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2018-2019 Unified Planning Work Program

Transportation Planning in the Portland/Vancouver Metropolitan Area

Adopted

May 3, 2018

Public service
We are here to serve the public with the highest level of integrity.

Excellence
We aspire to achieve exceptional results

Teamwork
We engage others in ways that foster respect and trust.

Respect
We encourage and appreciate diversity in people and ideas.

Innovation
We take pride in coming up with innovative solutions.

Sustainability
We are leaders in demonstrating resource use and protection.

Metro's values and purpose

We inspire, engage, teach and invite people to preserve and enhance the quality of life and the environment for current and future generations.

Metro respects civil rights

Metro hereby gives public notice that it is the policy of the Metro Council to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, sex, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which Metro receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with Metro. Any such complaint must be in writing and filed with Metro's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, see the web site at www.oregonmetro.gov or call (503) 797-1536.

Metro is the federally mandated metropolitan planning organization

designated by the Governor to develop an overall transportation plan and to allocate federal funds for the region. The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council. The established decision-making process assures a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds.

Project web site: http://www.oregonmetro.gov/unified-planning-work-program

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TABLE OF CONTENTS

III. Other Regional Planning Projects

(These are projects of regional significance not led by Metro)

IV. Project Development Planning

(These are federally funded transportation planning projects that have en emphasis of pre-NEPA, project development activities)

V. Other Planning Related Information

Portland Metropolitan Area Unified Planning Work Program (UPWP) Overview

INTRODUCTION:

The Unified Planning Work Program (UPWP) is developed annually and documents metropolitan transportation planning activities performed with federal transportation funds. The UPWP is developed by Metropolitan Planning Organizations (MPOs) in cooperation with Federal and State agencies, local governments and transit operators.

This UPWP documents the metropolitan planning requirements, planning priorities facing the Portland metropolitan area and transportation planning activities and related tasks to be accomplished during FY 2018-2019 (from July 1, 2018 to June 30, 2019).

Metro is the metropolitan planning organization (MPO) designated by Congress and the State of Oregon, for the Oregon portion of the Portland/Vancouver urbanized area, covering 24 cities and three counties. It is Metro's responsibility to meet the requirements of The Fixing America's Surface Transportation FAST Act, the Oregon Transportation Planning Rule (which implements Statewide Planning Goal 12), and the Metro Charter for this MPO area. In combination, these requirements call for development of a multi- modal transportation system plan that is integrated with the region's land use plans, and meets Federal and state planning requirements.

The UPWP is developed by Metro, as the MPO for the Portland metropolitan area. It is a federally-required document that serves as a tool for coordinating federally- funded transportation planning activities to be conducted over the course of each fiscal year, beginning on July 1. Included in the UPWP are detailed descriptions of the transportation planning projects and programs, listings of draft activities for each project, and a summary of the amount and source of state and federal funds to be used for planning activities. Estimated costs for project staff (expressed in full-time equivalent, or FTE) include budget salary and benefits as well as overhead costs per FTE for project administrative and technical support.

The UPWP is organized into three sections: the UPWP Overview, a listing of planning activities by category, and other planning related information including the UPWP for the Southwest Washington Regional Transportation Council.

Planning activities for the Portland metropolitan area are listed in the UPWP by categories to reflect how the activities are administered through planning agreements and the Metropolitan Transportation Improvement Program (MTIP). These categories include: General MPO planning for planning activities that occur on continuous cycles and are administered in the annual Metro-ODOT plan funding agreement, MPO planning projects that are discrete activities with an end date and may have an individual agreement between ODOT and Metro and unique entry in the TIP, other regional planning projects led by agencies other than Metro, and project development planning activities to increase project readiness and prepare project concepts to begin the NEPA and Preliminary Engineering phase of development. Organizing planning activities in this manner facilitates transparent administration of the planning activities by the agreements that provide for their scope and budget and by the MTIP which programs the funding for these activities and ensures funding is constrained (limited) to funds actually available.

The UPWP is developed by Metro with input from local governments, TriMet, SMART, ODOT, FHWA and FTA. Additionally, Metro must annually undergo a process known as self-certification to demonstrate that the Portland metropolitan region's planning process is being conducted in accordance with all applicable federal transportation planning requirements. Self- certification is conducted in conjunction with annual adoption of the UPWP.

This Unified Planning Work Program (UPWP) includes the transportation planning activities of Metro and other area governments using Federal funds for transportation planning activities for the fiscal year of July 1, 2018 through June 30, 2019. During the consultation, public review and adoption process for the 2018-19 UPWP, draft versions of the document were made available to the public through Metro's website, and distributed to Metro's advisory committees and the Metro Council.

When developing the annual UPWP, Metro follows protocols established by ODOT in cooperation with USDOT in 2016. These protocols govern the general timeline for initiating the UPWP process, consultation with state and federal agencies and adoption by JPACT and the Metro Council.

FEDERAL REQUIREMENTS FOR TRANSPORTATION PLANNING

The current federal transportation ACT, Fixing America's Surface Transportation (FAST) Act provides direction for regional transportation planning activities. The FAST Act was signed into law by President Obama on December 4, 2015. It sets the policy and programmatic framework for transportation investments. Fast Act stabilizes federal funding to state and metropolitan regions for transportation planning and project improvements and funding levels for the federal aid transportation program, and among key initiatives adds new competitive grants which promote investments in the nation's strategic freight corridors. In addition, FAST Act retains the multi-modal emphasis of the federal program by ensuring funding of transit programs as well as the Transportation Alternatives Program. FAST Act builds in the program structure and reforms of the prior federal Transportation Act, MAP-21, which created streamlined and performance-based surface transportation program.

Regulations implementing FAST Act require state DOTs and MPOs to establish performance measures and set performance targets for each of the seven national goal areas to provide a means to ensure efficient investment of federal transportation funds, increase accountability and transparency, and improve investment decision-making. The national goal areas are:

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduce project delivery delays

A. Planning Emphasis Areas (PEAs)

The metropolitan transportation planning process must also incorporate Federal Highway Administration/Federal Transit Administration planning emphasis areas (PEAs). (Accessed

at www.fhwa.dot.gov/planning/processes/metropolitan/mpo/fy_2015/index.cfm on February 20, 2015) For FY 2018-2019, these include:

- **Models of Regional Planning Cooperation:** Promote cooperation and coordination across MPO boundaries and across State boundaries to ensure a regional approach to transportation planning. Cooperation could occur through the metropolitan planning agreements that identify how the planning process and planning products will be coordinated, through the development of joint planning products, and/or by other locally determined means. Coordination includes the linkages between the transportation plans and programs, corridor studies, projects, data, and system performance measures and targets across MPO and State boundaries. It also includes collaboration between State DOT(s), MPOs, and operators of public transportation on activities such as: data collection, data storage and analysis, analytical tools, target setting, and system performance reporting in support of performance based planning.

- **Access to Essential Services:** As part of the transportation planning process, identify social determination of transportation connectivity gaps in access to essential services. Essential services include housing, employment, health care, schools/education, and recreation. This emphasis area could include identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of the public, including traditionally underserved populations, to essential services. It could also involve the identification of solutions to address those gaps.

- **MAP-21 and FAST Act Implementation: Transition to Performance Based Planning and Programming to be used in Transportation Decision-making:** The development and implementation of a performance management approach to metropolitan transportation planning and programming includes the development and use of transportation performance measures, target setting, performance reporting, and selection of transportation investments that support the achievement of performance targets. These components will ensure the achievement of transportation system performance outcomes.

B. Public Involvement

Federal regulations place significant emphasis on broadening participation in transportation planning to include key stakeholders who have not traditionally been involved in the planning process, including the business community, members of the public, community groups, and other governmental agencies. Effective public involvement will result in meaningful opportunities for public participation in the planning process.

C. Regional Transportation Plan

The long-range transportation plan must include the following:

- Identification of transportation facilities (including major roadways, transit, bike, pedestrian

and intermodal facilities and intermodal connectors) that function as an integrated metropolitan transportation system.
- A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities.
- A financial plan that demonstrates how the adopted transportation plan can be implemented.
- Operational and management strategies to improve the performance of existing transportation facilities to manage vehicular congestion and maximize the safety and mobility of people and goods.
- Capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs.
- Proposed transportation and transit enhancement activities.
- Recognition of the 2016 Coordinated Transportation Plan for Seniors and People with Disabilities
- Addressing required federal planning factors: improving safety, supporting economic vitality, increasing security, increasing accessibility and mobility, protecting the environment and promoting consistency between transportation investments and state and local growth plans, enhancing connectivity for people and goods movement, promoting efficient system management and operations, and emphasizing preservation of existing transportation infrastructure.

D. Metropolitan Transportation Improvement Program (MTIP)

The short-range metropolitan TIP must include the following:

- A priority list of proposed federally supported projects and strategies to be carried out within the MTIP period.
- A financial plan that demonstrates how the MTIP can be implemented.
- Descriptions of each project in the MTIP.

E. Transportation Management Area (TMA)

Metropolitan areas designated TMAs (urbanized areas with a population of over 200,000) such as the Metro must also address the following requirements:

- Transportation plans must be based on a continuing and comprehensive transportation planning process carried out by the MPO in cooperation with the State and public transportation operators.
- A Congestion Management Process (CMP) must be developed and implemented that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities, through use of travel demand reduction and operational management strategies.
- A federal certification of the metropolitan planning process must be conducted at least every 4 years. At least every 4 years, the MPO must also self-certify concurrent with submittal of an adopted TIP.

F. Air Quality Conformity Process

Areas in attainment, but with maintenance plan requirements must demonstrate the region will continue to meet federal standards for air quality and with the transportation provisions of the state's air quality plan (the State Implementation Plan or SIP). The Portland metropolitan region will continue to demonstrate its transportation plans and programs are in conformance until October 2017, when the Portland metropolitan region's maintenance plan will be completed. After October 2017, the region will no longer have maintenance plan requirements and will be in attainment status and therefore will no longer be subject to demonstrating transportation plans and programs are in conformance, but will continue to be subject to meeting federal air quality standard and provisions within the State's air quality plan.

STATUS OF METRO'S FEDERALLY REQUIRED PLANNING DOCUMENTS

Plan Name	Last Update	Next Update
Unified Planning Work Program (UPWP)	Adopted in May 2017	Scheduled for adoption in May 2018
Regional Transportation Plan (RTP)	Adopted June 2014	Scheduled for adoption in December 2018
Metropolitan Transportation Improvement Program (MTIP)	Adopted August 2017	Scheduled for adoption in July, 2020
Annual Listing of Obligated Projects Report	Completed at the end of each calendar year – 2017 is still in progress (as of 1/4/18)	Scheduled for December 31, 2018
Title VI/ Environmental Justice Plan	Approved July 2017	Scheduled for July 2020
Public Participation Plan	Adopted November 2017	March2018
ADA Self-Evaluation & Facilities Update Plan		Underway – scheduled for completion in July 2018

II. METRO OVERVIEW

Metro was established in 1979 as the MPO for the Portland metropolitan area. Under the requirements of FAST Act, Metro serves as the regional forum for cooperative transportation decision-making as the federally designated Metropolitan Planning Organization (MPO) for Oregon portion of the Portland-Vancouver urbanized area.

Federal and state law requires several metropolitan planning boundaries be defined in the region for different purposes. The multiple boundaries for which Metro has a transportation and growth management planning role are: MPO Planning Area Boundary, Urban Growth Boundary (UGB), Urbanized Area Boundary (UAB), Metropolitan Planning Area Boundary (MPA), and Air Quality maintenance Area Boundary (AQMA). A map displaying these boundaries can be found on page xiii.

First, Metro's jurisdictional boundary encompasses the urban portions of Multnomah, Washington and Clackamas counties.

Second, under Oregon law, each city or metropolitan area in the state has an urban growth boundary that separates urban land from rural land. Metro is responsible for managing the Portland metropolitan region's urban growth boundary.

Third, the Urbanized Area Boundary (UAB) is defined to delineate areas that are urban in nature distinct from those that are largely rural in nature. The Portland-Vancouver metropolitan region is somewhat unique in that it is a single urbanized area that is located in two states and served by two MPOs. The federal UAB for the Oregon-portion of the Portland-Vancouver metropolitan region is distinct from the Metro Urban Growth Boundary (UGB).

Fourth, MPO's are required to establish a Metropolitan Planning Area (MPA) Boundary, which marks the geographic area to be covered by MPO transportation planning activities, including development of the UPWP, updates to the Regional Transportation Plan (RTP), Metropolitan Transportation Improvement Program (MTIP), and allocation of federal transportation funding through the Regional Flexible Fund Allocation (RFFA) process. At a minimum, the MPA boundary must include the urbanized area, areas expected to be urbanized within the next twenty years and areas within the Air Quality Maintenance Area Boundary (AQMA) – a fifth boundary.

The federally-designated AQMA boundary includes former non-attainment areas in the metropolitan reagion that are subject to federal air quality regulations. As a former carbon monoxide and ozone non-attainment region, the Portland metropolitan region had been subject to a number of transportation conformity requirements. As of October 2017, the region has completed and is not longer required to perform transportation conformity requirements for carbon monoxide. Transportation conformity requirements related to ozone were lifted in the late 2000's due to the revocation of the 1-hour ozone standard, which was the standard the region had been in non-attainment.

REGIONAL TRANSPORTATION DECISION-MAKING PROCESS

Metro is governed by an elected regional Council, in accordance with a voter-approved charter. The Metro Council is comprised of representatives from six districts and a Council President elected region-wide. The Chief Operating Officer is appointed by the Metro Council and leads the day-to-day operations of Metro. Metro uses a decision-making structure that provides state, regional and local governments the opportunity to participate in the transportation and land use decisions of the organization. Two key committees are the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Policy Advisory Committee (MPAC). These committees are comprised of elected and appointed officials and receive technical advice from the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC).

JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT)

JPACT is a 17-member policy committee chaired by a Metro Councilor and includes two additional Metro Councilors, seven locally elected officials representing cities and counties, and appointed officials from the Oregon Department of Transportation (ODOT), TriMet, the Port of Portland, and the Department of Environmental Quality (DEQ). The State of Washington is also represented with

three seats that are traditionally filled by two locally elected officials and an appointed official from the Washington Department of Transportation, (WSDOT). All transportation-related actions (including Federal MPO actions) are recommended by JPACT to the Metro Council. The Metro Council can ratify the JPACT recommendations or refer them back to JPACT with a specific concern for reconsideration.

Final approval of each action requires the concurrence of both JPACT and the Metro Council. JPACT is primarily involved in periodic updates to the Regional Transportation Plan (RTP), Metropolitan Transportation Improvement Program (MTIP), and review of ongoing studies and financial issues affecting transportation planning in the region.

METRO POLICY ADVISORY COMMITTEE (MPAC)

MPAC was established by Metro Charter to provide a vehicle for local government involvement in Metro's growth management planning activities. It includes eleven locally-elected officials, three appointed officials representing special districts, TriMet, a representative of school districts, three citizens, two Metro Councilors (with non-voting status), two officials from Clark County, Washington and an appointed official from the State of Oregon (with non-voting status). Under Metro Charter, this committee has responsibility for recommending to the Metro Council adoption of, or amendment to, any element of the Charter-required Regional Framework Plan.

The Regional Framework Plan was first adopted in December 1997 and addresses the following topics:

- Transportation
- Land Use (including the Metro Urban Growth Boundary (UGB))
- Open Space and Parks
- Water Supply and Watershed Management
- Natural Hazards
- Coordination with Clark County, Washington
- Management and Implementation

In accordance with these requirements, the transportation plan is developed to meet not only FAST Act, but also the Oregon Transportation Planning Rule and Metro Charter requirements, with input from both MPAC and JPACT. This ensures proper integration of transportation with land use and environmental concerns.

TRANSPORTATION POLICY ALTERNATIVES COMMITTEE (TPAC)

TPAC is comprised of technical staff from the same jurisdictions as JPACT, plus a representative from the Southwest Washington Regional Transportation Council, and six community members. In addition, the Federal Highway Administration and C-TRAN have each appointed an associate non-voting member to the committee. TPAC makes recommendations to JPACT.

METRO TECHNICAL ADVISORY COMMITTEE (MTAC)

MTAC is comprised of technical staff from the same jurisdictions as MPAC plus community and business members representing different interests, including public utilities, school districts, economic development, parks providers, housing affordability, environmental protection, urban design and development. MTAC makes recommendations to MPAC on land use related matters.

PLANNING PRIORITIES FACING THE PORTLAND REGION

FAST Act, the Clean Air Act Amendments of 1990 (CAAA), the Oregon Transportation Planning Rule, the Oregon Transportation Plan and modal/topic plans, the Metro Charter, the Regional 2040 Growth Concept and Regional Framework Plan together have created a comprehensive policy direction for the region to update land use and transportation plans on an integrated basis and to define, adopt, and implement a multi-modal transportation system.

These Federal, state and regional policy directives also emphasize development of a multi-modal transportation system. Major efforts in this area include:

- Update of the Regional Transportation Plan (RTP);
- Update to the Metropolitan Transportation Improvement Program (MTIP)
- Implementation of projects selected through the STIP/MTIP updates; and
- Completing multi-modal refinement studies in the Southwest Corridor Plan and the Powell/Division Transit Corridor Plan.

These policy directives point toward efforts to reduce vehicle travel and vehicle emissions, in particular:

- The Oregon state goal to reduce vehicle miles traveled (VMT) per capita;
- Targeting transportation investments to leverage the mixed-use, land use areas identified within the Regional 2040 Growth Concept;
- Adopted maintenance plans for ozone and carbon monoxide with establishment of emissions budgets to ensure future air-quality violations do not develop;
- Adoption of targets for non-single occupant vehicle travel in RTP and local plans;
- An updated five-year strategic plan for the Regional Travel Options Program; and
- Continued implementation of the five-year Transportation and System Management and Operations (TSMO) strategic plan for the Regional Mobility Program.

The current status of these activities is that many of the transportation planning programs – including the Regional Transportation Plan, Freight Plan, TSMO Plan, Regional Transit Plan and supporting updates to our Public Involvement Policy and Title VI Plan –are being updated. Implementation of these updated plans, policies and public involvement procedures will continue in FY 2018-19 and is reflected in the respective work programs for these ongoing projects.

Metro's regional priorities not only meet the most critical planning needs identified within our region, but also closely match federal planning priorities, as well:

- Our update to the Regional Freight Strategy will address rapidly changing port conditions in our region, including a gap in container cargo service, while also addressing FAST Act goals for implementing a national freight system.
- Our update to the Regional Safety Strategy responds to strong public demand for immediate action to improve multimodal safety on our major streets while also helping establish measures to help track safety to meet state and federal performance monitoring.
- Our Regional Transit Strategy will not only expand on our vision for strong transit system to help shape growth in our region, but will also help ensure that we continue to meet state and federal clean air requirements.

- The 2018 RTP update will continue to refine our outcomes-based policy framework that not only allows our decision makers that base regulatory and investment decisions on desired outcomes, but will also allow us to meet new federal requirements for performance base planning.

A Climate Smart Strategy was adopted in December 2014, and is currently being implemented through the 2018 RTP. The Congestion Management Process (CMP) was adopted as part of 2014 RTP in July 2014 (see Chapter 5). Many of the elements of the CMP are included as part of the Transportation System Management and Operations (TSMO) program, consisting of both the Regional Mobility and Regional Travel Options work programs. Metro staff revised the Regional Mobility Atlas as part of the 2014 RTP update.

Metro's annual development of the UPWP and self-certification of compliance with federal transportation planning regulations are part of the core MPO function. The core MPO functions are contained within the MPO Management and Services section of the work program. Other MPO activities that fall under this work program are air quality conformity analysis, quarterly reports for FHWA, FTA and other funding agencies, management of Metro's advisory committees, management of grants, contracts and agreements and development of the Metro budget. Quadrennial certification review took place in February 2017 and is covered under this work program.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE FISCAL YEAR 2018-19 UNIFIED PLANNING WORK PROGRAM	))))	RESOLUTION NO. 18-4877 Introduced by Chief Operating Officer Martha Bennett with the concurrence of Council President Tom Hughes

WHEREAS, the Unified Planning Work Program (UPWP) update as shown in Exhibit A attached hereto, describes all Federally-funded transportation planning activities for the Portland-Vancouver metropolitan area to be conducted in Fiscal Year (FY) 2018-19; and

WHERAS, the UPWP is developed in consultation with federal and state agencies, local governments, and transit operators; and

WHEREAS, the FY 2018-19 UPWP indicates federal funding sources for transportation planning activities carried out by Metro, Southwest Washington Regional Transportation Council, Clackamas County and its cities, Multnomah County and its cities, Washington County and its cities, TriMet, South Metro Area Regional Transit, the Port of Portland, and the Oregon Department of Transportation; and

WHEREAS, approval of the FY 2018-19 UPWP is required to receive federal transportation planning funds; and

WHEREAS, the FY 2018-19 UPWP is consistent with the proposed Metro Budget submitted to the Metro Council; now therefore

BE IT RESOLVED that:

1. The FY 2018-19 UPWP attached hereto as Exhibit A is hereby adopted.

2. The FY 2018-19 UPWP is consistent with the continuing, cooperative, and comprehensive planning process and has been reviewed through formal consultation with state and federal partners.

3. Metro's Chief Operating Officer is authorized to apply for, accept, and execute grants and agreements specified in the UPWP.

4. Staff shall update the UPWP budget figures, as necessary, to reflect the final Metro budget.

5. Staff shall submit the final UPWP to the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

ADOPTED by the Metro Council this 3rd day of May 2018.

Tom Hughes, Council President

Craig Dirksen, Chair of JPACT

Approved as to Form:

Alison R. Kean, Metro Attorney

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO.18-4877, FOR THE PURPOSE OF ADOPTING THE FISCAL YEAR 2018-19 UNIFIED PLANNING WORK PROGRAM

Date: April 10, 2018

Prepared by: John Mermin
(503) 797-1747

BACKGROUND

The Unified Planning Work Program (UPWP) is developed annually by Metro as the Metropolitan Planning Organization (MPO) for the Portland Metropolitan Area. It is a federally-required document that serves as a guide for transportation planning activities to be conducted over the course of each fiscal year, beginning July 1.

The UPWP is developed by Metro with input from local governments, TriMet, ODOT, the Port of Portland, FHWA, and FTA. Included in the UPWP are detailed descriptions of the transportation planning tasks, listings of various activities, and a summary of the amount and source of state and federal funds to be used for planning activities.

ANALYSIS/INFORMATION

1. **Known Opposition** – No known opposition
2. **Legal Antecedents** – this resolution adopts a UPWP for the Portland metropolitan area, as defined in Title 23 of the Code of Federal Regulations, Parts 450 and 420, and title 49, of the Code of Federal Regulations, Part 613.
3. **Anticipated Effects** – Approval means that grants can be submitted and contracts executed so work can commence on July 1, 2018 in accordance with established Metro priorities.
4. **Budget Impacts** – Approval of this resolution is a companion to the UPWP. It is a prerequisite to receipt of Federal planning funds and is, therefore, critical to the Metro budget. The UPWP matches projects and studies reflected in the proposed Metro budget submitted by the Metro Chief Operating Officer to the Metro Council. The UPWP is subject to revision in the final adopted Metro budget.

RECOMMENDED ACTION

Approve Resolution No.18-4877 adopting a Unified Planning Work Program for the Fiscal Year 2018-19.

GLOSSARY OF RESOURCE FUNDING TYPES

- PL – Federal FHWA transportation planning funds allocated to Metropolitan Planning Organizations (MPO's).
- STBG– Federal Surface Transportation Program transportation funds allocated to urban areas with populations larger than 200,000. Part of Metro's regional flexible fund allocation (RFFA) to Metro Planning, or to specific projects as noted.
- 5303 – Federal FTA transportation planning funds allocated to MPOs and transit agencies.
- ODOT Support – Funding from ODOT to support regional transportation planning activities (currently $225,000 per year).
- TriMet Support - Funding from TriMet to support regional transportation planning activities (currently $225,000 per year).
- Metro – Local match support from Metro general fund or solid waste revenues.
- Other – Anticipated revenues pending negotiations with partner agencies.

