Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21630**	Convert existing two-way left turn lane to a raised median to improve safety on this section.				Roadway and bridge
MTIP ID	71184					
RTP ID	12095					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	HSIP (92.22)	$241,415	$20,367	$0	$261,782
Construction	2023	HSIP (92.22)	$1,057,646	$89,227	$0	$1,146,873
		FY 21-26 Totals	$1,299,061	$109,594	$0	$1,408,655
		Estimated Project Cost (YOE$)	**$1,299,061**	**$109,594**	**$0**	**$1,408,655**

LEAD AGENCY		Portland				
PROJECT NAME		**Stark & Washington Safety: SE 92nd Ave - SE 109th Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**22138**	Construct protected bike lanes protected signal phasing for peds and bikes transit islands to improve transit operations and comfort ped islands to shorten crossing distance and signal controllerupgrades to better manage speeds and traffic flow.				Active Transportation
MTIP ID	71091					
RTP ID	10319					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2022	STBG-URBAN	$585,040	$66,960	$0	$652,000
Purchase right of way	2024	STBG-URBAN	$404,682	$46,318	$0	$451,000
Other	2024	STBG-URBAN	$44,865	$5,135	$0	$50,000
Construction	2026	STBG-URBAN	$4,297,413	$491,858	$589,729	$5,379,000
		FY 21-26 Totals	$5,332,000	$610,271	$589,729	$6,532,000
		Estimated Project Cost (YOE$)	**$5,332,000**	**$610,271**	**$589,729**	**$6,532,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland					
PROJECT NAME		**SW Barbur Blvd: SW Caruthers St - SW Capitol Hwy**					
Project IDs		Project Description					Project Type
ODOT KEY	**18316**	Provide preliminary advanced and final PS&E for the Installation of two (2) CCTV cameras moving one (1) CCTV camera to a different location and Installing 288 count Fiber Optic cable along Barbur Boulevard from SW Caruthers at 4th Ave to just south of					Transportation System Management Operations
MTIP ID	70653						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STP - Urban	$449,242	$51,418	$0	$500,660
			FY 21-26 Totals	$449,242	$51,418	$0	$500,660
			Prior Years' Totals	$80,757	$9,243	$0	$90,000
			Estimated Project Cost (YOE$)	**$529,999**	**$60,661**	**$0**	**$590,660**

LEAD AGENCY		Portland					
PROJECT NAME		**SW Shattuck Rd at OR10 (Portland)**					
Project IDs		Project Description					Project Type
ODOT KEY	**21633**	Rebuild traffic signal to increase visibility and accommodate left turn signal heads and phases on Shattuck Road to improve safety at this intersection.					Roadway and bridge
MTIP ID	71187						
RTP ID	12095						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$180,655	$15,241	$0	$195,896
Purchase right of way		2022	HSIP (92.22)	$33,764	$2,848	$0	$36,612
Construction		2024	HSIP (92.22)	$833,893	$70,350	$0	$904,243
			FY 21-26 Totals	$1,048,312	$88,439	$0	$1,136,751
			Estimated Project Cost (YOE$)	**$1,048,312**	**$88,439**	**$0**	**$1,136,751**

LEAD AGENCY		Portland					
PROJECT NAME		**Transportation Demand Management (Portland)**					
Project IDs		Project Description					Project Type
ODOT KEY	**21593**	Through the Metro RTO program Portland will conduct outreach and education to connect residents on available bike/ped/transit transportation alternatives and options (2019-21 RFFA Award) Keys 20812/20813/20814.					Transportation System Management Operations
MTIP ID	71067						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2021	TA - URBAN	$40,000	$4,578	$0	$44,578
Other		2021	STBG-URBAN	$126,400	$14,467	$0	$140,867
			FY 21-26 Totals	$166,400	$19,045	$0	$185,445
			Estimated Project Cost (YOE$)	**$166,400**	**$19,045**	**$0**	**$185,445**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Portland				
PROJECT NAME		**W Burnside at SW St Clair Ave (Portland)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21624**	Install a pedestrian hybrid beacon to increase pedestrian crossing safety.				Roadway and bridge
MTIP ID	71178					
RTP ID	10250					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	HSIP (92.22)	$105,712	$8,918	$0	$114,630
Construction	2023	HSIP (92.22)	$463,176	$39,075	$0	$502,251
		FY 21-26 Totals	$568,888	$47,993	$0	$616,881
		Estimated Project Cost (YOE$)	**$568,888**	**$47,993**	**$0**	**$616,881**

LEAD AGENCY		Sherwood				
PROJECT NAME		**Cedar Creek/Tonquin Trail: OR99W - SW Pine St**				
Project IDs		Project Description				Project Type
ODOT KEY	**18026**	Construct a multi-modal travel corridor within Sherwood between OR99W and SW Pine Street.				Trail
MTIP ID	70480					
RTP ID	10701					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction	2021	CMAQ	$3,418,526	$391,266	$0	$3,809,792
		FY 21-26 Totals	$3,418,526	$391,266	$0	$3,809,792
		Prior Years' Totals	$1,540,868	$176,359	$0	$1,717,227
		Estimated Project Cost (YOE$)	**$4,959,394**	**$567,625**	**$0**	**$5,527,019**

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Bus and Bus Facilities (Capital) 2021**				
Project IDs		Project Description				Project Type
ODOT KEY	**20871**	Bus and Bus Facility Upgrades				Transit
MTIP ID	70901					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5339 FTA Bus & Bus Facilities	$80,000	$20,000	$0	$100,000
		FY 21-26 Totals	$80,000	$20,000	$0	$100,000
		Estimated Project Cost (YOE$)	**$80,000**	**$20,000**	**$0**	**$100,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		SMART					
PROJECT NAME		**SMART Bus and Bus Facilities (Capital) 2022**					
Project IDs		Project Description					Project Type
ODOT KEY	**22191**	Bus and Bus Facility Upgrades					Transit
MTIP ID	71139						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2022	5339 FTA Bus & Bus Facilities	$80,000	$20,000	$0	$100,000
			FY 21-26 Totals	$80,000	$20,000	$0	$100,000
			Estimated Project Cost (YOE$)	**$80,000**	**$20,000**	**$0**	**$100,000**

LEAD AGENCY		SMART					
PROJECT NAME		**SMART Bus and Bus Facilities (Capital) 2023**					
Project IDs		Project Description					Project Type
ODOT KEY	**22194**	Bus and Bus Facility Upgrades					Transit
MTIP ID	71140						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2023	5339 FTA Bus & Bus Facilities	$80,000	$20,000	$0	$100,000
			FY 21-26 Totals	$80,000	$20,000	$0	$100,000
			Estimated Project Cost (YOE$)	**$80,000**	**$20,000**	**$0**	**$100,000**

LEAD AGENCY		SMART					
PROJECT NAME		**SMART Bus and Bus Facilities (Capital) 2024**					
Project IDs		Project Description					Project Type
ODOT KEY	**22197**	Bus and Bus Facility Upgrades					Transit
MTIP ID	71141						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2024	5339 FTA Bus & Bus Facilities	$80,000	$20,000	$0	$100,000
			FY 21-26 Totals	$80,000	$20,000	$0	$100,000
			Estimated Project Cost (YOE$)	**$80,000**	**$20,000**	**$0**	**$100,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Bus Purchase/PM/Amenities and Technology 2021**				
Project IDs		Project Description				Project Type
ODOT KEY	**20874**	Maintenance and Bus Fleet Replacement and Software				Transit
MTIP ID	70904					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2021	5307	$298,758	$74,690	$0	$373,448
			FY 21-26 Totals	$298,758	$74,690	$0	$373,448
			Estimated Project Cost (YOE$)	**$298,758**	**$74,690**	**$0**	**$373,448**

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Bus Purchase/PM/Amenities and Technology 2022**				
Project IDs		Project Description				Project Type
ODOT KEY	**22192**	Maintenance and Bus Fleet Replacement and Software				Transit
MTIP ID	71144					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2022	5307 (FF91 - 80/20)	$298,758	$74,690	$0	$373,448
			FY 21-26 Totals	$298,758	$74,690	$0	$373,448
			Estimated Project Cost (YOE$)	**$298,758**	**$74,690**	**$0**	**$373,448**

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Bus Purchase/PM/Amenities and Technology 2023**				
Project IDs		Project Description				Project Type
ODOT KEY	**22195**	Maintenance and Bus Fleet Replacement and Software				Transit
MTIP ID	71145					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2023	5307 (FF91 - 80/20)	$298,758	$74,690	$0	$373,448
			FY 21-26 Totals	$298,758	$74,690	$0	$373,448
			Estimated Project Cost (YOE$)	**$298,758**	**$74,690**	**$0**	**$373,448**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Bus Purchase/PM/Amenities and Technology 2024**				
Project IDs		Project Description				Project Type
ODOT KEY	**22198**	Maintenance and Bus Fleet Replacement and Software				Transit
MTIP ID	71146					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2024	5307 (FF91 - 80/20)	$298,758	$74,690	$0	$373,448
		FY 21-26 Totals	$298,758	$74,690	$0	$373,448
		Estimated Project Cost (YOE$)	**$298,758**	**$74,690**	**$0**	**$373,448**

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Senior and Disabled Program (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20868**	Services and Facility Improvements for Elderly and Disabled Customers				Transit
MTIP ID	70898					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5310 (80/20)	$41,000	$10,250	$0	$51,250
		FY 21-26 Totals	$41,000	$10,250	$0	$51,250
		Estimated Project Cost (YOE$)	**$41,000**	**$10,250**	**$0**	**$51,250**

LEAD AGENCY		SMART				
PROJECT NAME		**SMART Senior and Disabled Program (2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22190**	Services and Facility Improvements for Elderly and Disabled Customers				Transit
MTIP ID	71134					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2022	5310 (80/20)	$41,000	$10,250	$0	$51,250
		FY 21-26 Totals	$41,000	$10,250	$0	$51,250
		Estimated Project Cost (YOE$)	**$41,000**	**$10,250**	**$0**	**$51,250**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		SMART					
PROJECT NAME		**SMART Senior and Disabled Program (2023)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22193**	Services and Facility Improvements for Elderly and Disabled Customers					Transit
MTIP ID	71135						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2023	5310 (80/20)	$41,000	$10,250	$0	$51,250
			FY 21-26 Totals	$41,000	$10,250	$0	$51,250
			Estimated Project Cost (YOE$)	**$41,000**	**$10,250**	**$0**	**$51,250**

LEAD AGENCY		SMART					
PROJECT NAME		**SMART Senior and Disabled Program (2024)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22196**	Services and Facility Improvements for Elderly and Disabled Customers					Transit
MTIP ID	71136						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2024	5310 (80/20)	$41,000	$10,250	$0	$51,250
			FY 21-26 Totals	$41,000	$10,250	$0	$51,250
			Estimated Project Cost (YOE$)	**$41,000**	**$10,250**	**$0**	**$51,250**

LEAD AGENCY		Tigard					
PROJECT NAME		**Durham Rd/Upper Boones Ferry Rd. OR99W - I-5**					
Project IDs		Project Description					Project Type
ODOT KEY	**18311**	Design upgrades to signal hardware and communication. Add adaptive signal timing and detection					
MTIP ID	70647						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	STP - Urban	$279,056	$31,939	$309,459	$620,454
			FY 21-26 Totals	$279,056	$31,939	$309,459	$620,454
			Prior Years' Totals	$720,943	$82,516	$0	$803,459
			Estimated Project Cost (YOE$)	**$999,999**	**$114,455**	**$309,459**	**$1,423,913**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Tigard				
PROJECT NAME		**Fanno Crk Trail: Woodard Pk to Bonita Rd/85th Ave - Tualatin BR**				
Project IDs		Project Description				Project Type
ODOT KEY	**19327**	This project will construct four sections of the Fanno Creek Trail from Woodward Park to Bonita Road and 85th Avenue to Tualatin River Bridge in Tigard.				Trail
MTIP ID	70690					
RTP ID	10766					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	OTHER - LOCAL	$0	$0	$1,500,000	$1,500,000
Construction		2021	CMAQ	$3,000,000	$343,363	$0	$3,343,363
			FY 21-26 Totals	$3,000,000	$343,363	$1,500,000	$4,843,363
			Prior Years' Totals	$1,401,236	$160,378	$0	$1,561,614
			Estimated Project Cost (YOE$)	**$4,401,236**	**$503,741**	**$1,500,000**	**$6,404,977**

LEAD AGENCY		Tigard				
PROJECT NAME		**North Dakota Street: Fanno Creek Bridge**				
Project IDs		Project Description				Project Type
ODOT KEY	**20488**	Construct a new single span bridge on the same alignment. Raise the vertical grade line to improve site distance approaching the railroad crossing.				Roadway and bridge
MTIP ID	70979					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STBG - STATE	$385,839	$44,161	$0	$430,000
Construction		2021	STBG - STATE	$2,170,524	$248,426	$0	$2,418,950
Construction		2021	OTHER - LOCAL	$0	$0	$907,940	$907,940
			FY 21-26 Totals	$2,556,363	$292,587	$907,940	$3,756,890
			Prior Years' Totals	$958,316	$109,684	$0	$1,068,000
			Estimated Project Cost (YOE$)	**$3,514,679**	**$402,271**	**$907,940**	**$4,824,890**

LEAD AGENCY		Tigard				
PROJECT NAME		**OR99W (Barbur Blvd): MP 8.01 to MP 11.50**				
Project IDs		Project Description				Project Type
ODOT KEY	**20439**	Install Illumination at 72nd Ave; Main and Johnson; McKenzie; School; Walnut; Frewing; Garrett; Park; Royalty Parkway; and Durham Rd. (Safety PM Cat) (ODOT Safety PGB for Tigard)				Roadway and bridge
MTIP ID	70992					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Construction		2021	HSIP (92.22)	$616,030	$51,970	$0	$668,000
			FY 21-26 Totals	$616,030	$51,970	$0	$668,000
			Prior Years' Totals	$306,170	$25,830	$0	$332,000
			Estimated Project Cost (YOE$)	**$922,200**	**$77,800**	**$0**	**$1,000,000**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Tigard					
PROJECT NAME		**Red Rock Creek Tr Alignment Study: Fanno Ck Tr-SW 64th**					
Project IDs		Project Description					Project Type
ODOT KEY	**22136**	Implement the Red Rock Trail alignment feasibility study from Fanno Creek Trail to SW 64th Street (approximately 2 miles) to identify and evaluate preliminary alignments easement requirements develop prelimiinary cost assessments.					Active Transportation
MTIP ID	71100						
RTP ID	12008						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning		2022	STBG-URBAN	$314,055	$35,945	$0	$350,000
			FY 21-26 Totals	$314,055	$35,945	$0	$350,000
			Estimated Project Cost (YOE$)	**$314,055**	**$35,945**	**$0**	**$350,000**

LEAD AGENCY		TriMet					
PROJECT NAME		**Bus and Rail Preventive Maintenance (RFFA-2021)**					
Project IDs		Project Description					Project Type
ODOT KEY	**20842**	Capital Maintenance For Bus and Rail (Regional Flexible Fund Allocation Fund Exchange)					Transit
MTIP ID	70928						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2021	STBG-URBAN	$2,506,749	$286,909	$0	$2,793,658
			FY 21-26 Totals	$2,506,749	$286,909	$0	$2,793,658
			Estimated Project Cost (YOE$)	**$2,506,749**	**$286,909**	**$0**	**$2,793,658**

LEAD AGENCY		TriMet					
PROJECT NAME		**Electric Bus Purchase (Metro Fund Exchange)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22188**	Alternative Fuel Transit Buses					Transit
MTIP ID	71217						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2023	CMAQ - URBAN	$4,946,372	$566,134	$0	$5,512,506
			FY 21-26 Totals	$4,946,372	$566,134	$0	$5,512,506
			Estimated Project Cost (YOE$)	**$4,946,372**	**$566,134**	**$0**	**$5,512,506**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**HCT and Project Development Bond Payment (FFY 2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20834**	HCT bond payment for 2020. Amount combines identified bond payments from Resolution 08-3942 and 10-4185 17-4800 17-4848 which provide the federal total of $21390000 for 2021.				Transit
MTIP ID	70921					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2021	CMAQ - URBAN	$11,000,000	$1,258,999	$0	$12,258,999
Transit		2021	STBG-URBAN	$10,390,000	$1,189,182	$0	$11,579,182
			FY 21-26 Totals	$21,390,000	$2,448,181	$0	$23,838,181
			Estimated Project Cost (YOE$)	**$21,390,000**	**$2,448,181**	**$0**	**$23,838,181**

LEAD AGENCY		TriMet				
PROJECT NAME		**HCT and Project Development Bond Payment (FFY 2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22148**	Payment to a high capacity transit (HCT) and project development bond administered by TriMet.				Transit
MTIP ID	71121					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	CMAQ - URBAN	$11,000,000	$1,258,999	$0	$12,258,999
Other		2022	STBG-URBAN	$10,830,000	$1,239,542	$0	$12,069,542
			FY 21-26 Totals	$21,830,000	$2,498,541	$0	$24,328,541
			Estimated Project Cost (YOE$)	**$21,830,000**	**$2,498,541**	**$0**	**$24,328,541**