UPWP AMENDMENT PROCESS

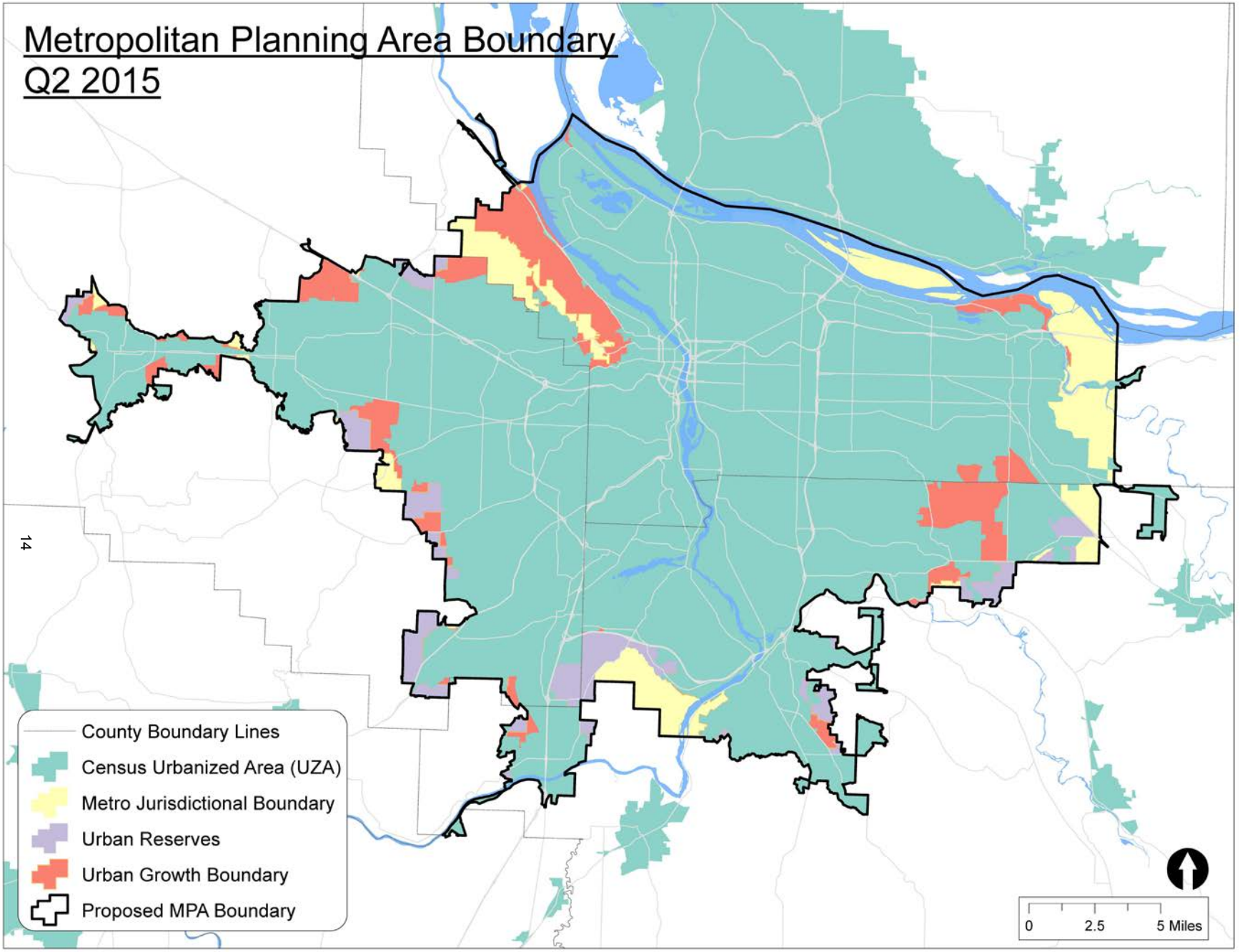
The UPWP is a living document, and must be amended periodically to reflect significant changes in project scope or budget to ensure continued, effective coordination among our federally funded planning activities. This section describes the management process for amending the UPWP, identifying project changes that require an amendment to the UPWP, and which of these amendments can be accomplished as administrative actions by staff versus legislative action by JPACT and the Metro Council.

Legislative amendments to the UPWP are required when any of the following occur:

- A new planning study or project is identified.
- There is either a $200,000 or 20 percent change, whichever is greater, in the total cost of an existing UPWP project. This does not cover carryover funds for a project/program extending multiple fiscal years that is determined upon fiscal year closeout.

Administrative changes to the UPWP can occur for the following:

- Changes to TOTAL UPWP project costs that do not exceed the thresholds for formal amendments above.
- Revisions to a UPWP narrative's scope of work, including objectives, tangible products expected in fiscal year, and methodology.
- Addition of carryover funds from previous fiscal year once closeout has been completed to projects/programs that extend into multiple fiscal years.



Description The Metropolitan Planning Area (MPA) boundary is a federal requirement for the metropolitan planning process. The boundary is established by the governor and individual Metropolitan Planning Organizations within the state, in accordance with federal metropolitan planning regulations. The MPA boundary must encompass the existing urbanized area and the contiguous areas expected to be urbanized within a 20-year forecast period. Other factors may also be considered to bring adjacent territory into the MPA boundary. The boundary may be expanded to encompass the entire metropolitan statistical area or combined as defined by the federal Office of Management and Budget.

Function The Metropolitan Planning Area boundary establishes the area in which the Metropolitan Planning Organization conducts federally mandated transportation planning work, including: a long-range Regional Transportation Plan, the Metropolitan Transportation Improvement Program for capital improvements identified for a four-year construction period, a Unified Planning Work Program, a congestion management process, and conformity to the state implementation plan for air quality for transportation related emissions.

Transportation Planning

Staff contact: Tom Kloster, Tom.Kloster@oregonmetro.gov

Description:

As the designated Metropolitan Planning Organization (MPO) for the Portland metropolitan region, Metro is responsible for meeting all federal planning mandates for MPOs. These include major mandates described elsewhere in this Unified Planning Work Program (UPWP), such as the Regional Transportation Plan (RTP) and Metropolitan Transportation Improvement Plan (MTIP) that follow this section. In addition to these major mandates, Metro also provides a series of ongoing transportation planning services and programs that support the major regional programs and other transportation planning in the region, including:

- Periodic amendments to the RTP that occur outside the regular RTP update cycles
- Periodic updates to the regional growth forecast
- Periodic updates to the regional revenue forecasts
- General support for regional safety planning
- General support for regional corridor planning
- Ongoing transportation model updates and enhancements
- Policy support for regional Mobility and CMP programs

Metro also brings supplementary federal funds and regional funds to this program in order to provide general planning support to the following regional and state-oriented transportation planning efforts:

- Policy and technical planning support for the Metro Council
- Administration of the regional framework & transportation functional plans
- Ongoing compliance with State greenhouse gas emission targets
- Periodic urban growth report support
- Ongoing support for Metro's local partnerships program
- Support for local Transportation System Planning
- Ongoing support for Metro's Transportation Snapshots
- Periodic support for other programs in the Planning & Development Department on transportation issues
- Participation in statewide transportation planning and rulemaking activities

Objectives:

Continued provision of regional transportation planning services and programs that support the major regional programs and other transportation planning in the region, as described above (ongoing)

Previous Work:

- Supported the Powell-Division Transit & Development Project adoption and amendment to the RTP.
- Participated in federal rulemaking process.
- Supported federal research projects on MPO operations and administration.
- Worked with ODOT and local partners to updates to the regional revenue forecast for

2040.
- Provided periodic safety and bicycle policy planning support for the Powell-Division and Southwest Corridor projects.
- Provided policy and technical support for freight enhancements to the regional travel demand model.
- Secured grant funding for the Regional Transit Strategy.
- Secured grant funding for the Designing Livable Streets project.

Metro also brings supplementary federal funds and regional funds to this program in order to provide general planning support to the following regional and state-oriented transportation planning efforts:

- Provided periodic transportation planning policy support for the Metro Council
- Produced annual transportation functional plan compliance report to the Metro Council
- Participated in rulemaking for updated greenhouse gas emission targets
- Supported the 2015 urban growth report
- Provided ongoing support for Metro's local partnerships program
- Provided support for local Transportation System Planning efforts
- Completed Transportation Snapshots in 2015 and 2016

Work Completed in 2017-18 included:
- Supported the Powell-Division Transit & Development Project adoption and amendment to the RTP.
- Drafted a major update to the Regional Freight Strategy as part of the 2018 RTP Update.
- Drafted a Regional Transit Strategy as part of the 2018 RTP Update.
- Drafted a major update to the Regional Safety Strategy as part of the 2018 RTP Update.
- Initiated a major update to the Designing Livable Streets program of best practice tools.
- Participated in federal rulemaking process with comments on the draft performance measure and MPO planning rules.
- Participated in state rulemaking amendments to the Oregon Transportation Planning Rule.
- Supported federal research projects on MPOs, including detailed surveys and phone interviews on Metro's operations and administration.
- Coordination with ODOT and local city and county partners to develop a regional revenue forecast for 2040.
- Provided policy and technical support for freight enhancements to the regional travel demand model funded through a national grant.
- Produced 2016 transportation functional plan compliance report to the Metro Council
- Provided ongoing support for Metro's local partnerships program, including monthly training meetings and individual support for staff liaisons.
- Provided support for local Transportation System Planning efforts in several local jurisdictions.

Methodology:
General transportation support is organized around two thematic teams within the planning program. A team of modal and topic experts provides expertise and support on freight, bicycle, pedestrian, motor vehicle and transit planning, and topic experts provide support on climate change, equity, safety, street design, resilience, transportation funding, state and federal regulation and performance

monitoring. These staff experts are generally available on short notice for periodic strategic consultation and support on Metro's major projects and programs.

A second cross-departmental team consists of local government liaisons, each with 1-2 local jurisdictions to support on land use and transportation planning topics. This team provides ongoing support, and meets monthly to stay abreast of key planning issues and trends, legal and regulatory issues affecting local planning and to share experiences and solutions in providing local planning support.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:
Continued provision of regional transportation planning services and programs, as needed, to support the major regional programs and other transportation planning in the region. In addition to ongoing support activities, major tangible products in 2018-19 include:

- Complete a final Regional Freight Strategy as part of the 2018 RTP adoption. (2nd Quarter)
- Complete a final Regional Transit Strategy. (2nd Quarter)
- Complete a final Regional Safety Strategy. (2nd Quarter)
- Complete the update to the Designing Livable Streets tools. (2nd Quarter)
- Support adoption of the Southwest Corridor LPA. (2nd Quarter)
- Complete an RTP Amendment for TriMet's Red Line Expansion Project. (2nd Quarter)
- Participate in the rulemaking advisory committee and formally comment on the Oregon Transportation Planning Rule amendments. (2nd Quarter)

Entity/ies Responsible for Activity:

- Metro – Product Owner/Lead Agency

Other Stakeholders:

- Local Cities and Counties
- Metro Council
- Metro Parks & Nature Department
- Metro Research Center
- Oregon Department of Transportation
- Oregon Department of Land Conservation and Development
- Oregon Department of Environmental Quality
- U.S. Department of Transportation

Schedule for Completing Activities:
Please refer to schedule information provided in the Major Project Deliverables/Milestones section.

Funding History:
No funding history (new program). This is the first year this narrative has been separated out from the RTP update narrative.

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	721,566	PL	$	353,372
Interfund Transfers	$	351,950	STBG	$	341,476
Materials and Services	$	16,600	5303	$	72,859
			Metro	$	331,246
TOTAL	**$**	**1,090,116**	**TOTAL**	**$**	**1,090,116**

Full-Time Equivalent Staffing

Regular Full-Time FTE	5.782
TOTAL	**5.782**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	698,349	PL	$	665,787
Interfund Transfers	$	381,729	STBG	$	397,745
Materials and Services	$	66,600	5303	$	33,759
			Metro	$	49,388
TOTAL	**$**	**1,146,678**	**TOTAL**	**$**	**1,146,678**

Full-Time Equivalent Staffing

Regular Full-Time FTE	5.334
TOTAL	**5.334**

Regional Transportation Plan Update (2018)

Staff contact: Kim Ellis, kim.ellis@oregonmetro.gov

Description of the Project:
The Regional Transportation Plan (RTP) guides local and regional transportation planning, funding and implementation activities in the Portland metropolitan region for all forms of travel – motor vehicle, transit, biking and walking – and the movement of goods and freight. In addition to meeting federal and state requirements, the plan also addresses a broad range of regional planning objectives, including implementing the 2014 Climate Smart Strategy and the 2040 Growth Concept – the region's long-range growth management strategy – to create healthy, equitable communities and a strong economy.

Central to the RTP is an overall emphasis on outcomes, system completeness, and measurable performance targets to track progress toward the plan's goals. The plan seeks to create an integrated regional transportation system that is safe, healthy, accessible, reliable, equitable, affordable and efficient for all users and supports how and where the region and communities have planned to grow. The plan identifies current and future regional transportation needs, near- and long-term investment priorities and actions to address those needs. The plan also accounts for local, regional, state and federal transportation funds the region expects to have available to build the region's investment priorities.

The RTP is maintained and updated regularly to ensure continued compliance with State and Federal requirements and to address growth and changes in land use, demographic, financial, travel, technology and economic trends. Updates to the RTP are governed by a number of federal requirements that must be met in order for the plan to be certified by the U.S. Department of Transportation and for the region to remain eligible to receive federal transportation dollars. Updates to the RTP are also governed by a number of state requirements that must be met in order for the plan to be approved by the Land Conservation and Development Commission. The RTP is a Regional Transportation System Plan (TSP) under state law. TSPs for cities and counties located within an MPO area must be consistent with both the statewide Transportation Planning Rule and the RTP. Regional functional plans direct local government implementation of the RTP.

Objectives of the Project:
- Carry out work activities to maintain, implement, and update the RTP in cooperation and coordination with federal, state and local agencies and other transportation providers and comply with state and federal requirements, including the Oregon Transportation Planning Rule, and FAST Act. (ONGOING)
- Provide inclusive and meaningful opportunities for interested members of the public, transportation providers, historically marginalized communities (e.g., communities of color, low-income persons, and persons with limited ability to speak English, persons living with disabilities, youth and older adults) and other affected stakeholders to be involved, providing clear and concise information, timely public notices of opportunities to comment, and full public access to key decisions. (ONGOING)
- Continue transition to performance-based planning to identify innovative, cost-effective solutions to social, economic and environmental challenges facing the region and better

connect plan outcomes to the values and experiences of people living and working in the region. (ONGOING)

- Implement the 2014 Climate Smart Strategy and 2014 Regional Active Transportation Plan, develop and adopt a Regional Transit Strategy and Regional Emerging Technologies Strategy, and update the RTP vision, goals and performance targets, RTP Finance Plan, Regional Transportation Safety Strategy, Regional Freight Strategy, and transportation design policies. (ONGOING)
- Coordinate with other related UPWP planning activities, including the Title VI/Environmental Justice Program, Public Involvement, Regional Transit Strategy, , Regional Travel Options Program, Regional Freight Program and related studies, Regional Mobility Program, Economic Value Atlas, Designing Livable Streets, Southwest Corridor Project, Division Transit Project and relevant ODOT and local planning activities and studies. (ONGOING)
- Collaborate with the Metro Research Center to identify and address data needs, improve tools for evaluating and monitoring RTP performance outcomes and seek coordination and partnership opportunities with the Transportation Research and Education Center (TREC) and PORTAL at Portland State University, the Oregon Modeling Steering Committee (OMSC), ODOT, Washington DOT, TriMet, SMART and SW Regional Transportation Council to support on-going RTP monitoring, the region's Congestion Management Process (CMP), FAST Act implementation, Regional Mobility Program and regional GHG emissions analysis. (ONGOING)
- Promote cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning. (ONGOING)

Previous Work:

- Maintained web page to provide access to information about the current adopted plan, 2018 RTP update, opportunities to provide input and technical work group meetings. Materials can be downloaded at: www.oregonmetro.gov/rtp. (ONGOING)
- Draft updated RTP performance targets that address RTP goals, federal planning factors and MAP-21 goal areas and subsequent federal rulemaking to implement MAP-21 and the FAST Act. (FEBRUARY 2018)
- Technical review and public review drafts of the 2018 Regional Transit Strategy, 2018 Regional Freight Strategy, 2018 Regional Emerging Technologies Strategy and 2018 Regional Safety Strategy. (NOVEMBER-JANUARY 2017 AND JUNE 2018)
- Public review drafts of the 2018 Regional Transportation Plan. (JUNE 2018)
- Draft updated RTP project list reflecting two levels of investment – a financially constrained list o project priorities that meets federal requirements and a more ambitious list of additional unfunded regional transportation project priorities that reflects the level of investment the region agrees to work together to fund, reflecting policy direction from the Metro Council and JPACT. (SEPTEMBER 2017 AND MAY 2018)
- Four Regional Leadership Forums through which the Metro Council convenes joint meetings of JPACT and MPAC to provide policy direction to staff on updating the plan's policies, project priorities, and implementation actions. The first three forums were held in FY 16-17 and included state legislators and community and business leaders. The last forum was held in 2018. (APRIL 2016, SEPTEMBER 2016, DECEMBER 2016 AND MARCH 2018)
- Draft 2018 RTP Financial Forecast that estimates the amount of funding that is reasonably

anticipated to be available under federal law to implement regional transportation investment priorities, as well as operate and maintain the regional transportation system for the plan period. (JUNE 2017 AND MARCH 2018)

- Call for Projects/project solicitation materials that define a process for local coordinating committees, city of Portland, Port of Portland, ODOT, and transit providers to submit updated project lists for the financially constrained system as well as a more ambitious system that fit within revenue projections and demonstrate progress toward achieving the plan's goals and performance targets. (JUNE 2017 AND MARCH 2018)
- Draft updated RTP vision, goals and objectives that address the region's six desired outcomes, and federal planning factors and MAP-21 goal areas. (MAY 2017 AND DECEMBER 2018)
- Draft 2018 RTP Existing Conditions Chapter that documents key trends and current systems conditions for all modes of travel, including the movement of goods and freight. The information was reported through Regional Snapshots in support of the region's Congestion Management Process and identification of current and future regional transportation needs and potential solutions, and the project solicitation process for updating investment priorities in the RTP. (JANUARY 2017)
- Regional Snapshot No. 3 and No. 7 on Transportation to document experiences of residents and businesses using the regional transportation system, trends affecting travel in the region, and began documenting current system conditions and current plan performance. Information is posted at: www.oregonmetro.gov/regional-snapshots. (APRIL 2016 AND JUNE 2017)
- Regionally-coordinated and adopted population, household and job growth forecast for the years 2015 to 2040 to support RTP modeling and regional planning activities. (OCTOBER 2016)
- Provided elderly and disabled transportation planning support in partnership with the region's transit providers through most recent update to TriMet's Coordinated Transportation Plan for Seniors and People with Disabilities. (JUNE 2016)
- Adopted the work plan and public engagement plan for the 2018 RTP update. (DECEMBER 2015)
- Adopted the 2014 Climate Smart Strategy and supporting implementation actions. The strategy and supporting implementation actions will be further implemented through the 2018 RTP update. (DECEMBER 2014)
- Adopted the 2014 RTP. The update was limited in scope, focusing on maintaining compliance with federal law addressing two corrective actions identified in the 2012 Federal Certification Review, conducting an expanded environmental justice and Title VI assessment and incorporating system map and project list changes identified in local TSPs and regional plans developed or adopted since 2010, such as the Regional Active Transportation Plan and Regional Transportation Safety Plan. (JULY 2014)
  Adopted the Environmental Justice and Title VI Assessment for the 2014 RTP and 2015-18 Metropolitan Transportation Improvement Program with recommendations for future refinements to be addressed in the 2018 RTP update and development of 2018-21 MTIP. The assessment included a demographic analysis and a regional-level disparate impacts and benefits and burdens analysis. The assessment also identified recommendations for future research and transportation equity analysis refinements that were further addressed through the 2018 RTP update. (JULY 2014)
- Developed and adopted the first Regional Active Transportation Plan (ATP). The 2014 ATP identified recommendations related to transportation safety and design that were further

addressed in the 2018 RTP update. (JULY 2014)

- Developed the first Regional Transportation Safety Plan and coordinated efforts to identify and recommend short- and long-term actions related to planning, transportation design, data collection, and performance monitoring. The recommendations were further refined and addressed as part of updating the Regional Transportation Safety Plan through the 2018 RTP update. (MAY 2012)

Methodology for the Project:

Regional Transportation Plan (RTP): The focus of the current fiscal year will be continuing a major update to the RTP following the work plan and public engagement plan adopted by JPACT and the Metro Council in December 2015. The update began in May 2015. Partnership and engagement activities, planning work and policy discussions to support development of an updated plan will continue in 2018 with final adoption of the 2018 RTP scheduled for December 2018. The final plan will be effective for federal purpose upon adoption by JPACT and the Metro Council. The final plan will be sent to the LCDC to begin their approval process in the manner of periodic review in 2019.

Updates to the plan will address a number of regional, state and federal planning requirements, and, as a result, require special coordination with staff with state, regional, county and city agencies, as well as significant public engagement efforts, consistent with Metro's Public Engagement Guide. The update will also address actions and recommendations identified in relevant planning efforts, including the 2012 Regional Transportation Safety Plan, the 2013 Portland Region Westside Freight Access and Logistics Analysis, and subsequent 2016 Washington County Freight Study, the 2014 RTP update, the 2014 Regional Active Transportation Plan, the 2014 Climate Smart Strategy, the 2014 Economic Impacts of Congestion Study, Metro's Diversity Equity and Inclusion Strategy, TriMet's Service Enhancement Plans and 2016 Coordinated Transportation Plan for Seniors and People with Disabilities, the 2017 SMART Master Plan, and updates to the 2011 Oregon Freight Plan to meet FAST Act requirements.

The update will also address FHWA/FTA Planning Emphasis Areas (PEA) related to models of regional planning cooperation, access to essential services for underserved populations and MAP-21 and FAST Act implementation and related performance measurement requirements as well as recommendations or corrective actions identified in the 2017 Federal Certification Review to the extent practicable.

Several UPWP subarea and modal planning activities will be undertaken throughout FY 2018-19 that will be coordinated with and provide input to the 2018 RTP update. Related Metro-led UPWP activities include the Regional Transit Strategy, Regional Freight Program, Economic Value Atlas, Designing Livable Streets, Transportation System Management and Operations, Regional Travel Options and Regional Mobility programs, Division Transit Project and Southwest Corridor Plan. Related ODOT Region 1-led UPWP activities will also inform the 2018 RTP update.

Additional regional transportation planning tasks are anticipated to be identified through the 2018 RTP update to advance implementation of the plan. These tasks will be amended into the UPWP as appropriate.

The 2018 RTP update work plan will be accomplished using the following approach:

- **Document key regional trends and challenges, existing conditions and needs.** Update Chapter 1 of the RTP to document key trends and challenges affecting travel in the region as well as current and future regional transportation needs.
- **Update shared vision and outcomes-based policy goals and performance targets**. Refine

the region's vision for the transportation system and regional goals, objectives and performance targets that identify specific outcomes the region wants to achieve with investments in the transportation system. This work will include significant coordination and collaboration with TriMet, SMART and ODOT as the agencies also set performance measures and targets in response to federal MAP-21 and FAST Act rulemaking. This work will be completed in December 2018.

- **Update outcomes-based performance evaluation framework.** Continue to update data, methods and analytic tools as needed to address MAP-21 and FAST Act performance-based planning requirements and the federally-required congestion management process, and improve the region's ability to measure the benefits and impacts of investments across economic, social equity and environmental outcomes. This work will include convening two technical work groups of staff from local jurisdictions, transit providers, TREC at Portland State University, environmental justice leaders and other topical experts to refine and further advance the region's methodology for conducting a regional transportation system analysis and transportation equity analysis for the 2018 RTP. This work will also seek to develop and pilot the use of project-level criteria to provide additional information to stakeholders and decision-makers to help identify a pipeline of priority projects on the regional transportation system that are anticipated to seek regional, state and federal funding to advance them. This work will be completed in December 2018.
- **Update Congestion Management Process (CMP) Reporting.** This work will include a limited update to data used in the Regional Mobility Corridor Atlas to serve as a factual foundation for documenting current congestion, high crash locations, access to travel options and other information as part of the federally-required congestion management process. The information and findings will be reported in a regional snapshot focused on transportation and a separate existing conditions report that will inform identification regional transportation needs in advance of updating the RTP investment priorities. In addition, staff will work with local, regional and state partners to review and identify recommendations for refinements to the region's CMP data collection and reporting approach. The review will aim to more effectively address MAP-21 and FAST Act performance-based planning and target-setting requirements, identify data gaps and limitations, collaborate with TREC, ODOT, TriMet and SMART to bring relevant data into the atlas and better align the CMP reporting with the RTP's outcomes-based evaluation framework and performance measures and targets. This work will include convening a technical work group on performance measures to help identify recommendations for refinements to the atlas and the CMP reporting approach. This work will be completed in December 2018.
- **Update RTP Financial Plan:** Continue work to update estimates of funding reasonably expected to be available under federal law and identify potential new funding mechanisms in coordination with local jurisdictions, transit agencies, ODOT, and business and community leaders to address current and future transportation needs, including keeping the existing transportation system in a state of good repair. This includes accounting for anticipated revenues from federal, state, regional, local, and private sources, and user fees. This work will result in a new financially constrained revenue forecast that meets federal requirements as well as a more ambitious revenue forecast that reflects the level of investment the region agrees to work together to pursue to fund additional regional transportation project priorities. This work will be completed in December 2018.
- **Update regional policies and strategies.** Update policy elements of the RTP (Chapter 2) as

needed to address new federal and state requirements, 2012 Transportation Safety Plan recommendations, and recent regional policy actions, including adoption of the 2014 Climate Smart Strategy, the 2014 Regional Active Transportation Plan and the 2014 Regional Transportation Plan, and new policies and strategies recommended through this update and related Metro projects and programs. This work will be completed in December 2018.

- **Update shared investment strategy and action plan.** Update regional strategies for safety, transit, and freight, and related near- and long-term investment priorities, actions and partnerships to support implementation. This will include developing policy recommendations on emerging concepts related to emerging technologies, such as driverless vehicles and shared mobility services, and disaster resilience. Analysis of the two RTP investment strategies will also include demonstrating the region's priorities continue to meet the federal Clean Air Act and Title VI/Environmental Justice requirements, and the state-mandated greenhouse gas emissions reduction target for light-duty vehicles. This work will be completed in December 2018.
- **Implement Climate Smart Strategy.** Update the plan's policies, investment priorities and actions to address recommendations for increased investment in transit and transportation system management and operations programs and projects. This will also include background work to support the greenhouse gas emissions analysis that will be completed for the 2018 RTP update, and address anticipated amendments to the Metropolitan Area Greenhouse Gas Target Rules. This work will continue in FY 18-19.
- **Update Regional Transportation Safety Strategy.** Continue work to update the Regional Transportation Safety Plan. This work will include policy and data coordination and collaboration with ODOT as the agency sets statewide safety-related performance measures and targets to respond to MAP-21 and FAST Act. This work will be completed in December 2018.
- **Update Regional Freight Strategy.** Continue work to update the Regional Freight Plan in coordination with the Regional Freight Program with the following work products: updated economic figures and commodity flow data; new freight performance measures that inform near- and long-term investment priorities and FAST Act required freight performance targets and measures; updated Regional Freight Network map; and new sections on regional freight funding and the federal FAST Act and FASTLANE grant program. This work will be completed in December 2018 in coordination with an update to the 2011 Oregon Freight Plan, including identification of freight bottlenecks in the Portland region and other areas of the state to help ODOT direct funding to projects that alleviate critical freight bottlenecks.
- **Develop Regional Transit Strategy.** Continue work to develop a Regional Transit Strategy, including:
    - Collaborate and coordinate with TriMet and SMART and other transit providers to develop a regional transit vision and report on FAST Act required transit performance targets and measures.
    - Work with transit stakeholders to develop or adopt required performance targets and measures.
    - Improve data and methods for evaluating transit performance and expected benefits.
    - Update the regional transit network vision and transit system expansion policies to inform investment priorities.
    - Incorporate relevant service and infrastructure needs and priorities, strategies and

actions from TriMet's 2016 Coordinated Transportation Plan for Seniors and Persons with Disabilities.
  - Provide oversight of contractor deliverables. This work will be completed in December 2018.

- **Develop Regional Emerging Technologies Strategy.** Continue work to develop a Regional Emerging Technologies Strategy in coordination with the 2018 RTP update. This work will include development of policies and strategies that will be incorporated in the 2018 RTP. The policies and strategies will focus on the key areas where public agencies need to act in the next decade to respond to the most pressing issues presented by emerging technologies and stay on track to meet regional goals for social equity, the environment, economic prosperity, land use and transportation over the long term. This work will be completed in December 2018.

Entities Responsible for the Project:

- Metro – Product Owner/Lead Agency
- Oregon Department of Transportation – Cooperate/Collaborate/Coordinate
- TriMet – Cooperate/Collaborate/Coordinate
- SMART – Cooperate/Collaborate/Coordinate

Other Project Stakeholders:

- Joint Policy Advisory Committee on Transportation (JPACT)
- Metro Policy Advisory Committee (MPAC)
- Transportation Policy Alternatives Committee (TPAC)
- Metro Technical Advisory Committee (MTAC)
- TransPORT Subcommittee to TPAC
- Cities and counties in the Metro region
- Bi-State Coordination Committee, Southwest Washington Regional Transportation Council (RTC), C-TRAN, and other Clark County governments
- Federal and State legislators and elected officials representing counties and cities in the region
- Northwest Region Area Commission on Transportation (NW ACT)
- Port of Portland
- Port of Vancouver
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Environmental Protection Agency (EPA)
- Oregon Transportation Commission (OTC)
- Land Conservation and Development Commission (LCDC)
- Department of Land Conservation and Development (DLCD)
- Oregon Department of Environmental Quality (DEQ)
- Oregon Health Authority
- Oregon MPOs
- Community groups and organizations involved in health, equity, environmental justice, economic development, business, climate change, land use and transportation issues and serving the needs of historically underrepresented communities (e.g., communities of color, low-income persons, and persons with limited English proficiency) as well as older adults, youth, people with disabilities

- Organizations and advisory committees serving regional bicycle, pedestrian, freight, motor vehicle and transit needs
- Transportation Research and Education Consortium (TREC) and Portland State University
- Interested public
- Special Transportation Funding Advisory Committee (STFAC)

Major Project Deliverables and Schedule for Completion in FY 2018-2019:

- Quarterly progress reports. (QUARTERLY)
- Public information and technical and policy meeting materials on the RTP via Metro's website. (ONGOING)
- RTP amendments, if necessary (ONGOING)
- MAP-21 and FAST Actimplementation, including the implementation of the performance-based planning framework, goal areas, target setting, and performance reporting through the 2018 RTP update and coordination and collaboration with federal and state agencies and transit providers on statewide and regional target setting as directed by MAP-21. (ONGOING)
- Public engagement activities and reports documenting engagement activities, consistent with the adopted Public Engagement Plan for the 2018 RTP update. (ONGOING)
- Reports, memoranda, legislation and other materials documenting research, analysis, recommended refinements to the regional transportation vision, goals, performance targets and measures, visualizations of information, policies, financial assumptions, investment priorities, CMP reporting recommendations, and outreach activities conducted to support development and adoption of the 2018 RTP. (ONGOING)
- Implementation of the region's Coordinated Transportation Plan for Seniors and People with Disabilities (CTP). (ONGOING)
- Adoption drafts of the 2018 Regional Transportation Plan and updated components, including the 2018 Regional Transit Strategy, 2018 Regional Freight Strategy, 2018 Emerging Technologies Strategy and 2018 Regional Safety Strategy. (FIRST QUARTER)

Funding History:

Fiscal Year	Total Budget	FTE Comparison
[1,2]2011-12	$2,110,058	11.965
[1,2]2012-13	$1,497,674	9.099
[1,2]2013-14	$698,555	3.980
[1,2]2014-15	$1,105,379	3.130
[2]2015-16	$1,462,908	6.000
[2]2016-17	$1,696,646	8.555

1The total budget and FTE comparison for FY 2011-12 and FY 2012-13 includes both the Regional Transportation Planning and Climate Smart Strategy work. The two projects were split into separate narratives for the 2013-15 UPWP.
2This program budget and FTE comparison was included Transportation Planning in these years.

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	523,320	PL	$	119,350
Interfund Transfers	$	234,312	STBG	$	314,574
Materials and Services	$	15,600	5303	$	133,845
			5303 Pre-MAP21 Supplemental Allocation	$	77,070
			Metro	$	128,394
TOTAL	**$**	**773,232**	**TOTAL**	**$**	**773,232**

Full-Time Equivalent Staffing

Regular Full-Time FTE	4.163
TOTAL	**4.163**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	371,763	PL	$	253,272
Interfund Transfers	$	188,629	STBG	$	43,913
Materials and Services	$	15,600	5303	$	245,663
			Metro	$	33,143
TOTAL	**$**	**575,992**	**TOTAL**	**$**	**575,992**

Full-Time Equivalent Staffing

Regular Full-Time FTE	2.944
TOTAL	**2.944**

Regional Transit Strategy

Staff contact: Jamie Snook, Jamie.Snook@oregonmetro.gov

Description:

Transit has a significant role in supporting the 2040 Growth Concept – the region's long-range strategy for managing growth. The 2040 Growth Concept calls for focusing future growth in the Portland Central City, regional and town centers, station communities, main streets, 2040 corridors and employment areas, and includes policies to connect the Portland Central City and regional centers together with high capacity transit, which can include light rail, bus rapid transit, commuter rail, or streetcar. The Regional Transportation Plan (RTP) expands this vision to include a connected network of regional and local transit service that is complemented by transit-supportive land uses, safe and convenient bike and pedestrian connections to transit, and other facilities, programs and services designed to make transit more convenient, frequent, accessible and affordable.

The Regional Transit Strategy, formerly known as the Regional High Capacity Transit System Plan, will provide a coordinated vision of future transit for the region to support the 2040 Growth Concept, Climate Smart Strategy, and Regional Transportation Plan. The plan will include improvements to bus service as well as future investments in high capacity transit improvements. The Plan will also include an update to the System Expansion Policy that will provide local and regional partners with direction on how to move future projects forward. This work will be conducted as part of the 2018 Regional Transportation Plan update and will be closely coordinated with the Future of Transit vision being developed by TriMet through its Service Enhancement Plans and the update to Transit Master Plan by the South Metro Area Regional Transit (SMART) district. This strategy will also incorporate relevant service and infrastructure needs and priorities, strategies and actions from TriMet's 2016 Coordinated Transportation Plan for Seniors and Persons with Disabilities.

Objectives:

- Implement the 2040 Growth Concept, Climate Smart Strategy and the RTP.
- Update RTP transit-related policies and performance measures to guide consideration of the effect of investments on transit performance and ability to support broader mobility, land use, urban form, environmental and social equity objectives.
- Update the current Regional Transit Network Map and High Capacity Transit Map in the RTP to reflect a coordinated vision for future transit service in the region that includes high capacity transit and regional, local and community-based transit services.
- Update the Transit System Expansion Policy to provide a clear and efficient implementation process for major transit investments.
- Recommend refinements and/or amendments to RTP transit-related policies, strategies and investments to support the coordinated vision for future transit service in the region.
- Recommend a coordinated strategy for future transit investments and identify potential partnerships, strategies and funding sources for implementation.
- Implementation of the Regional Enhanced Transit Concept Pilot Program.

Previous Work:

- The Regional High Capacity Transit System Plan and System Expansion Policy, adopted as a component of the RTP in 2010, identified the region's HCT corridor priorities in support

of the 2040 Growth Concept and RTP. (August 2010)

- Developed and adopted the first Regional Active Transportation Plan to support improved bike and pedestrian access to transit and other community destinations. (July 2014)
- The Climate Smart Strategy, adopted in December 2014, identified increased capital and operational transit investments and supporting infrastructure as a key component of the region's strategy for reducing greenhouse gas emissions from light-duty vehicles. (DECEMBER 2014)
- Trimet's adopted Coordinated Transportation Plan for Seniors and Persons with Disabilities identifies service and infrastructure needs and priorities, strategies and actions to improve travel options and services for older adults and persons living with disabilities. (July 2016)

Methodology:

The methodology includes stakeholder and public outreach, technical analysis and policy discussions that will be coordinated with other related UPWP planning activities, including the 2018 RTP update and SMART Transit Master Plan update, Metro's My Place in the Region and Regional Equity Strategy. Public outreach, including, but not limited to workshops, meetings in places where people gather (e.g., farmers markets), community meetings and web surveys will be conducted. An updated System Expansion Policy evaluation framework will be developed consistent with the RTP to guide how to move future projects forward. Approval of the Regional Transit Strategy is by the Metro Council after consideration of public comments and recommendations from JPACT and MPAC, Metro's regional policy advisory committees.

Schedule for Completing Activities:

- Update the Transit System Expansion Policy. (WINTER 2018)
- Integrate appropriate Regional Transit Plan investments and strategies in draft 2018 RTP. (2017-2018)
- Finalize the Regional Transit Strategy (WINTER 2018)
- Advance ETC projects to project development. (SUMMER/FALL 2018)

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Reports documenting technical analysis and outreach activities. (ONGOING)
- Draft Regional Transit Strategy (FIRST QUARTER)
- Updated System Expansion Policy (FIRST QUARTER)
- Public input on Regional Transit Strategy and transit related elements of the 2018 RTP (FIRST QUARTER)
- Final Regional Transit Strategy report (THIRD QUARTER)

Entity/ies Responsible for Activity:

Metro - Lead Agency
TriMet – Cooperate/Collaborate
SMART – Cooperate/Collaborate
Other stakeholders - Consider/Collaborate:

- Transportation Policy Alternatives Committee (TPAC)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Metro Technical Advisory Committee (MTAC)
- Metro Policy Advisory Committee (MPAC)
- Federal Highway Administration (FHWA)

- Federal Transit Administration (FTA)
- Cities within Metro's boundaries
- Clackamas, Multnomah, Washington, and Clark Counties
- Oregon Department of Transportation (ODOT)
- Other neighboring transit districts, including C-TRAN
- Community groups and organizations involved in equity, environmental justice, economic development, business, climate change, land use and transportation issues and serving the needs of communities of concern, including communities of color, low-income persons, older adults, youth, people with disabilities, and persons with limited English proficiency.
- Citizens of the region

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2015-16	$61,379	0.275
2016-17	$80,516	0.375

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	59,145	STBG	$	74,251
Interfund Transfers	$	24,153	5303	$	493
			Metro	$	8,555
TOTAL	**$**	**83,298**	**TOTAL**	**$**	**83,298**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.4
TOTAL	**0.4**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	69,623	PL	$	16,230
Interfund Transfers	$	29,566	STBG	$	70,302
			5303	$	4,137
			Metro	$	8,520
TOTAL	**$**	**99,189**	**TOTAL**	**$**	**99,189**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.455
TOTAL	**0.455**

Metropolitan Transportation Improvement Program

Staff contact: Ted Leybold, Ted.Leybold@oregonmetro.gov

Description:

The Metropolitan Transportation Improvement Program (MTIP) is a critical tool for implementing and monitoring the progress of the Regional Transportation Plan (RTP) and 2040 Growth Concept. The MTIP programs and monitors funding for all regionally significant projects in the metropolitan area. The MTIP administers the allocation of urban Surface Transportation Block Grant (STBG) Program, Congestion Mitigation Air Quality (CMAQ) Improvement Program, and Transportation Alternatives (TA) funding awarded through the Metro Regional Flexible Fund process.

The MTIP reflects the approved RTP's first four year implementation program of funding goals and regional transportation strategies. The MTIP also is a project implementation financial document used to verify and obligate federal project transportation funding. It reflects how funding for projects and their specific phases will be expended to implement the project as part of the first four years of the RTP. The MTIP must be fiscally constrained and demonstrate the programming of project funding does not exceed the funding capacity in any single year of the MTIP. Finally, the MTIP though its major four-year update provides a reconfirmation of implementing the region's transportation control measures (TCMs) for air quality, ensuring federal transportation funds are being programmed, obligated, and expended correctly and in a timely fashion to meet transportation obligations to reduce vehicle emissions.

Development and management of the MTIP is governed under 23 CFR 450.300-336, Metropolitan Transportation Planning and Programming. Projects included in the MTIP are generally one of five types:

1. Projects on the State Highway System
2. Projects on the regional arterial system
3. Major transit investments in the region
4. Separated active transportation projects on the regional network
5. The project is a planning project as part of a regional major investment study, or will complete project development work (Planning through Preliminary Engineering).

As stated previously, the MTIP represents the first four-year implementation program of projects from the approved long range RTP. Before being added to the MTIP, the project must first be part of the fiscally constrained portion of the RTP. From there, adding projects into the MTIP will satisfy one or more of the following criteria:

- The transportation project is awarded federal funding.
- The project is located in the State Highway System and was awarded ODOT administered funding.
- The transportation project is locally funded, but requires any form of required federal approvals to be implemented.
- The transportation project helps the region meet its TCM requirements to reduce vehicle emissions.
- The transportation project is locally funded, but regionally significant and clearly meets the goals and strategies of the approved RTP.

Through its major update, the MTIP verifies the region's compliance with air quality and other federal requirements, demonstrates fiscal constraint over the MTIP's four-year period and informs the region on progress in implementation of the RTP. Between major MTIP updates, the MPO manages and amends the MTIP projects as required to ensure project funding can be obligated based on the project's implementation schedule. MTIP amendments are ongoing and generally fall within one of three categories:

Formal amendments:

- Result due to substantial funding, policy, or scope changes to the project.
- Require a detailed documentation narrative, a confirmation of consistency with the region's long-range plan and that the region's fiscal constraint findings have not been impacted or violated.
- Require formal approval by Metro's Joint Policy Advisory Committee on Transportation (JPACT) and Council approval.
- Requires approval by U.S. DOT.

Administrative amendments/modifications:

- Minor changes and funding adjustments that clearly do not impact fiscal constraint or RTP consistency.
- The range of possible administrative changes generally are negotiated and pre-approved between the MPO and U.S. DOT.
- Do not require formal Metro approval.
- Approval normally by ODOT with possible review by U.S. DOT

Technical corrections/modifications:

- Represent extremely minor corrections (e.g. spelling errors, or typos)
- No impact on anything as a result of the correction.
- Notification to ODOT required, but approval not necessary by ODOT or U.S. DOT.

As mentioned earlier, the MTIP is also subject to federal and state air quality requirements, and a determination is made during each MTIP update to ensure consistency with the State Implementation Plan for air quality and implementation of it's TCMs. These activities require special coordination with staff from Oregon Department of Transportation (ODOT), TriMet, South Metro Area Regional Transit (SMART), and other regional, county and city agencies, as well as public-involvement efforts, consistent with Metro's public involvement plan.

Objectives:

Developing, updating, and managing the MTIP requires a cooperative, continuous, and comprehensive process to prioritize projects from the RTP for funding which includes (ONGOING):

MTIP Management: Effectively administer the existing MTIP and completing required federal responsibilities as outlined in the applicable CFRs and regulations that include:

- Collaborate with partner TIP administering agencies to document roles and responsibilities utilizing tools such as planning agreements, project charters, regular coordination meetings, and other resources.
- Programming transportation projects in the region consistent with Federal rules and

regulations. (ONGOING)

- Ensure funding in the first two years of the MTIP is available or committed and that costs are programmed in year-of-expenditure dollars. (ONGOING)
- Document the cooperative revenue estimation process that ensures adequate funding is available by year to operate and maintain the system, adequate revenue is available to deliver projects on the schedule proposed in the TIP, and all other financial planning and fiscal constraint requirements. (ONGOING)
- Consult with program stakeholders, including formal consultation with required entities in compliance with federal regulations. (ONGOING)
- Continue improvements to the on-time and on-budget delivery of the local program of projects selected for funding through the Transportation Priorities process. (ONGOING)
- Continue the MTIP public awareness program to include updated printed materials, web resources and other material to increase understanding of the MTIP process. (ONGOING)
- Work with the Oregon MPO consortium, ODOT and transit agencies to consider options to utilize better data management tools for managing the TIP and financial plan. In the interim, maintain Transtracker database with project programming, amendment, obligation information and revenue information. (ONGOING)
- Implement new performance measurement requirements (ONGOING).

MTIP Update: Coordinate with the ODOT, TriMet and SMART to begin creation of the 2021-24 MTIP and STIP, including:

- Monitor and update the financial forecast.
- Complete the policy update to provide MPO policy direction and input to the various funding allocation programs for allocating federal funds to ensure progress in implementing the goals and objectives of the RTP.
- Utilize the Congestion Management Process (CMP) in analyzing the existing transportation system and developing the priority projects for the 2021-24 MTIP process.
- Prepare for adoption of the 2021-24 MTIP through analysis and documentation of the funding allocation and programming processes relative to federal regulations.

Local Project Support: Provide administrative and technical support to local project development and construction. This includes support of initial project development tasks performed as a planning phase activity. The administrative responsibilities for Metro, ODOT and local agency staff performing these planning activities are described in Appendix A.

Previous Work:

Work completed in the 2017-18 fiscal year included:

- Adoption of the 2018-2021 MTIP and its Air Quality Conformity findings.
- Updated the MTIP amendment process to ensure consistency with federal regulations for formal amendments vs. administrative adjustments and with Metro's federally approved public notification and comment processes.
- Adoption of a project charter for the development of the 2021-24 MTIP and coordination with ODOT, TriMet and SMART in the allocation and programming of funding to projects administered by those agencies.
- Administration of the MTIP, including reviewing, evaluating, and processing of MTIP amendments, project selection, financial plan and scope/schedule adjustments.
- Participating and assisting ODOT Local Agency Liaisons (LAL) develop and execute RFFA

project funded IGAs and obligate federal funding.
- Support in administering local project development plans (UPWP Regionally Significant projects)

Methodology:
The MTIP is updated and maintained through extensive cooperation and collaboration with partner agencies, a rigorous public involvement process, and administrative procedures such as the maintenance of a project and financial database.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:
- Funding forecast through the FFY 2024 (ONGOING).
- Adoption of the 2021-24 MTIP and Regional Flexible Fund allocation (RFFA) policy report (SUMMER 2018)
- CMAQ, STBG, and TA project implementation monitoring report (QUARTERLY)
- MTIP Fiscal Constraint report. (ONGOING)
- Amendments to current 2018-21 MTIP (ONGOING).
- Completion of the FFY 2018 Obligation Report (DECEMBER 2018).
- Monitoring the obligation and implementation of several project development plans (UPWP Regionally Significant Projects) (ONGOING).
- Monitoring and review assistance in the development of RFFA funded CMAQ, STBG, and TA Scope of Work, Project Prospectus, and IGAs to ensure federal funds are obligated per their milestone schedule correctly and in a timely fashion. (ONGOING)

Entities Responsible for Activity:
- Metro – Product Owner/Lead Agency
- Oregon Department of Transportation – Cooperate/Collaborate
- TriMet – Cooperate/Collaborate
- South Metro Area Regional Transit – Cooperate/Collaborate

Other Stakeholders:
Local partner agencies and members of the public, including:
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Transportation Policy Alternatives Committee (TPAC)
- Oregon Transportation Commission (OTC)
- Oregon Department of Environmental Quality (DEQ)
- Oregon Metropolitan Planning Organization Consortium (OMPOC)
- US Environmental Protection Agency (EPA)
- Environmental Justice and Underserved work group and organizations involved with minority and non-English speaking residents

Schedule for Completing Activities:
- Adoption of the 2021-24 MTIP and Regional Flexible Fund allocation (RFFA) policy report (SUMMER 2018)
- Completion of the FFY 2018 Obligation Report (DECEMBER 2018).

Please refer to schedule information provided in the *Objectives* section for a list on-going activities without scheduled completion dates.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2013-14	$560,466	3.26
2014-15	$1,020,003	5.375
2015-16	1,086,933	5.6
2016-17	$1,164,993	5.8

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	669,545	PL	$	355,865
Interfund Transfers	$	283,387	STBG	$	233,439
Materials and Services	$	74,500	5303	$	369,158
			Metro	$	68,970
TOTAL	**$**	**1,027,432**	**TOTAL**	**$**	**1,027,432**

Full-Time Equivalent Staffing

Regular Full-Time FTE	5.55
TOTAL	**5.55**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	757,814	PL	$	49,999
Interfund Transfers	$	339,979	STBG	$	674,970
Materials and Services	$	115,841	5303	$	369,158
			Metro	$	119,505
TOTAL	**$**	**1,213,634**	**TOTAL**	**$**	**1,213,634**

Full-Time Equivalent Staffing

Regular Full-Time FTE	6.025
TOTAL	**6.025**

Note: Include as part of the Annual UPWP Master Agreement – Not a Regionally Significant Stand Alone Project. No consultants utilized. Staff salary funding.

Air Quality Program

Staff Contact: Grace Cho, grace.cho@oregonmetro.gov

Description:

The Air Quality Program ensures activities undertaken as part of the Metropolitan Planning Organization (MPO), such as the Regional Transportation Plan (RTP) and the Metropolitan Transportation Improvement Program (MTIP), for the Portland metropolitan area address state and federal regulations and coordinates with other air quality initiatives in the region.

As part of state and federal commitments, the Air Quality Program ensures the region's MPO activities are carrying out the commitments and rules set forth as part of the Portland Area State Implementation Plan (SIP) and state and federal regulations pertaining to air quality and air pollution. The SIP is overseen by the Oregon Department of Environmental Quality (DEQ) and approved by the U.S Environmental Protection Agency (EPA). The following activities comprise of the Portland area SIPs:

- Monitor air pollution levels for criteria air pollutants, particularly ozone because of the region's history, and proactively work to address increasing ozone pollutions levels to prevent a non-attainment designation
- Monitor vehicle miles traveled (VMT) per capita and if key thresholds are triggered (as identified in the SIP) then undertake the contingency provisions outlined in the SIP
- Facilitate interagency consultation with federal, state, regional, and local partners
- Continue to implement the Transportation Control Measures as outlined, unless a specific date or completion point has been identified in the SIP
- Work collaboratively with DEQ as issues emerge related to federal air quality standards, mobile source pollution, and transportation programs

Because the Portland metropolitan region has successfully completed two consecutive 10-year maintenance plans after receiving an attainment designation from U.S. EPA as required by the Clean Air Act, the region is no longer required to conduct Air Quality Conformity Determinations (AQCDs) specifically for carbon monoxide to assess the air quality impacts of MPO activities and determine if transportation investments are conducive to the area meeting federal and state air quality standards.

In addition to the state and federal components, the Air Quality Program includes participation and partnerships on other regional initiatives related to air quality.

Objectives:

- Continue to implement the provisions set forth by the Portland Area Second 10-Year Maintenance Plan SIP. (ONGOING)
- Monitor the region's vehicle miles traveled and air pollution levels to ensure a contingency action is not triggered. (ONGOING)
- Serve and continue to coordinate interagency consultation on air quality related issues in the Portland metropolitan region. (ONGOING)
- Continue to maintain and implement emissions modeling tools for air quality analyses purposes. (ONGOING)
- Ensure MPO activities are consistent with Federal air quality rules and regulations.

(ONGOING)
- Consult, participate, and partner on activities as it relates to the implementation of the Portland Area Second 10-Year Maintenance Plan SIP. (ONGOING)
- Carry out any other mutually agreed upon air quality related activities outlined in the Memorandum of Understanding between Metro and DEQ.
- Participate and partner on air quality related activities which are beyond the scope of federal regulations and transportation conformity. (ONGOING)

Previous Work:
Work completed in the 2016-17 fiscal year included:
- Metro staff participation in EPA Region 10 quarterly conformity information sharing sessions;
- Development and approval of the 2018-2021 MTIP Air Quality Conformity Determination;
- Continued on-going participation and partnerships with local, regional, and state agencies on various air pollution mitigation efforts. Efforts are not solely focused on transportation/mobile source emissions; and
- Continued partnership with Oregon Department of Environmental Quality (DEQ) to assist with modeling to support background and regulatory compliance efforts addressing the 2015 updated ozone national ambient air quality standards (NAAQS).