LEAD AGENCY		TriMet				
PROJECT NAME		**HCT and Project Development Bond Payment (FFY 2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22149**	Payment to a high capacity transit (HCT) and project development bond administered by TriMet.				Transit
MTIP ID	71122					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2023	STBG-URBAN	$10,840,000	$1,240,687	$0	$12,080,687
Other		2023	CMAQ - URBAN	$11,000,000	$1,258,999	$0	$12,258,999
			FY 21-26 Totals	$21,840,000	$2,499,686	$0	$24,339,686
			Estimated Project Cost (YOE$)	**$21,840,000**	**$2,499,686**	**$0**	**$24,339,686**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**HCT and Project Development Bond Payment (FFY 2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22150**	Payment to a high capacity transit (HCT) and project development bond administered by TriMet.				Transit
MTIP ID	71123					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2024	CMAQ - URBAN	$11,000,000	$1,258,999	$0	$12,258,999
Other	2024	STBG-URBAN	$10,800,000	$1,236,108	$0	$12,036,108
		FY 21-26 Totals	$21,800,000	$2,495,107	$0	$24,295,107
		Estimated Project Cost (YOE$)	**$21,800,000**	**$2,495,107**	**$0**	**$24,295,107**

LEAD AGENCY		TriMet				
PROJECT NAME		**Portland Milwaukie Light Rail**				
Project IDs		Project Description				Project Type
ODOT KEY	**22187**	Remaining funding for the 7.3 miles of double tracked light rail alignment; per FFGA.				Transit
MTIP ID	71216					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5309 (55.88%)	$20,464,288	$16,157,559	$0	$36,621,847
		FY 21-26 Totals	$20,464,288	$16,157,559	$0	$36,621,847
		Estimated Project Cost (YOE$)	**$20,464,288**	**$16,157,559**	**$0**	**$36,621,847**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20823**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	70910					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5307 (FF91 - 80/20)	$41,348,348	$10,337,087	$0	$51,685,435
		FY 21-26 Totals	$41,348,348	$10,337,087	$0	$51,685,435
		Estimated Project Cost (YOE$)	**$41,348,348**	**$10,337,087**	**$0**	**$51,685,435**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20829**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	70916					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5337	$25,333,200	$6,333,300	$0	$31,666,500
		FY 21-26 Totals	$25,333,200	$6,333,300	$0	$31,666,500
		Estimated Project Cost (YOE$)	**$25,333,200**	**$6,333,300**	**$0**	**$31,666,500**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22177**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71206					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2022	5307 (FF91 - 80/20)	$42,175,315	$10,543,829	$0	$52,719,144
		FY 21-26 Totals	$42,175,315	$10,543,829	$0	$52,719,144
		Estimated Project Cost (YOE$)	**$42,175,315**	**$10,543,829**	**$0**	**$52,719,144**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22180**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71209					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2022	5337	$25,839,864	$6,459,966	$0	$32,299,830
		FY 21-26 Totals	$25,839,864	$6,459,966	$0	$32,299,830
		Estimated Project Cost (YOE$)	**$25,839,864**	**$6,459,966**	**$0**	**$32,299,830**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22178**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71207					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2023	5307 (FF91 - 80/20)	$43,018,821	$10,754,705	$0	$53,773,526
		FY 21-26 Totals	$43,018,821	$10,754,705	$0	$53,773,526
		Estimated Project Cost (YOE$)	**$43,018,821**	**$10,754,705**	**$0**	**$53,773,526**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22181**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71210					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2023	5337	$26,356,662	$6,589,166	$0	$32,945,828
		FY 21-26 Totals	$26,356,662	$6,589,166	$0	$32,945,828
		Estimated Project Cost (YOE$)	**$26,356,662**	**$6,589,166**	**$0**	**$32,945,828**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22179**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71208					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2024	5307 (FF91 - 80/20)	$43,879,198	$10,969,800	$0	$54,848,998
			FY 21-26 Totals	$43,879,198	$10,969,800	$0	$54,848,998
			Estimated Project Cost (YOE$)	**$43,879,198**	**$10,969,800**	**$0**	**$54,848,998**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus and Rail Preventive Maintenance (2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22182**	Capital Maintenance For Bus And Rail				Transit
MTIP ID	71211					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2024	5337	$26,883,795	$6,720,949	$0	$33,604,744
			FY 21-26 Totals	$26,883,795	$6,720,949	$0	$33,604,744
			Estimated Project Cost (YOE$)	**$26,883,795**	**$6,720,949**	**$0**	**$33,604,744**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Bus Purchase (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20820**	Bus Purchase				Transit
MTIP ID	70907					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2021	5339 FTA Bus & Bus Facilities	$3,433,101	$858,275	$0	$4,291,376
			FY 21-26 Totals	$3,433,101	$858,275	$0	$4,291,376
			Estimated Project Cost (YOE$)	**$3,433,101**	**$858,275**	**$0**	**$4,291,376**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet					
PROJECT NAME		**TriMet Bus Purchase (2022)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22174**	Bus Purchase					Transit
MTIP ID	71203						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2022	5339 FTA Bus & Bus Facilities	$3,433,101	$858,275	$0	$4,291,376
			FY 21-26 Totals	$3,433,101	$858,275	$0	$4,291,376
			Estimated Project Cost (YOE$)	**$3,433,101**	**$858,275**	**$0**	**$4,291,376**

LEAD AGENCY		TriMet					
PROJECT NAME		**TriMet Bus Purchase (2023)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22175**	Bus Purchase					Transit
MTIP ID	71204						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2023	5339 FTA Bus & Bus Facilities	$3,433,101	$858,275	$0	$4,291,376
			FY 21-26 Totals	$3,433,101	$858,275	$0	$4,291,376
			Estimated Project Cost (YOE$)	**$3,433,101**	**$858,275**	**$0**	**$4,291,376**

LEAD AGENCY		TriMet					
PROJECT NAME		**TriMet Bus Purchase (2024)**					
Project IDs		Project Description					Project Type
ODOT KEY	**22176**	Bus Purchase					Transit
MTIP ID	71205						
RTP ID							
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit		2024	5339 FTA Bus & Bus Facilities	$3,433,101	$858,275	$0	$4,291,376
			FY 21-26 Totals	$3,433,101	$858,275	$0	$4,291,376
			Estimated Project Cost (YOE$)	**$3,433,101**	**$858,275**	**$0**	**$4,291,376**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Elderly and Disabled Program (2021)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20838**	Services And Facility Improvements In Excess Of ADA Requirements				Transit
MTIP ID	70925					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2021	5310 (80/20)	$1,350,863	$337,716	$0	$1,688,579
		FY 21-26 Totals	$1,350,863	$337,716	$0	$1,688,579
		Estimated Project Cost (YOE$)	**$1,350,863**	**$337,716**	**$0**	**$1,688,579**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Elderly and Disabled Program (2022)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22183**	Services And Facility Improvements In Excess Of ADA Requirements				Transit
MTIP ID	71212					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2022	5310 (80/20)	$1,377,880	$344,470	$0	$1,722,350
		FY 21-26 Totals	$1,377,880	$344,470	$0	$1,722,350
		Estimated Project Cost (YOE$)	**$1,377,880**	**$344,470**	**$0**	**$1,722,350**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Elderly and Disabled Program (2023)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22184**	Services And Facility Improvements In Excess Of ADA Requirements				Transit
MTIP ID	71213					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2023	5310 (80/20)	$1,405,437	$351,359	$0	$1,756,796
		FY 21-26 Totals	$1,405,437	$351,359	$0	$1,756,796
		Estimated Project Cost (YOE$)	**$1,405,437**	**$351,359**	**$0**	**$1,756,796**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Elderly and Disabled Program (2024)**				
Project IDs		Project Description				Project Type
ODOT KEY	**22185**	Services And Facility Improvements In Excess Of ADA Requirements				Transit
MTIP ID	71214					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Transit	2024	5310 (80/20)	$1,433,546	$358,387	$0	$1,791,933
		FY 21-26 Totals	$1,433,546	$358,387	$0	$1,791,933
		Estimated Project Cost (YOE$)	**$1,433,546**	**$358,387**	**$0**	**$1,791,933**

LEAD AGENCY		TriMet				
PROJECT NAME		**TriMet Preventive Maintenance (TOD) 2021**				
Project IDs		Project Description				Project Type
ODOT KEY	**21267**	The federal fund portion to the annual Metro-TriMet Transit Oriented Development (TOD) STP and Local funds exchange. The Metro STP supports TriMet's Preventive Maint 2021 program. 2019-21 RFFA TOD Allocation)				Transit
MTIP ID	71047					
RTP ID						
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other	2021	STBG-URBAN	$3,393,696	$388,424	$0	$3,782,120
		FY 21-26 Totals	$3,393,696	$388,424	$0	$3,782,120
		Estimated Project Cost (YOE$)	**$3,393,696**	**$388,424**	**$0**	**$3,782,120**

LEAD AGENCY		Tualatin Hills PRD				
PROJECT NAME		**Beaverton Creek Trail: Westside Trail - SW Hocken Ave**				
Project IDs		Project Description				Project Type
ODOT KEY	**19357**	Construct a 1.5-mile long 12-foot wide regional trail consisting of paving bridges/boardwalks lighting road right-of-way improvements environmental mitigation and bicycle/pedestrian amenities and site furnishings.				Trail
MTIP ID	70689					
RTP ID	10811					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering	2021	STBG-URBAN	$589,309	$67,449	$0	$656,758
Construction	2021	STBG-URBAN	$3,103,903	$355,256	$827,115	$4,286,274
		FY 21-26 Totals	$3,693,212	$422,705	$827,115	$4,943,032
		Prior Years' Totals	$800,000	$91,564	$0	$891,564
		Estimated Project Cost (YOE$)	**$4,493,212**	**$514,269**	**$827,115**	**$5,834,596**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Washington County				
PROJECT NAME		**Aloha Access Improvements: OR8 Area Cornelius Pass-SW 160th**				
Project IDs		Project Description				Project Type
ODOT KEY	**22128**	Construct sidewalk infills. Add enhanced pedestrian crossing on SW 185th Ave and complete design realignment of SW Blanton St/SW 185th Ave intersection with a new traffic signal (2022-24 RFFA award)				Active Transportation
MTIP ID	71095					
RTP ID	10608					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2022	STBG-URBAN	$1,871,768	$214,232	$0	$2,086,000
Purchase right of way		2024	STBG-URBAN	$323,028	$36,972	$0	$360,000
Other		2024	STBG-URBAN	$44,865	$5,135	$0	$50,000
Construction		2026	STBG-URBAN	$1,587,898	$181,742	$1,522,485	$3,292,125
			FY 21-26 Totals	$3,827,559	$438,081	$1,522,485	$5,788,125
			Estimated Project Cost (YOE$)	**$3,827,559**	**$438,081**	**$1,522,485**	**$5,788,125**

LEAD AGENCY		Washington County				
PROJECT NAME		**Basalt Creek Ext: Grahams Ferry Rd - Boones Ferry Rd.**				
Project IDs		Project Description				Project Type
ODOT KEY	**19358**	Extend the new east-west arterial from Grahams Ferry Road to Boones Ferry Road and provide access between I-5 and the Basalt Creek industrial area.				Roadway and bridge
MTIP ID	70789					
RTP ID	11470					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way		2021	STBG-URBAN	$2,805,879	$321,145	$873,976	$4,001,000
Construction		2021	Local (Wash Co)	$0	$0	$28,173,000	$28,173,000
			FY 21-26 Totals	$2,805,879	$321,145	$29,046,976	$32,174,000
			Prior Years' Totals	$2,757,000	$315,551	$0	$3,072,551
			Estimated Project Cost (YOE$)	**$5,562,879**	**$636,696**	**$29,046,976**	**$35,246,551**

LEAD AGENCY		Washington County				
PROJECT NAME		**NW West Union Rd at Neakahnie Ave (Washington County)**				
Project IDs		Project Description				Project Type
ODOT KEY	**21632**	Widen West Union at Neakahnie and install a left turn lane to allow through traffic to keep moving and give turning vehicle drivers more time to evaluate turns thereby improving safety at this location.				Roadway and bridge
MTIP ID	71186					
RTP ID						
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Preliminary engineering		2021	HSIP (92.22)	$142,773	$12,045	$0	$154,818
Purchase right of way		2022	HSIP (92.22)	$1,455	$123	$0	$1,578
Construction		2023	HSIP (92.22)	$854,763	$72,111	$0	$926,874
			FY 21-26 Totals	$998,991	$84,279	$0	$1,083,270
			Estimated Project Cost (YOE$)	**$998,991**	**$84,279**	**$0**	**$1,083,270**

2021-2026 Metropolitan Transportation Improvement Program (MTIP)

Current Approved Project List with Approved Amendments

LEAD AGENCY		Washington County				
PROJECT NAME		**US26 at Cornelius Pass Rd: Bike/Ped Xing**				
Project IDs		Project Description				Project Type
ODOT KEY	**22140**	On US 26 just east of Cornelius Pass Rd IC complete preâ€EPA project development feasibility study for a future bike/ped bridge grade separation across US26.				Active Transportation
MTIP ID	71099					
RTP ID	11913					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Planning	2022	STBG-URBAN	$628,110	$71,890	$0	$700,000
		FY 21-26 Totals	$628,110	$71,890	$0	$700,000
		Estimated Project Cost (YOE$)	**$628,110**	**$71,890**	**$0**	**$700,000**

LEAD AGENCY		West Linn				
PROJECT NAME		**OR43: Marylhurst Dr - Hidden Springs Rd (West Linn)**				
Project IDs		Project Description				Project Type
ODOT KEY	**20329**	Construct a new cycle track and sidewalk along OR-43 from Cedar Oaks to Hidden Springs Rd. Install a new traffic signal at OR43 and Hidden Springs Rd.				
MTIP ID	70882					
RTP ID	10127					
Phase	Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Purchase right of way	2021	TA - STATE	$294,696	$33,729	$111,354	$439,779
Other	2021	CMAQ - URBAN	$67,010	$7,670	$25,320	$100,000
Construction	2021	CMAQ - URBAN	$2,687,441	$307,590	$1,015,190	$4,010,221
		FY 21-26 Totals	$3,049,147	$348,989	$1,151,864	$4,550,000
		Prior Years' Totals	$1,050,853	$120,275	$397,075	$1,568,203
		Estimated Project Cost (YOE$)	**$4,100,000**	**$469,264**	**$1,548,939**	**$6,118,203**

Chapter 7: Adoption of the 2021-2024 MTIP and integration with the STIP

Chapter sections

- Public comment and the process for the disposition of public comments
- Public comment major themes and responses
- Adoption and finalizing the 2021-2024 MTIP

Public comment and the process for the disposition of public comments

As part of developing and finalizing the adoption draft of the 2021-2024 MTIP, a public comment period took place from Friday, April 17, 2020 to Monday, May 18, 2020. During the public comment period a public review draft of the 2021-2024 MTIP was made available for comment. An electronic version of the 2021-2024 MTIP public review draft was available for download on Metro's website. Additionally, information was made available for requesting a hard copy of the 2021-2024 MTIP public review draft. A public hearing took place on April 23, 2020 at the Metro Council meeting. Comments were further solicited through various communications to community and civic networks. A request for comment and offer for a consultation meeting was made to resource agencies and tribes. Furthermore, newspaper advertisements were published to encourage comment and notify members of the public of the comment opportunity.

In efforts to encourage participation and not have the length and detail of the MTIP document serve as a barrier, a public comment survey requesting feedback and comment was made available on Metro's website. The survey focused on communicating a summary of the 2021-2024 MTIP and the results of the performance assessment. The survey asked respondents to select on a rating on a one (1) to five (5) scale how well the 2021-2024 MTIP is doing towards achieving outcomes related to equity, safety, climate change, and managing congestion. In addition, the survey left open ended responses to allow survey respondents to elaborate further or address other topics.

Upon the completion of the public comment period, the comments received through the survey, public hearing, written submissions, email submissions, voicemail/telephone submissions, consultation and other comments received were reviewed by Metro staff and synthesized into major comment themes. The major themes from public comment were provided to MTIP partners – ODOT, SMART, and TriMet. Prior to the opening of the public comment period, Metro staff met with MTIP partners to outline the schedule, expectations, and general participation in public comment activities taking place, such as the public hearing. In conducting this pre-public comment coordination, the partners had an understanding of the next steps and to prepare to respond to comments in a short turn around period. (See Appendix V for detail on the public comment coordination meeting) MTIP partners were asked to help augment Metro responses to the themes directed towards their agency or agency activities. Responses to the public comment themes were requested back to Metro by May 26, 2020. The responses were incorporated into the public comment report. Any needed adjustments were reflected in the adoption draft of the 2021-2024 MTIP or scheduled for action as part of the first amendment to the 2021-2024 MTIP once approved by federal partners.

Project specific comments were sent to the implementing agency of the project. Depending on the nature of the comment, the implementing agencies were asked to provide responses to some comments formally to record as part of the public comment report of the 2021-2024 MTIP. For the remainder of the project specific comments, the implementing agencies were asked to receive the comments and adjust the project as needed.

A public comment report was developed as an appendix to the 2021-2024 MTIP. The public comment report is part of the appendix package for the adoption draft of the 2021-2024 MTIP and brought forward to the technical and policy advisory committees throughout the adoption process. A description of the adoption process can be found in this chapter.

For more information about the 2021-2024 MTIP public comment report and to gather an understanding of the major comment themes, the full 2021-2024 MTIP public comment report can be found in the Appendix V.

Public comment major themes and responses

In total, the 2021-2024 MTIP public review draft received 210 public comments. The public comments comprised of the following:

- One (1) public comment at the 2021-2024 MTIP public hearing on April 23, 2020
- Three (3) public comments received through email (2), telephone (1), or mail (0)
- 201 completed public comment surveys on the 2021-2024 MTIP public review draft
- Five (5) resource agency comments resulting from the consultation meeting (held on May 11, 2020, comments provided prior, at, or after the consultation.)

The total number of comments received on the 2021-2024 MTIP public review draft is greater than the previous two MTIP cycles (2015-2018 and 2018-2021).

The public comment survey provided opportunity for open ended comments to elaborate further on the survey question and ratings or provide other feedback on the 2021-2024 MTIP public review

draft. Metro staff tabulated the ratings and reviewed all the open ended survey comments as well as other comments received (e.g. comment received at the public hearing, comments from consultation, comment received by phone). In review of the ratings and comments, key themes emerged. The key themes are organized by the topic area of each survey question as well as other key themes to emerge.

Addressing equity

- The investments in the 2021-2024 MTIP are not enough and are not doing enough to address the disparities in transportation access, options, and infrastructure experienced by historically marginalized communities.
  - Comments provided a range of policies and types of investments to address the disparities gap, such as expanded and focused transit, completing active transportation networks in historically marginalized communities, and affordability.

Addressing safety

- There is a need for the region to design safer streets and reduce speeds.
- A small number of comments expressed encouragement on the region's increased investment in safety and targeted focus on high injury corridors.

Addressing climate change

- The investments in the 2021-2024 MTIP are not doing enough to address the gravity of the climate crisis and there are certain types of roadway investments which are in antithesis of reducing emissions from transportation sources.
  - Comments emphasized the need for the reprioritization of investments as well as fast and aggressive actions in the region's transportation system to address climate. Some examples include more expedient build of the transit system, increased transit service coverage, and reprioritization of existing transportation investments which promote automobile travel.

Managing congestion

- Traffic congestion remains a problem which needs to be addressed, but the solutions to address traffic congestion varied widely.
  - Some commenters expressed there is not enough investment the 2021-2024 MTIP in the motor vehicle network to address the traffic congestion on the region's roadways.
  - Other commenters expressed further investment into demand management strategies and deploying aggressive approaches like congestion pricing.
  - Other commenters expressed a need to reprioritize existing investments in freeway and roadway expansions and reinvest those funds into building out the transit system to make it a competitive and viable option to address traffic congestion.

Active transportation investments

- There is not enough investment in the 2021-2024 MTIP in bicycling and walking infrastructure, especially in equity focus areas, to create a complete network. More investment is needed and the implementation of these project must occur faster.

Transit investments

The range in comments related to transit expressed more investment in the transit system is needed than what is included in the 2021-2024 MTIP. In addition, certain key needs for the transit system were expressed.

• the need to build out the transit system quickly

• the need to make transit travel faster to be compete with car travel

• the need for improves transit access, especially in equity focus

areas,

• the need for more affordable transit and

• the need to transition transit fleet to electric

In developing the public comment report, Metro, working with partners, created a set of responses to the key themes. While the public comment themes reflect dissatisfaction with certain types of projects and an urgency to address different transportation deficiencies as well as transportation emissions contributing to global climate change, Metro staff's response, in review of comment themes and the funding allocation processes, is to focus primarily on future opportunities to influence and align investments to address the comments and concerns. As a result, adjustments to the proposed programming of transportation investments were not recommended.[1] Metro responses can be found in the 2021-2024 MTIP public comment report. The report also outlines any staff recommendations for the 2024-2027 MTIP process that were informed by public comments. These recommendations may shape the policy of future funding allocations as well as provide guidance towards the MTIP performance evaluation.

Some project specific or facility specific comments were also received through the open ended comments. These comments were sent to staff at the jurisdiction delivering the project or owns the facility. Of the project-specific comments received, Metro staff did not believe agency responses were necessary and responses could be addressed more broadly among the public comment themes.

Lastly, TPAC provided recommendations and comments directed specifically towards the assessment methodology of the 2021-2024 MTIP. As the 2021-2024 MTIP is the first MTIP to report progress toward federal performance targets and to undergo a more complex performance evaluation, the members of TPAC expressed a desire to investigate further both the methods and the outputs of the 2021-24 MTIP performance analysis. This review extends beyond what was discussed previously in the 2021-2024 MTIP assessment methodology review, prior to conducting the analysis. Metro staff recommends working with TPAC to schedule a technical workshop after the adoption of the 2021-2024 MTIP to address the desire to review and comment on performance methods and analysis outputs.

Adopting and finalizing the 2021-2024 MTIP

Metro began the adoption process for the 2021-2024 MTIP in June 2020 with a request to TPAC to recommend the approval of the 2021-2024 MTIP by JPACT. After receiving the TPAC recommendation, JPACT takes action and recommends adoption by the Metro Council.

Upon adoption by the Metro Council, the 2021-2024 MTIP is submitted to the Governor of Oregon for final approval. With approval by the Governor, the programming of projects from the MTIP is incorporated without change into the 2021-24 State Transportation Improvement Program administered by the Oregon Department of Transportation (ODOT). Metro completes the adoption and submission of the MTIP for inclusion in the STIP during the summer prior to start of the first federal fiscal year for the new MTIP. For the 2021-2024 MTIP, this takes place in summer 2020.

Once the 2021-2024 STIP has included the MTIPs from all the Oregon metropolitan planning organizations (MPOs), the fully packaged 2021-2024 STIP is then submitted to Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) for approval. The STIP is submitted to federal agencies in late summer or early autumn prior to the start of the first federal fiscal year for the new STIP and MTIPs. In the case of the 2021-2024 STIP, this takes place in late summer through early fall 2020.

1 Technical corrections to programming, as formally requested by ODOT and TriMet, were adjusted and reflected in the adoption draft of the 2021-2024 MTIP. These technical corrections were reviewed and vetted to determine whether they were appropriate for the adoption draft or should wait for the transition amendment in fall 2020.

Once federal partners approve the 2021-2024 STIP, a letter is transmitted to ODOT with copies to all the Oregon MPOs and transit agencies, confirming approval as well as any further actions that need to be taken. Upon federal approval of the STIP the 2021-2024 MTIP becomes the effective MTIP and supersedes the 2018-2021 MTIP.

Chapter 8: Changes to the Metropolitan Transportation Improvement Program (MTIP)

This chapter describes the approach to managing proposed changes to the 2021-2024 MTIP. Changes to the 2021-2024 MTIP are regulated by the Code of Federal Regulations (23 CFR 450.326) and additional guidance may be provided by regional offices of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). This chapter describes Metro's policies and approach to implementing those federal regulations and guidance as the Portland metropolitan area metropolitan planning organization (MPO).

The need for changes to the MTIP

The federal transportation project delivery process involves numerous approval steps. If a project is federally funded, or considered a regionally significant, the project is required to be included in the MTIP and STIP, reflected through the programming. MTIP programming presents the project with its proposed improvements, summary of major scope elements, identifies how the project will expend its committed federal funds by specific phase, and

Chapter sections

- The need for changes to the MTIP
- Objectives of the MTIP change management process
- Classification of changes to the MTIP
- Description of approval process for project changes in the MTIP
- MTIP change management procedures manual

the delivery timing summary to complete each project phase. The MTIP is as a four-year snap shot of how the approved Regional Transportation Plan (RTP) will be implemented. Additionally, the MTIP is used as part of the obligation verification process, and as part of the required federal approval process.

Due to the complexity of the federal transportation delivery process, most projects require changes as to how they are presented in the MTIP and subsequently the STIP as they progress through the process. The changes are necessary to complete federal requirements, such as the National Environmental Policy Act (NEPA), or obligate federal funds with a specific project phase, or obtain their next required federal approval step. Examples of project changes that may require adjustments to the MTIP include:

- Lead agency and the project name
- Description and approved scope of work
- Approved limits, milepost references, and/or cross street limits
- Changes to needed funding
- Timing of the obligation of funds
- Delivery timing changes and expected completion date
- Combining existing projects or splitting a project in multiple projects
- Adding a new project
- Cancelling a project

Objectives of the MTIP change management process

Proposed changes to the MTIP will be managed with the following objectives:

- Ensure that federal requirements are properly met for use of available federal funds.
- Ensure consideration of proposed amendments on progress toward regional policies and system performance targets for use of limited available resources.
- Provide opportunity for consideration of proposed amendments on other jurisdictions or transportation assets or services provided by other agencies in the region.
- Ensure that the responsibilities for project management and cost control remain with the agency sponsoring the project.
- Ensure routine amendments to the MTIP to proceed expeditiously to avoid unnecessary delays and committee activity.
- Provide for dealing with emergency situations.
- Ensure projects are progressing to fully obligate programmed funding in order to avoid a lapse of funds.

Classification of changes to the MTIP

There are two types of changes to the MTIP: formal amendments and administrative modifications.

The Oregon Division of the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) Region X, and the Oregon Department of Transportation (ODOT) developed an amendment matrix to further describe distinctions between formal amendments and administrative modifications. Metro follows the amendment matrix when evaluating and processing requests for project changes in the MTIP to determine whether the change are administrative modifications or amendments. The Amendment Matrix (Table 8-1) provides the summary of allowable changes that qualify as formal amendments or as administrative modifications. This matrix may be updated and the most current version is included in the MTIP Change Management Procedures Manual (Appendix VI)

Table 8-1: ODOT-FHWA-FTA amendment matrix

FULL AMENDMENTS
1. Adding or cancelling a federally funded, and regionally significant project to the STIP and state funded projects which will potentially be federalized
2. Major change in project scope. Major scope change includes: • Change in project termini - greater than .25 mile in any direction • Changes to the approved environmental footprint • Impacts to air quality conformity (if applicable) • Adding capacity per FHWA Standards • Adding or deleting work type

3. Changes in Fiscal Constraint by the following criteria:
• FHWA project cost increase/decrease:
  • Projects under $500K – increase/decrease over 50%
  • Projects $500K to $1M – increase/decrease over 30%
  • Projects $1M and over – increase/decrease over 20%
• All FTA project changes – increase/decrease over 30%

4. Adding an emergency relief permanent repair project that involves substantial change in function and location.
ADMINISTRATIVE/TECHNICAL ADJUSTMENTS
1. Advancing or Slipping an approved project/phase within the current STIP (If slipping outside current STIP, see Full Amendments #2)
2. Adding or deleting any phase (except CN) of an approved project below Full Amendment #3
3. Combining two or more approved projects into one or splitting an approved project into two or more, or splitting part of an approved project to a new one
4. Splitting a new project out of an approved program-specific pool of funds (but not reserves for future projects) or adding funds to an existing project from a bucket or reserve if the project was selected through a specific process (i.e. ARTS, Local Bridge...)
5. Minor technical corrections to make the printed STIP consistent with prior approvals, such as typos or missing data
6. Changing name of project due to change in scope, combining or splitting of projects, or to better conform to naming convention. (For major change in scope, see Full Amendments #2)
7. Adding a temporary emergency repair and relief project that does not involve substantial change in function and location.

To process the proposed project changes, Metro staff works with the project lead agency staff to collect project related information. The information is to understand the effect of the proposed change, if any, on the following:

- consistency with the adopted policies, goals, strategies, and financially constrained project list of the adopted Regional Transportation Plan (RTP),
- consistency with the project description and scope identified in the RTP,
- consistency with the Metro regional travel demand model project inputs for motor vehicles, transit, freight, and bicycle facilities,
- the timely implementation of Transportation Control Measures (TCMs) and other requirements of the State Implementation Plan (SIP) for air quality,
- funding adjustment impacts to the financial constraint finding,
- progress toward achieving regionally adopted performance targets.

Description of approval process for project changes in the MTIP

When project changes are necessary, they are required to be reflected in both the MTIP and STIP. This action requires a coordinated effort among the Metro, ODOT Region 1, ODOT Headquarters, and the US Department of Transportation (USDOT).

Formal amendments and administrative modifications each have a similar development process, but their approval steps differ. The approval of administrative modifications is delegated to the Metro MTIP Program Manager. Once the Metro MTIP Program Manager approves the administrative modification, it may be added into the current approved MTIP. The State STIP Program Manager approves administrative modification for STIP inclusion. There are no required USDOT approval steps for administrative modifications.

For formal amendments, the Metro approval process includes:

- a public notification and comment process,
- a recommendation from Metro's Transportation Policy Alternatives Committee (TPAC),
- approval action by the Joint Policy Advisory Committee on Transportation (JPACT), and
- final approval from the Metro Council.

Once approved by Metro, all formal amendments are sent to the ODOT Region 1 STIP Coordinator to initiate the final STIP review and approval process by USDOT. A final review and approval of formal amendments by the State STIP Coordinator and final USDOT approval occurs before the proposed project changes are included into the MTIP and STIP.

MTIP change management procedures manual

The specific procedures to receive, consider and process MTIP project change requests are documented in the MTIP Change Management Procedures Manual. This manual is available on the Metro website or by request to the Metro Planning and Development Department. The version current as of May 2020 is included as Appendix VI to this MTIP.

These procedures may be updated by Metro staff as needed to respond to the circumstances presented by individual change requests or changes to federal regulations and guidance.

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Glossary of terms

Accessibility – The ability or ease to reach desired goods, services, activities and destinations with relative ease, within a reasonable time, at a reasonable cost and with reasonable choices. Many factors affect accessibility (or physical access), including mobility, the quality, cost and affordability of transportation options, land use patterns, connectivity of the transportation system and the degree of integration between modes. The accessibility of a particular location can be evaluated based on distances and travel options, and how well that location serves various modes. Locations that can be accessed by many people using a variety of modes of transportation generally have a high degree of accessibility.

Access Management – Enables access to land uses while maintaining roadway safety and mobility through controlling access location, design, spacing and operation.

Action – Discrete steps to make progress toward a desired outcome(s).

Active Living – Lifestyles characterized by incorporating physical activity into daily routines through activities such as walking or biking for transportation, exercise or pleasure. To achieve health benefits, the goal is to accumulate at least 30 minutes of activity each day.

Active Transportation – Non-motorized forms of transportation including walking and biking, people using wheelchairs or mobility devices and skateboarding. Transit is considered part of active transportation because most transit trips start with a walking or bicycle trip.

Active Transportation Network – Combined network of streets, trails and districts identified on the Regional Pedestrian and Bicycle Network Functional Classification Maps and identified as pedestrian and bicycle parkways, regional bikeways, regional pedestrian corridors and regional pedestrian and bicycle districts, which include station communities. The active transportation network also includes frequent bus routes, all of which are designated as pedestrian parkways, and high ridership bus stops.

Adaptation – This term refers to adjustment in natural or human systems in anticipation of or response to a changing environment in a way that effectively uses beneficial opportunities or reduces negative effects.

Air Toxics – Also known as toxic air pollutants or hazardous air pollutants, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects.

All Roads Transportation Safety (ARTS) – Formerly known as the Jurisdictionally Blind Safety Program, is an Oregon Department of Transportation Program that is designed to address safety needs on all public roads in Oregon. The program's goals are to:

- Increase awareness of safety on all roads;
- Promote best practices for infrastructure safety;
- Complement behavioral safety efforts;

- Focus limited resources to reduce fatal and serious injury crashes in the state of Oregon.

The program is data driven to achieve the greatest benefits in crash reduction and is blind to jurisdiction.

Amendment – A revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a redemonstration of fiscal constraint. If an amendment involves "non-exempt" projects in nonattainment and maintenance areas, a conformity determination is required.

Arterial – A classification of street. Arterial streets interconnect and support the throughway system. Arterials are intended to provide general mobility for travel within the region. Correctly sized arterials at appropriate intervals allow through trips to remain on the arterial system thereby discouraging use of local streets for cut–through travel. Arterial streets link major commercial, residential, industrial and institutional areas. Major arterials serve longer distance through trips and serve more of a regional traffic function. Minor arterials serve shorter, more localized travel within a community. As a result, major arterials usually carry more traffic than minor arterials. Arterial streets are usually spaced about one mile apart and are designed to accommodate bicycle, pedestrian, truck and transit travel.

Arterial Traffic Calming – Designed to manage traffic at higher speeds and volumes, but still minimize speeding and unsafe speeds. Treatments can include raised medians, raised intersections, gateway treatments, textured intersections, refuge islands, road diets, and roundabouts.

Asset Management – A strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on both engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost.

Attainment Area – Any geographic area in which levels of a given criteria air pollutant (e.g., ozone, carbon monoxide, PM10, PM2.5, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant. An area may be an attainment area for one pollutant and a nonattainment area for others. A "maintenance area" (see definition in this section) is not considered an attainment area for transportation planning purposes.

Autonomous Vehicle (AV) – Also known as a driverless car, self-driving car, robotic car, AVs use sensors and advanced control systems to operate independently of any input from a human driver. Transportation experts have developed a five-level system to distinguish between different levels of automation;i in this plan we focus on Level 4 or 5 AVs, which can operate independently under most or all conditions.

Auxiliary Lane – An auxiliary lane provides a direct connection from one interchange ramp to the next. The lane separates slower traffic

movements from the mainline, helping smooth the flow of traffic and reduce the potential for crashes.