Methodology:

For compliance with the SIP, monitoring activities are undertaken with the development of each RTP and MTIP as part of the suite of technical analysis which takes place for the plan and programming. These activities involve collecting data from DEQ and the Oregon Department of Transportation (ODOT) looking at annual air pollution reports and vehicle miles traveled data. For other on-going activities, consultation is carried out with federal, state, regional, and local partners to gather information, direction, and feedback.

For other regional air quality initiatives, participation, partnership, and disseminating information are main activities.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019
- Consult, coordinate, and collaborate on air quality and transportation conformity related items with Oregon DEQ, local, regional, state, and federal partners as well as interested community-based organizations. (ONGOING)
- Updated Metro-DEQ Memorandum of Understanding (MOU)

Entity/ies Responsible for Activity:
- Metro – Product Owner/Lead Agency
- Oregon State Department of Environmental Quality – Consult/Collaborate
- Transportation Policy Alternatives Committee (TPAC) – Consult/Collaborate
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)

Other Stakeholders:

- Local partner agencies and members of the public
- Joint Policy Advisory Committee on Transportation (JPACT)
- US Environmental Protection Agency (EPA)
- Southwest Washington Regional Transportation Commission (SWRTC)

Schedule for Completing Activities

- State Implementation Plan monitoring (On-Going)

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2015-16	26,689	0.15
2016-17	$28,334	0.155

FY 2017-18 Cost and Funding Sources:

Requirements:		**Resources:**	
Personal Services	$ 31,172	PL	$ 43,432
Interfund Transfers	$ 12,730		
TOTAL	**$ 43,902**	**TOTAL**	**$ 43,432**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.255
Total	**.0255**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	30,656	PL	$	43,674
Interfund Transfers	$	13,018			
TOTAL	**$**	**43,674**	**TOTAL**	**$**	**43,674**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.24
TOTAL	**0.24**

Civil Rights and Environmental Justice

Staff contact: Clifford Higgins, clifford.higgins@oregonmetro.gov

Description:

Metro's transportation-related planning policies and procedures respond to mandates in Title VI of the 1964 Civil Rights Act and related regulations; Section 504 of the 1973 Rehabilitation Act and Title II of the 1990 Americans with Disabilities Act; the federal Executive Order on Environmental Justice; the United States Department of Transportation (USDOT) Order; the Federal Highway Administration (FHWA) Order; Goal 1 of Oregon's Statewide Planning Goals and Guidelines and Metro's organizational values of Respect and Public Service.

Objectives:

- Identify communities and populations that are historically under-represented in decision-making processes using the most current federal census data, supplemented by more granular local information. Examples of supplemental information include Oregon Department of Education data on LEP populations and school lunch participation, HUD data on Section 8 housing voucher distribution, local real estate value data, job/income distribution data from the Bureau of Labor Statistics, Portland State University's Population Research Center analysis, and interviews with leaders of local immigrant groups and other community-based organizations. (ONGOING)
- Engage minority and low-income people in the decision-making processes through (1) relationships with community-based organizations and schools and minority business organizations; (2) promoting minority representation on advisory committees that have seats for community members; (3) development of outreach and engagement activities that minimize barriers to participation; and (4) improving communication techniques to increase the accessibility of information. (ONGOING)
- Assess – and improve methods to assess – the outcomes of regional transportation plans and programs on historically marginalized populations in order to improve decisions, inform communities and increase equity outcomes. (ONGOING)
- Implement strategies to achieve equity goals that were adopted as a goal and value of the RTP and as a criterion for evaluating projects to include in the Metropolitan Transportation Improvement Plan (MTIP). (ONGOING)

Previous Work:

- Continued updating and distributing internal language assistance guide to help staff take advantage of resources to provide access for English language learners; continued annual training for staff on how to use telephonic interpretation service to provide language assistance for incoming calls and at Metro outreach events.
- Continued the language hub on the Metro website to communicate services and civil rights in 13 non-English languages.
- Updated Metro's Title VI Plan and submitted to the Oregon Department of Transportation. The plan was approved in July, 2017 and will be updated by July, 2020.
- Submitted a Title VI Compliance Report covering 12 months of activity through June 30, 2017 to the Oregon Department of Transportation. (expected November 2017)

- Used email and Metro News posts to keep environmental justice stakeholders informed of Regional Transportation Plan update and Metropolitan Transportation Improvement Program comment opportunities and decision-making milestones.
- Coordinated with the development of the Metro equity strategy; began coordination on developing a Planning and Development departmental equity plan aligned with the Metro equity strategy.
- Conducted specific engagement to populations of color, limited English proficiency populations and low-income populations for the Southwest Corridor Plan draft Environmental Impact Statement process (NEPA). (DEIS expected completion Fourth Quarter 2017-18)
- Worked with local jurisdictions and environmental justice leaders on methodology for a Transportation Equity Analysis for future benefits, burdens and disparate impact analyses for Regional Transportation Plan updates and future Metropolitan Transportation Improvement Programs to inform decision-makers, inform communities and identify any need to avoid, minimize or mitigate impacts to historically marginalized communities prior to final adoption.
- Worked with environmental justice leaders and communities of concern to assess transportation needs that might be addressed through policy updates and project prioritization in the 2018 Regional Transportation Plan.
- Conducted Transportation Equity Analysis for future benefits, burdens and disparate impact analyses for the Metropolitan Transportation Improvement Program and 2018 Regional Transportation Plan. (Regional Transportation Plan analysis expected completion Fourth Quarter 2017-18)
- LEP Plan implementation: completed tasks identified in the LEP Plan through June 2018, which – for this fiscal year – consisted primarily of monitoring, assessing and improving internal processes for the program through efforts to engage English language learners.
- Developed Americans with Disabilities Act facility accessibility self-evaluation and action plan for Metro Regional Center. (Expected completion Fourth Quarter 2017-18.
- Updated web and report civil rights non-discrimination notice to specifically underscore compliance with Title II of the 1990 Americans with Disabilities Act.

Methodology

Metro's work to ensure compliance with Title VI, ADA and Environmental Justice regulations and statutes includes implementing: Metro’s Title VI Plan for ODOT consistent with FHWA guidelines, its Title VI Program and LEP Plan for FTA, annual and quarterly UPWP reporting to both ODOT and FTA; implementing outreach strategies that help EJ populations overcome barriers to participation; demographic data collection and mapping; assessing outcomes of plans and programs on historically marginalized communities; and trainings provided to staff on Title VI compliance requirements and EJ outreach best practices. Program work on compliance is found across many areas of transportation planning: developing the Regional Transportation Plan (RTP), the Metropolitan Transportation Improvement Program (MTIP); corridor planning projects that follow NEPA regulations and in the Regional Travel Options program, which conducts federally-funded outreach that promotes non-automobile transportation options. In 2012, Metro created a new public engagement review process, designed to ensure that Metro’s public involvement is effective, reaches diverse audiences and harnesses emerging best practices. One of the three criteria for selection of members of the Public Engagement Review Committee, an advisory committee to the Metro Council, is ability to represent diverse communities in the region. Other components of the

public engagement review process that will contribute to more inclusive engagement and accountability include an annual public survey, meetings of public involvement staff from around the region to address best practices, an annual community summit to gather input on priorities and engagement techniques, and an annual report.

Metro addresses compliance agency-wide as well as within transportation planning functions and program-by-program. A key way that Metro complies across the agency is with implementation of its Diversity Action Plan, updated and adopted by the Metro Council in May 2017. The plan identifies goals, strategies and actions to increase diversity and cultural competence at Metro in four key areas: internal awareness and diversity sensitivity, employee recruitment and retention, committee membership and public involvement, and procurement. Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion was adopted by the Metro Council in June 2016 and identifies goals and actions under five goals: Metro convenes and supports regional partners to advance racial equity; Metro meaningfully engages communities of color; Metro hires, trains and promotes a racially diverse workforce; Metro creates safe and welcoming services, programs and destinations; and Metro's resource allocation advances racial equity. Through the 2017-18 fiscal year, four departments are developing racial equity plans to reach the goals of the racial equity strategy: Planning and Development, Parks and Nature, Property and Environmental Services and the Oregon Zoo.

Entities Responsible for Activity:

- Metro – Lead Agency
- Oregon Department of Transportation – Cooperate/Collaborate
- TriMet – Cooperate/Collaborate
- Local jurisdictions – Cooperate/Collaborate

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019

- Submit a Title VI Compliance Report covering 12 months of activity through June 30, 2018 to the Oregon Department of Transportation. (First Quarter 2018-19)
- Annually update staff language resource list to provide in-house translation services as needed for multiple languages. (Ongoing)
- Updated the Limited English Proficiency Factor One (of the Department of Justice Four Factor Analysis) data and analysis for a 2018-19 Limited English Proficiency Plan and Implementation Plan update. (Third Quarter 2018-19)
- LEP Plan implementation: complete all tasks identified in the LEP Plan through June 2018, which – for this fiscal year – consists primarily of monitoring, assessing and improving internal processes for the program through efforts to engage English language learners. (Ongoing)
- Planning and Development departmental equity plan: complete tasks identified in the equity plan through June 2019. (Ongoing)
- Planning and Development departmental equity plan: complete tasks identified in the equity plan through June 2019. (Ongoing once departmental equity plan completed)
- Research available datasets for mapping populations of people with disabilities. (Third Quarter 2018-19)
- Research spatial demographic trends for communities of color and communities with low income compared to 2010 decennial census to inform next MTIP cycle. (Third Quarter 2018-19)

- English language learner and communities with low income analysis at the local jurisdictional (municipal) level to provide to those jurisdictions without capacity for their own analysis. (Fourth Quarter 2018-19)

Schedule for Completing Activities:

Please refer to schedule information provided in the Major Project Deliverables/Milestones section.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$62,182	0.45
2012-13	$53,940	0.45
2013-14	$122,644	0.50
2014-15	$50,191	0.41
2015-16	$113,658	0.7
2016-17	$124,561	0.7

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	103,952	PL	$	146,403
Interfund Transfers	$	42,451			
TOTAL	**$**	**146,403**	**TOTAL**	**$**	**146,403**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.75
TOTAL	**0.75**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	108,035	PL	$	156,544
Interfund Transfers	$	48,508			
TOTAL	**$**	**156,544**	**TOTAL**	**$**	**156,544**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.76
TOTAL	**0.76**

Public involvement

Staff contact: Clifford Higgins, clifford.higgins@oregonmetro.gov

Description:

Metro is committed to transparency and access to decisions, services and information for everyone throughout the region. Metro strives to be responsive to the people of the region, provide clear and concise informational materials and address the ideas and concerns raised by the community. Public engagement activities for decision-making processes are documented and given full consideration.

Objectives:

- Promote participation, based on public involvement opportunities, of individuals and of community, business and special interest groups. (ONGOING)
- Provide communications to encourage public participation in Metro processes that are understandable, timely and broadly distributed. (ONGOING)
- Provide the public with opportunities to be involved early in the process of policy development, planning and projects. (ONGOING)
- Comply with federal and state laws, regulations and guidance regarding public participation and notice of comment opportunities in transportation and land use decisions. (ONGOING)

Previous Work:

- Continued the Public Engagement Review Committee and public engagement review process to ensure that Metro's public involvement is effective, reaches diverse audiences and harnesses emerging best practices.
- Conducted public engagement for Southwest Corridor Plan Draft Environmental Impact Statement. (expected completion Fourth Quarter 2017-18)
- Conducted public engagement Powell-Division Transit and Development Project up to NEPA process.
- Continued outreach and public comment opportunities the 2018 Regional Transportation Plan update. (Ongoing)
- Produced the annual public involvement report for Metro, reviewing and evaluating public involvement processes across the agency. (expected completion Second Quarter 2017-18)
- Produced three Regional Snapshots in fiscal year 2017-18 to better communicate issues and opportunities for the region in the areas of transportation, jobs and housing. (expected completion Fourth Quarter 2017-18)
- Updated the agency’s Public Engagement Guide. (expected completion Second Quarter 2017-18)

Methodology:

Metro' public involvement practices follow the agency's Public Engagement Guide (formerly the Public Involvement Policy for Transportation Planning). Metro's public involvement policies establish consistent procedures to ensure all people have reasonable opportunities to be engaged in planning and policy process. Procedures include outreach to communities underserved by transportation

projects, public notices and opportunities for comment, which are addressed more specifically in this report's Title VI and Environmental Justice section. The policies also include nondiscrimination standards that Metro, its subcontractors and all local governments must meet when developing or implementing projects that receive funding through Metro. When appropriate, Metro follows specific federal and state direction, such as those associated with the National Environmental Policy Act and Oregon Department of Land Conservation and Development rules, on engagement and notice and comment practices.

In 2012, Metro created a new public engagement review process, designed to ensure that Metro's public involvement is effective, reaches diverse audiences and harnesses emerging best practices. Other components of the public engagement review process which will contribute to more inclusive engagement and accountability include an annual public survey, meetings of public involvement staff from around the region to address best practices, an annual community summit to gather input on priorities and engagement techniques, and an annual report.

In 2015, Metro introduced its Regional Snapshot series, bringing new online communications tools to expressing the issues and opportunities for the region in the areas of transportation, jobs and housing. These snapshots combine data infographics, personal stories and reports of actions being taken within the region and around the country to better connect residents to planning issues and solutions that show promise at the local or regional level.

Entities Responsible for Activity:

- Metro – Lead Agency
- Oregon Department of Transportation – Cooperate/Collaborate
- TriMet – Cooperate/Collaborate
- Local jurisdictions—Cooperate/Collaborate

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Convene the annual community summit, seeking input from the public to help shape public involvement processes. (Annual event)
- Produce the annual public involvement report for Metro, reviewing and evaluating public involvement processes across the agency. (Annual activity)
- Continue outreach and public comment opportunities the 2018 Regional Transportation Plan update. (Through Second Quarter 2018-19)
- Conduct outreach and public comment opportunities for amendments to the Metropolitan Transportation Improvement Program (As needed)
- Produce three Regional Snapshots in fiscal year 2018-19 to better communicate issues and opportunities for the region in the areas of transportation, jobs and housing.

Schedule for Completing Activities:

Please refer to schedule information provided in the Major Project Deliverables/Milestones section.

Funding History:

Public Involvement is spread throughout other project budgets. Please refer to the MTIP, Corridor Planning, Title VI MPO Management & Services budget summaries.

Transportation System Management and Operations - Regional Mobility Program

Staff contact: Caleb Winter, caleb.winter@oregonmetro.gov

Description

Regional Mobility is one of two program areas under the broad policy heading of Transportation System Management and Operations (TSMO) – the other is the Regional Travel Options program. Together these two programs advance TSMO strategies by coordinating the development, implementation and performance monitoring of regional demand and system management strategies that relieve congestion, optimize infrastructure investments, promote travel options and reduce greenhouse gas emissions. Both the Regional Mobility Program and Regional Travel Options programs are key components of Metro's Congestion Management Process (CMP). Many CMP activities related to performance measurement and monitoring are covered as part of the Regional Mobility Program. The TSMO Program works in collaboration with ODOT Region 1 Planning for Operations (see separate entry in UPWP).

Objectives:

- Coordinate Regional Mobility strategies and investments with the Regional Transportation Plan (RTP), corridor refinement plans, and local Transportation System Plans (TSP) to ensure consideration and integration of TSMO strategies as directed by the Regional Transportation Functional Plan.
- Implement the region's Congestion Management Process (CMP) by enhancing performance data and reporting capabilities and by continuing to advance demand and system management solutions that address congested travel.
- Coordinate allocation of regional flexible funds for TSMO project priorities, as identified by the Regional TSMO Strategy.
- Coordinate and collaborate with ODOT Region 1 Planning for Operations activities (see separate UPWP entry)
- Guide investments in ITS communications infrastructure based on the Communications Master Plan, regional resources and regional partnerships.
- Update the region's ITS Architecture Plan for consistency with the National and State ITS Architecture Plans, and with the Regional TSMO Strategy update (see separate UPWP entry).
- Continue to strengthen the Transportation Policy Alternatives Committee's (TPAC) institutional capacity regarding TSMO especially in the area of joint demand and system management policy and funding decisions (e.g., Mobility on Demand and Smart City innovations).
- Support regional understanding of, and opportunities for connected and automated vehicles.
- Serve as a regional liaison to advance research, education and training on transportation management and operation issues relevant to the region.
- Maintain ongoing communication with counterparts at Federal Highway Administration (FHWA) and Oregon Department of Transportation (ODOT) regarding the CMP implementation as it relates to TSMO.

Previous Work:

In FY 2017-18, the Regional Mobility Program:

- Administered TSMO projects sub-allocated in the 2012-15 MTIP and 2016-2018 MTIP.
- Participated in project coordination meetings.
- Continued TSMO related work from the Congestion Management Process (CMP).
- Shared and began trained regional partners on the regional ITS Architecture.
- Coordinated with agency leads on fiber optic and data communications based on the regional Communications Master Plan.
- Coordinated and participated in monthly TransPort meetings.
- Coordinated TSMO-related professional development and training opportunities.
- Held connected and automated vehicle presentations and discussions at TransPort to begin developing a regional vision in advance of a TSMO Strategy update.
- Provided input to transit signal priority planning region-wide, for Powell/Division and Southwest Corridor high capacity transit projects.
- Participated in the Traffic Incident Management (TIM) Coalition for the Portland area.
- Participated at federal level: hosted FHWA Operations workshop on the lessons learned from Integrated Corridor Management deployments around the country; participated in an MPO peer exchange on regional TSMO.

Methodology:

With the intent of supporting TSMO investments and activities in the Portland metropolitan region, the Regional Mobility program encompasses three activity areas that include regional policy development and support, MTIP grant management and system performance management.

Development and Support

The Regional Mobility program serves as the liaison for TSMO policy development and implementation. It facilitates the sharing of best practices with and among partner agencies. The program provides leadership on the update of the Regional Intelligent Transportation System (ITS) Architecture in order to comply with the FHWA rule that requires federally funded transportation projects to be in compliance with the National ITS Architecture. It will also guide implementation of the region's ITS communications network under the Communications Master Plan. The program will work with the Regional Travel Options program to coordinate an ad hoc regional transportation management policy and funding subcommittee of TPAC as needed. It will continue to seek and support opportunities for research, education, and training on TSMO.

MTIP Grant Management

The Regional Mobility Program manages the sub-allocation of MTIP funding dedicated to TSMO. The TSMO program coordinates projects that were prioritized for a sub-allocation of federal funds for 2016-2018 and 2018-2021, consistent with the Regional TSMO program plan and strategy. The program will continue to coordinate and manage the allocation of TSMO-designated regional flexible funds to partner agencies. It will provide support for applying systems engineering to regionally-funded ITS projects.

Congestion Management Process

The Regional Mobility program supports the federal mandates to maintain a CMP and promote TSMO, including intelligent transportation systems (ITS). The program will implement actions identified in the Arterial Performance Management Regional Concept of Traffic Operations (RCTO) to advance the region's performance measurement capabilities on arterial streets. CMP performance monitoring will continue (e.g., Regional Mobility Corridor Atlas) in order to support development of the RTP, local TSPs and MTIP programming. The program will continue to enhance PORTAL, a regional archived data user service managed by Portland State University. PORTAL will continue to expand the collection, archiving, and uses of multimodal performance data in a way that will enhance the region's ability to diagnose and address congestion and support multimodal operations.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Manage projects funded with FY2016-2018 MTIP to advance priority projects as identified in the 2010-2020 Regional TSMO Plan (ONGOING)
- Conduct project selection process for FY 2018-2021 MTIP TSMO Program funds.
- Provide strategic and collaborative program management including coordination of activities for TransPort, ODOT Region 1 Planning for Operations (see separate UPWP entry), PORTAL Technical Advisory Committee, ITS Architecture, ITS Network Management Team, Traffic Incident Management (TIM) Coalition, Central Signal System Users Group, Cooperative Telecommunications Infrastructure Committee and other regional TSMO-related forums. (ONGOING)
- Support implementation of the Arterial Performance Measure Regional Concept of Operations (RCTO) to expand real-time, multimodal traffic surveillance and performance data collection capabilities including signal controller software enhancements. (ONGOING)
- Participate in the regional project led by City of Portland to upgrade or replace the Regional Central Signal System and form partnerships as well as next generation Transit Signal Systems. (ONGOING)
- Identify and pursue opportunities to implement the Emerging Technology Strategy, which includes policies to develop new regional data sources and management systems in preparation for automated and connected vehicles, through the TSMO program.
- Continue TSMO Strategy Update by exploring topics including equity, safety, resiliency, connected vehicles, automated vehicles, vehicle-to-X communications, transit signal priority, freight signal priority, mobility as a service/mobility on demand (e.g., public-private partnerships), performance measures, big data analytics and asset management (For more info, see separate UPWP entry on TSMO Strategy update).
- I-84 Multimodal Integrated Corridor Management (ICM) Deployment Plan (See separate UPWP entry)
- Support TSMO related elements of the Congestion Management Process (ONGOING)

Entities Responsible for TSMO Activity

Policymaking

- Metro Council
- Metro (Lead Agency)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Transportation Policy Alternatives Committee (TPAC)

- TransPort (Subcommittee of TPAC)

Cooperation, Collaboration & Funding Recipients

- TransPort subcommittees (includes PORTAL Technical Advisory Committee, ITS Architecture Subcommittee, ITS Network Management Team, Traffic Incident Management Coalition.
- Transportation Research and Education Center (TREC)/ Portland State University Federal Highway Administration (FHWA) Federal Transit Administration (FTA), US DOT ITS Joint Program Office
- Oregon Department of Transportation (ODOT), TriMet, Port of Portland, Counties of Clackamas, Multnomah & Washington, Cities of Beaverton, Gresham, Hillsboro, Portland, Lake Oswego, Tigard, Wilsonville, SW Regional Transportation Council, C-Tran, Washington State Department of Transportation

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major project deliverables/milestones* section.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$192,225	1.13
2012-13	$60,000	0.76
2013-14	$69,963	1.49
2014-15	$281,805	1.55
2015-16	$193,735	0.9
2016-17	$114,687	0.55

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	46,501	TSMO STBG	$	60,769
Interfund Transfers	$	18,989	Metro	$	7,220
Materials and Services	$	2,500			
TOTAL	$	67,990	TOTAL		$67,990

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.318
TOTAL	**0.318**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	59,254	TSMO – STBG	$	69,010
Interfund Transfers	$	25,162	STBG	$	8,979
Materials and Services	$	2,500	Metro	$	8,926
TOTAL	**$**	**86,916**	**TOTAL**	**$**	**86,916**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.418
TOTAL	**0.418**

Transportation System Management and Operations - Regional Travel Options (RTO)

Staff Contact: Dan Kaempff; daniel.kaempff@oregonmetro.gov

Description:
Regional Travel Options is one of two program areas under the broad policy heading of Transportation System Management and Operations (TSMO) – the other is the Regional Mobility program. Together these two programs advance TSMO strategies by coordinating the development, implementation and performance monitoring of regional demand and system management strategies that relieve congestion, optimize infrastructure investments, promote travel options, and reduce greenhouse gas emissions. Both the Regional Mobility Program and Regional Travel Options programs are key components of Metro's Congestion Management Process (CMP).

Objectives:

- Implement the 2018 RTO Strategy. (ONGOING)
- Support regional coordination and collaboration around travel options education and outreach. Convene working group of partners. Provide support for partner agency education and outreach activities. Lead development of regional education, outreach and awareness initiatives. Facilitate Portland-region implementation of ODOT transportation options education and outreach initiatives. (ONGOING)
- Develop and implement a funding allocation methodology that reflects and supports the goals and objectives of the 2018 RTO Strategy. Develop criteria that support the Regional Transportation Plan and other regional goals, focusing on achieving outcomes that improve equity, the environment, and the economy. Consider elderly, disabled, low income, minority and other underserved populations in the grant making process. Consider the impacts on public health in the grant making process. (ONGOING)
- Administer and monitor funding allocated or awarded to local governments and non-government organizations. Work with funding recipients to provide technical assistance in the areas of budget and fiscal management to ensure funds are spent in compliance with federal regulations.
- Continued implementation of an evaluation strategy that measures the outputs and outcomes of all projects and programs supported with RTO funds, to ensure alignment with federal and regional goals related to reducing vehicle miles traveled and improving air quality. (ONGOING)
- Continued implementation of the regional commuter program with a focus on new rail transit investments, multi-use trail investments and improved coordination of multi-agency efforts. (ONGOING)
- Continued administration of ride matching services to region, including participation in multi-state online ride matching system. (ONGOING)

Previous Work:
In FY 17-18 quarters 1 and 2, the Regional Travel Options Program:

- Managed 18 grant projects, totaling $2.1 million awarded through the 2017-19 RTO grant solicitation process. Enhanced coordination between regional partners engaged in employer outreach activities. Provided technical assistance and materials to support partners work.

- Managed Drive Less Connect (DLC) for the Portland region. DLC is a multi-state ride matching system covering Idaho, Oregon and Washington
- Supported regional collaborative marketing initiatives to promote travel options and safety, including "Be Seen. Be Safe.", "Transit Is," "Bike More Challenge," "Bike Month," "Drive Less Challenge," and others.
- Conducted the 2013-2016 RTO evaluation that will be broken into reports by key topics: Commuters, Neighborhoods, Traveler Information & Services, Health/Active Transportation and Administration. These reports provided findings to aid in the RTO Strategy update.

Methodology:
The RTO program implements regional policies to reduce drive-alone auto trips and personal vehicle miles of travel and to increase use of travel options. The program improves mobility and reduces pollution by carrying out the TDM components of the TSMO strategy outlined in the 2014 Regional Transportation Plan (RTP). The program maximizes investments in the transportation system and relieves traffic congestion by managing travel demand, particularly during peak commute hours. Specific RTO strategies encompass promoting transit, ridesharing, cycling, walking, and telecommuting.

Policies at the Federal, state and regional level emphasize system management as a cost-effective solution to expanding the transportation system. The RTO program supports system management strategies that reduce demand on the transportation system. RTO strategies relieve congestion and support movement of freight by reducing drive-alone auto trips.

RTO and partners will measure projects along a triple-bottom line framework with performance indicated in terms of economic, social and environmental benefits. RTO developed a multiple account evaluation framework to better capture the range of outcomes delivered by RTO grant partners and to align projects with RTP performance measures. In keeping with the RTP mode share targets, a primary RTO performance measure is shifting mode share to approximately a 50% non-drive-alone trips by 2035.

Partners responsible for RTO program planning and delivery include:

- Metro Council – Policy making
- Joint Policy Advisory Committee on Transportation (JPACT) – Policy making
- Transportation Policy Alternatives Committee (TPAC) – Policy making
- Transportation Research and Education Center (TREC) – Cooperate/Collaborate
- Oregon Transportation Commission (OTC) – Cooperate/Collaborate
- Federal Highway Administration (FHWA) – Cooperate/Collaborate
- Federal Transit Administration (FTA) – Cooperate/Collaborate
- Oregon Department of Transportation (ODOT) – Cooperate/Collaborate
- SW Regional Transportation Council – Cooperate/Collaborate
- Washington State Department of Transportation – Cooperate/Collaborate
- Beaverton School District – Grant Recipient
- City of Gresham – Grant Recipient
- City of Lake Oswego – Grant Recipient
- City of Milwaukie – Grant Recipient
- City of Portland – Grant Recipient
- City of Tigard – Grant Recipient
- City of Vancouver – Cooperate/Collaborate
- City of Wilsonville/Wilsonville SMART – Grant Recipient

- Clackamas Community College – Grant Recipient
- Clackamas County – Grant Recipient
- Community Cycling Center – Grant Recipient
- C-TRAN – Cooperate/Collaborate
- Explore Washington Park – Grant Recipient
- Go Lloyd – Cooperate/Collaborate
- Gresham Area Chamber of Commerce – Grant Recipient
- Hillsboro Parks and Recreation – Grant Recipient
- Multnomah County – Grant Recipient
- National Safe Routes to School Alliance – Grant Recipient
- Oregon Walks – Grant Recipient
- Portland Community College – Grant Recipient
- Portland Public Schools – Grant Recipient
- Ride Connection – Grant Recipient
- The Street Trust – Grant Recipient
- TriMet – Grant Recipient, Cooperate/Collaborate
- Washington County – Grant Recipient, Cooperate/Collaborate
- West Columbia Gorge Chamber of Commerce – Grant Recipient
- Verde – Cooperate/Collaborate
- Westside Transportation Alliance TMA – Grant Recipient

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:

Develop and update tools to support coordination of RTO partners' education and outreach activities including a marketing plan, calendar and shared marketing materials. (ONGOING)

- Manage the Regional Travel Options sponsorship program, which supports community and regional travel options partners through events and limited duration community outreach initiatives that promote and educate the public about travel options. (ONGOING)
- Distribute the Bike There! map through area retail outlets, distribute free copies of the flatmap to employment sites to encourage and assist employees in finding their route to work. (ONGOING)
- Manage and support Drive Less Connect ride matching database. (ONGOING)
- Monitor and report progress on programs and projects carried out by Metro, TriMet, SMART, and RTO grant recipients, including evaluations and surveys. (ONGOING)
- Coordinate with Mobility on Demand (MOD) partners, real-time traveler information partners to advance Active Transportation Demand Management (ATDM) strategies and increase use of travel options.
- Coordinate with City of Vancouver and C-TRAN on bi-state commute programs. (ONGOING)
- Implement and manage FY 17-19 Regional Travel Options grants and past grants that are still active. (ONGOING)
- Based on policy direction from the 2018 RTO Strategy, update and modify RTO funding allocation process, criteria, methodology.
- Begin preparations for 19-21 RTO funding allocation process.

Schedule for Completing Activities:
Ongoing – Grant projects awarded through 2017-19 funding allocation continue
Fall/Winter 2018 – Solicitation of 2019-21 grant proposals; award of grants
Spring 2019 – Refinement of grant project scopes of work; development of grant agreements between Metro and grant recipients for projects scheduled to begin July 1, 2019
June 30, 2019 – 2017-19 grant projects due to be completed. Final reports are due in July 2019

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$2,041,526	6.2
2012-13	$1,791,267	6.46
2013-14	$2,040,294	5.66
2014-15	$2,286,261	5.35
2015-16	$2,280,818	4.25
2016-17	$2,255,371	3.75

FY 2017-18 Cost and Funding Sources:

Requirements:		**Resources:**	
Personal Services	$ 534,858	FTA - STBG	$ 1,969,215
Interfund Transfers	$ 219,759	ODOT-FHWA-STBG	$ 225,000
Materials and Services	$ 1,544,070	Metro	$ 104,472
TOTAL	**$ 2,298,686**	**TOTAL**	**$ 2,298,686**

Full-Time Equivalent Staffing

Regular Full-Time FTE	4.282
TOTAL	**4.282**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	600,777	FTA - STBG	$	2,802,835
Interfund Transfers	$	257,530	ODOT – FHWA - STBG	$	172,219
Materials and Services	$	2,247,394	Metro	$	130,646
TOTAL	**$**	**3,105,701**	**TOTAL**	**$**	**3,105,701**

Full-Time Equivalent Staffing

Regular Full-Time FTE	4.932
TOTAL	**4.932**

Regional Freight Program

Contact: Tim Collins at tim.collins@oregonmetro.gov

Description:

The safe and efficient movement of freight is critical to the region's continued economic health. The Regional Freight Program manages updates to, and implementation of, multimodal freight elements in the Regional Transportation Plan (RTP) and provides guidance to affected municipalities in the accommodation of freight movement on the regional transportation system. The program supports coordination with local, regional, state, and federal plans to ensure consistency in approach to freight-related needs and issues across the region. It ensures that prioritized freight requests are competitively considered within federal, state, and regional funding programs. Ongoing freight data collection, analysis, education, and stakeholder coordination are also key elements of Metro's freight planning program.

Metro's freight planning program also coordinates with the updates for the Oregon Freight Plan. Metro's coordination activities include participation in the Oregon Freight Advisory Committee (OFAC), and Portland Freight Committee (PFC). To facilitate USDOT requirements under the FAST Act, Metro helped provide information on the locations of freight intermodal connectors in the region, and the urban freight roadways and highways to add to the National Multimodal Freight Network.

Objectives:

Policy

- Engage with the Oregon Transportation Plan, Regional Transportation Plan (RTP), corridor refinement plans, and local Transportation System Plans (TSP) to ensure consideration and integration of freight policies and strategies as directed by the Regional Transportation Functional Plan.
- Work with state, regional and local agencies and private interests to implement the Regional Freight Strategy, including the action items identified in Chapter 9, as well as advancement of key multimodal freight investment priorities, securing appropriate private matching funds, and ensuring regional investments are competitively considered under state freight funding programs.
- Update regional freight vision and policies for the 2018 Regional Transportation Plan.
- Track industrial land use planning efforts to ensure that current and future freight movement needs are addressed.
- Continue to work with Oregon Freight Advisory Committee to identify statewide freight project needs and seek support for funding of priorities.
- Participate in the Portland Freight Committee and the implementation of the Portland Freight Master Plan, meeting FAST Act provisions for coordination of freight movement.
- Maintain a Regional Freight Program outreach component including web page, presentations, and informational materials.

Projects

- Support and collaborate on enhancements to freight analysis tools including the update of the Commodity Flow Forecast, Metro's truck module of the travel forecast model, Metro's Behavior Based Freight Model, and the Portland Oregon Regional Transportation Archive Listing (PORTAL).
- Collaborate with the Port of Portland and other stakeholders, to support the region's export initiative and leverage it into a broader economic development initiative that maximizes returns in the region. Consider export strategies as a key driver for investments affecting the regional freight network, seek available funding and coordinate relevant initiatives or analysis.
- Track regional projects with significant implications for freight movement.

Previous Work:

In FY 2017-18, major freight program tasks completed included:

- Continued to participate in monthly Portland Freight Committee and quarterly State Oregon Freight Advisory Committee.
- Participated in the Oregon Freight Intermodal Connector System (OFICS) Study, Technical Advisory Committee.
- Under the FAST Act, provided recommendations to USDOT, and developed with ODOT an expanded Metro region-wide network for the Interim National Multimodal Freight Network.
- Provided advice and modeling expertise to the City of Portland and their consultant for the Regional Over-Dimensional Truck Route Study.
- Participated in and provided over-site to the Project Management Team (PMT), for completion of the Regional Over-Dimensional Truck Route Study in February of 2017.
- Participated in the proposals of the Regional Flexible Fund Allocations (RFFA) for current and future regional freight programs and studies.

Methodology:

The regional freight program is part of Metro's MPO function, and the Regional Freight Plan was adopted in June 2010 as part of the Regional Transportation Plan. The focus of the work program for FY 2018-19 will continue to be on coordination with freight stakeholders, local jurisdictions and partners; and enhancing data collection and analysis tools. Specific major activities will include finalizing the Regional Freight Strategy as part of the 2018 Regional Transportation Plan. With the input of the Regional Freight Work Group, and policy guidance from TPAC and JPACT, the plan will be updated as the Regional Freight Strategy. We will also continue to seek additional funding and partnership opportunities which will allow us to further implement the regional freight strategy and stimulate jobs and economic activity.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:

- Update Freight Element of 2018 RTP (December 2018)
- Finalize the Regional Freight Strategy (October 2018) with the following work products:
    1. Updated economic figures and commodity flow data
    2. New freight measures that inform near- and long-term investment priorities
    3. Updated regional Freight Network map
    4. New sections on regional freight funding and the federal FAST Act and FASTLANE grants
    5. New sections on the new freight model and technology in freight transportation
- Develop and model new RTP system performance measures and monitoring measures for freight (2018 - 2019).
- Collaborate with Port of Portland and other business entities on expanded export and related industrial economic development activities. (ON-GOING)
- Continue to participate in monthly Portland Freight Committee and other local projects (ON-GOING)
- Participate in quarterly State Oregon Freight Advisory Committee. (ON-GOING).

Entity/ties Responsible for Activity:

- Metro Council (Lead Agency)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Transportation Policy Alternatives Committee (TPAC)
- Regional Freight Work Group (input and coordination of the 2018 Regional Transportation Plan and Regional Freight Strategy)
- Cities and counties within the region including Clark County, Washington
- Federal Highway Administration (FHWA)
- Oregon Department of Transportation (ODOT)
- Washington State Department of Transportation (WSDOT) (for certain coordination)
- Ports of Portland and Vancouver
- Businesses, including freight shippers and carriers, distribution companies, manufacturers, retailers and commercial firms
- Oregon Trucking Association and other business associations including the Westside Economic Alliance, East Metro Economic Alliance, the Columbia Corridor Association, and the Portland Business Alliance
- Metro area residents and neighborhood associations

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project deliverables/milestones* section.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$146,142	0.795
2012-13	229,341	1.32
2013-14	$91,385	0.51
2014-15	$192,713	0.95
2015-16	$108,586	0.53
2016-17	$123,532	0.55

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	69,015	STBG	$	87,216
Interfund Transfers	$	28,183	Metro	$	9,982
TOTAL	**$**	**97,198**	**TOTAL**	**$**	**97,198**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.475
TOTAL	**0.475**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	38,520	STBG	$	49,242
Interfund Transfers	$	16,358	Metro	$	5,636
TOTAL	**$**	**54,878**	**TOTAL**	**$**	**54,878**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.255
TOTAL	**0.255**

Data Management, Data Visualization, and Performance Measurement

Staff Contact: Karen Scott-Lowthian, karen.scott-lowthian@oregonmetro.gov

Description:

Metro's Research Center (RC) department includes the Data Resource Center (DRC) which provides Metro and the region with spatial and other data services including: data acquisition, aggregation, and standardization; data storage systems, software applications, and system analysis; and analytic products that visualize data to support decision-making, performance measurement, and other purposes. DRC performs the following primary activities in close cooperation with staff in Metro's Planning & Development (P&D) department:

- Data analysis and visualization. DRC computes transportation plan evaluation measures, performs land development trend analyses, and applies many other analytics that turn data into useful information.
- Data system and data-driven application development. DRC designs, implements, and maintains data systems and software applications that let end users acquire, store, analyze, and retrieve data for Metro's federal and other programs.
- Data development: DRC collates maintains a collection of more than 150 spatial and related datasets which form the foundation for providing services to the Research Center's partners. The data repository, known as the Regional Land Information System (RLIS), supports land use and transportation planning and almost every other Metro program.
- Performance Measurement: DRC uses its own and other data sources to produce visualizations for monitoring the performance of the regional transportation system, monitoring the region's land use, measuring transportation plan outcomes, assessing growth management planning outcomes, and measuring other Metro programs' progress toward regional goals. Key elements of performance measurement for the UPWP include:

    - Transportation System Monitoring: The DRC collects, manages, and analyzes a wide array of data regarding transportation performance. This work informs transport and land use planning, MTIP activity, and Metro policy development. Transport monitoring in turn has several dimensions, including but not limited to:
        - Roadway performance
        - Transit performance
        - Bicycle (and, eventually, pedestrian) system performance
        - Safety/Crashes
        - Performance of and data streams from emerging technologies including CV/AV, transport network companies, etc.
        - Performance measures required under MAP-21

    - Land Development Monitoring System (LDMS): similarly to transportation monitoring, DRC data and analytics inform Metro's growth management and housing programs.

- *Ensuring compliance with federal requirements:* DRC staff work together with P&D to craft

data and information products that comply with federal and state regulations.

- *Advanced analytic research:* DRC carries out, as part of overall RC efforts, innovative research to enhance data acquisition, data processing, and analytic methods in ways that improve Metro's ability to conduct its growth planning, transport planning, and other functions.

Objectives:

The primary DRC objective is to ***provide a data-driven and valid analytic foundation for decision support, planning support, and program management support*** to Metro and the region. This includes more-detailed objectives that augment and support P&D objectives:

- *Provide performance measurement data and easy access to* it via products and systems that visualize data as useful information supporting land use planning, transportation planning & programming, program management, and other Metro programs and policy goals.
- *Provide foundation data* upon which analytics and other processes can depend for performance measurement, planning, and operational support.
- *Provide land use and transportation data to support Metro's transport and land use forecasting models* (see separate sections describing land use and transport forecasting).
- *Provide decision-support, analytic, and operational-support software applications* by procurement or in-house development.
- *Innovate* to enhance Metro's ability to use data for planning, performance measurement, and decision-making.
- Coordinate with local jurisdictions, state agencies, private entities, and other partners to *ensure efficient data development and data management*.

Previous Work:

- Provided custom mapping and analysis to Metro Planning and Development Department
- Provided custom mapping and analysis to Metro Property and Environmental Services
- Provided custom mapping and analysis to Metro Parks and Nature Department
- Maintained RLIS datasets, providing quarterly updates to subscribers and partners
- Managed contract to acquire regional orthophotography for partners
- Developed and analyzed regional demographic data
- Conducted Limited English Proficiency and Environmental Justice analysis to comply with federal regulations and executive orders.
- Mapped regional employment sites
- Mapped regional vacant lands
- Updated the regional buildable lands analysis in support of the Urban Growth Management program.
- Acquired and combined rental market data from various sources to support the Land Development Monitoring Program and support affordable housing research
- Developed data and methodology to support analysis of redevelopment and infill potential. Prepared datasets of observed information to assist in the validation of Metro's land use forecast model (i.e., MetroScope)
- Updated regional bicycle network data
- Updated trail network and trail usage data
- Provided mapping and analysis to visualize crash incident data
- Updated the database and server infrastructure to more efficiently manage and deliver data
- Established a web site that summarizes Daily VMT and Daily VMT per capita, transit, and

population data for the Portland Federal-Aid Urban Area as well as the Metropolitan Statistical Area
- Compiled TriMet patronage and new fare structure information
- Collected parking cost information for key areas within the Portland Central Business District (CBD) and the Lloyd Area
- Researched gasoline prices per gallon for the Portland Area, Oregon, the West Coast, and the U.S., and prices per barrel of oil nationally
- Reviewed and commented on key documents that pertain to comparisons of national system performance (e.g., Texas Transportation Institute – Urban Mobility Report, FHWA – Federal Highway Statistics, FHWA – HPMS Summary Report – National Transit Database
- Provided information to those seeking system performance data (e.g., traffic counts, Daily VMT per capita, transit ridership comparisons of top 50 reporting agencies in U.S. – including Portland)
- Assembled transportation system performance data for inclusion into the next Metro Performance Measures document
- Consolidated and standardized historic traffic count data in centralized database for improved reporting, visualization, and distribution
- Began collecting and compiling traffic count data collection contract with input from local jurisdictions, working to see that cutlines and count locations were not duplicative of other agencies' traffic count collection efforts
- Provided RLIS and ad hoc data to members of the public and private entities through DRC public information support
- Deployed the first part of a web-based system to assist volunteers to collected detailed counts of bikes and pedestrians
- Began exploring the development of common, multi-jurisdictional data repositories to house new data

Methodology:

RC and DRC apply the following methods to achieve the *Data Management, Data Visualization,* and *Performance Measurement* work element objectives:

- Coordinate and cooperate closely with internal Metro and external partners, especially ODOT & data researchers at PSU, to ensure optimal data acquisition and utilization and to craft analytics that well serve Metro's growth planning, MTIP, and RTP activities
- Maintain robust data system infrastructure, application software "stack," and staff system analysis/coding capability within Metro
- Maintain state-of-the art software and staff capacity for data analysis and visualization
- Develop and maintain systems using best enterprise practices
- Develop analytic and visualization techniques that are valid, robust, and repeatable
- Integrate data management, visualization, and analysis with the forecasting elements of the UPWP (described elsewhere)
- Monitor developments of and suggest directions for data- and analytic-related policy at the regional, state, and national level
- Stay informed of national and local advanced research, and make contributions to it that could serve others

- Work with other regional jurisdictions and partners to identify common needs and develop common cost-saving solutions
- Design and deploy a web- and mobile-accessible information system providing access to a comprehensive, dynamic view of Metro's transport, land use, and other performance measures.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Data management & system development
- Supplying MAP-21 performance measures in coordination with Metro Planning & Development department and ODOT
- Develop a comprehensive "MPO data plan" as a part of RC's overall RLIS data management plan that guides Metro's acquisition, management, and use of data for growth planning, RTP, MTIP, and other federally-required planning functions. The plan will articulate roles and responsibilities for institutions, individuals, and the variety of data systems necessary for success.
- Create a workplan to procure or develop a project & financial tracking database system for the MTIP and RTP programs, preferably spatially-enabled and scalable to include regional partners. Resources permitting, begin implementation of the new database.
- Implement and maintain a single regional site for all regional bike and pedestrian counts, as developed with regional agency and academic partners.
- Support the needs of Metro Planning and Development Department, including analytic and cartographic products for the RTP, MTP, RTO, and other efforts described elsewhere in this document (ONGOING)
- Data acquisition: Update the RLIS data repository regularly with elements including but not limited to: (ONGOING)
- Updated regional demographic and socio-economic data (e.g., income, race, ethnicity, age, employment, education)
- Transportation facility location and characteristics for all modes, including street centerlines and attributes, transit, bicycle, and pedestrian infrastructure
- Land Development Monitoring System (LDMS), including taxlot, housing and employment space pricing, building permits, etc.
- Jurisdictional boundaries and annexations
- Coordinate with ODOT and regional partners to improve street centerline data and to ensure that streets data are current, consistent, standardized, and shared with ODOT and other state agencies
- Collect and compile regional system monitoring data (VMT, transit patronage, auto driving and operating costs, parking costs, gasoline costs per gallon, and oil per barrel) (ONGOING)
- Update regional aerial orthophoto and related (e.g. LiDAR) products for Metro and its partners (ONGOING)
- Storage, maintenance, and upkeep of a single site for all regional traffic counts, as developed with regional partners
- Coordination and cooperation
- Conduct standing coordination between RC and P&D on transportation technology topics and policies, and together bring such topics to Metro Council and committees
- Proactively work with academic partners, especially PSU's PORTAL and National Bike-Pedestrian programs, to enhance their ability to meet Metro's MPO and other needs
- Coordinate with local jurisdictional agencies to help provide updated regional demographic

data to them to allow for easier demographic analysis around current and planned transportation projects (ONGOING)

- Update strategic plan for data management and sharing to sustain centralized, consistent and cost- effective storage and maintenance of regional data. (ONGOING) should this be ongoing?
- New set of regional auto and vehicle classification count data as part of quarterly RLIS releases (ONGOING)
- Coordinate with other jurisdictions to help implement a federal standard classification for streets which will support ODOT's classifications in TransData/TransGIS. (ONGOING)
- (ONGOING)
- Coordinate regional emergency response entities to maintain a single street centerline data set that can be used by all (ONGOING)
- Collaborate and coordinate with ODOT to support the use of TransData datasets and to ensure that data development efforts are not duplicative. (ONGOING)
- Coordinate with the Active Transportation Program and regional partners to review existing bicycle and pedestrian count protocols and equipment. Develop a comprehensive program to collect and report these data to support multi-modal transportation modeling (ONGOING)
- Expand on web mapping portal and address services for public usage
- Analytic products
- Conduct regional Factor 1 limited English proficiency analysis for Metro's Title VI reporting
- Respond to transportation monitoring data requests (e.g., traffic counts, daily Vehicle Miles of Travel (VMT) per capita) (ONGOING)
- Continue providing ad hoc data, analysis, and visualization services to members of the public and private entities through DRC public information support (ONGOING)
- Creative analytic solutions to ad hoc transportation and land use planning data visualization and performance measurement needs from the Planning & Development and other Metro Departments through innovation activities (ONGOING)
- Provide data, analysis and technical expertise to the Southwest Corridor Equitable Development project
- Provide data and technical expertise to TriMet in the development of a multi-modal trip planning tool
- Provide data, analysis and technical support to the 2018 update of the Regional Transportation Plan
- Support the MTIP effort
- Title VI support:
    - Analyze demographics of citizens with disabilities
    - Trend analysis on status of communities of color and low income communities both for Metro and for local agencies through technical assistance
- Performance measurement
    - Scope and document the requirements and resource needs for a new (dynamic, web-delivered) version of the Mobility Corridors Atlas, Metro's implementation of the Congestion Management Process (CMP) measurement requirements.
    - Continue to support the development and implementation of the regional Economic Value Atlas within the context of the unified Metro performance

measurement data system
- Deploy first phase of a centralized, comprehensive web-accessible application providing access to performance measure information. First phase will be comprised of infrastructure build out, data and performance measure identification, and workflows needed for required reporting, and (resources permitting) prototype measures.

- Advanced analytic research
  - In close coordination with P&D, local jurisdictions, ODOT, and academic partners develop and being implementation of a technology strategy for CV/AV/TNCs and other emerging transport technologies to complement the P&D policy work on those topics (as part of the previously-mentioned "MPO data plan"
  - Scope a data and analytic method long-term strategy to ensure that RC data and analytics will be responsive to emerging planning topics for future RTP, MTIP, and RTO cycles

Entities Responsible for Activity:

- Metro planners and analysts
- Local governments
- Businesses
- Citizens

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project Deliverables/Milestones* section.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$1,600,932	9.74
2012-13	$1,530,797	8.91
2014-15	$1,821,176	9.48
2015-16	$1,753,816	6.111
2016-17	$1,615,517	6.13

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	723,570	PL	$	158,370
Interfund Transfers	$	514,416	ODOT Support	$	112,784
Materials and Services	$	143,600	TriMet Support	$	122,638
			Metro	$	782,229
			Other	$	205,566
TOTAL	**$**	**1,381,586**	**TOTAL**	**$**	**1,381,586**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	5.664
TOTAL	**5.664**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	831,242	PL	$	211,448
Interfund Transfers	$	725,145	ODOT Support	$	183,490
Materials and Services	$	42,000	TriMet Support	$	236,582
			Metro	$	911,868
			Other Anticipated Funds	$	55,000
TOTAL	**$**	**1,598,387**	**TOTAL**	**$**	**1,598,387**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	6.259
TOTAL	**6.259**

Economic, Demographic and Land Use Data and Forecasting Maintenance

Staff Contact: Jeff Frkonja, jeff.frkonja@oregonmetro.gov

Description:

The land use analysis team (LUAT), formerly the socio- economic research center (LUAT), is a unit within Metro's Research Center (RC). LUAT provides historical and forecast estimates of economic activity, population, and land use distribution to Metro's transportation, land use, and solid waste management planners. Historic estimates offer benchmark information to help calibrate the travel demand and land use forecast models and provide performance metrics to help planners understand current conditions. LUAT provides forecasts of future economic, population, and land use conditions in various geographies ranging from regional (MSA) to transportation analysis zone (TAZ) level. Forecast periods range from 20 to 50 years into the future. Metro planners use the projections to manage solid waste policy, study transportation corridor needs, formulate regional transportation plans, analyze the economic impacts of potential climate change scenarios, to develop land use planning alternatives. The latter include performance-based growth management and urban / rural reserves studies. At times, local jurisdictions use the forecast products for their own comprehensive plan and system plan updates.