Barrier – A condition or obstacle that prevents an individual or a group from accessing the transportation system or transportation planning process. Examples include a physical gap or impediment, lack of information, language, education and/or limited resources.

Best Practices – For purposes of this document, the term "best practices" is used as a general term of preferred practices accepted and supported by experience of the applicable professional discipline. It is not prescriptive to a particular set of standards or a particular discipline.

Bicycle – A vehicle having two tandem wheels, a minimum of 14 inches in diameter, propelled solely by human power, upon which a person or persons may ride. A three–wheeled adult tricycle is considered a bicycle. In Oregon, a bicycle is legally defined as a vehicle. Bicyclists have the same right to the roadways and must obey the same traffic laws as the operators of other vehicles.

Bicycle Boulevards – Sometimes called a bicycle priority street, a bicycle boulevard is a low-traffic street where all types of vehicles are allowed, but the street is modified as needed to enhance bicycle safety and convenience by providing direct routes that allow free-flow travel for bicyclists at intersections where possible. Traffic controls are used at major intersections to help bicyclists cross streets. Typically these modifications also calm traffic and improve pedestrian safety.

Bicycle Comfort Index (BCI) – A method to analyze the auto volumes, auto speeds and number of auto lanes on existing bikeways and within defined 'cycle zones' and assign a comfort rating to the bikeway. Generally off-street paths receive the highest rating because they are completely separated from auto traffic. Results help identify existing bikeways on the regional bicycle network that could be upgraded to increase bicyclists comfort. Metro's BCI analysis was used in the existing conditions step of developing the ATP. Additional data would be useful to refine the tool.

Bicycle District – An area with a concentration of transit, commercial, cultural, institutional and/or recreational destinations where bicycle travel is attractive, comfortable and safe. Bicycle districts are areas where high levels of bicycle use exist or a planned. Within a bicycle district, some routes may be designated as bicycle parkways or regional bikeways, however all routes within the bicycle district are considered regional. A new concept for the Regional Transportation Plan and added to the regional bicycle network through the ATP. The Central City, Regional and Town Centers and Station Communities are identified as bicycle districts.

Bicycle Facilities – A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities, all bikeways and shared roadways not specifically designated for bicycle use.

Bicycle Parkway – A bicycle route designed to serve as a bicycle highway providing for direct and efficient travel for large volumes of cyclists with minimal delays in different urban and suburban environments and to destinations outside the region. These bikeways connect 2040 activity centers, downtowns, institutions and greenspaces within the urban area. The specific design of a bike parkway will vary depending on the land use context within which it passes through. These bikeways could be designed as an off-street trail along a stream or rail corridor, a cycletrack along a main street or town center, or a bicycle boulevard through a residential neighborhood.

Bicycle Routes – Link bicycle facilities together into a clear, easy to follow route using wayfinding such as signs and pavement markings,

connecting major destinations such as town centers, neighborhoods and regional destinations.

Bike Lane – A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bike Share – Systems like Biketown in Portland make fleets of bicycles available for short-term rental within a defined service area. Some bike share systems now offer electric bikes. Conventional bike share systems like Biketown in Portland are operated through exclusive agreements between a private company and a public agency, and in most cases users must pick up and leave bikes at designated stations, through Biketown and other modern systems also offer users the option of locking a bike anywhere within the service area. Fully Dockless systems operated by companies such as Ofo, Lime bike and Spin allow users to pick up and leave bikes (or electric scooters, which many companies now offer) within a defined service area and require less coordination between the public and private sector.

Bike-Transit Facilities – Infrastructure that provide connections between the two modes, by creating a "bicycle park-and-ride," a large-scale bike parking facility at a transit station.

Bikeable – A place where people live within biking distance to most places they want to visit, whether it is school, work, a grocery store, a park, church, etc. and where it is easy and comfortable to bike.

Bikeway – Any road, street, path or right-of-way that is specifically designated in some manner as being open to bicycle travel, either for the exclusive use of bicycles or shared use with other vehicles or pedestrians, including separated bike paths, striped bike lanes or wide outside lanes that accommodate bicycles and motor vehicles.

Capacity – A transportation facility's ability to accommodate a moving stream of people or vehicles in a given place during a given time period. Increased capacity can come from building more streets or throughways, adding more transit service, timing traffic signals, adding turn lanes at intersections or many other sources.

Capacity Expansion – Constructed or operational improvements to the regional motor vehicle network that increase the capacity of the system.

Car Share – Services allow people to rent a nearby vehicle for short trips and pay only for the time that they use. Different car share service types include:

- Stationary car share (ZipCar, in some cases ReachNow), under which cars are kept at fixed stations and users pick up cars from and return them to the same station.
- Free-floating car share (Car2Go, ReachNow), which allows people to pick up and drop off cars anywhere within a defined service area.
- Peer-to-peer car share (Getaround, Turo), which enables people to rent cars from their neighbors on a short-term basis.

Central City (2040 Design Type) – Downtown Portland and adjacent areas (like Lloyd District) within the city of Portland.

Climate Change – Any significant change in the measures of climate lasting for an extended period of time. Climate change includes major

variations in temperature, precipitation or wind patterns, among other environmental conditions, that occur over several decades or longer. Changes in climate may manifest as a rise in sea level, as well as increase the frequency and magnitude of extreme weather events now and in the future.

Collector Street – A class of street. Collector streets provide both access and circulation between residential, commercial, industrial and agricultural community areas and the arterial system. As such, collectors tend to carry fewer motor vehicles than arterial streets, with reduced travel speeds. Collector streets are usually spaced at half–mile intervals, midway between arterial streets. Collectors may serve as bike, pedestrian and freight access routes providing local connections to the arterial street network and transit system.

Community Places – Key local destinations such as schools, libraries, grocery stores, pharmacies, hospitals and other medical facilities, general stores, and other places which provide key services and/ or daily needs.

Commute – Regular travel between home and a fixed location (e.g., work, school).

Commuter Rail – Short–haul rail passenger service operated within and between metropolitan areas and neighboring communities. This transit service operates in a separate right–of–way on standard railroad tracks, usually shared with freight use. The service is typically focused on peak commute periods but can be offered other times of the day and on weekends when demand exists and where rail capacity is available. The stations are typically located one or more miles apart, depending on the overall route length. Stations offer infrastructure for passengers, bus and LRT transfer opportunities and parking as supported by adjacent land uses. See also Inter–city rail.

Complete Streets – A transportation policy and design approach where streets are designed, operated and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation.

Complete Streets Project Checklist – With the realization that street design affects so much more than traffic flow, leading Complete Streets programs have been successful in part because they endeavored to break down silos between city departments. In addition to regular meetings between departments, some cities have instituted a Project Checklist that is circulated for a sign-off from each interested department when street designs are in process. The best known example comes from the City of Seattle. Some Metropolitan Planning Organizations also use project checklists to ensure funding for street improvements adhere to Complete Street goals. Examples include the Bay Area's Metropolitan Transportation Commission, and the Mid-Ohio Regional Planning Commission.

Congestion – A condition characterized by unstable traffic flows that prevents movement on a transportation facility at optimal legal speeds. Recurrent congestion is caused by constant excess volume compared with capacity. Nonrecurring congestion is caused by incidents such as bad weather, special events and/or traffic accidents.

Congestion Management – The application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods.

Congestion Management Process – A systematic and regionally-accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state, regional and local needs. This systematic approach is required in transportation management areas (TMAs) to provide for effective

management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C., and title 49 U.S.C., through the use of travel demand reduction and operational management strategies.

Congestion Mitigation And Air Quality Improvement (CMAQ) Program – A federal source of funding for projects and activities that reduce congestion and improve air quality, both in regions not yet attaining federal air quality standards and those engaged in efforts to preserve their attainment status.

Connected Vehicles (CVs) – Vehicles that communicate with each other, wireless devices or with infrastructure like traffic signals and incident management systems. It seems increasingly likely that vehicles in the near future will be automated and may include some connected elements, we typically use "automated vehicles" to refer to vehicles that include a mix of automated and connected elements, and only use "connected vehicles" to distinguish connected from automated vehicles.

Connected Vehicle (CV) Infrastructure – This refers to the communications, wireless devices and other infrastructure, such as traffic signals and roadside sensors, that offer the ability of vehcles to send and receive message to other vehicles, wireless devices and comunication devices to communicate information in order to help them navigate the transportation system safely and efficiently.

Connectivity – The degree to which the local and regional street, pedestrian, bicycle, transit and freight systems in a given area are interconnected.

Consideration – One or more parties takes into account the opinions, action, and relevant information from other parties in making a decision or determining a course of action.

Constrained Budget – The budget of federal, state and local funds the greater Portland region can reasonably expect through 2040 under current funding trends presuming some increased funding compared to current levels.

Constrained List – Projects that can be built by 2040 within the constrained budget.

Consultation – One or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken. This definition does not apply to the "consultation" performed by the States and the Metropolitan Planning Organizations (MPOs) in comparing the long-range statewide transportation plan and the metropolitan transportation plan, respectively, to State and tribal conservation plans or maps or inventories of natural or historic resources (see section 450.216(j) and sections 450.324(g)(1) and (g)(2)).

Context Sensitive Design – A model for transportation project development that requires proposed transportation projects to be planned not only for its physical aspects as a facility serving specific transportation objectives, but also for its effects on the aesthetic, social, economic and environmental values, needs, constraints and opportunities in a larger community setting.

Cooperation – The parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective.

Coordinated Public Transit-Human Services Transportation Plan – A locally developed, coordinated transportation plan that identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes, provides strategies for meeting those local needs, and prioritizes transportation services for funding and implementation. Trimet leads developmentof this plan for the reigon.

Coordination – The cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, freight, active transportation and transit route alignments.

Corridors (2040 Design Type) – A type of land use that is typically located along regional transit routes and arterial streets, providing a place for somewhat higher densities than is found in 2040 centers. These land uses should feature a high–quality pedestrian environment and convenient access to transit. Typical new developments would include row houses, duplexes and one to three–story office and retail buildings, and average about 25 persons per acre. While some corridors may be continuous, narrow bands of higher–intensity development along arterial streets, others may be more nodal, that is a series of smaller centers at major intersections or other locations along the arterial that have high quality pedestrian environments, good connection to adjacent neighborhoods and transit service.

Countermeasure – An activity, initiative or design element to prevent, neutralize, or correct a specific safety problem.

Crash – A violent collision, typically of one vehicle with another (vehicles include bicyclists, motorcyclists, freight trucks, school buses, transit buses, etc.), a pedestrian, or with a stationary objects such as a pole or guard rail.

Criteria Pollutants – Carbon monoxide, lead, ground-level ozone, nitrogen oxides, particulate matter, and sulfur dioxides. Criteria pollutants are the only air pollutants with national air quality standards that define allowable concentrations of these substances in ambient air.

Cycletrack – Bicycle lanes that are physically separated from motor vehicle and pedestrian travel. A cycle track is an exclusive bike facility that has elements of a separated path and on-road bike lane. A cycle track, while still within the roadway, is physically separated from motor traffic and is distinct from the sidewalk. Cycle tracks may be one-way or two-way, and may be at road level, at sidewalk level, or at an intermediate level. They all share in common some separation from motor traffic with bollards, car parking, barriers or boulevards.

Cyclist – Person riding a bicycle.

Data-Driven Safety Analysis – Uses data to promote the integration of safety performance into all roadway investment decisions. Broader implementing of quantitative safety analysis so that it becomes an integral part of safety management and project development decision making in order to lead to better targeted roadway investments that result in fewer fatal and serious injury crashes. Decisions are compelled by data, rather than by intuition or by personal experience.

Deficiency – A performance, design or operational constraint that limits, but does not prohibit the ability to travel by a given mode.

Examples include locations where throughway capacity is less than six through lanes or that have poor or substandard design features; at–grade rail crossings; height restrictions; bike and pedestrian connections that contain obstacles (e.g., missing curb ramps, distances greater than 330 feet between pedestrian crossings, absence of pedestrian refuges, sidewalks occluded by utility infrastructure, high traffic volumes and complex traffic environments); transit overcrowding, inadequate frequency, or schedule unreliability; and high crash locations).

Delay – The additional travel time required by all travelers, as measured by the time needed to reach destinations at posted speed limits (free–flow speed) versus traveling at a slower congested speed. Delay can be expressed in several different ways, including total delay in vehicle–hours, total delay per vehicle miles traveled (VMT) and share of delay by time period, day of week or speed range.

Design Type – The conceptual areas depicted on the Metro 2040 Growth Concept Map and described in the Regional Framework Plan, including Central City, Regional Center, Town Center, Station Community, Corridor, Main Street, Inner Neighborhood, Outer Neighborhood, Regionally Significant Industrial Area, Industrial Area and Employment Area.

Electric Vehicles (EVs) – Vehicles that use electric motors for propulsion instead of or in addition to gasoline motors.

Emergency – Any human-made or natural event or circumstance causing orthreatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought earthquake, volcanicactivity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.

Emergency Medical Services (EMS) – The treatment and transport of people in crisis health situations that may be life threatening. Emergency medical support is applied in a wide variety of situations, including traffic crashes.

Emergency Transportation Routes – Priority routes used during and after a major regional emergency or disaster to move people and response resources, including including the transport of first responders (e.g., police, fire and emergency medical services), fuel, essential supplies and patients.

Emerging Technologies – A blanket term that we use throughout this plan to refer to new developments in transportation technology. We use it to refer both to technologies like automated vehicles or smart phones and services that operate using these technologies, like car and bike share.

Employer-Based Commute Programs – Work-based travel demand management programs that can include transportation coordinators, employer-subsidized transit pass programs, ride-matching, carpool and vanpool programs, telecommuting, compressed or flexible work weeks and bicycle parking and showers for bicycle commuters.

Employment Areas – Areas of mixed employment that include various types of manufacturing, distribution and warehousing uses, and may include commercial and retail development. Retail uses should primarily serve the needs of the people working or living in the immediate employment area. Exceptions to this general policy can be made only for certain areas indicated in a functional plan.

Employment Lands – Areas of mixed employment that include various types of manufacturing, distribution and warehousing uses, and

may include commercial and retail development.

Enhanced Transit Concept – Enhanced transit is a set of street design, signal, and other improvements that improve transit capacity, reliability and travel time along major Frequent Service bus lines. Enhanced Transit actions can include changes to the design and operation of streets and signals, typically owned and operated by the City. It can also include changes to transit vehicle fleet, station equipment and operation systems typically owned and operated by TriMet.

Enhanced transit projects come in a variety of shapes and sizes; for example, the improvements might address bottlenecks, or a portion of a transit line experiencing delay, or in some cases, improvements to a full transit line. Treatments can be applied systematically across a transit network to improve multiple lines or through a corridor approach to improve one or more transit lines. Enhanced Transit is intended to be flexible and context-sensitive during design and implementation. Enhanced Transit encompasses a range investments comprised of capital and operational treatments of moderate cost. It can be deployed relatively quickly in comparison to larger transit capital projects, such as building light rail.

Environmental Justice (EJ) – The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. (EPA definition)

Environmental Justice Populations – People living in poverty, people with low-income as determined annually by the U.S. Department of Health and Human Services Low-Income Index, people of color, elderly, children, people with disabilities, and other populations protected by Title VI and related nondiscrimination statutes.

Environmental Mitigation Activities – 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.

Equitable Development – An approach to creating healthy, vibrant, communities of opportunity by creating smart, intentional strategies to ensure that everyone (residents of all incomes, races and ethnicities) can participate in, and benefit from, decisions that shape their neighborhoods and region.

Equity – Just and fair inclusion into a society in which all can participate, prosper, and reach their full potential. In transportation, a normative measure of fairness among transportation system users. See also Racial Equity and Social Equity.

Equity Focus Areas (EFA's) – Census tracts with higher than regional average concentrations and double the density of one or more of the following: people of color, English language learners, 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.

Excessive Delay – The extra amount of time spent in congested conditions defined by speed thresholds that are lower than a normal delay threshold. For the purposes of MAP-21 target-setting, the speed threshold is 20 miles per hour (mph) or 60 percent of the posted speed

limit, whichever is greater.

Extreme Events – This term refers to risks posed by climate change and extreme weather events. The definition does not apply to other uses of the term nor include consideration of risks to the transportation system from other natural hazards, accidents, or other human induced disruptions.

Extreme Weather Events – Significant anomalies in temperature, precipitation and winds and can manifest as heavy precipitation and flooding, heatwaves, drought, wildfires and windstorms (including tornadoes). Consequences of extreme weather events can include safety concerns, damage, destruction and/or economic loss. Climate change can also cause or influence extreme weather events.

Facility – The fixed physical assets (structures) enabling a transportation mode to operate (including travel, as well as the loading and unloading of passengers). This includes streets, throughways, bridges, sidewalks, bikeways, transit stations, bus stops, ports, air and marine terminals and rail lines.

Federal Amount - Federal funding authority made available to a project to reimburse eligible project related expenses.

Federal Highway Administration (FHWA) – The U.S. Department of Transportation agency responsible for administering the federal highway aid program to individual states, and helping to plan, develop and coordinate construction of federally-funded highway projects. FHWA also governs the safety of hazardous cargo on the nation's highwaysThe FHWA implements transportation legislation approved at the congressional level that appropriates all federal funds to states,MPOs and local governments.

Federal Transit Administration (FTA) – U.S. Department of Transportation agency that provides financial and planning assistance to help plan, build and operate rail, bus and paratransit systems. The agency also assists in the development of local and regional traffic reduction programs.

Financial Plan – Documentation required to be included with a metropolitan transportation plan and TIP (and optional for the long-range statewide transportation plan and STIP) that demonstrates the consistency between reasonably available and projected sources of Federal, State, local, and private revenues and the costs of implementing proposed transportation system improvements.

Financially Constrained Or Fiscal Constraint – This means that the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained.

Fiscal Constraint – A federal requirement that long-range transportation plans and four-year multistage investments programs (aka Transportation Improvement Program – TIP) include only projects that have a reasonable expectation of being funded, based upon anticipated revenues (for the long-range transportation plan) or secured revenues (for the four-year TIP). In other words, long-range transportation plans or TIP cannot be a wish lists of projects; they must reflect realistic assumptions about revenues that will likely be available or secured.

Fixing America's Surface Transportation Act (FAST Act) – A funding and authorization bill to govern United States federal surface transportation spending, signed by President Obama on December 4, 2015. The FAST Act established funding levels and federal policy for our nation's highways and public transit systems for fiscal years 2016-2020. The $305 billion, five-year bill maintains the core highway and transit funding programs established by its predecessor MAP-21, and establishes the National Highway Freight Program, a formula program focused on goods movement.

Forecast – Projection of population, employment or travel demand for a given future year.

Freeway – A design for a Throughway in which all access points are grade separated. Directional travel lanes usually separated by a physical barrier, and access and egress points are limited to on–and off–ramp locations or a very limited number of at–grade intersections.

Freight Intermodal Facility – An intercity facility where freight is transferred between two or more freight modes (e.g., truck to rail, rail to ship, truck to air).

Freight Mobility – The efficient movement of goods from point of origin to destination.

Freight Intermodal Facility – An intercity facility where freight is transferred between two or more freight modes (e.g., truck to rail, rail to ship, truck to air).

Freight Modes – Freight modes are the means by which freight achieves mobility. These modes fall into five basic types: road (by truck), rail, pipeline, marine (by ship or barge) and air.

Freight Rail – A freight train that is a group of freight cars hauled by one or more locomotives on a railway, transporting cargo all or some of the way between the shipper and the intended destination.

Frequent Bus – Frequent bus service offers local and regional bus service with stops approximately every 750 to 1000 feet, providing corridor service rather than nodal service along selected arterial streets. This service typically runs at least every 15 minutes throughout the day and on weekends though frequencies may increase based on demand, and it can include transit preferential treatments, such as reserved bus lanes and transit signal priority, and enhanced passenger infrastructure along the corridor and at major bus stops, such as covered bus shelters, curb extensions, special lighting and median stations.

Full Funding Grant Agreement (FFGA) – An instrument that defines the scope of a project, the federal financial contribution, and other terms and conditions for funding from Federal Transit Administration Capital Infrastructure Grant Program (e.g. New Starts) projects.

Functional Classification – The class or group of roads to which the road belongs. There are three main functional classes as defined by the United States Federal Highway Administration: arterial, collector, and local. Throughways and freeways fall under arterial in the federal classification system.

Fund Type – Description of the federal, state or local funds assigned to a project phase

Gap – A missing link or barrier in the "typical" urban transportation system for any mode that functionally prohibits travel where a

connection might be expected to occur in accordance with the system concepts and networks in Chapter 3 of the RTP. A gap generally means a connection does not exist at all, but could also be the result of a physical barrier such as a throughway, natural feature, weight limitations on a bridge or existing development.

Goal – A broad statement that describes a desired outcome or end statetoward which actions are focused to make progress toward a long-term vision.

Greenhouse Gas Emissions – The six gases identified in the Kyoto Protocol and by the Oregon Greenhouse Gas Mandatory Reporting Advisory Committee as contributing to global climate change: carbon dioxide (CO_2), nitrous oxide (N_2), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Greenhouse gases absorb solar radiation and act like a heat-trapping blanket in the atmosphere, causing climate change. More information is available at epa.gov/climatechange.

Green Infrastructure – A network of multi-functional green spaces and environmental features, both natural and engineered, that use or replicate natural systems to better manage stormwater, protect streams and enhance wildlife corridors—trees, soils, water and habitats. Examples include: permeable paving, vegetated swales, rain gardens, green streets, green roofs, green walls, urban forestry, street trees, parks, green corridors such as trails, and other low impact development practices.

Green Streets – An innovative stormwater management approach that captures rain where it falls by using vegetation, soil and engineered systems to slow, filter and clean stormwater runoff from impervious surfaces.

Greenways – Greenways generally follow rivers and streams and may or may not provide for public access. In some cases, greenways may be a swath of protected habitat along a stream with no public access. In other cases, greenways may allow for an enviro9nmentally compatible trail, viewpoint or canoe launch site. The greenways that are identified in Metro's regional trails plan do not presently offer public access. Usage of the term "greenway" can be ambiguous because it is sometimes used interchangeably with the word "trail." For example, "Fanno Creek Trail", "Fanno Creek Greenway", and "Fanno Creek Greenway Trail" are used with equal frequency for the same trail. Trail and greenway professional prefer to make the technical distinction that the "trail" refers to the tread or the actual walking service, while the "greenway" refers to the surrounding park or natural corridor. The term is also ambiguous because the City of Portland recently began referring to its bicycle boulevards as "neighborhood greenways." Neighborhood greenways differ from traditional greenways in that they general do not follow an open space corridor aside from local streets.

Health Impact Assessment – A combination of procedures, methods, and tools by which a policy, program or project may be evaluated as to its potential effects on the health of a population, and the distribution of these effects within the population.

High Capacity Transit (HCT) – High capacity transit is public transit that can have exclusive right of way, non-exclusive right of way, or a combination of both. Vehicles make fewer stops, travel at higher speeds, have more frequent service and carry more people than local service transit such as typical bus lines. It includes:

- Light rail uses high capacity trains (68 seats with room and design for several passengers to stand) and focuses on regional mobility with stops typically one-half to 1 mile apart, connecting concentrated housing or local bus hubs and employment areas. The service has its own right of way. Cars can be doubled, and service frequency increased, during peak hours.

- Commuter rail uses high capacity heavy rail trains (74 seats in a single car, 154 in doubled cars), typically sharing right of way with freight or other train service (though out of roadway). The service focuses on connecting major housing or local bus hubs and employment areas with few stops and higher speeds. The service may have limited or no non-peak service.
- Bus rapid transit uses coach-style or high capacity busses (40-60 seats with room and design for several passengers to stand). The service may be in the roadway with turnouts and signal priority for stops, have an exclusive right of way, or be some combination of the two. The service focuses on regional mobility, with higher speeds, fewer stops, higher frequency and more substantial stations than local bus, connecting concentrated housing or local bus hubs and employment areas. Service frequency can be increased during peak hours.
- Using the same technology as local streetcar, rapid streetcar focuses on regional mobility, offering fewer stops through less populated areas to connect housing areas to jobs or other destinations. Cars can be doubled, and service frequency increased, during peak hours. The service operates in mixed traffic, in exclusive right of way or a combination of the two.

High Crash Location – Highway or road segments identified by the frequency and severity of motor vehicle crashes. Identification of high crash locations is part of the safety problem identification process.

High Injury Corridors And Intersections (HIC) – Roadways where the highest concentrations of fatal and severe injury crashes involving people in cars, biking and walking occur on the regional transportation system Corridors and intersections were analyzed to determine aggregate crash scores based on the frequency and severity of crashes, using the following methodology:

- Fatal and Injury A (serious) crashes for all modes are assigned to the network;
- "Injury B", "Injury C", and "PDO (property damage only)" crashes involving bikes and pedestrians are also assigned to the network;
- Fatal and Injury A crashes are given a weight of 10;
- Roadways are analyzed in mile segments; if a segment has only one Fatal or Injury A crash it must also have at least one B/C (minor injury) crash, for the same mode, to be included in the analysis.; and
- Roadway segments are assigned an N-score (or "crash score") by calculating the weighted sum by mode and normalizing it by the roadway length.

To reach 60 percent of Fatal and Severe Injury crashes, roadway segments had to have an N-score of 39 or higher; high injury Bicycle Corridors had to have an N-score of 6 or more, and high injury Pedestrian Corridors had to have an N-score of 15 or more. Intersections with the highest weighted crash scores were also identified; 5 percent of intersections had an N-score (or "crash score") higher than 80 and are also shown on the map, and 1 percent of intersections (the top 1 percent) had to have an N-score higher than 128.

High Risk Roadways – Characteristics if high risk roads are identified by looking at crash history on an aggregate basis to identify particular severe crash types (e.g. pedestrian) and then use the roadway characteristics associated with particular crash types (e.g. arterial roadways with four-or more lanes, posted speed over 35 mph, unlit streets) to understand which roadways may have a higher risk of the same type of severe crash.

High–Occupancy Vehicle (HOV) – A vehicle carrying more than two passengers with the exception of motorcycles.

High-Occupancy Vehicle Lane – The technical term for a carpool lane. See also high-occupancy vehicle.

Highway – A design for a Throughway in which access points are a mix of separate and at–grade.

Historically Marginalized Communities – Communities of people that have been historically excluded from critical aspects of social participation including, voting, education, housing and more. Historical marginalization is often a result of systematic exclusion based on devaluation of any individual existing outside of the dominant culture. For purposes of the RTP, this includes people of color, people with limited English proficiency, people with lower-incomes, youth, older adults and people living with a disability.

Incident Management (ICM) – The detection and verification of incidents (crashes, stalled vehicles, etc. blocking traffic) and the implementation of appropriate actions to clear the highway.

Individualized Marketing – Travel demand management programs focused on individual households. IM programs involve individualized outreach to households that identify household travel needs and ways to meet those needs with less vehicle travel.

Induced Demand – The process whereby improvements in the transportation system intended to alleviate congestion and delay result in additional demand for the transportation segment, offsetting some of the improvement's potential benefits. For instance, when a congested roadway is expanded from 2 to 3 lanes, some drivers will recognize the increased capacity and take this roadway though they had not done so previously.

Industrial Areas – Areas set aside for industrial activities. Supporting commercial and related uses may be allowed, provided they are intended to serve the primary industrial users. Residential development and retail users whose market area is larger than the industrial area are not considered supporting uses.

Intelligent Transportation Systems (ITS) – Electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of the transportation system. ITS can include both vehicle-to-vehicle communication (which allows cars to communicate with one another to avoid crashes and vehicle-to-infrastructure communication (which allows cars to communicate with the roadway) to identify congestion, crashes or unsafe driving conditions, manage traffic flow, or provide alternate routes to travelers.

Intermodal Connector – A road that provides connections between major rail yards, marine terminals, airports, and other freight intermodal facilities; and the freeway and highway system (the National Highway System).

Intermodal Facilities – A transportation element that allows passenger and/or freight connections between modes of transportation. Examples include airports, rail stations, marine terminals, and rail–yards that facilitate the transfer of containers or trailers. See also passenger intermodal facility and freight intermodal facility definitions.

Lead Agency - The agency that is contractually responsible for managing and delivering the project.

Level-Of-Service (Motor Vehicle Network, LOS) – A traditional measure of congestion, calculated by by dividing the number of motor vehicles passing through a section of roadway during a specific increment of time by the motor vehicle capacity of the section. For

example, a LOS of 1.00 indicates the roadway facility is operating at its capacity.

Traditionally, motor vehicle LOS has been used in transportation system planning, project development and design as well as in operational analyses and traffic analysis conducted during the development review process. As a system plan, the RTP uses the interim regional policy to diagnose the extent of motor vehicle congestion on throughways and arterials during different times of the day and to determine adequacy in meeting the region's needs. LOS is also used to determine consistency of the RTP with the Oregon Highway Plan for state-owned facilities. See also volume-to-capacity ratio and regional mobility policy.

Local Bikeways – Trails, streets and connections not identified as regional bicycle routes, but are important to a fully functioning network. Local bikeways are the local collectors of bicycle travel. They are typically shorter routes with less bicycle demand and use. They provide for door-to-door bicycle travel.

Local Jurisdiction – For the purpose of this plan, this term refers to a city or county within the Metro boundary.

Local Pedestrian Connectors – All streets and trails not included on the regional network. Local connectors experience lower volumes of pedestrian activity and are typically on residential and low-volume/speed roadways or smaller trails. Connectors, however, are an important element of the regional pedestrian network because they allow for door-to-door pedestrian travel.

Local Streets Or Roads – Local streets primarily provide direct access to adjacent land. While Local streets are not intended to serve through traffic, the aggregate effect of local street design impacts the effectiveness of the arterial and collector system when local travel is restricted by a lack of connecting routes, and local trips are forced onto the arterial street network. In the urban area, local roadway system designs often discourage "through traffic movement." Regional regulations require local street connections spaced no more than 530 feet in new residential and mixed used areas, and cul–de–sacs are limited to 200 feet in length. These connectivity requirements ensure that a lack of adequate local street connections does not result in the arterial system becoming congested. While the focus for local streets has been on motor vehicle traffic, they are developed as multi–modal facilities that accommodate bicycles, pedestrians and sometimes transit.

Lower Income Focus Area – Census tracts with higher than regional average concentrations and double the density of people with lower income. Lower income is defined as households with incomes below 200 percent of the federal poverty level, adjusted for household size (i.e., with incomes up to twice the level of poverty), as defined by the U.S. Census Bureau for 2016. The 2016 federal poverty level for a two person household was $16,020.

Main Line Rail – Class I rail lines (e.g., Union Pacific and Burlington Northern/Santa Fe).

Main Roadway Routes – Designated freights routes that are freeways and highways that connect major activity centers in the region to other areas in Oregon or other states throughout the U.S., Mexico and Canada.

Major Transit Stop – Existing and planned light rail stations and transit transfer stations, except for temporary facilities and other existing and planned transit stops which:

(A) Have or are planned for an above average frequency of scheduled, fixed-route service when compared to region wide service. In urban areas of 1,000,000 or more population major transit stops are generally located along routes that have or are planned for 20 minute service during the peak hour; and

(B) Are located in a transit oriented development or within 1/4 mile of an area planned and zoned for:

(i) Medium or high density residential development; or

(ii) Intensive commercial or institutional uses within 1/4 mile of subsection (i); or

(iii) Uses likely to generate a relatively high level of transit ridership.

Marine Facilities – A facility where freight is transferred between water–based and land–based modes.

Meaningful Involvement – This term means that the public should have opportunities to participate in decisions that could affect their environment and their health, their contributions should be taken into account by regulatory agencies, and decision-makers should seek and facilitate the engagement of those potentially affected by their decisions. (from EPA)

Measure – An expression based on a metric that is used to establish targets and to assess progress toward achieving the established targets.

Memorandum Of Understanding (MOU) - An MOU (Memorandum of Understanding) or an MOA (Memorandum of Agreement) is an agreement between agencies that specifies the terms of the project, documents the requirements for team member participation, and establishes the specific authority that each team member has for making decisions.

Metric – A quantifiable indicator of performance or condition.

Metropolitan Greenspaces Master Plan (1992) – Details the vision, goals and organizational framework of a regional system of natural areas, trails and greenways for wildlife and people in the region, and set the foundation for subsequent bond measures and trail plans.

Metropolitan Planning Area Boundary (MPA) – The geographic area determined by agreement between the Metropolitan Planning Organization (MPO) and the Governor, in which the metropolitan transportation planning process is carried out by the MPO.

Metropolitan Planning Organization (MPO) – A federally-required policy body responsible for the transportation planning, project selection and scheduling the use of federal transportation funds in its region. Governed by policy board, MPOs are required in urbanized areas with populations more than 50,000 and are designated by the governor of the state. Oregon currently has eight MPOs covering the metropolitan areas of Portland, Salem-Keizer, Corvallis area, Eugene-Springfield, Rogue Valley (Medford-Ashland,) Bend area, Albany area, and Middle Rogue. JPACT and the Metro Council constitute the MPO for the Portland region. The MPO conducts federally mandated transportation planning work, including: a long-range Regional Transportation Plan (RTP), the Metropolitan Transportation Improvement Program (MTIP) for capital improvements identified for a four-year construction period, a Unified Planning Work Program (UPWP), a congestion management process (CMP), federal performance-based planning and target-setting and conformity to the state

implementation plan for air quality for transportation related emissions.

Metropolitan Transportation Improvement Program (MTIP) – The MTIP includes all federally funded transportation projects in the Portland metropolitan planning area, including projects planned by TriMet, the Oregon Department of Transportation and local agencies receiving federal funds allocated by Metro. The MTIP is incorporated in the Statewide Transportation Improvement Program (STIP), which identifies the state's four-year transportation capital improvements. See also transportation improvement program.

Metropolitan Transportation Plan (MTP) – The official multimodal transportation plan addressing no less than a 20-year planning horizon that the MPO develops, adopts, and updates through the metropolitan transportation planning process. The Regional Transportation Plan is metropolitan transportation plan for the Portland region.