Objectives:

The primary objective of the LUAT unit is to ***provide robust employment, population, and land use projections to regional policy makers***. State regulations and federal guidance inform these activities, which use the best available tools to carry out forecasting efforts. LUAT sees that forecasts are peer reviewed and coordinated with local jurisdictions per state law.

To provide this information LUAT maintains sets of econometric models and supporting tools that produce regional growth projections for economic and demographic data series. RC maintains model inputs and software on an ongoing basis to ensure that the forecast products remain relevant and valid.

RC also makes major updates to land use forecasting tools on a periodic basis and applies tools to planning projects. See Section II chapter entitled "Economic, Demographic and Land Use Data and Forecasting Development Program" for a description of periodic work.

Previous Work:

Survey, Data Acquisition, and Research

- **Census Data**—Metro RC created for internal use a repository of key Census data and advised its local partners on Census activities such as the local update of community addresses (LUCA) process.

Model Maintenance

- **Regional macro-economic model** —RC staff completed modernization (in 2017) of the regional model to a new forecasting software platform supported by the vendor for U.S. macroeconomic forecast. Also during the project, tasks included re-estimating the model

equations with the most current regional population and employment estimates. Prepared additional forecast operation documents to be used with the new model developments. Validated the model and demonstrated good consistency between forecasts and history after revisions and re-benchmarking have been taken into account. Metro convened an independent expert panel of economists and demographers from the Portland region to review and confirm the model and forecast. Outcomes from the expert review panel are to be published as support documentation for the UGR analysis.

- **MetroScope viewer update**— In conjunction with validation and sensitivity, staff has produced and will continue to update and modernize the templates for displaying and explaining model results. Diagnostic and land use statistics are being standardized into common formats so that future validation and sensitivity exercises can be compared temporally and also provide feedback concerning the model's performance for re-calibration as needed.
- **Land Development Monitoring Program** —in order to properly validate the recent updates to the land use model, staff prepared new data to independently evaluate the land use model's forecasting performance. Independent and verifiable rental information, land consumption, infill, and redevelopment estimates are needed and being prepared by the DRC. This data is based on observed current information. Plans are underway to maintain the longitudinal analysis to maintain the land development monitoring program.

Methodology:

Survey, Data Acquisition, and Research

- **Market Research**—use consumer surveys to investigate the difference in actual market choices vs. stated preferences (similar to the use of revealed and stated preferences in travel demand forecasting), and establishment surveys to investigate how suppliers make decisions.
- **Performance Measures**—use observed data and market research to produce analytic findings that measure land market performance.

Model and Analytic Tool Improvements

- **Innovation**—Respond in creative ways to emerging requests for analytic improvements.

Model Maintenance

- **Validation**—Conduct appropriate validation exercises for forecast models.
- **Upkeep**—Maintain model software in sustainable software frameworks.
- **Update**—Review model, model structures, equations, and parameters in order to sustain "state of the practice" forecasting capabilities

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Survey, Data Acquisition, and Research (Model Improvements also listed here for clarity)

- Enhancing Metro's use of Census and other federal data, defining and implementing optimal coordination activities between Metro and local agencies regarding the 2020 Census. [Ongoing]
- Continue acquiring new data for, publishing information products from, and enhancing the Land Development Monitoring System especially for residential rental price; supplier redevelopment location, type, and frequency; and commercial development. [Data plan

by June 2018]

- Develop a peer reviewed housing and transportation cost calculator for the current year and future year based on outputs derived from the MetroScope land use model (i.e., housing cost estimates) and Metro's own travel demand model (i.e., travel costs based on auto ownership, value of time and other travel factors). [Prototype by June 2018]

Performance Measurement

- Ensure that LDMS data informs the build-out of Metro's next-generation performance measurement information access system (see also the "Data and Performance Measurement" section of this UPWP). [June 2018]

Model Maintenance

- **Regional macro model** – Define and begin implementation of a long-term plan for the regional macro model's evolution. [Plan by November 2018]
- **MetroScope model re-validation exercise** – Devise and begin implementation of a long-term land use allocation model and data improvement program. [Plan by November 2018]
- Creative analytic solutions to ad hoc transportation and land use planning data visualization and performance measurement needs from the Planning & Development and other Metro Departments through innovation activities [ONGOING]

Entities Responsible for Activity:

- Metro – Lead Agency
- Oregon Office of Economic Analysis and Portland State Population Research Center – Population (and economic) coordination per State regulations
- Local Governments – coordination per State regulations
- Stakeholders (academics and non-governments) – collaboration and consensus building

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major project deliverables/milestones* sections.

Funding History:

Please note that due to modifications to the organizational chart and funding structure for the Research Center, the budget for Economic and Land Use Forecasting has increased and been split across two programs: Maintenance vs. Development & Application. This increase reflects primarily a change in funding source for existing staff rather than a net increase of staff or staff time.

Fiscal Year	Total Budget	FTE Comparison
2011-12	$517,340	3.415
2012-13	$373,916	2.45
2013-14	$425,151	2.6

2014-15	$576,019	2.4
2015-16	$600,099	2.528
2016-17	$429,699	1.553

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	197,163	PL	$	84,295
Interfund Transfers	$	140,172	STBG	$	274,371
Materials and Services	$	113,000	TriMet Support	$	50,445
			Metro	$	41,223
TOTAL	**$**	**450,335**	**TOTAL**	**$**	**450,335**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	1.483
TOTAL	**1.483**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	129,813	PL	$	162,105
Interfund Transfers	$	113,244	STBG	$	7,286
Materials and Services	$	41,300	Metro	$	114,966
TOTAL	**$**	**284,357**	**TOTAL**	**$**	**284,357**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	0.8570
TOTAL	**0.8570**

Travel Forecast Maintenance Program

Staff Contact: Chris Johnson, chris.johnson@oregonmetro.gov

Description:

The Travel Forecast Maintenance Program includes work elements necessary to keep the travel demand model and various ancillary tools responsive to issues that emerge during the regional transportation planning process. The major work activities and projects within this program area include model maintenance innovation, and both statewide and national professional involvement.

The program area is critical because the travel demand model provides the analytical foundation for transportation policy and investment decisions

Objectives:

The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Environmental Protection Agency (EPA) require that project modeling be carried out using methods, techniques and tools that meet certain guidelines. Failure to meet the guidelines may result in analytical conclusions that do not meet Federal approval.

Thus, the primary objective for this program is to ***ensure the validity and utility of the modeling methods, techniques and tools.*** This is achieved through the work elements listed under the Model Maintenance, Innovation, and Statewide and National Professional Involvement categories.

Previous Work (conducted under single Model Development program area):

Travel Behavior Surveys

- The last comprehensive travel behavior survey for this region was conducted in 2011. The data serves as a basis to understand the degree to which various stimuli (demographics, urban form, cost, travel time, lifestyle choices, etc.) affect traveler behavior and choices.

New Models

- Activity Based Model: A new dynamic activity based model has been developed for this region. Results from the 2011 travel behavior survey were used in the model estimation.
- Trip Based Model (current model): The trip-based models was re-estimated to better reflect behavior patterns and choice characteristics derived from the household travel behavior survey data. In addition, the model was updated to a 2015 base year.
- Freight Model: A SHRP2 C-20 IAP grant was awarded to Metro. A consultant team was contracted to assist with the project. A prototype model framework was implemented using national data. Additional data was collected local data from establishments, logistic firms, and other sources. These data were used to refine the prototype model to ensure that it more closely reflects the conditions in Portland. To meet the match requirement, Metro performed various tasks

throughout the project (e.g., national zonal definition and network coding).

- Bike Routing Algorithm: The routing algorithm is being reviewed and re-evaluated to potentially include a variety of simplifying features to ease the application of the tool by external partners such as the City of Portland.
- Multi-Criterion Evaluation (MCE) Toolkit: The MCE Toolkit is consists of three tools: a benefits calculator to determine monetized benefits of transportation projects based on outputs from the regional travel demand model, a project costing tool, and a visualizer that calculates B/C ratios, and summarizes and visualizes results. Phase I of the MCE project was completed in FY2017.
- Housing+Transportation Cost Index. Modeling program staff collaborated with Land Use team staff to prototype a H+T cost "viewer" for both current and forecast states of the regional land markets and transport system.

Model Maintenance

- Modeling Network Attributes: Metro modeling staff reviewed and updated the modeling network assumptions (e.g., uncongested speeds, vehicle throughput capacities, transit line itineraries). These attributes were incorporated into a master network database system.
- Travel Demand Model Input Data: Model input data was reviewed and updated. Variables such as intersection densities, household and employment accessibility, and parking cost assumptions were adjusted to reflect 2015 conditions.
- Travel Demand Model Computer Code: Model application code was refined to address specific needs (e.g., model application interface, code changes required by the model re- estimation)

Statewide and National Professional Engagement

- Oregon Modeling Steering Committee: Staff participated on the OMSC Executive Committee and several affiliated subcommittees.
- Transportation Research Board Committees: Staff served on the TRB Transportation Planning Applications Committee. This committee is instrumental in providing a forum for advancing model application guidelines.

Methodology:

The following methods will be applied to achieve the objectives of the Model Development Program:

Innovation

- Ad hoc research and development: "Innovation" efforts respond during the year to emerging issues and needs (e.g. the Housing+Transportation cost index tool described in the *Economic, Demographic and Land Use Forecasting* section of this document is a multi-program innovation effort).
- Strategic visioning for long-range model enhancements. Metro RC continues to scope research and development of new tools and methods for analyzing and forecasting travel-related information.

Model Maintenance

- Modeling Network Attributes: Metro will continue to collaborate with the regional modeling partners to ensure the validity of the network assumptions found in the network. Additional staff resources will also be devoted to refining the zone system required to support the activity-based model platform
- Travel Demand Model Input Data: The model input data will be modified as warranted. Such things as intersection densities, household and employment accessibility, and parking cost assumptions will be refined. The activity-based model requires more extensive input data than the trip-based model and, as such, this effort will require additional staff resources.
- Travel Demand Model Computer Code: Model application code will be modified, as warranted.
- Software Expertise: As new versions of the network modeling software are released, staff will take steps to maintain and expand their expertise.

Statewide and National Professional Engagement

- Oregon Modeling Steering Committee: Staff will continue to participate on the OMSC (Metro now chairs the OMSC) and affiliated subcommittees.
- Transportation Research Board Committees: Staff will continue to serve on TRB committees that influence national planning guidelines.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Model Maintenance

- Modeling Network Attributes: Modified networks that reflect current assumption sets. (As warranted). Final zone system for activity-based model.
- Travel Demand Model Input Data: Modify model input data that reflect current assumption sets. (As warranted). Final input data set for activity-based model.
- Travel Demand Model Computer Code: Modify model application code. (As warranted)
- Coordinate with the performance measurement and data acquisition programs described in the Data Management, Data Visualization, and Performance Measurement section of this document to ensure that they both provide information necessary for the travel forecasting efforts and make good use of information from the travel forecast models.

Statewide and National Professional Development

- Oregon Modeling Steering Committee: Staff participation on OMSC. (Ongoing).
- Transportation Research Board Committees: Staff participation on TRB. (Ongoing).

Innovation

- Conduct research and development on emerging issues as needs and resources indicate

Entities Responsible for Activity:

Model Maintenance

- Metro – Product Owner/Lead Agency

Statewide and National Professional Development

- Metro in collaboration with other professionals

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project Deliverables/Planned Milestones* section.

Funding History:

The travel demand model must be kept current and robust to remain a viable tool for analyzing future travel condition. The confidence level of the model must be such that it can ensure the provision of sound information for policy and investment decisions. Thus, the Travel Forecast Maintenance program is funded each year to meet that need. Key areas within the program include the maintenance of the model input data (Model Maintenance), conducting research on state of the art methods (Innovation), and the staff participation on local and national research and model implementation committees (Statewide and Professional Involvement).

Fiscal Year	Total Budget	FTE Comparison
2011-12	$843,236	2.9
2012-13	$860,307	4.837
2013-14	$693,559	4.11
2014-15	$875,764	3.56
2015-16	$934,920	3.723
2016-17	$1,136,273	4.082

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	780,435	PL	$	845,527
Interfund Transfers	$	554,844	STBG	$	141,765
Materials and Services	$	34,016	ODOT Support	$	88,891
			TriMet Support	$	63,463
			Metro	$	229,648
TOTAL	**$**	**$1,369,295**	**TOTAL**	**$**	**1,369,295**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	5.744
TOTAL	**5.744**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	529,904	PL	$	659,383
Interfund Transfers	$	462,269	ODOT Support	$	19,196
Materials and Services	$	35,585	TriMet Support	$	98,527
			Metro	$	250,652
TOTAL	**$**	**1,027,758**	**TOTAL**	**$**	**1,027,758**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	3.787
TOTAL	**3.787**

Technical Assistance Program

Staff Contact: Cindy Pederson, cindy.pederson@oregonmetro.gov

Description:

The purpose of the Technical Assistance program is to provide transportation data and modeling services for projects that are of interest to local entities. Clients of this program include regional cities and counties, TriMet, the Oregon Department of Transportation (ODOT), the Port of Portland, private sector businesses, and the general public. In addition, client agencies can use funds from this program to purchase and maintain copies of the transportation modeling software used by Metro. A budget allocation defines the amount of funds that is available to each regional jurisdiction for these services.

Objectives:

US Department of Transportation (USDOT) protocols require the preparation of future year travel forecasts to analyze project alternatives. Similarly, modeling is required by the Environmental Protection Agency (EPA) in project analysis to quantify emissions in air quality analysis.

Thus, the primary objective of this program is to ***provide travel modeling tools and services to clients for local project needs.***

Previous Work:

- Provided data and modeling services to regional jurisdictions and agencies (e.g., provided survey data tabulations to jurisdictions; provided modeling support to TriMet, Washington County, and the City of Portland).
- Provided data and modeling services to private consultants and other non-governmental clients (e.g., modeling support services to a jurisdiction in Clackamas County via private consultant).
- Purchased and maintained modeling software for seven governmental agencies (ODOT Region 1, City of Portland, City of Gresham, City of Hillsboro, Clackamas County, Multnomah County, and Washington County).

Methodology:

Provide Transportation Data and Modeling Services

- Data and modeling services are provided to jurisdictions, regional agencies, and the private sector upon request.

Modeling Software

- Upon request, transportation network modeling software is purchased and maintained for regional agencies. There are currently seven agencies that participate in this program.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Data and modeling services to jurisdictions and regional agencies (Upon request). This will likely include:

- Support to Oregon DOT on its Value Pricing analysis for the Metro region.

- Support to local agencies for Title VI analyses.
- Data and modeling services to private consultants and other non-governmental clients. (Upon request)

- Funds to the local governmental agencies to purchase and pay maintenance on transportation modeling software. (Upon request)

Entities Responsible for Activity:

Metro – in collaboration with clients

Schedule for Completing Activities:

Data and modeling services are provided to jurisdictions and regional agencies upon request. Schedules are negotiated at the time of the requests.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2012-13	$81,916	0.409
2013-14	$77,658	0.370
2014-15	$174,224	0.712
2015-16	$118,744	0.407
2016-17	$98,421	0.35

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	49,266	STBG	$	65,046
Interfund Transfers	$	35,035	ODOT Support	$	23,325
Materials and Services	$	19,014	TriMet Support	$	7,489
			Metro	$	7,445
TOTAL	**$**	**103,305**	**TOTAL**	**$**	**103,305**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.35
TOTAL	0.35

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	48,510	STBG	$	67,979
Interfund Transfers	$	42,318	ODOT Support	$	25,828
Materials and Services	$	19,176	TriMet Support	$	8,417
			Metro	$	7,780
TOTAL	**$**	**110,004**	**TOTAL**	**$**	**110,004**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.33
TOTAL	**0.33**

MPO Management & Services

Staff Contact: Tom Kloster, tom.kloster@oregonmetro.gov

Description:

Metropolitan Planning Organization (MPO) Management and Services provides overall management and administration of Metro's Metropolitan Planning Organization (MPO) role. Overall department administration includes:

- preparation and administration of the Unified Planning Work Program (UPWP),
- procurement,
- contract administration,
- grants administration,
- internal and external reporting,
- human resource management,
- quadrennial review and annual self-certification of meeting MPO requirements,
- certifications and assurances filing to demonstrate capacity to fulfill MPO requirements,
- public participation in support of MPO activities,
- air quality modeling support for MPO programs, and
- staffing and services to meet required needs of the various standing MPO advisory committees, including:
    - Metro Council
    - Joint Policy Advisory Committee on Transportation (JPACT)
    - Transportation Policy Alternatives Committee (TPAC)
    - Project-specific working groups and advisory committees

As an MPO, Metro is regulated by Federal planning requirements and is a direct recipient of Federal transportation grants to help meet those requirements. Metro is also regulated by State of Oregon planning requirements that govern the Regional Transportation Plan (RTP) and other transportation planning activities. The purpose of the MPO is to ensure that Federal transportation planning programs and mandates are effectively implemented, including ongoing coordination and consultation with state and federal regulators.

As the MPO, Metro is responsible for preparing the annual Unified Planning Work Program (UPWP), a document that coordinates activities for all federally funded planning efforts in the Metro region. Metro follows recently adopted state protocols for developing the UPWP to ensure adequate opportunity for state and local partners to develop project narratives, for state and federal consultation on the draft UPWP and for adoption of the final plan by JPACT and the Council in a timely manner for submittal to ODOT and the USDOT. Once adopted, the UPWP is a living document, and Metro makes periodic amendments, as needed, under procedures established in the UPWP. Amendments to the UPWP area submitted to USDOT for approval.

JPACT serves as the MPO board for the region in a unique partnership that requires joint action with the Metro Council on MPO actions. TPAC serves as the technical body that works with Metro staff to develop policy alternatives and recommended actions for JPACT and the Metro Council.

As the MPO for the Portland region, for meeting recently adopted federal transportation performance measures. Metro is coordinating with ODOT and TriMet to determine roles and responsibilities for setting targets and collecting monitoring data needed to report our progress toward these measures. In related work (described separately in the UPWP), Metro and ODOT plan to follow the 2018 RTP adoption with an update to our regional mobility policy. Our goal is to continue linking our mobility policy to the 24 mobility corridors that make up our Regional Mobility Atlas, and we believe this approach strongly meets the intent of federal regulations for tailoring our performance-based planning and programming to conditions on the ground. As part of this work, we will likely fine-tune our performance targets and measures as they relate to federal requirements.

Metro also maintains intergovernmental agreements (IGAs) and memorandums of understanding (MOUs) with local on general planning coordination and special planning projects. These agreements include:

- South Metro Area Rapid Transit (SMART) MOU *(effective through June 30, 2020)*
- Southwest Washington Regional Transportation Council (RTC) MOU *(effective through June 30, 2018)*
- Oregon Department of Environmental Quality MOU *(effective through February 2023 (agreement still being finalized)*
- 3-Way Planning IGA with ODOT and TriMet *(effective through June 19, 2018)*

Metro belongs to the Oregon MPO Consortium (OMPOC), a coordinating body made up of representatives of all eight Oregon MPO boards. OMPOC was founded in 2005 to build on common MPO experiences and to advance the practice of metropolitan transportation planning in Oregon. OMPOC meets four times each year and operates under its own bylaws. Metro staff also participates in the quarterly MPO & Transit District coordination meetings convened by ODOT, and attended by all eight MPOs, several transit districts, ODOT, FHWA and other state and federal agencies, as needed.

Objectives:

Provide consistent and ongoing administrative support for the regional transportation planning programs. (ONGOING)

- Maintain an updated Unified Planning Work Program (UPWP), including annual updates and periodic amendments, as needed to advance regional planning projects (ONGOING)
- Complete quarterly and year-end planning progress reports to be submitted to FTA and FHWA via ODOT (ONGOING)
- Complete an annual self-certification review of compliance with federal transportation planning requirements (ONGOING)
- Complete the 5-year federal certification review by FHWA, FTA and EPA (2021)
- Complete annual recruitment of community representatives for TPAC's six community member seats (three seats are filled annually for 2-year terms)
- Maintain planning intergovernmental agreements and memorandums of understanding with regional planning partners to ensure timeline delivery of planning program products and funding (ONGOING)

Previous Work:

Work completed in the 2016-17 fiscal year included:

- Adoption of the revised 2018-19 UPWP.
- Completion of quarterly and year-end planning progress reports in 2017-18 submitted to FTA and FHWA via ODOT.
- Coordination of the UPWP with the 2018-19 Metro budget.
- Completion of the 2017 Quadrennial Review.
- Completion of the 2017 annual self-certification.
- Update of the Metro Public Participation Plan.
- Organization of twelve JPACT meetings and twelve TPAC meetings in 2017-18, as well as coordination of agenda items on Metro Council, MPAC, MTAC meetings as needed.
- Recruitment of community representatives for the 2018-19 (calendar year) cycle.
- Participation in quarterly Oregon MPO and Transit staff meetings and quarterly OMPOC meetings.
- Complete scheduled updates to IGAs and MOUs.
- Provision of MPO staff support, as needed.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-19:

- Adoption of the 2019-20 UPWP.
- Completion of quarterly and year-end planning progress reports for 2018-19 submitted to FTA and FHWA via ODOT.
- Coordination of the UPWP with the 2019-20 Metro budget.
- Completion of the 2018 annual self-certification.
- Organization of twelve JPACT meetings and twelve TPAC meetings as well as coordination of agenda items on Metro Council, MPAC, MTAC meetings as needed.
- Complete recruitment of TPAC community representatives for the 2019-20 (calendar year) cycle.
- Participation in quarterly Oregon MPO and Transit staff meetings and quarterly OMPOC meetings.
- Complete scheduled updates to IGAs and MOUs.
- As part of updating the 3-way Metro, ODOT and TriMet IGA, create a new exhibit that describes roles and responsibilities for target setting and data sharing necessary to meet federal performance requirements.
- Provision of MPO staff support, as needed.

Entities Responsible for Activity:

- Metro – Product Owner/Lead Agency
- Oregon Department of Transportation – Cooperate/Collaborate
- TriMet – Cooperate/Collaborate
- South Metro Area Regional Transit (SMART) – Cooperate/Collaborate
- Oregon MPO Consortium (OMPOC) - Cooperate/Collaborate

Other Stakeholders:

- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Transportation Policy Alternatives Committee (TPAC)
- Oregon Transportation Commission (OTC)
- Oregon Department of Environmental Quality (DEQ)
- US Environmental Protection Agency (EPA)

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major project deliverables/milestones* section.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2013-14	$1,644,305	8.42
2014-15	$321,436	1.52
2015-16	$305,930	1.45
2016-17	$281,194	1.2

FY 2017-18 Cost and Funding Sources:

Requirements:			Resources:	
Personal Services	$	123,518	PL	$ 292,376
Interfund Transfers	$	50,441		
Materials and Services	$	46,100		
Contingency	$	72,318		
TOTAL	**$**	**292,376**	**TOTAL**	**$ 292,376**

Full-Time Equivalent Staffing

Regular Full-Time FTE	.8
TOTAL	**.8**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	155,881	PL	$	276,999
Interfund Transfers	$	66,195			
Materials and Services	$	54,922			
TOTAL	**$**	**276,999**	**TOTAL**	**$**	**276,999**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	0.97
TOTAL	**0.97**

Regional Safety Program

Staff contact: Lake McTighe, lake.mcTighe@oregonmetro.gov

Description

Metro is formalizing regional transportation safety activities in a Regional Safety Program to support Vision Zero and achieving national, state, regional and local safety performance targets. A two-year work plan will be developed to guide Metro activities related to transportation safety and coordinate with federal, state and local partners. The work plan will be based on the strategies and actions identified in the 2018 Regional Transportation Safety Strategy and the Regional Safe Routes to School Program.

Starting in 2009, in response to a Federal Highway Administration recommendation to better incorporate safety into the MPO planning process, Metro began working with local governments, ODOT, TriMet, practitioners and researchers to draft the region's first Regional Transportation Safety Plan. The plan built on the 2011 Oregon Transportation Safety Action Plan and the 2012 Clackamas County Transportation Safety Action Plan.

Since the completion of the 2012 Regional Transportation Safety Plan, governments and communities across the country have recognized the need for new strategies and approaches, such as Safe Systems, Vision Zero, Toward Zero Deaths and Road to Zero, in order to make streets safe. Cities and counties in the region have developed transportation safety action plans with targets for zero deaths and severe injuries, and the federal government has a stated goal of zero deaths and severe injury crashes in thirty years. Additionally, the region and state have increased funding and programs for Safe Routes to School. Increasing Safe Routes to School is a core element of the Regional Safety Program.

There is a recognition that funding and programs need to ramp up to address fatal and severe crashes for all modes of travel, especially for vulnerable users. The 2018 Regional Transportation Safety Strategy uses the Safe Systems and Vision Zero frameworks and identifies recommended strategies and actions for all partners. The Regional Safety Program work plan will describe steps Metro will take to implement Metro related actions indentified in the 2018 Regional Transportation Safety Strategy and Regional Safe Routes to School Program.

Tasks in the Regional Safety Program work plan will include annual reports to the Metro Council and JPACT, schedules to update regional plans and the Regional Transportation Functional Plan to reflect current policy direction, activities to coordinate with partners and increase awareness of Vision Zero and Safe Routes to School, identifying legislative priorities, and refining regional funding criteria.