Microtransit – Services such as Via, Chariot and Leap can differ from conventional transit service in several different ways:

- Dynamic routing: Some microtransit services operate on flexible routes to pick up and drop off riders nearer to their origins and destinations. Services may deviate from a fixed route to make pickups and dropoffs, crowdsource routes from data provided by riders or make stops anywhere within a defined service area.
- On-demand scheduling: Instead of operating on a fixed schedule, microtransit services may allow riders to request a ride when they need it.
- Smaller vehicles: Microtransit services often use vans or small buses instead of 40-passenger buses.
- Private operation: Many microtransit services are privately operated or operated through partnerships between public agencies and private companies.

We distinguish between microtransit that is coordinated with public transit, for example services that connect people to high-frequency transit or operate in areas that are hard to serve with conventional transit, and luxury microtransit that serve existing transit routes and offer more space or amenities than a public bus at a higher cost.

Minimum Local Match - Funding required to be provided by the lead agency to qualify for the federal funding authority programmed to the project.

Mitigation – Planning actions taken to avoid an impact altogether, minimize the degree or magnitude of the impact, reduce the impact over time, rectify the impact, or compensate for the impact. Mitigation includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

Mixed Use – Comprehensive plan or implementing regulations that permit a mixture of commercial and residential development.

Mixed-Use Development – Areas of a mix of at least two of the following land uses and includes multiple tenants or ownerships: residential, retail and office. This definition excludes large, single-use land uses such as colleges, hospitals, and business campuses.

Mobility – The ability to move people and goods to destinations efficiently and reliably.

Mobility Corridor – Mobility corridors represent subareas of the region and include all regional transportation facilities within the subarea as well as the land uses served by the regional transportation system. This includes freeways and highways and parallel networks of arterial streets, regional bicycle parkways, high capacity transit, and frequent bus routes. 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. This framework emphasizes the integration of land use and transportation in determining regional system needs, functions, desired outcomes, performance measures, and investment strategies.

Modal Targets – Performance targets for increased walking, biking, transit, shared ride and other non-drive alone trips as a percentage of all trips made in a defined area. The targets apply to trips to, from and within each 2040 Design Type. The targets reflect desired mode shares for each area for the year 2040 needed to comply with Oregon Transportation Planning Rule objectives to reduce reliance on single-occupant vehicles and per capita vehicle miles traveled.

Regional 2040 Modal Targets

2040 Design Type	Non-Drive Alone Modal Target
Portland central city	60-70%
Regional centers Town centers Main streets Station communities Corridors Passenger intermodal facilities	45-55%
Industrial areas Freight intermodal facilities Employment areas Neighborhoods	40-45%

Note: The targets apply to trips to, from and within each 2040 design type

Mode – A type of transportation distinguished by means used (e.g., such as walking, bike, bus, single– or high–occupancy vehicle, bus, train, truck, air, marine).

Mode Choice – The ability to choose one or more modes of transportation.

Mode Share – The proportion of total person trips using various modes of transportation.

Motorcycle – A motor vehicle with motive power having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground. The NHTSA defines "motorcycle" to include mopeds, two or three-wheeled motorcycles, off-road motorcycles, scooters, mini bikes and pocket bikes.

Moving Ahead For Progress In The 21st Century Act (MAP-21) (P.L. 112-141) – Reauthorization of Federal highway funding, signed into law by President Obama on July 6, 2012. Subsequent adoption of the FAST Act does not replace MAP-21 in all areas regulation of transportation safety planning and funding, so both must be referenced.

MTIP ID - This is a unique identification number assigned to a program or project by the MPO (Metro) to organize all transportation projects within the Metropolitan Transportation Improvement Program (MTIP).

Multimodal – Transportation facilities or programs designed to serve many or all methods of travel, including all forms of motor vehicles, public transportation, bicycles and walking.

Multimodal Level Of Service (MMLOS) – Multimodal level of service (MMLOS) is an analytical tool that measures and rates users' experiences of the transportation system according to their mode. It evaluates not only drivers' experiences, but incorporates the experiences of all other users, such as cyclists and pedestrians.

National Environmental Protection Act (NEPA) - A federal environmental policy that establishes a process by which federal agencies must study the environmental effects of their proposals, document the analysis, and make the information available to the public for comment. For transportation projects, NEPA requires examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed projects. It provides an interdisciplinary framework for federal agencies to prevent environmental damage and contains "action-forcing" procedures to ensure that federal agency decision makers take environmental factors into account.

National Highway System (NHS) – Title 23 of the U.S. Code section 103 states that the purpose of the NHS is to provide an interconnected system of principal routes that serve major population centers, international border crossings, ports, airports, public transportation facilities, intermodal transportation facilities, major travel destinations, meet national defense requirements, and serve interstate and inter–regional travel. Facilities included in the NHS are of regional significance.

National Performance Management Research Data Set (NPMRDS) – A data set derived from vehicle/passenger probe data (sourced from Global Positioning Station (GPS), navigation units, cell phones) that includes average travel times representative of all traffic on each mainline highway segment of the National Highway System (NHS), and additional travel times representative of freight trucks for those segments that are on the Interstate System. The data set includes records that contain average travel times for every 15 minutes of every day (24 hours) of the year recorded and calculated for every travel time segment where probe data are available. The NPMRDS does not include any imputed travel time data.

Network – Connected routes forming a cohesive system.

New Mobility Services – Transportation services like ride-hailing, microtransit and car and bike share, which operate using smart phones and other emerging technologies. Many of these services are privately operated by new mobility companies.

Non-Motorized – Generally referring to bicycle, walking and other modes of transportation not involving a motor vehicle.

Non-SOV Travel – Any travel mode other than driving alone in a motorized vehicle (i.e., single occupancy vehicle or SOV travel), including travel avoided by telecommuting.

Objective (In A Plan) – A specific, measureable desired outcome and means for achieving a goal(s) to guide action within the plan period.

ODOT - This is a unique identification number assigned to a program or a project by the ODOT to organize all transportation projects within the State Transportation Improvement Program (STIP).

Off–Peak Hours – The hours outside of the highest motor vehicle traffic period, generally between 9 a.m. and 3 p.m. and between 6 p.m. and 7 a.m.

Older Adults (Vulnerable) – The Moving Ahead for Progress in the 21st Century (MAP-21) Act created a new Special Rule for older drivers and pedestrians under 23 USC 148(g)(2), which was continued under the Fixing America's Surface Transportation (FAST) Act. If the rate per capita of traffic fatalities and serious injuries for drivers and pedestrians over the age of 65 in a State increases over the most recent 2-year period, this Special Rule requires a State to include strategies to address the increases in those rates in their State Strategic Highway Safety Plan (SHSP). FHWA issued the Section 148: Older Drivers and Pedestrians Special Rule Final Guidance in May 2016. TriMet's Coordinated Transportation Plan for Seniors and Persons With Disabilities (2016) identifies several principles and actions related to addressing safety and security concerns getting to and at transit stops and on transit.

Operational And Management Strategies – Actions and strategies aimed at improving the performance of existing and planned transportation facilities to relieve congestion and maximize the safety and mobility of people and goods.

Oregon Transportation Commission (OTC) – The Oregon Transportation Commission is a five–member governor–appointed government agency that manages the state highways and other transportation in the state of Oregon, in conjunction with the Oregon Department of Transportation.

Oregon Transportation Plan (OTP) – The official statewide intermodal transportation plan that is developed through the statewide transportation planning process by ODOT and approved by the Oregon Transportation Commission.

Other Amount - Additional funding from non-federal sources identified as available to the project.

Parking Management – Strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users, and improve parking facility design. Examples include developing an inventory of parking supply and usage, reduced parking requirements, shared and unbundled parking, parking-cash-out, priced parking, bicycle parking and providing information on parking space availability. More information can be found at vtpi.org/park_man.pdf

Passenger Car Equivalent – Passenger Car Equivalent (PCE) is a metric used in Transportation Engineering, to assess traffic–flow rate on a highway. A PCE is essentially the impact that a mode of transport has on traffic variables compared to a single car.

Passenger Intermodal Facilities – Facilities that accommodate or serve as transfer points to interconnect various transportation modes for the movement of people. Examples include Portland International Airport, Union Station, Oregon City Amtrak station and inter–city bus stations.

Passenger Rail – Inter–city passenger rail is part of the state transportation system and extends from the Willamette Valley north to British Columbia. Amtrak already provides service south to California, east to the rest of the continental United States and north to

Canada. It is a transit system that operates, in whole or part, on a fixed guide–way. These systems should be integrated with other transit services within the metropolitan region with connections at passenger intermodal facilities.

Passenger Train – A railroad train for only passengers, rather than goods. Amtrak is the company that controls the railroads that carry passengers in the U.S.

Passenger Vehicles – Motor vehicles with at least four wheels, used for the transport of passengers, and comprising no more than eight seats in addition to the driver's seat. Light commercial vehicles are motor vehicles with at least four wheels, used for the carriage of goods.

Peak Period Or Hours – The period of the day during which the maximum amount of travel occurs. It may be specified as the morning (A.M.) or afternoon or evening (P.M.) peak. Peak periods in the Portland metropolitan region are currently generally defined as from 7–9 AM and 4–6 PM.

Pedestrian – A person traveling on foot, in a wheelchair or in another health–related mobility device.

Pedestrian Comfort Index (PCI) - Uses data such as auto volumes, auto speeds, number of auto lanes, sidewalk existence and width, number of pedestrian crossings on existing roadways and assigns a comfort rating for pedestrians. Results help identify roadways on the regional pedestrian network that could be upgraded to increase bicyclists comfort. Metro has collected and analyzed initial data for the regional pedestrian network but has not created a PCI. Additional data and analysis is needed.

Pedestrian Connection – A continuous, unobstructed, reasonably direct route between two points that is intended and suitable for pedestrian use. Pedestrian connections include but are not limited to sidewalks, walkways, accessways, stairways and pedestrian bridges. On developed parcels, pedestrian connections are generally hard surfaced. In parks and natural areas, pedestrian connections may be soft-surfaced pathways. On undeveloped parcels and parcels intended for redevelopment, pedestrian connections may also include rights-of-way or easements for future pedestrian improvements.

Pedestrian Corridor – The second highest functional class of the regional pedestrian network. On-street regional pedestrian corridors are any major or minor arterial on the regional urban arterial network that is not a pedestrian parkway. Regional trails that are not pedestrian parkways are regional pedestrian corridors. These routes are also expected to see a high level of pedestrian activity, though not as high as the parkways.

Pedestrian District – A comprehensive plan designation or set of land use regulations designed to provide safe and convenient pedestrian circulation, with a mix of uses, density, and design that support high levels of pedestrian activity and transit use. The pedestrian district can be a concentrated area of pedestrian activity or a corridor. Pedestrian districts can be designated within the following 2040 Design Types: Central City, Regional and Town Centers, Corridors and Main Streets. Though focused on providing a safe and convenient walking environment, pedestrian districts also integrate efficient use of several modes within one area, e.g., auto, transit, and bike.

Pedestrian Facility – A facility provided for the benefit of pedestrian travel, including walkways, protected street crossings, crosswalks, plazas, signs, signals, pedestrian scale street lighting and benches.

Pedestrian Parkway – A new functional class for pedestrian routes in the Regional Transportation Plan and the highest functional class. They are high quality and high priority routes for pedestrian activity. Pedestrian parkways are major urban streets that provide frequent and almost frequent transit service (existing and planned) or regional trails. Adequate width and separation between pedestrians and bicyclists should be provided on shared use path parkways.

Pedestrian-Scale – An urban development pattern where walking is a safe, convenient and interesting travel mode. The following are examples of pedestrian scale facilities: continuous, smooth and wide walking surfaces, easily visible from streets and buildings and safe for walking; minimal points where high speed automobile traffic and pedestrians mix; frequent crossings; and storefronts, trees, bollards, on-street parking, awnings, outdoor seating, signs, doorways and lighting designed to serve those on foot; all well-integrated into the transit system and having uses that cater to pedestrians.

People Of Color Focus Area – Census tracts with higher than regional average concentrations and double the density of one or more of the following: people of color and/or English language learners.

Per Capita – Used to describe the rate of something per person.

Performance-Based Planning And Programming – Refers to the application of performance management within the planning and programming processes of MPOs and transportation agencies to achieve desired performance outcomes for the multimodal transportation system. Attempts to ensure that transportation investment decisions are made – both in long-term planning and short-term programming of projects – based on their ability to meet established goals.

Performance Management – A strategic approach that uses data and information to support decisions that help to achieve identified performance outcomes.

Performance Measurement – A process of assessing progress toward achieving goals using data.

Performance Measure – A metric used to assess and monitor progress toward meeting an objective using quantitative or qualitative data and provide feedback in the plan's decision-making process.

Some measures can be used to predict the future as part of an evaluation process using forecasted data, while other measures can be used to monitor changes based on actual empirical or observed data. In both cases, they can be applied at a system-level, corridor-level and/or project level, and provide the planning process with a basis for evaluating alternatives and making decisions on future transportation investments. As used in the RTP, performance measures are used to evaluate transportation system performance and potential impacts of the plan's investments within the planning period. They are also used to monitor performance of the plan in between updates to evaluate the need for refinements to policies, investment strategies or other elements of the plan..

Person Trip – A trip made by a person from one location to another, whether as a driver, bicyclist, passenger or pedestrian.

Per Vehicle Miles Traveled (VMT) – Used to describe rate of something per the number of motor vehicle miles traveled, such as the crash rate per motorized vehicle miles. Except where otherwise noted, crash rates are per 100-million motorized vehicle miles travelled in this

document.

Phase - The type of work being completed on the project with funds programmed for the fiscal year identified. Includes:

- Planning: activities associated with preparing for projects for implementation, from broad systems planning to project development activities.
- Preliminary Engineering: work to create construction and environmental documents.
- Right Of Way: activities associated with investigating needs for use of land for the construction or operation of a project.
- Construction: activities associated with the physical construction of a project.
- Other: Activities for programs or projects not defined by one of the other phase activities defined above.

Physically Separated Bicycle Lanes – These types of facilities provide a physical buffer between a person riding a bicycle and auto traffic and can be referred to as cycle tracks, trails, paths and buffered bicycle lanes. Buffers can be provided by parked cars, landscaped strips, raised pavement, bollards and planters.

Planning Area Boundary – A boundary used by Metro for planning purposes – also called the metropolitan planning area boundary. Included within the boundary are all areas within the Metro jurisdictional boundary, the 2010 Census urbanized area, designated urban reserves and the urban growth boundary.

Planning Factors – A set of broad objectives defined in Federal legislation to be considered in both the metropolitan and statewide planning process. The factors are:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase the accessibility and mobility of people and for freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Improve the resiliency and reliabilityof the transportation system and reduce or mitigate stormwaterimpacts of surface transportation.
- Enhance travel and tourism.

Policy – A policy is a statement of intent and describes a direction and a course of action adopted and pursued by a government to achieve desired outcome(s).

Posted Speed – The speeds indicated on signs along the roadway. When speeds differ from statutory speeds there must be a posted sign indicating the different speed.

Practicable – This term means available and capable of being done after taking into consideration cost, existing technology and logistics, in light of overall project purposes.

Preparedness – This term refers to actions taken to plan, organize, equip, train, and exercise to build, apply, and sustain the capabilities necessary to prevent, protect against, ameliorate the effects of, respond to, and recover from climate change related damages to life, health, property, livelihoods, ecosystems, and national security.

Principal Arterial – Limited-access roads that serve longer-distance motor vehicle and freight trips and provide interstate, intrastate and cross-regional travel. See definition of Throughway.

Project Development – A phase in the transportation planning process during which a proposed project undergoes a more detailed analysis of the project's social, economic and environmental impacts and various project alternatives to determine the precise location, alignment, and preliminary design of improvements based on site-specific engineering and environmental studies. After a project has successfully passed through this phase, it may move forward to right–of–way acquisition and construction phases. Project development activities include: Environmental Assessment (EA)/Environmental Impact Statement (EIS) work, Design Options Analysis (DOA), management plans, and transit Alternatives Analysis (AA).

Project Type - This is the primary mode for the project.

Protected Bike Lanes – Separated bike lane, cycle track, a bike lane that is physically separated from auto traffic, typically they are created using planters, curbs, parked cars, or posts and are essential for creating a complete network of bike-friendly routes. For bicyclists, safety increases significantly when there is physical separation from motorists through infrastructure. Fully protected bikeways can reduce bicycle injury risk up to 90 percent. Another report found that on-street bike lanes that use barriers to physically separate bicyclists from motor vehicles are 89 percent safer than streets with parked cars and without bicycling infrastructure. When physical separation is not possible, infrastructure such as striped bike lanes, bicycle boulevards, and bike boxes help reduce the risk of conflict with motor vehicles.

Public Health – The health of the population as a whole, especially as monitored, regulated, and promoted by the state.

Racial Equity – When race can no longer be used to predict life outcomes and outcomes for all groups are improved. The removal of barriers with a specific focus on eliminating disparities faced by and improving equitable outcomes for communities of color – the foundation of Metro's strategy with the intent of also effectively identifying solutions and removing barriers for other disadvantaged groups.

Rail Branch Lines – Non–Class I rail lines, including short line or branch lines.

Ramp Meter Or Metering – A traffic signal used to regulate the flow of vehicles entering the freeway. Ramp meters smooth the merging process resulting in increased freeway speeds and reduced crashes. Ramp meters can be automatically adjusted based on traffic

conditions.

Record Of Decision - A federal environmental decision document issued by FHWA that explains the basis for the project decision, summarizes mitigation measures to incorporate into the project, and documents any required Section 4(f) approvals.

Refinement Plan – Amendment to a transportation system plan which determines at a systems level the function, mode or general location of a transportation facility, service or improvement, deferred during system planning because detailed information needed to make the determination could not be reasonably obtained at that time.

Regional Bike-Transit Facility – The hub where the spokes of the regional bikeway network connect to the regional transit network. Stations and transit centers identified as regional bike-transit facilities have high-capacity bike parking and are suitable locations for bike-sharing and other activities that support bicycling. Criteria for identifying locations are found in the TriMet Bicycle Parking Guidelines.

Regional Bikeway – Designated routes that provide access to and within the central city, regional centers and town centers. These bikeways are typically located on arterial streets but may also be located on collectors or other low-volume streets. These bikeways should be designed using a flexible "toolbox" of bikeway designs, including bike lanes, cycle tracks (physically separated bicycle lanes) shoulder bikeways, shared roadway/wide outside lanes and bicycle priority treatments (e.g. bicycle boulevards).

Regional Centers (2040 Design Type) – Compact, specifically–defined areas where higher density growth and a mix of intensive residential and commercial land uses exists or is planned. Regional centers are to be supported by an efficient, transit–oriented, multi–modal transportation system. Examples include traditional centers, such as downtown Gresham, and new centers such as Gateway and Clackamas Town Center.

Regional Concept For Transportation Operations (RCTO) - A Regional Concept for Transportation Operations (RCTO) helps plan and implement TSMO strategies in an ongoing and collaborative way. It states the shared regional objective for transportation operations and identifies what is needed to achieve that objective. This includes physical improvements, relationships and procedures, and resources. A RCTO is developed through agreement between those responsible for operating the transportation system on a day-to-day basis: staff representing traffic operations, transit operations, emergency management, transportation planning and others.

Regional Conservation Strategy (RCS) For The Greater Portland Vancouver Metropolitan Area, Intertwine And Metro - Identifies high quality land and riparian areas in the region. The strategy was developed by The Intertwine Alliance, Metro and a broad coalition of conservation organizations to pull together 20 years of conservation planning and create an integrated blueprint for regional conservation. The plan will help government, nonprofit and private organizations work together to care for and restore thousands of acres of natural area land and create habitat for wildlife.

Regional Destinations – Include the following types of places: employment sites with 300 or more employees (includes regional sports and attraction sites such as Oregon Zoo, Oregon Museum of Science and Industry, Providence Park, Moda Center); high ridership bus stop locations; regional shopping centers; major hospitals and medical centers; colleges, universities and public high schools; regional parks; major government centers; social services; airports; and libraries.

Regional Flexible Funds (RFF) – Regional flexible funds come from three federal grant programs: the Surface Transportation Block Grant Program, the Congestion Mitigation/Air Quality Program and the Transportation Alternatives Program. The regional flexible fund allocation process identifies which projects in the Regional Transportation Plan will receive funding. Regional flexible funds are allocated every two years and are included in the Metropolitan Transportation Improvement Program. Unlike funding that flows only to highways or only to transit by a rigid formula, this is money that can be invested in a range of transportation projects or programs as long as federal funding eligibility requirements are met.

Regional Freight Network – Applies the regional freight concept on the ground to identify the transportation networks and freight facilities that serve the region and state's freight mobility needs.

Regional Intelligent Transportation System (ITS) Architecture – A regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects or groups of projects.

Regional Mobility Policy – The minimum motor vehicle performance desired for transportation facilities designated on the Regional Motor Vehicle Network in Chapter 3. Table 3.6 reflects volume-to-capacity targets adopted in the RTP for facilities designated on the Regional Motor Vehicle Network as well as volume-to-capacity targets adopted in the Oregon Highway Plan for state-owned facilities in the urban growth boundary. In effect, the policy is used to evaluate current and future performance of the motor vehicle network, using the ratio of traffic volume (or forecasted demand) to planned capacity of a given roadway, referred to as the volume-to-capacity ratio (v/c ratio) or level-of-service (LOS. As a system plan, the RTP uses the interim regional policy to diagnose the extent of motor vehicle congestion on throughways and arterials during different times of the day and to determine adequacy in meeting the region's needs. LOS is also used to determine consistency of the RTP with the Oregon Highway Plan for state-owned facilities. JPACT and the Metro Council adopted the policy in 2000, agreeing that building a regional arterial and throughway network to accommodate all motor vehicle traffic during peak travel periods is not practical nor would it be desirable considering potential financial, social equity, environmental and community impacts. The RTP mobility policy can be found in Chapter 2 and Chapter 3 of the RTP.

Regional Trails – Regional Trails are defined by Metro as linear facilities for non-motorized users that are at least 75% off-street and are regionally significant. Bicycle/pedestrian sidewalks on bridges are also included in this definition. The term "non-motorized" is used instead of "multi-use" or "multi-modal" because some Regional Trails are pedestrian-only. Trails must meet two levels of criteria to be considered "regionally significant." The criteria are adopted by the Metro Council in the Regional Trails and Greenways Plan. Regional trails are physically separated from motor vehicle traffic by open space or a barrier. Bicyclists, pedestrians, joggers, skaters and other non-motorized travelers use these facilities.

While all trails serve a transportation function, not all regional trails identified on Metro's Regional Trails and Greenways Map are included in the RTP. The RTP includes regional trails that support both utilitarian and recreational functions. These trails are generally located near or in residential areas or near mixed-use centers and provide access to daily needs. Trails in the RTP are defined as transportation facilities and are part of the regional transportation system. Regional trails in the RTP are eligible to receive federal transportation funds. Trails that use federal transportation funds need to be ADA accessible according to the AASHTO trail design guidelines. There are some pedestrian only trails or trails near sensitive habitat on the RTP network that would most likely not be paved. Regional bicycle connections are planned parallel to pedestrian only regional trails. Colloquially, terms like "bike path" and "multi-use

path" are often used interchangeably with "regional trail," except when referring to pedestrian-only regional trails.

Regional Trails And Greenways Map – A map developed and maintained by Metro. The map was first developed as part of the Metropolitan Greenspaces Master Plan. The map includes the existing and proposed trails and greenways in the regional system. Many of the regional trails are included in the Regional Transportation Plan.

Regional Transit Network – The regional transit system includes light rail, commuter rail, bus rapid transit, enhanced transit, frequent bus, regional bus, and streetcar modes as well as major transit stops.

Regional Transportation Functional Plan (RTFP) – A regional functional plan regulating transportation in the Metro region, as mandated by Metro's Regional Framework Plan. The plan directs local plan implementation of the Regional Transportation Plan.

Regional Transportation Plan (RTP) – A long-range metropolitan transportation plan that is developed and adopted for the greater Portland metropolitan planning area (MPA) covering a planning horizon of at least 20 years. Usually RTPs are updated every five years through the federally-mandated metropolitan transportation planning process. The plan identifies and analyzes transportation needs of the metropolitan region and creates a framework for implementing policies and project priorities. Required by state and federal law, it includes programs to better maintain, operate and expand transportation options to address existing and future transportation needs. The RTP also serves as the regional transportation system plan under the Oregon Transportation Planning Rule.

Regional Transportation System – The regional transportation system is identified on the regional transportation system maps in the Regional Transportation Plan. The system is limited to facilities of regional significance generally including regional arterials and throughways, high capacity transit and regional transit systems, regional multi–use trails with a transportation function, bicycle and pedestrian facilities that are located on or connect directly to other elements of the regional transportation system, air and marine terminals, as well as regional pipeline and rail systems.

Regional Travel Options (RTO) Program – Metro program guided by a five-year strategic plan aimed at reducing the demand for roadway travel, particularly single occupant vehicle travel. More specifically, Metro's RTO program includes:

- a coordinated education and outreach effort to efficiently use public dollars to reach key audiences
- an employer outreach program to save employers and employees money
- a regional Safe Routes to School effort that supports local education programs in schools to teach kids how to walk and bicycle to school safely
- a regional rideshare program that makes carpooling safer and easier and helps people with limited transit access have options to get around
- a grant program that funds partner efforts, such as The Street Trust's Bike Commute Challenge, TriMet's and TMA's work with employers, Ride Connection's RideWise travel training program for seniors and people with disabilities, and Portland Sunday Parkways, to name a few
- funding for bicycle racks, wayfinding signage and other tools that help people to walk and bicycle

- funding for pilot projects to test new ways to reach the public through technology or innovative engagement methods.

See also transportation demand management.

Regionally Significant Industrial Area (RSIA) – 2040 land use designation; RSIAs are shown on Metro's 2040 map. Industrial activities and freight movement are prioritized in these areas.

Regionally Significant Project – A transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA's transportation conformity regulations (40 CFR part 93, subpart A)) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network. Chapter 3 of the RTP defines the regional transportation system.

Reliability – This term refers to consistency or dependability in travel times, as measured from day to day and/or across different times of day. Variability in travel times means travelers must plan extra time for a trip.

Reload Facility – An intermediary facility where freight is reloaded from one land–based mode to another.

Resilience Or Resiliency – This term means the ability to anticipate, prepare for and adapt to changing conditions and withstand, respond to and recover rapidly from disruptions.

Revision – A change to a long-range statewide or metropolitan transportation plan, TIP, or STIP that occurs between scheduled periodic updates. A major revision is an "amendment" while a minor revision is an "administrative modification."

Ride-Hailing Services – Also known as transportation network companies, or TNCs like Uber and Lyft, which use apps to connect passengers with drivers who provide rides in their personal vehicles.

Rideshare – A transportation demand management strategy where two or more people share a trip in a vehicle to a common destination or along a common corridor. Private passenger vehicles are used for carpools, and some vanpools receive public/private support to help commuters. Carpooling and vanpooling provide travel choices for areas underserved by transit or at times when transit service is not available.

Right-Of-Way (ROW) – Land that is publicly-owned, or in which the public has a legal interest, usually in a strip, within which the entire road facility (including travel lanes, medians, sidewalks, shoulders, planting areas, bikeways and utility easements) resides. The right-of-way is usually acquired for or devoted to multi-modal transportation purposes including bicycle, pedestrian, public transportation and vehicular travel.

Road Diet – Road diets are one way to reconfigure limited roadway space in a way that allows for the inclusion of wider sidewalks and separated bicycle facilities such as buffered bicycle lanes, which can provide space for all users to operate safely an in their own "zones." Road diets can have multiple safety and operational benefits for autos, as well as pedestrians and cyclists. On existing roadways,

separated in-roadway facilities may be implemented by narrowing existing travel lanes, removing travel lanes, removing on-street parking or widening the roadway shoulder. If constraints, such as narrow existing right-of-way, prohibit providing optimally desired bicycle facility widths, then interim facility improvements can be used.

Road Users – A motorist, passenger, public transportation operator or user, truck driver, bicyclist, motorcyclist, or pedestrian, including a person with disabilities. (23 USC section 148)

Roadway Connectors – Roads that connect other freight facilities, industrial areas, and 2040 centers to a main roadway route.

RTP ID - This is a unique identification number assigned to a program or project by the MPO (Metro) to organize all transportation projects within the long range Regional Transportation Plan.

Rural Reserves (2040 Design Type) – 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.

Safe Routes To School (SRTS) – A comprehensive engineering/education program focused on youth school travel that aims to create safe, convenient, and fun opportunities for children to walk and roll (bike, scooter, etc.) to and from schools. City or school district based programs incorporate evaluation, education, encouragement, engineering, enforcement, and equity with the goal of increasing walking and rolling to school. Safe Routes to School is a national program that works to nationally, regionally and locally to create safe, healthy, and livable urban, suburban and rural communities. The program works with parents, school districts, local governments, government, police and community partners to make it easy and safe for kids to walk and bike to school. Results are achieved through investments in small capital projects, educations and outreach such as walking school buses.

Safe System Approach – A data-driven, strategic approach to roadway safety that aims to eliminate fatal and severe injury crashes. The approach is based on a foundational understanding of the underlying causes of traffic fatalities and severe injuries (using data) and is based on the principle that errors are inevitable but serious crashes should not be. Transportation safety policies that use a Safe System approach include Vision Zero, Towards Zero Deaths, Road to Zero and Sustainable Safety.

Safe System Approach Speed Setting – Speed limits are set according to the likely crash types, the resulting impact forces, and the human body's ability to withstand these forces. It allows for human errors (that is, accepting humans will make mistakes) and acknowledges that humans are physically vulnerable (that is, physical tolerance to impact is limited). Therefore, in this approach, speed limits are set to minimize death and severe injury as a consequence of a crash.

Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy For Users (SAFETEA-LU) – Signed into federal law in 2005, SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit through 2009. SAFETEA-LU refined and reauthorized TEA-21. SAFETEA-LU was subsequently replaced by MAP-21 and the FAST Act.

Safety – Protection from death or bodily injury from a motor-vehicle crash through design, regulation, management, technology and

operation of the transportation system.

Safety Benefit Projects – Projects with design features to increase safety for one or more roadway user. These projects may not necessarily address an identified safety issue at an identified high injury or high risk location, but they do include design treatments known to increase safety and reduce serious crashes. Examples include adding sidewalks, bikeways, medians, center turn lanes and intersection or crossing treatments.

Safety Data – Includes, but is not limited to, crash, roadway, and traffic data on all public roads. For railway- highway grade crossings, safety data also includes the characteristics of highway and train traffic, licensing, and vehicle data.

Safety Project – Has the primary purpose of reducing fatal and severe injury crashes or reducing crashes by addressing a documented safety problem at a documented high injury or high risk location with one or more proven safety countermeasures.

Scenario Planning – An analytical approach and planning process that provides a comprehensive framework for evaluating how various combinations of strategies, policies, plans and/or programs may affect the future of a community, region or state. The approach involves identifying various packages or strategies or scenarios against a baseline projection.

Security (Public And Personal) – Protection from intentional criminal or antisocial acts while engaged in trip making through design, regulation, management, technology and operation of the transportation system.

Serious Crash – Refers to the total number of Fatal and Severe Injury (Injury A) crashes combined.

Severity – A measurement of the degree of seriousness concerning both vehicle impact (damage) and bodily injuries sustained by victims in a traffic crash.

Shared Mobility – Describes services that allow people to share a vehicle, such as ride-hailing trips, car and bike share and microtransit, as well as traditional shared modes like transit, car- or vanpools and taxis. Some of these services are privately operated by shared mobility companies.

Shared Trips – Trips taken by multiple passengers traveling in a single vehicle, including carpools, transit trips and some ride-hailing or car share trips.

Short Trip – Generally defined as a one-way trip less than three miles.

Sidewalk – A walkway separated from the roadway with a curb, constructed of a durable, hard and smooth surface, designed for preferential or exclusive use by pedestrians.

Single–Occupanct Vehicle (SOV) – A private motorized passenger vehicle carrrying one occupant (the driver only). Also referred to as a drive alone vehicle.

Smart Cities – The way in which public agencies are using technology to collect better data, provide better service, do business more

efficiently and make better decisions.

Social Equity – The idea that all members of a societal organization or community should have access to the benefits associated with civil society – the pursuit of an equitable society requires the recognition that there are a number of attributes that give members of a society more or less privilege and that in order to provide equitable situations the impacts of these privileges (or lack thereof) must be addressed. For transportation, equity refers to fair treatment or equal access to transportation services and options. In the context of safety, transportation equity relates to improving the travel choices, the safety of travel and not unfairly impacting one group or mode of transportation. More specifically it means improved safety for all transportation options and lessening the risks or hazards associated with different choices of transportation.

Stakeholders – Individuals and organizations with an interest in or who are affected by a transportation plan, program or project, including federal, state, regional and local officials and jurisdictions, institutions, community groups, transit operators, freight companies, shippers, non–governmental organizations, advocacy groups, residents of the geographic area and people who have traditionally been underrepresented.

State Highways – In Oregon, is a network of roads that are owned and maintained by the Highway Division of the Oregon Department of Transportation (ODOT), including Oregon's portion of the Interstate Highway System.

State Transportation Improvement Program (STIP) – The four-year funding and scheduling document for major street, highway and transit projects in Oregon. The STIP is produced by ODOT, consistent with the Oregon Transportation Plan (the statewide transportation plan) and other statewide plans as well as metropolitan transportation plans and MTIPsThe STIP covers the entire state and is overseen by the Oregon Transportation Commission (OTC). It must include all the metropolitan region's TIPs without change as well as a list of specific projects proposed by ODOT in the non-metropolitan areas. Updated every three years, the STIP determines when and if transportation projects will be funded by the state with state or federal funds.

State Transportation Plan – The official statewide intermodal transportation plan that is developed through the statewide transportation planning process. See also Oregon Transportation Plan.

Station Communities (2040 Design Type) – Areas generally within a 1/4- to 1/2-mile radius of a light rail station or other high capacity transit stops that are planned as multi-modal, mixed-use communities with substantial pedestrian and transit-supportive design characteristics and improvements.

Strategic Plan – Defines the desired direction and outcomes to guide decisions for allocating resources to pursue the strategy.

Strategic Project List – Additional policy-driven transportation needs and priority projects that could be achieved with additional resources.

Strategy – Involves setting goals, determining actions to achieve the goals, and mobilizing resources to execute the actions. A strategy describes how the ends (goals) will be achieved by the means (resources).