Objective

Adopt the 2018 Regional Transportation Safety Strategy. Develop and implement a two-year work plan to support implementation of the 2018 Regional Transportation Safety Strategy and Safe Routes to School Program.

Previous Work

- Establishment of ad-hoc Regional Safety Workgroup in 2009.
- Adoption of regional safety targets in 2010 Regional Transportation Plan.
- Completion of the 2011 State of Safety Report.
- Completion of the 2012 Regional Transportation Safety Plan.
- Adoption of the 2014 Climate Smart Strategy, which included recommended actions for safety.
- Update of safety targets and policy in the 2014 Regional Transportation Plan.
- Adoption of Portland's Vision Zero Plan and Transportation Safety Action Plans in Beaverton, Hillsboro, Clackamas County and Washington County.
- Adoption of the 2016 Oregon Transportation Safety Action Plan.

Work Completed in 2017-18 included

- Development of the 2018 Regional Transportation Safety Strategy, including updated Vision Zero safety target, annual safety targets to meet federal requirements, safety performance measures, strategies and actions, developed with guidance from technical safety work group, Metro technical and policy advisory committees, and Metro Council.
- Completion of the 2017 State of Safety Report.
- Identification Regional High Injury Corridors using replicable GIS based methodology.
- New safety policy section in the 2018 Regional Transportation Plan.
- Completion of the Regional Travel Options Strategy including a Safe Routes to School Program.

Methodology

Metro will manage the Regional Safety Program and the development of a two-year work plan. Metro will also consult with partners listed under Other Stakeholders in the development of the work plan and actions to implement safety actions.

Major Project Deliverables and Schedule for Completion in FY 2018-2019:

Two-year Regional Safety Program work plan and initial implementation activities.

Entity/ies Responsible for Activity

Metro – Product Owner/Lead Agency

Other Stakeholders

- Local Cities and Counties
- Police and Fire
- Oregon Department of Transportation
- Oregon Department of Land Conservation and Development
- Port of Portland
- TriMet, SMART and other transit operators in the region
- U.S. Department of Transportation/ Federal Highway Administration

(The 2018 Regional Safety Strategy includes an extensive list of partners that could play a role in the Regional Safety Program)

Funding History

This program is being described for the first time in this UPWP, and therefore does not include a discrete funding history.

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	19,380	STBG	$	24,774
Interfund Transfers	$	8,230	Metro	$	2,835
TOTAL	**$**	**27,609**	**TOTAL**	**$**	**27,609**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.133
TOTAL	**0.133**

Mobility Policy Refinement Planning

Staff contact: Tom Kloster, Tom.Kloster@oregonmetro.gov

Description

As part of adopting the 2000 RTP, the first transportation plan to fully implement the Region 2040 Growth Concept, Metro developed a new approach to managing mobility. The new policy came from an extensive conversation with regional elected officials and policy makers over a two-year period, including an alternatives analysis to help officials better understand the tradeoffs in making mobility investments.

The new policy was adopted by the Oregon Transportation Commission in [2002] as an amendment to the recently completed 1999 Oregon Highway Plan (OHP), and has been in effect since then. This new emphasis on a tailored mobility policy and multi-modal solutions was also incorporated into the Oregon Transportation Plan (OTP) in 2006, the policy document that frames and organizes all of the state's modal plans for transportation.

The new mobility policy broke from the historic practice of "once size fits all" congestion standards for roads and freeways to a more tailored approach that centered the function of major streets on land use outcomes, and focused mobility expectations on the freeway system.

The new policy also recognized that historic expectations of "building your way out" of peak-hour highway congestion was not only fiscally and technically unattainable, but also had unintended impacts that were inconsistent with the larger 2040 vision, including encouraging sprawl and undermining the broader public and private investments being made in centers and transit corridors.

In the 2010 RTP, Metro expanded on the concept with the development of a series of regional mobility corridors that provide the geography for monitoring and reporting on mobility. Twenty-four mobility corridors were developed, with each corridor framed by Region 2040 land use outcomes, and bundling highways, transit, major streets and bikeway in each mobility corridor as a complementary parts of an integrated system. Metro publishes a periodic Regional Mobility Atlas to provide ongoing tracking of these corridors as a foundation for planning and project development work in the region.

In 2013, ODOT published the Corridor Bottleneck Operations Study (CBOS), another tool for understanding and responding to congestion bottlenecks on highways within the regional mobility corridors. This tool has since been used to prioritize system management investments across the metro region with an eye toward fine-tuning a mature highway system with strategic improvements.

Despite these efforts to keep pace with traffic growth in the region, in the region, congestion has continued to grow since the 2000 RTP mobility policy was adopted. During this time, the region has experienced significant population and employment growth, straining all parts of our transportation

system. During the same period, state investments in the region's freeway system continued to decline from historic levels due to slowing state and federal transportation funding. In recent years, ODOT has adapted to this new fiscal reality with an emphasis on fine-tuning the freeway system with improved operational management and strategic capacity improvements. The few major freeway projects envisioned for the system in the 2018 RTP are also focused on bottlenecks that are part of this shift toward maintaining a mature system.

More recently, the U.S. Department of Transportation issued new regulations (through MAP-21 / FAST Act) for states and MPOs that will require greater monitoring of mobility on our freeway system and setting targets for system performance. While these new requirements differ somewhat from the current mobility policy for the region, the approach is similar, with a focus on specific segments of the freeway system.

To meet the new federal mandate and the growing challenges on our freeway system, ODOT and Metro propose to work in partnership on a refinement to our regional mobility policy, upon completion of the 2018 RTP. This will allow the refinement work to build on a rich data set and updated policy framework from the RTP, with the goal of better informing system management and investments in the region.

This work would produce two major policy frameworks for consideration by JPACT, the Metro Council and the Oregon Transportation Commission. First, a corridor-specific mobility strategy would be developed for the National Highway System for the purpose of meeting federal requirements, and because the NHS generally corresponds to the interstate and statewide highway system defined in the Oregon Highway Plan (OHP).

Second, a mobility corridor-based strategy for managing congestion on regional arterial streets that support the interstate and statewide highways would be developed and incorporated into the Regional Transportation Plan (RTP).

Together, these new policy frameworks would guide system development as part of future RTP updates and the development of city and county Transportation System Plans (TSPs) and the regions ongoing Congestion Management Process (CMP).

Objective

Complete a 2-year refinement planning effort to modernize the regional mobility policy to better reflect current. The results of this effort would be amended into the RTP and Oregon Highway Plan.

Previous Work

- Adoption of the Oregon Highway Plan (OHP) in 1999.
- Adoption of the Interim Regional Mobility Policy for the Metro region in the 2000 RTP.
- Ongoing implementation of the region’s Congestion Management Process (CMP) since adoption of the 2000 RTP.
- Adoption of the Interim Regional Mobility Policy in the Oregon Highway Plan in 2002.
- Adoption of Oregon Transportation Plan (OTP) in 2006.

- Creation of Regional Mobility Corridors in the 2010 RTP as a tool for framing mobility investments.
- Updates to the Oregon Transportation Planning Rule (TPR) and Oregon Highway Plan (OHP) in 2011 to address emerging statewide issues in congestion management.
- Completion of the Corridor Bottleneck Operations Study (CBOS) in 2013.
- Creation of ODOT Region 1 Active Traffic Management (ATM) strategy in 2014.
- Completion of ODOT's Portland Regional Traffic Management Report in 2016.
- Publication of the Regional Mobility Corridor Atlas in [year] and 2015.

Work Completed in 2017-18 included:

- Collaboration with ODOT in analysis and formal comment on new USDOT mobility regulations.
- Initial discussions with ODOT on a refinement planning partnership to address mobility policy in the region.

Methodology

Metro's partnership with ODOT on this work will include project scoping with county, city and special districts in the region, a steering or advisory committee that includes a broad cross section of stakeholders to create an inclusive work plan. Metro and ODOT will also consult with federal agencies during the scoping phase.

Metro and ODOT will formalize project management and funding through an intergovernmental agreement that spans the 2-year extent of the project.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019

Scoping is expected to begin in the third quarter and continue through the fiscal year, with a draft IGA and detailed work plan completed by the end of the fiscal year.

Entity/ies Responsible for Activity:

Metro and ODOT – Product Owner/Lead Agency

Other Stakeholders

- Local Cities and Counties
- Regional Transportation Council of Southwest Washington
- Ports of Portland and Vancouver
- TriMet, C-TRAN and other transit operators in the region
- Metro Parks & Nature Department
- Oregon Department of Transportation
- Oregon Department of Land Conservation and Development
- Oregon Department of Environmental Quality
- U.S. Department of Transportation

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project Deliverables/Milestones* section.

Funding History

This project is being described for the first time in this UPWP, and therefore does not include a discrete funding history.

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	41,409	STBG	$	52,934
Interfund Transfers	$	17,584	Metro	$	6,059
TOTAL	**$**	**58,993**	**TOTAL**	**$**	**58,993**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.25
TOTAL	**0.25**

Complete Streets

Staff Contact: Lake McTighe, lake.mctighe@oregonmetro.gov

Description:

Metro's "Complete Streets" Program was established to provide transportation design guidelines and other tools to support local jurisdictions to design streets that implement the 2040 Growth Concept. The Program started with the release of the *Creating Livable Streets* guidelines in 1997. Since then the Program has grown to include a suite of guidelines: *Green Streets, Trees for Green Streets, Green Trails: Guidelines for Environmentally Friendly Trails,* and *Wildlife Crossings: Providing safe passage for urban wildlife*.

The Complete Streets Program implements Regional Transportation Plan (RTP) design policies for regional transportation facilities and includes ongoing involvement in local transportation project conception, funding, and design. Metro's Regional Transportation Functional Plan (RTFP), the implementing plan of the RTP, specifies that city and county street design regulations shall allow implementation of the recommended designs. This program also addresses Federal context-sensitive design solutions initiatives and requirements to develop mitigation strategies to address impacts of the transportation projects.

Other program elements include providing technical assistance to cities and counties as transportation projects are developed, and providing workshops, forums and tours to increase understanding and utilization of best practices in transportation design.

The Program guidelines were last updated in 2002 (with the exception of the *Wildlife Crossings*, which was completed in 2009) and content needs to be updated to reflect the state of the practice in transportation and incorporate missing topics, including designing for safety, age friendly communities, relationship of transportation design to public and environmental health, providing for effective freight and goods movements in multi-modal environments, trail design, cycle tracks and other protected bikeways and bicycle and transit interaction.

Objectives:

- Provide cities, counties and agencies with up-to-date, state of the practice, context sensitive and performance based guidance in street and trail transportation design through the update of the Creating Livable Streets, Green Streets, and Trees for Green Streets guidelines and development of new Regional Trail Design guidelines.
- Update and develop Program website with visual library, resources and other tools.
- Conduct forums, workshops and tours.
- Implement regional street-design policy and recommendations in the Regional Transportation Safety Plan by participating in local project development and design activities, including technical advisory committees, design workshops and seminars, as well as formal comment on proposed projects.
- Ensure that local plans and design codes adequately accommodate regional design objectives through the local Transportation System Plan (TSP) review process.
- Provide leadership in the professional engineering and planning community on innovative designs and the transportation/land use connection through the guidelines.

- Develop shared strategies with partner agencies to increase awareness and use of the guidelines and result in on-the-ground projects that reflect innovative design that work for all users.
- Inspire and educate with imagery and visualizations, and represent the unique areas of the region and the different needs of communities. Create an understanding of beneficial outcomes that can occur with best practices.
- Draft updated policy language in Chapter 2 of the 2018 Regional Transportation Plan.
- Updated design classification map in Chapter 2 of the 2018 Regional Transportation Plan.

Previous Work:

- Completed Annotated Draft Table of Contents for updated guidelines.
- Completed Draft Chapter layout for updated guidelines.
- Completed Resource List for design guidelines.

Methodology:

Metro has traditionally participated in local project-development activities for regionally funded transportation projects. During FY 2018-19, the Complete Streets Program will continue to focus on projects that directly relate to implementation of Region 2040 land use components, including projects funded through the Metropolitan Transportation Improvement Program (MTIP).

Design is one of eight policy priority areas of the 2018 Regional Transportation Plan update; therefore, Program activities will be coordinated with the update of the Regional Transportation Plan to most effectively provide resources for implementing the RTP, the adopted *Climate Smart Communities Strategy* and recommendations in the 2007 *METRO Freight and Goods Movement Plan: Truck and Street Design Recommendations Technical Report, 2012 Regional Transportation Safety Plan*, and the *2014 Regional Active Transportation Plan*. Opportunities to coordinate and collaborate with partner agencies, including ODOT, TriMet, SMART and DLCD, will be actively sought out in order to more effectively increase understanding, awareness and acceptance of Livable Streets and Trails.

Updates to the guidelines and additional activities in FY 2018-19 will be managed by Metro but guided by the Technical Work Group.

Periodic updates will be given to the Transportation Policy Alternatives Committee (TPAC), the Metro Technical Advisory Committee (MTAC), the Metro Policy Advisory Committee (MPAC), the Joint Policy Advisory Committee on Transportation (JPACT), and the Metro Council. Direction from the Metro Council and the technical and policy advisory committees will inform the project.

To update the *Creating Livable Streets, Green Streets, and Trees for Green Streets* guidelines and to develop a new handbook on Regional Trail Design, Metro staff will work with experts within Metro, with the Consultant team and with the Technical Work Group, to review and revise content for design guidance. The Technical Work Group will meet approximately six times over the course of the update to the guidelines.

The update will incorporate recommendations from the *Metro Freight and Goods Movement Plan: Truck and Street Design Recommendations Technical Report* (May 2007); incorporate recommendations from the update of the *Regional Transportation Safety Plan* (May 2012); and

incorporate design guidance recommendations from the *Regional Active Transportation Plan* (July 2014).

Updates to county and city transportation coordinating technical advisory committees and other stakeholder groups will be made to increase awareness of the project and receive input.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Workshop(s) and/or best practice tour(s).
- Updated Program webpage with resources including schematics, photo library, library of external resources, community and personal stories and case studies
- Update content of Creating Livable Streets, Green Streets, and Trees for Green Streets, and new regional trail design guidelines. Content will be combined into one comprehensive and holistic guide.
- Draft updated policy language in Chapter 2 of the 2018 Regional Transportation Plan.
- Updated design classification map in Chapter 2 of the 2018 Regional Transportation Plan.

Entities Responsible for Activity:

- Metro – Lead Agency
- Oregon Department of Transportation - Cooperate/Collaborate
- TriMet, SMART –Collaborate/Collaborate
- Cities, Counties, Special Districts, Agencies - Cooperate/Collaborate

Schedule for Completing Activities:

Update of the guidelines and related activities are planned to be completed by the end of FY 2018-19.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2014-15	$234,581	1.1
2015-16	$324,762	1.4
2016-17	$248,401	1.0

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	140,049	STPBG	$	168,988
Interfund Transfers	$	42,451	Creating Livable Streets STBG	$	250,000
Materials and Services	$	62,300	Metro	$	40,551
ODOT Consultant Contract	$	200,000		$	
TOTAL	**$**	**444,800**	**TOTAL**	**$**	**444,800**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.95
TOTAL	**0.95**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	121,224	PL	$	2,500
Interfund Transfers	$	51,478	STBG	$	160,645
Materials and Services	$	62,300	Creating Livable Streets STBG	$	50,000
			Metro	$	21,856
TOTAL	**$**	**235,002**	**TOTAL**	**$**	**235,002**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.8
TOTAL	**0.8**

Transportation System Management and Operations – Strategy Update

Caleb Winter, caleb.winter@oregonmetro.gov

Description

The Transportation System Management and Operations (TSMO) program follows a 10-year plan that ends 2020. The plan update will be known as the TSMO Strategy, in support of the RTP. The TSMO Strategy will guide program investments using RFFA funding, state funding, additional federal grant funds and local funds, building on investments in transportation system efficiency and supporting innovations. The TSMO Strategy will include key components of Metro's system monitoring, performance measurement and Congestion Management Process (CMP). Most of the required CMP activities are related to performance measurement and monitoring. While the current plan continues to serve the region, an update is needed to formalize new concepts among regional TSMO partners including connected and automated vehicles, shared-use mobility, integrated corridor management, decision support systems, cloud-based analytics and "Smart City" urban applications of the Internet-of-Things (IoT).

Objectives

- Lead process for updating and adoption of the TSMO Strategy. Strategy will provide direction for new regional funding investments aimed at reducing greenhouse gas emissions.
- The Strategy update process will review past TSMO investments and the state of ITS in the region to understand the safety, livability, multimodal and reliability outcomes achieved.
- The process will look at how advances in information technology have changed methods to manage and operate the transportation system.
- Refine the program structure and funding process.
- Review regional coordination and collaboration around TSMO including Traffic Incident Management (TIM), Central Signal System, data communications (ITS Network) and data archiving and tools (PORTAL).

Previous Work:

Planning activities that inform the TSMO Strategy update include:

- 2006-2007 – development of regional ITS strategies (federal grant).
- 2008-2011 - an ODOT TGM grant supported the region's first TSMO Plan.
- 2014 – a final Concept of Operations was completed for a large area around the area where I-84 and I-205 meets to consider Active Corridor Management elements ODOT, City of Portland and other regional partners could implement to improve reliability.
- 2014 – 2018 US DOT awarded Metro funds to lead an Integrated Corridor Management planning grant for the I-84 multimodal corridor from downtown Portland to Troutdale.
- 2016 – FHWA supported a regional workshop around capability maturity for traffic management.
- 2016 – Update of the regional ITS Architecture and data Communications Plan
- 2017 – Regional concept for next-generation Transit Signal Priority completed by TriMet

Methodology:

Refine regional strategy to guide TSMO investments and activities in the Portland metropolitan region, identifying and recommending policy to leverage the strategy. Engage a broad range of stakeholders to understand issues and needs from operators and the traveling public. Analyze multimodal performance data to advance the region's ability to diagnose and address congestion, support multimodal operations, reduce climate and other impacts and incorporate safety connected to Vision Zero.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019

- Stakeholder Participation Plan
- Refined Vision Goals and Objectives that are grounded in regional needs for people and goods movement. Topics to explore in refining vision goals and objectives include social equity, safety, resiliency, connected vehicles, automated vehicles, vehicle-to-X communications, transit signal priority, freight signal priority, mobility as a service/mobility on demand (e.g., public-private partnerships), performance measures, big data analytics and asset management.
- Updated TSMO Toolbox.
- Updated TSMO project list.
- Form agreements among operators supported by the region's ITS Architecture, relationships and procedures, decision support systems and other shared understanding and operations methods.
- Updated Capability Maturity Framework for the TSMO program.
- Produce a final TSMO Strategy to recommend for adoption.

Entities Responsible for TSMO Strategy Update

Lead Agency

- Metro

Policymaking

- Metro Council
- Joint Policy Advisory Committee on Transportation (JPACT)
- Transportation Policy Alternatives Committee (TPAC)

Operators

- TransPort and subcommittees (includes Portal Technical Advisory Committee, ITS Architecture, Central Signal System Users Group, ITS Network Management Team, Traffic Incident Management Coalition).
- Oregon Department of Transportation (ODOT) TriMet, Port of Portland, Counties of Clackamas, Multnomah & Washington, Cities of Beaverton, Gresham, Hillsboro, Portland, Lake Oswego, Tigard, Wilsonville and other cities

Cooperation and Collaboration

- Transportation Research and Education Center (TREC)/ Portland State University Federal Highway Administration (FHWA) Federal Transit Administration (FTA), US DOT ITS Joint Program Office
- Oregon State Police, County Sheriff Offices, Fire Bureaus, 911 Bureau of Emergency Communications, Washington County Consolidated Communications Agency and other incident responders and emergency managers.
- SW Regional Transportation Council, C-Tran
- Washington State Department of Transportation

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project Deliverables/Milestones* section.

Funding History:

This Strategy update is being described separately from other planning activities for the first time, therefore it does not include a discrete funding history.

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**	
Materials & Services – ODOT Consultant	$	302,828	TSMO STBG	$271,728
			Metro	$ 31,100
TOTAL	**$**	**302,828**	**TOTAL**	**$ 302,828**

FY 2018-19 Cost and Funding Sources:

Requirements:		**Resources:**	
Personal Services	$100,000	TSMO STBG	$271,728
Materials and Services (ODOT Consultant)	$202,828	Metro	$ 31,100
TOTAL	**$302,828**	**TOTAL**	**$302,828**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.6
TOTAL	**0.6**

Transportation System Management and Operations - Regional Travel Options (RTO) Strategy Update

Staff Contact: Dan Kaempff; daniel.kaempff@oregonmetro.gov

Description:

Regional Travel Options is one of two program areas under the broad policy heading of Transportation System Management and Operations (TSMO) – the other is the Regional Mobility program. Together these two programs advance TSMO strategies by coordinating the development, implementation and performance monitoring of regional demand and system management strategies that relieve congestion, optimize infrastructure investments, promote travel options, and reduce greenhouse gas emissions. Both the Regional Mobility Program and Regional Travel Options programs are key components of Metro's Congestion Management Process (CMP).

The RTO program goals and objectives are derived from the Regional Transportation Plan, and are further defined via a strategic plan. The current strategic plan covers the years 2012-2017 and is in the process of being updated.

Objectives:

- Lead process for updating and adoption of the new RTO Strategy. Plan will provide direction for new regional funding investments aimed at reducing greenhouse gas emissions and expanding funding opportunities for Safe Routes to School education and outreach.
- The plan update process will examine outcomes achieved through the 2012-2017 RTO Strategic Plan to ascertain those investments' success and contribution to achieving regional goals related to reducing single-occupant-vehicle trips and other key objectives.
- The process will look at how advances in information technology have changed people's travel choices and will define strategies on how to best position the program to leverage further advances in order to improve communication and engagement with the public.
- Defining the necessary program structure and funding mechanism for supporting and investing in Safe Routes to School education and outreach programs at the region's schools will be a component of the strategy update.
- Review regional coordination and collaboration around travel options education and outreach to determine key strategic investment areas and funding mechanisms to support partners' activities in those areas.
- Update ongoing evaluation strategy to measure outputs and outcomes of all projects and programs supported with RTO funds, to ensure alignment with federal and regional goals related the vehicle miles traveled and air quality.
- Subsequent to the 2018 RTO Strategy adoption by JPACT and Metro Council, staff will lead a process to update the program's funding allocation methodology so as to align with new policy direction, goals and objectives.

Previous Work:

This will be the fourth version of the RTO Strategy. The initial plan was drafted in 2003. This plan and the two subsequent plans have covered five-year time spans.

- The 2003 plan established the RTO program, building on the work done to implement the first two rounds of CMAQ funding in the Portland region. During the five-year span

covered by this plan, oversight of the regional program transferred from TriMet to Metro, and program evaluation activities commenced, to determine how well RTO investments were performing relative to the program's goals and objectives.

- The 2008 plan update refined roles and responsibilities for RTO partners, and laid out goals for program growth.
- The 2012 plan established a larger, more competitive funding strategy, and placed greater emphasis on program performance, measurement and evaluation.

Methodology:

The RTO strategic plan update will further define implementation of regional policies to reduce drive-alone auto trips and personal vehicle miles of travel and to increase use of travel options. The program improves mobility and reduces pollution by carrying out the TDM components of the TSMO strategy outlined in the 2035 Regional Transportation Plan (RTP). The program maximizes investments in the transportation system and relieves traffic congestion by managing travel demand, particularly during peak commute hours. Specific RTO strategies encompass promoting transit, ridesharing, cycling, walking, and telecommuting.

The planning process will engage stakeholders from around the region, working in both the public and private sectors, to develop a plan focused on achieving greater performance from the program investments, and facilitating the growth of the program throughout the region.

The 2018 RTO Strategy will take a 10-year look into the future and define a process for supporting growth in the program's partners, as well as continuing the work of key, critical investments that have proven value in reducing drive-alone auto trips.

Entities Responsible for RTO Strategy Update:

- Metro Council – Policy making
- Joint Policy Advisory Committee on Transportation (JPACT) – Policy making
- Transportation Policy Alternatives Committee (TPAC) – Policy making
- Transportation Research and Education Center (TREC) – Cooperate/Collaborate
- Oregon Transportation Commission (OTC) – Cooperate/Collaborate
- Federal Highway Administration (FHWA) – Cooperate/Collaborate
- Federal Transit Administration (FTA) – Cooperate/Collaborate
- Oregon Department of Transportation (ODOT) – Cooperate/Collaborate
- Westside Transportation Alliance TMA – Grant Recipient
- Explore Washington Park – Grant Recipient
- Ride Connection – Grant Recipient
- Bicycle Transportation Alliance – Grant Recipient
- Gresham Area Chamber of Commerce – Grant Recipient
- Verde – Grant Recipient
- City of Portland – Grant Recipient
- City of Gresham – Grant Recipient
- City of Lake Oswego – Grant Recipient
- West Columbia Gorge Chamber of Commerce – Grant Recipient
- Portland Public Schools – Grant Recipient
- National Safe Routes to School Alliance – Grant Recipient
- City of Tigard – Grant Recipient

- Beaverton School District – Grant Recipient
- Portland Community College – Grant Recipient
- Housing Authority of Washington County – Grant Recipient
- Clackamas Community College – Grant Recipient
- TriMet – Grant Recipient
- City of Wilsonville/Wilsonville SMART – Grant Recipient
- Go Lloyd – Cooperate/Collaborate
- Swan Island TMA – Cooperate/Collaborate
- Clackamas County – Cooperate/Collaborate
- Multnomah County – Cooperate/Collaborate
- Washington County – Grant Recipient, Cooperate/Collaborate
- C-TRAN – Cooperate/Collaborate
- City of Vancouver – Cooperate/Collaborate
- SW Regional Transportation Council – Cooperate/Collaborate
- Washington State Department of Transportation – Cooperate/Collaborate

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:
Develop updated funding allocation methods, based on partner's capability, capacity, interest and potential for success. The Strategy is scheduled for adoption by JPACT and Metro Council in Spring 2018. Allocation process should be in place by Fall 2018 and be used in awarding funding available July 1, 2019 and beyond.