Street – A generally gravel or concrete– or asphalt–surfaced facility. The term collectively refers to arterial, collector and local streets that are located in 2040 mixed–use corridors, industrial areas, employment areas and neighborhoods. While the focus for streets has been on motor vehicle traffic, they are designed as multi–modal facilities that accommodate bicycles, pedestrians and transit, with an emphasis on vehicle mobility and special pedestrian infrastructure on transit streets.

Surface Transportation Block Grant (Stbg) – A federal source of funding for projects and activities that is the most flexible in its use. Projects and activities which states and localities can use STBG include: projects that preserve and improve the conditions and performance on any federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure and transit capital projects, including intercity bus terminals.

Sustainability – Using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can meet future needs, from the joint perspective of environmental, economic and community objectives. This definition of sustainability is from the 2006 Oregon Transportation Plan and ORS 184.421(4). The 2001 Oregon Sustainability Act and 2007 Oregon Business Plan maintain that these principles of sustainability can stimulate innovation, advance global competitiveness and improve quality of life in communities throughout the state.

Sustainable – A method of using a resource such that the resource is not depleted or permanently damaged.

System Efficiency – Strategies that optimize the use of the existing transportation system, including traffic management, employer-based commute programs, individualized marketing and carsharing.

System Management – A set of strategies for increasing travel flow on existing facilities through improvements such as ramp metering, traffic signal synchronization and access management.

Target – A specific level of performance that is desired to be achieved within a specified time period.

Throughways – Controlled access (on-ramps and off-ramps) freeways and major highways.

Total Amount - The amount of funding programmed as available to the project within the timeframe of the 2015-2018 Metropolitan Transportation Improvement Program.

Toward Zero Deaths – The United States' highway safety vision. The National Strategy on Highway Safety provides a platform of consistency for state agencies, private industry, national organizations and others to develop safety plans that prioritize traffic safety culture and promote the national Toward Zero Deaths vision. As a strategic policy it is similar to Vision Zero.

Traffic – Movement of motorized vehicles, non–motorized vehicles and pedestrians on transportation facilities. Often traffic levels are expressed as the number of units moving over or through a particular location during a specific time period.

Traffic Calming – A transportation system management technique that aims to prevent inappropriate through-traffic and reduce motor vehicle travel speeds on a particular roadway. Traditionally, traffic calming strategies provide speed bumps, curb extensions, planted median strips or rounds and narrowed travel lanes.

Traffic Incident Management – Planned and coordinated processes followed by state and local agencies to detect, respond to, and remove traffic incidents quickly and safely in order to keep highways flowing efficiently.

Traffic Management – Strategies that improve transportation system operations and efficiency, including ramp metering, active traffic management, traffic signal coordination and real-time traveler information regarding traffic conditions, incidents, delays, travel times, alternate routes, weather conditions, construction, or special events.

Traffic Signal Progression – A process by which a number of traffic signals are synchronized to create the efficient progression of vehicles.

Transit Asset Management Plan (TAM) – A plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

Transit Asset Management System – A strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively, throughout the life cycles of those assets.

Transit Oriented Development (TOD)/Metro Transit Oriented Development Program – A mixed-use community or neighborhood designed to encourage transit use, bicycle and pedestrian activity, containing a rich mix of residential, retail, and workplaces in settings designed for bicycle and pedestrian convenience and transit accessibility. Metro began a regional Transit Oriented Development program in 1998 as part of a strategy to leverage the region's significant investment in high capacity transit. As part of Metro's TOD Program, the agency strategically invests to stimulate private development of higher-density, affordable and mixed-use projects near transit to help more people live, work and shop in neighborhoods served by high-quality transit. In addition, the program invests in "urban living infrastructure" like grocery stores and other amenities, provides technical assistance to communities and developers, and acquires and owns properties in transit-served areas and solicits proposals from qualified developers to create transit-oriented communities in these places. To date, the TOD program investments totaling $16 million have leveraged more than $697 million in private development activity across 45 completed TOD projects.

Transportation Alternatives Program – The Transportation Alternatives Program (TAP) was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century Act (MAP-21) and is codified at 23 U.S.C. sections 213(b), and 101(a)(29). Section 1122 provides for the reservation of funds apportioned to a State under section 104(b) of title 23 to carry out the TAP. The national total reserved for the TAP is equal to 2% of the total amount authorized from the Highway Account of the Highway Trust Fund for Federal-aid highways each fiscal year. The TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Transportation Demand – The quantity of transportation services desired by users of the transportation system.

Transportation Demand Management (TDM) – The application of a set of strategies and programs designed to reduce demand for roadway travel, particularly single occupant vehicle trips, through various means (e.g. education, outreach, marketing, incentives,

technology). The strategies aim to affect when, where and how much people travel in order to make more efficient use of transportation infrastructure and services. Strategies include offering other modes of travel such as walking, bicycling, ride–sharing and vanpool programs, car sharing, alternative work hours, education such as individualized marketing, policies, regulations and other combinations of incentives and disincentives that are intended to reduce drive alone vehicle trips on the transportation network. Metro's TDM program is called the Regional Travel Options (RTO) program. See also Regional Travel Options Program.

Transportation Disadvantaged/Persons Potentially Underserved By The Transportation System – Individuals who have difficulty in obtaining important transportation services because of their age, income, physical or mental disability.

Transportation Equity – The removal of barriers to eliminate transportation-related disparities faced by and improve equitable outcomes for historically marginalized communities, especially communities of color.

Transportation Improvement Program (TIP) – A prioritized listing/program of multimodal transportation projects covering a period of 4 years that is developed and formally adopted by an MPO as part of the metropolitan transportation planning process. The TIP must be consistent with the metropolitan transportation plan, and is required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. chapter 53. In the Portland metropolitan region, the TIP is referred to as the Metropolitan Transportation Improvement Program (MTIP). In practice, the MTIP is a short-term, four year program of transportation projects that will be funded with federal funds expected to flow to the region and locally and state-funded regionally significant projects.

Transportation Management Associations (TMA) – Non-profit coalitions of local businesses and/or public agencies, and residences such as condo Home Owner Associations all dedicated to reducing traffic congestion and pollution while improving commuting options for employees, residents and visitors.

Transportation Management Area (TMA) – An urbanized area with a population over 200,000, as defined by the U.S. Census Bureau and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the Secretary of Transportation. These areas must comply with special transportation planning requirements regarding congestion management process, project selection, processes for develoment of tan RTP and MTIP and certification identified in 23 CFR 450.300-340.

Transportation Needs – Estimates of the movement of people and goods based on current population and employment and future growth consistent with acknowledged comprehensive plans. Needs are typically defined based on an assessment of existing transportation system gaps and deficiencies and projections of future travel demand, from a continuation of current trends as modified by policy objectives expressed in Statewide Planning Goal 12, the Transportation Planning Rule, federal planning factors and the RTP (Chapter 2 and Chapter 3).

Deficiencies are defined as the difference between the current transportation system and adopted standards based on performance measures and targets identified in Chapter 2. Deficiencies are capacity or design constraints that limit but do not prohibit the ability to travel by a given mode. Gaps are defined as missing links in the transportation system for any mode. Gaps either prohibit travel by a particular mode or make it functionally unsafe. Together, gaps and deficiencies are defined as needs.

- Local Transportation Needs means needs for movement of people and goods within communities and portions of counties and the need to provide access to local destinations.
- Regional Transportation Needs means needs for movement of people and goods between and through communities and accessibility to regional destinations within a metropolitan area, county or associated group of counties.
- State Transportation Needs means needs for movement of people and goods between and through regions of the state and between the state and other states.

See also gap and deficiency.

Transportation Performance Management (TPM) – Strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.

Transportation Planning – A continuing, comprehensive, and cooperative (3-C) process to encourage and promote the development of a multimodal transportation system to ensure safe and efficient movement of people and goods while balancing environmental and community needs.

Transportation Planning Rule (TPR) – Oregon's statewide planning goals established state policies in 19 different areas. The TPR implements the Land Conservation and Development Commission's Planning Goal 12 (Transportation) which requires ODOT, MPOs, Counties and Cities, per OAR 660-012-0015 (2) and (3), to prepare a Transportation System Plan (TSP) to identify transportation facilities and services to meet state, regional and local needs, as well as the needs of the transportation disadvantaged and the needs for movement of goods and services to support planned industrial and commercial development, per OAR 660-012-0030(1).

Transportation System – Various transportation modes or facilities (aviation, bicycle and pedestrian, throughway, street, pipeline, transit, rail, water transport) serving as a single unit or system.

Transportation System Management (TSM) – A set of strategies for increasing travel flow on existing facilities through improvements such as ramp metering, traffic signal synchronization, incident response and access management.

Transportation System Management And Operations (TSMO) – Integrated strategies to optimize the performance of existing infrastructure and designed to preserve capacity and improve the safety, and reliability of the transportation system. Strategies include: Actions such as traffic detection, control and surveillance; management of corridors, freeways, arterials, work zones, emergencies, freight and parking; active transportation and demand management; traveler information services; congestion pricing and Coordination of highway, rail, transit, bicycle, and pedestrian operations as well as traffic incident management, intelligent transportation systems, communication networks, and information sharing systems.

Transportation System Plan (TSP) – The transportation element of the comprehensive plan for one or more transportation facilities that is planned, developed, operated and maintained in a coordinated manner to supply continuity of movement between modes, and between geographic and jurisdictional areas. A TSP describes a transportation system and outlines projects, programs, and policies to meet transportation needs now and in the future based on community (and regional) aspirations. A TSP typically serves as the transportation

component of the local comprehensive plan. The TSP supports the development patterns and land uses contained in adopted community and regional plans. The TSP includes a comprehensive analysis and identification of transportation needs associated with adopted land use plans. The TSP complies with Oregon's Transportation Planning Rule, as described in statewide Planning Goal 12. The RTP is a regional TSP.

Local TSPs must be consistent with the applicable Regional Transportation Plan. Jurisdictions within a metropolitan area must adopt TSPs that reflect regional goals, objectives, and investment strategies specific to the area and demonstrate how local transportation system planning helps meet regional performance targets. A jurisdiction within a Metropolitan Planning Organization area must make findings that the proposed Regional Transportation Plan amendment or update is consistent with the local TSP and comprehensive plan or adopt amendments that make the Regional Transportation Plan and the TSP consistent with one another. (OAR 660-012-0016) TSP updates must occur within one year of the adoption of a new or updated Regional Transportation Plan. (OAR 660-012-0055).

Travel Options/Choices – The ability range of travel mode choices available, including motor vehicle, walking, bicycling, riding transit and carpooling. Telecommuting is sometimes considered a travel option because it replaces a commute trip with a trip not taken.

Travel Time – The measure of time that it takes to reach another place in the region from a given point for a given mode of transportation. Stable travel times are a sign of an efficient transportation system that reliably moves people and goods through the region.

Travel Time Reliability – This term refers to consistency or dependability in travel times, as measured from day to day and/or across different times of day. Variability in travel times means travelers must plan extra time for a trip.

Trip – A one–way movement of a person or vehicle between two points. 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.

Tripcheck – An Oregon Department of Transportation website that displays real-time data regarding road conditions, weather conditions, camera images, delays due to congestion and construction, and other advisories. Additionally, TripCheck provides travelers with information about travel services such as food, lodging, attractions, public transportation options, scenic byways, weather forecasts, etc. This information is also available through the 511 travel information phone line.

Truck Terminal – A facility that serves as a primary gateway for commodities entering or leaving the metropolitan area by road.

Underserved Communities – Populations that have historically experienced a lack of consideration in the planning and decision making process. It describes historically marginalized communities in addition to those that are defined in the federal definition of Environmental Justice. These populations are seniors, persons with disabilities, youth, communities of color, low-income communities, and any other population of people whose needs may not have been full met in the planning process.

Unified Planning Work Program (UPWP) – This refers to annual statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.

United States Department Of Transportation (USDOT) – The federal cabinet-level agency with responsibility for highways, mass transit, aviation and ports; it is headed by the Secretary of Transportation. The DOT includes the Federal Highway Administration and the Federal Transit Administration, among others.

Universal Access – Universal access is the goal of enabling all citizens to reach every destination served by their public street and pathway system. Universal access is not limited to access by persons using automobiles. Travel by bicycle, walking, or wheelchair to every destination is accommodated in order to achieve transportation equity, maximize independence, and improve community livability. Wherever possible, facilities are designed to allow safe travel by youth, seniors, and people with disabilities who may have diminished perceptual or ambulatory abilities. By using design to maximize the percentage of the population who can travel independently, it becomes much more affordable for society to provide paratransit services to the remainder with special needs.

Update – For federal purposes, this means making current a long-range statewide transportation plan, metropolitan transportation plan, TIP, or STIP through a comprehensive review. Updates require public review and comment, a 20-year horizon for metropolitan transportation plans and long-range statewide transportation plans, a 4-year program period for TIPs and STIPs, demonstration of fiscal constraint (except for long-range statewide transportation plans), and a conformity determination (for metropolitan transportation plans and TIPs in nonattainment and maintenance areas). For state purposes, this means TSP amendments that change the planning horizon and apply broadly to a city or county and typically entails changes that need to be considered in the context of the entire TSP, or a substantial geographic area.

Urban Growth Boundary (UGB) – The politically defined boundary around an urban area beyond which no urban improvements may occur. In Oregon, UGBs are defined so as to accommodate projected population and employment growth within a 20–year planning horizon. A formal process has been established for periodically reviewing and updating the UGB so that it meets forecasted population and employment growth.

Urbanized Area (UZA) – A geographic area with a population of 50,000 or more, as designated by the Bureau of the Census.

Urban Reserve – An area outside of the urban growth boundary designated for future growth by the Metro Council pursuant to OAR 660 Division 27.

Value Pricing – A demand management strategy that involves the application of market pricing (through variable tolls, variable priced lanes, area-wide charges or cordon charges) to the use of roadways at different times of day. Also called congestion pricing or peak period pricing.

Vehicle – Any device in, upon or by which any person or property is or may be transported or drawn upon a public highway and includes vehicles that are propelled or powered by any means.

Vehicle Miles Traveled (VMT) – A common measure of roadway use by multiplying miles traveled per vehicle by the total number of vehicles for a specified time period. For purposes of this definition, "vehicles" include automobiles, light trucks and other passenger vehicles used for the movement of people. The definition does not include buses, heavy trucks and other vehicles that involve commercial movement of goods.

Vision – In this document, an aspirational statement of what the region (and plan) is trying to achieve over the long-term through policy and investment decisions.

Vision Zero – A system and approach to public policy developed by the Swedish government which stresses safe interaction between road, vehicle and users. Highlighted elements include a moral imperative to preserve life, and that the system conditions and vehicle be adapted to match the capabilities of the people that use them. Vision Zero employs the Safe System approach.

Visualization Techniques – Methods used by States and MPOs in the development of transportation plans and programs with the public, elected and appointed officials, and other stakeholders in a clear and easily accessible format such as GIS- or web-based surveys, inventories, maps, pictures, and/or displays identifying features such as roadway rights of way, transit, intermodal, and non-motorized transportation facilities, historic and cultural resources, natural resources, and environmentally sensitive areas, to promote improved understanding of existing or proposed transportation plans and programs.

Volume–To–Capacity (V/C) Ratio – A traditional measure of congestion, calculated by by dividing the number of motor vehicles passing through a section of roadway during a specific increment of time by the motor vehicle capacity of the section. For example, a V/C ratio of 1.00 indicates the roadway facility is operating at its capacity.

Also referred to as level-of-service, this ratio has been used in transportation system planning, project development and design as well as in operational analyses and traffic analysis conducted during the development review process. As a system plan, the RTP uses the volume-to-capacity ratio targets to diagnose the extent of motor vehicle congestion on throughways and arterials during different times of the day and to determine adequacy in meeting the region's needs. The v/c ratio targets are also used to determine consistency of the RTP with the Oregon Highway Plan for state-owned facilities. See also level-of-service and regional mobility policy.

Vulnerable Users – In this document, refers to groups of people that are more vulnerable to being killed or severely injured in traffic crashes. Vulnerable users are people that are more vulnerable to being killed or seriously injured in crashes. Vulnerable users are pedestrians, bicyclists, motorcycle operators, children, older adults, road construction workers, people with disabilities, people of color and people with low income.

Walkable Neighborhood – A place where people live within walking distance to most places they want to visit, whether it is school, work, a grocery store, a park, church, etc.

Walk Score – An online tool that produces a number between 0 and 100 that measures the walkability of any address. Similar tools for transit and bicycling - Transit Score and Bike Score.

Walkway – A hard-surfaced transportation facility designed and suitable for use by pedestrians, including persons using wheelchairs. Walkways include sidewalks, hard-surfaced portions of accessways, regional trails, paths and paved shoulders.

Wayfinding – Signs, maps, street markings, and other graphic or audible methods used to convey location and directions to travelers. Wayfinding helps people traveling to orient themselves and reach destinations easily.

Year - The programming year is the federal fiscal year funds are expected to be available for the project. The federal fiscal year begins October 1st of the year prior to the identified year (FFY 2021 is October 1, 2020 through September 30, 2021).

Year of Expenditure (YOE) - All funds programmed in the 2021-2024 MTIP are represented in year of expenditure (YOE) dollars