Entities Responsible for RTO Plan Update:
- Metro Council – Policy making
- Joint Policy Advisory Committee on Transportation (JPACT) – Policy making
- Transportation Policy Alternatives Committee (TPAC) – Policy making
- Transportation Research and Education Center (TREC) – Cooperate/Collaborate
- Oregon Transportation Commission (OTC) – Cooperate/Collaborate
- Federal Highway Administration (FHWA) – Cooperate/Collaborate
- Federal Transit Administration (FTA) – Cooperate/Collaborate
- Oregon Department of Transportation (ODOT) – Cooperate/Collaborate
- Westside Transportation Alliance TMA – Grant Recipient
- Explore Washington Park – Grant Recipient
- Ride Connection – Grant Recipient
- Bicycle Transportation Alliance – Grant Recipient
- Gresham Area Chamber of Commerce – Grant Recipient
- Verde – Grant Recipient
- City of Portland – Grant Recipient
- City of Gresham – Grant Recipient
- City of Lake Oswego – Grant Recipient
- West Columbia Gorge Chamber of Commerce – Grant Recipient
- Portland Public Schools – Grant Recipient
- National Safe Routes to School Alliance – Grant Recipient
- City of Tigard – Grant Recipient
- Beaverton School District – Grant Recipient
- Portland Community College – Grant Recipient

- Housing Authority of Washington County – Grant Recipient
- Clackamas Community College – Grant Recipient
- TriMet – Grant Recipient
- City of Wilsonville/Wilsonville SMART – Grant Recipient
- Go Lloyd – Cooperate/Collaborate
- Swan Island TMA – Cooperate/Collaborate
- Clackamas County – Cooperate/Collaborate
- Multnomah County – Cooperate/Collaborate
- Washington County – Grant Recipient, Cooperate/Collaborate
- C-TRAN – Cooperate/Collaborate
- City of Vancouver – Cooperate/Collaborate
- SW Regional Transportation Council – Cooperate/Collaborate
- Washington State Department of Transportation – Cooperate/Collaborate

Schedule for Completing Activities:
Fall 2018 – Completion of funding allocation methodology

Funding History:
This program is being described separately from the Regional Travel Options program for the first time in this UPWP, therefore does not include a discrete funding history.

FY 2018-19 Cost and Funding Sources:
Please refer to the funding section of the Transportation System Management and Operations - Regional Travel Options (RTO) narrative.

Economic, Demographic and Land Use Forecasting Development & Application Program

Staff Contact: Jeff Frkonja, jeff.frkonja@oregonmetro.gov

Description:

This chapter complements the Section I chapter "Economic, Demographic and Land Use Data and Forecasting Maintenance." The Land Use Analytics Team (LUAT) conducts, in addition to the land use data and forecast capacity sustenance work described in Section I, long-term forecast tool development activities and tool applications to Metro's planning responsibilities. This chapter describes these elements.

LUAT regularly updates long- range economic and demographic projections in order to incorporate the latest observed changes in demographic, economic, and real estate development conditions. Given forecast uncertainty, LUAT produces "risk-ranges" that quantify the variability in baseline growth projections which in turn inform risk analysis that tests alternative growth scenarios to evaluate ranges of potential economic, demographic, and land use impacts.

Objectives:

The development and application program is purposed to:

- making significant additions to the capacity of land use forecasting models, data, and knowledge;
- applying land use forecasting tools and data to Metro planning projects such as the Urban Growth Management process and the Regional Transportation Plan.

Previous Work:

Stakeholder Involvement

- Metro created the Land Use Technical Advisory Group (LUTAG) to advise Metro staff on the data, local conditions, and forecast validity of Metro's land use toolkit. LUTAG is scheduled to convene regularly throughout the technical part of the 2018 Urban Growth Management planning process. LUTAG briefs standing Metro policy committees such as the Metro Technical Advisory Committee (MTAC).

Survey, Data Acquisition, and Research

- **Residential Housing Preference Survey** — Using the household preference survey for the Metro region from 2013, a deeper examination of the survey data is being performed to potentially update and revise parameters for the MetroScope land use model. The stated preference survey was designed to determine if tastes and preferences for housing might shift in future years as regional demographics evolve. This project has been delayed (2017) because further research and analysis of the survey data has determined that there are inherent biases in the data collection methodology that cannot be reconciled or corrected using standard econometric techniques. The current scope of work is being re-examined to determine if funds can be redirected to refine other parts of the MetroScope land use sub-models that need further attention and update.
- **Validation and Sensitivity Research (MetroScope land use model)** – RC staff completed

(in August 2017) validation and sensitivity analysis of its long-range land use forecast model. The validation report compared the near term land use forecast results from the model against observed or actual growth estimates. RC staff convened (in October 2017) an independent expert review panel. The expert panel reviewed the model and analyzed the results from the validation and sensitivity report. The report and expert panel comments will be published as additional model documentation for the Urban Growth Report (UGR) statistics and to be used in the support of the 2018 Urban Growth Management (UGM) Decision. The expert panel found the land use model to be generally sound, but the model to be a bit outdated. They recommended that the model needed to be modernized to bring the land use model up to date with current state of the practice.

- **Buildable Land Inventory** — The equilibrium land use model –MetroScope –requires land supply estimates based on observed data that incorporate the regulatory framework, development constraints, and development incentives for the Metro region. An operational version of the Developer Supply Processor (DSP) has been delivered (June 2017) to Metro by the consultant. RC staff and the consultant reviewed the DSP methodology with an independent expert peer review panel in May 2017. Recommendations from the expert panel were incorporated in the delivery of the draft DSP model. The final task of the consultant is to calibrate the DSP model and produce a final version that will forecast land supply estimates for the MetroScope land use model. The DSP model is based on real estate development pro forma methods to refine the buildable land inventory so that it better reflects prevailing real estate development assumptions. A redevelopment sub-model is included in the DSP that incorporates back-cast information to predict the future likelihood that a parcel will redevelop. These refinements should provide greater accuracy of land supply estimates and therefore the MetroScope land use model should produce more realistic real estate development projections.
- **Redevelopment model** – Metro plans to review the growth capacity of its urban growth boundary (UGB). This planning effort requires a UGR analysis and an UGM decision by the Metro Council by the end of 2018. The new redevelopment method is based on a set of discrete choice (binary logit) equations, segmented into 3 distinct real estate sub-markets: urban city of Portland, inner suburbs and outer suburbs. The equations predict the redevelopment probability of a tax lot. The new redevelopment model replaces obsolete redevelopment filters in the old BLI methodology. The redevelopment model should provide greater accuracy in estimating the buildable land inventory and therefore better land supply information to the UGR analysis and results.
- **Housing and Transportation Cost Index** – As part of its “innovation” work RC staff are developing a housing and transportation (H+T) cost index for the 2018 Regional Transportation Plan. The H+T index is capable of estimating the number of cost burdened households in the current base year (2015) and forecast year (2040) projection. Thus, real (inflation adjusted) index values can be used as a growth performance indicator that compares the H+T costs across periods for different land use or transportation growth scenarios. H+T costs can be combined in the index or left disaggregated for more detailed cost analysis. The definition for which households are cost burdened can also be reset in the calculation of the index so that it is not always set to 45%, which is a typical threshold for combined housing and transportation costs. The index not only calculates the cost burdened condition of the median household, but expands the calculation of the cost burden estimates for above average, average and below average income bracket households. Delivery of the H+T cost index model is expected at the end of October 2017.

Methodology:

Survey, Data Acquisition, and Research

- **Stakeholder involvement** — local review of land use model inputs, assumptions, and outputs is a key quality assurance aspect of LUAT forecasting.
- **Buildable Land Inventory (BLI)** —Sustain existing and develop new sources of land market performance and firm decision-making to inform the BLI and related cyclical data products
- **Market Research**—use consumer surveys to investigate the difference in actual market choices vs. stated preferences (similar to the use of revealed and stated preferences in travel demand forecasting), and establishment surveys to investigate how suppliers make decisions.
- **Performance Measures**—use observed data and market research to produce analytic findings that measure land market performance.

Model and Analytic Tool Improvements

- **Model Development**—Use observed market data, surveys, and the best statistical methods to inform appropriate changes to model structure, model inputs, and model output interpretation.
- **Innovation**—Respond in creative ways to emerging requests for analytic improvements.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Stakeholder Involvement

- Metro will likely sustain LUTAG and/or form other standing groups to advise on the adoption of the Distributed Forecast (the TAZ-level land use product derived from the regional forecast used in the Urban Growth Management process) and, perhaps, data and model enhancements (such as buildable land inventory upgrades and a developer supply pre-processor), and model structural improvements (potentially improved accounting for differences in observed market share vs. stated preference and self selection bias in the consumer module). [Primary involvement ends December 2018]

Survey, Data Acquisition, and Research (Model Improvements also listed here for clarity)

- Enhancing Metro's use of Census and other federal data, defining and implementing optimal coordination activities between Metro and local agencies regarding the 2020 Census. [Ongoing]
- Continue acquiring new data for, publishing information products from, and enhancing the Land Development Monitoring System especially for residential rental price; supplier redevelopment location, type, and frequency; and commercial development. [Data plan by June 2018]
- **Conjoint market analysis** - use validated SP residential survey data to complete a market analysis assessing residential market share vs. stated preference, and if possible to re-scale MetroScope parameters in the residential demand equations based on the findings. (Task has been started but not expected to be completed until next FY). [June 2019]
- Develop a peer reviewed housing and transportation cost calculator for the current year and future year based on outputs derived from the MetroScope land use model (i.e., housing cost estimates) and Metro's own travel demand model (i.e., travel costs based on auto ownership, value of time and other travel factors). [Prototype by June 2018]

Model Improvements

- **Metroscope developer treatments** – continue work on the Developer Supply Preprocessor and other model features to upgrade or replace Metroscope. [December 2019]
- **Residential self-selection bias** –with consultant support staff will examine means of better addressing potential selection bias effects in Metroscope, perhaps through a neighborhood choice level in the residential (consumer) module or the application of household sorting submodels. [Task won't be initiated until after proper vetting of the research findings from the conjoint market analysis, but could be by December 2019]

Entities Responsible for Activity:

- Metro – Lead Agency
- Oregon Office of Economic Analysis and Portland State Population Research Center – Population (and economic) coordination per State regulations
- Local Governments – coordination per State regulations
- Stakeholders (academics and non-governments) – collaboration and consensus building

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major project deliverables/milestones* sections.

Funding History:

Please note that due to modifications to the organizational chart and funding structure for the Research Center, the budget for Economic and Land Use Forecasting has increased and been split across two programs: Maintenance vs. Development & Application. This increase reflects primarily a change in funding source for existing staff rather than a net increase of staff or staff time.

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	96,822	PL	$	65,417
Interfund Transfers	$	84,464	Metro	$	115,869
TOTAL	**$**	**181,286**	**TOTAL**	**$**	**181,286**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	0.668
TOTAL	**0.668**

Travel Forecast Development & Application Program

Staff Contact: Chris Johnson, chris.johnson@oregonmetro.gov

Description:

The Travel Forecast Development and Application Program includes work elements necessary to keep the travel demand model and various ancillary tools responsive to issues and trends that emerge during the regional transportation planning process. The major work activities and projects within this program area include travel behavior surveys, new models/tools, and significant one-time model application and/or enhancement efforts.

The program area is critical because the travel demand model provides the analytical foundation for transportation policy and investment decisions

Objectives:

The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Environmental Protection Agency (EPA) require that project modeling be carried out using methods, techniques and tools that meet certain guidelines. Failure to meet the guidelines may result in analytical conclusions that do not meet Federal approval.

Thus, the primary objective for this program is to ***ensure the validity and utility of the modeling methods, techniques and tools.*** This is achieved through the work elements listed under the Travel Behavior Surveys, New Models, and significant one-time model application/enhancement categories.

Previous Work (conducted under single Model Development program area):

Travel Behavior Surveys

- The last comprehensive travel behavior survey for this region was conducted in 2011. The data serves as a basis to understand the degree to which various stimuli (demographics, urban form, cost, travel time, lifestyle choices, etc.) affect traveler behavior and choices.

New Models

- Activity Based Model: A new dynamic activity based model has been developed for this region. Results from the 2011 travel behavior survey were used in the model estimation.
- Trip Based Model (current model): The trip-based models was re-estimated to better reflect behavior patterns and choice characteristics derived from the household travel behavior survey data. In addition, the model was updated to a 2015 base year.
- Freight Model: A SHRP2 C-20 IAP grant was awarded to Metro. A consultant team was contracted to assist with the project. A prototype model framework was implemented using national data. Additional data was collected local data from establishments, logistic firms, and other sources. These data were used to refine the prototype model to ensure that it more closely reflects the conditions in Portland. To meet the match requirement, Metro performed various tasks throughout the project (e.g., national zonal definition and network coding).

- Bike Routing Algorithm: The routing algorithm is being reviewed and re-evaluated to potentially include a variety of simplifying features to ease the application of the tool by external partners such as the City of Portland.
- Multi-Criterion Evaluation (MCE) Toolkit: The MCE Toolkit is consists of three tools: a benefits calculator to determine monetized benefits of transportation projects based on outputs from the regional travel demand model, a project costing tool, and a visualizer that calculates B/C ratios, and summarizes and visualizes results. Phase I of the MCE project was completed in FY2017.
- Housing+Transportation Cost Index. Modeling program staff collaborated with Land Use team staff to prototype a H+T cost "viewer" for both current and forecast states of the regional land markets and transport system.

Model Maintenance

- Modeling Network Attributes: Metro modeling staff reviewed and updated the modeling network assumptions (e.g., uncongested speeds, vehicle throughput capacities, transit line itineraries). These attributes were incorporated into a master network database system.
- Travel Demand Model Input Data: Model input data was reviewed and updated. Variables such as intersection densities, household and employment accessibility, and parking cost assumptions were adjusted to reflect 2015 conditions.
- Travel Demand Model Computer Code: Model application code was refined to address specific needs (e.g., model application interface, code changes required by the model re-estimation)

Statewide and National Professional Engagement

- Oregon Modeling Steering Committee: Staff participated on the OMSC Executive Committee and several affiliated subcommittees.
- Transportation Research Board Committees: Staff served on the TRB Transportation Planning Applications Committee. This committee is instrumental in providing a forum for advancing model application guidelines.

Methodology:

The following methods will be applied to achieve the objectives of the Travel Forecast Development Program:

Travel Behavior Surveys

- 2020 Travel Behavior Survey: Preliminary planning is underway for the next regional travel behavior survey. Additional research will be necessary to ensure that the survey will capture traditionally relevant as well as emerging behavior (e.g., extent of Uber/Lift substitution in place of other travel modes), and be conducted in a comprehensive and cost effective manner. New and emerging data collection methods (e.g., Sidewalk Labs Replica data, longitudinal or rolling surveys, mobile phone apps, personal GPS devices, etc.) will also be investigated to help ensure that the survey effort is well positioned to capture rapidly changing trends in personal travel behavior. Metro will likely partner with other Oregon modeling agencies as well as the Southwest Regional Transportation Council to maximize the geographic span and cross agency utility of the data. It is critical that the work begin now to ensure

that proper budgetary considerations and coordination with Metro planning staff are conducted in a timely manner.

New Models

- Activity Based Model: Key efforts in FY2018 will include the development of staff expertise, model validation and sensitivity testing, and the derivation/implementation of a tool acceptance program. Given the rapidly changing personal travel landscape, it will be critical to ensure that the activity-based model framework is analytically positioned to overcome the methodological shortcomings of the current trip-based model and can be adapted to explicitly represent evolving travel behavior (e.g., travel via Uber/Lyft and connected/automated vehicles) or new near-horizon advances in technology (e.g., connected and automated vehicles). Modeling staff will coordinate closely with Metro planning to ensure that activity-based model frameworks is analytically aligned with anticipated policy questions.
- Freight Model: The SHRP2 C20 project was completed and the grant was closed out during the fall of 2017. Work will continue to integrate the model with the trip-based and activity-based passenger models. Modeling staff will continue to coordinate closely with Metro planning to ensure that new freight model is able to answer the analytical questions posed from the freight planning perspective (e.g., type and value of commodities by corridor and facility).
- Multi-Criterion Evaluation (MCE) Toolkit: Phase II is anticipated to conclude in the spring of 2018. Phase II scope will add travel demand model and MCE toolkit workflow enhancements; test each benefit and test a bundle of benefits together in one scenario; improve methods for measures such as safety, physical activity and auto ownership benefits; stakeholder outreach support; and upgrade the visualizer to be fully-featured and web-accessible. A key analytical feature of the MCE toolkit is its ability to identify potential benefits and/or disbenefits that have implications for equity considerations. Modeling staff will coordinate with Metro planning staff to ensure that the MCE continues to be fine-tuned and ready to address policy questions related to equity.

Model Application/Enhancements

- Trip Based Model (*Kate*): The *Kate* model was validated and finalized during FY2017. This model platform will serve as a basis to initiate further enhancements.
- Bike Routing Algorithm: Based upon information gathered in FY2016, the routing algorithm may be refined to facilitate its use. Staff will work with the City of Portland to test and evaluate the refined model.
- Reliability: Based upon federal research conducted in this region (SHRP2 L35, L04), methods to integrate the aspect of system reliability will be incorporated into the model
- One-time model applications may include:
    - Regional Transportation Plan
    - SW Corridor
    - Regional Mobility Atlas
    - MTIP
- One-time model enhancements may include:
    - Update school mode choice model
    - Park & ride adjustments, shadow pricing refinements

- Area specific peaking factors
- External model modifications
- Journey level transit
- Capacitated transit
- Conversion to Modeler
- Airport model

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Travel Behavior Surveys

- 2020 Travel Behavior Survey: A committee will be set up through the Oregon Modeling Steering Committee to identify key activities and initiate a survey work plan and schedule. Metro staff will chair the committee. The survey implementation plan will be documented. (Q 1-4)

New Models

- Activity Based Model: Functional CT-Ramp activity-based model. Documentation that summarizes the validation and sensitivity testing methodology and results. (Q4). Continued meetings with regional modelers to share the validation and sensitivity testing results. (Q 4).
- Freight Model: Final documentation and validation. Integration within passenger model frameworks (Q1)
- Multi-Criterion Evlauation (MCE) Toolkit: Completion of Phase II. Tested and functional MCE Toolkit (Q2)

Model Applications/Enhancement

- Trip Based Model: Final documentation that reflects the refinements made to the model. (Quarter 1). Implementation of addition improvements (e.g., 24-hour transit, journey-level transit assignment algorithm, etc.) on as-needed basis (Q4).
- Bike Routing Algorithm: Documentation that reflects the refinements (if any). (Q1)
- As part of the "MPO data plan" mentioned in the Data Management, Data Visualization, and Performance Measurement section of this document staff will work with planning staff to devise policies and work plans to promote acquisition and use of data from "transportation network companies" (e.g. Uber and Lyft) and the coming generation of connected/automated vehicles (CAVs).

Entities Responsible for Activity:

Survey and Research

- Metro- Product Owner/Lead Agency

New Models

Metro – Product Owner/Lead Agency

- Freight model work in collaboration with the Port of Portland and ODOT
- MCE Toolkit

Model Applications/Enhancements

- Metro – Product Owner/Lead Agency

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project Deliverables/Planned Milestones* section.

Funding History:

The travel demand model must be kept current and robust to remain a viable tool for analyzing future travel condition. The confidence level of the model must be such that it can ensure the provision of sound information for policy and investment decisions. Thus, the Travel Forecast Development & Application program is funded each year to meet that need. Key areas within the program include the collection and analysis of data (Survey and Research), the development of new modeling tools (New Models), and significant one-time model enhancements.

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	278,340	PL	$	505,473
Interfund Transfers	$	242,815	ODOT Support	$	15,682
TOTAL	$	521,155	TOTAL	$	521,155

Full-Time Equivalent Staffing	
Regular Full-Time FTE	2.111
TOTAL	**2.111**

Corridor Refinement and Project Development (Investment Areas)

Staff contact: Malu Wilkinson, Malu.Wilkinson@oregonmetro.gov

Description:

The Investment Areas program works with partners to develop shared investment strategies that help communities build their downtowns, main streets and corridors and that leverage public and private investments that implement the region's 2040 Growth Concept. Projects include supporting compact, transit oriented development (TOD) in the region's mixed use areas, conducting multijurisdictional planning processes to evaluate high capacity transit and other transportation improvements, and integrating freight and active transportation projects into multimodal corridors.

The Investment Areas program completes system planning and develops multimodal projects in major transportation corridors identified in the Regional Transportation Plan (RTP) as well as developing shared investment strategies to align local, regional and state investments in economic investment areas that support the region's growth economy. It includes ongoing involvement in local and regional transit and roadway project conception, funding, and design. Metro provides assistance to local jurisdictions for the development of specific projects as well as corridor-based programs identified in the RTP.

Metro has traditionally participated in local project-development activities for regionally funded transportation projects. In recent years, the Project Development program has focused on projects directly related to completion of corridor refinement planning and project development activities in regional transportation corridors outlined in the RTP. Project Development funding is also required to fund work on major projects that occurs prior to a formal funding agreement between Metro and a jurisdiction, such as project scoping, preparation of purpose and need statements, development of evaluation criteria, and developing public involvement plans. This program coordinates with local and state planning efforts to ensure consistency with regional projects, plans, and policies. It will also support initiation of new corridor planning efforts to be led by Metro or others.

Objectives:

- Ensure consistency with regional plans and policies related to major transportation corridors by participating in local planning and project development activities, including technical advisory committees, workshops and charrettes, as well as provide formal comment on proposed projects. (ONGOING)
- Implement the Mobility Corridor Initiatives strategy outlined in the RTP through monitoring ongoing planning activities and working with other jurisdictions to initiate new corridor efforts. (ONGOING)
- Advance transit projects identified in the High Capacity Transit Plan as part of the RTP (ONGOING)
- Participate in the development of projects not yet funded by other grants or contracts. (ONGOING)

Previous Work:

This work program has included two regional corridor refinement work prioritization processes of the corridor refinement work plan (in 2005 and in 2009). It has also including scoping, grant application and other start up activities of many studies including the 2005 Highway 217 Corridor study, the Eastside Streetcar project, I-405 loop study, I-5/99W, Sunrise Corridor, Damascus TSP/Highway 212 and Sunrise Parkway refinement plans and the Columbia Crossing Project.

In FY 2013-14, the program provided support for the SW Corridor and East Metro Corridor Plans.

Accomplishments in FY 2013-2014 are:

- Advanced East Metro Connections Plan priority projects toward implementation. (August 2012 through present)
- Secured funding through a competitive process from the Strategic Highway Research Program (SHRP 2) to pilot decision support tool, Transportation for Communities - Advancing Projects through Partnerships. (August 2012 to January 2013)
- Partnered with community organizations, jurisdictions and agencies within the Powell-Division Transit and Development Project study area to lay the groundwork for the planning and policy decision phase. (January 2013 to January 2014)
- Advanced the Southwest Corridor Shared Investment Strategy towards implementation and initiated the Southwest Corridor Refinement Phase to narrow the transit options considered in the corridor (2013)
- Conducted public engagement in conjunction with the Southwest Corridor Shared Investment Strategy. (March 2013 to July 2013)

In FY 2014-15, the program provided support for the SW Corridor and Powell-Division Transit and Development Project Corridor Plans.

Accomplishments in FY 2014-2015 are:

- Advanced East Metro Connections Plan priority projects toward implementation. (August 2012 through present)
- Partnered with community organizations, jurisdictions and agencies within the Powell-Division Transit and Development Project study area to establish a Steering Committee. (February 2014 to present)
- Defined a shared investment strategy including definition of a bus rapid transit project to forward into FTA Project Development. (2014)
- Advanced the Southwest Corridor Shared Investment Strategy towards implementation and narrowed the range of options for a high capacity transit investment for further study (2014)
- Developed a collaborative funding strategy with contributions from nine project partners to define a Preferred Package by May 2016 that includes a prioritized set of roadway, bicycle and pedestrian improvements and a definition of a high capacity transit investment that includes mode, terminus and alignment options for further study (September 2014 to present)

In FY 2015-16, the program provided support for the SW Corridor and Powell-Division Transit and Development Project Corridor Plans.

Accomplishments in FY 2015-2016 are:

- Partnered with community organizations, jurisdictions and agencies within the Powell-Division Transit and Development Project study area to continue a Steering Committee. (February 2014 to present)
- Entered into Project Development for Powell Division BRT with FTA as a Small Starts Project. (2015)
- Developed an approach for shared funding for the Powell-Division BRT project to move through FTA Project Development. (2015-2016)
- Further narrowed the range of alignment options for high capacity transit in the Southwest Corridor for further study (2015)
- Conducted public engagement in to further refine and implement the Southwest Corridor Shared Investment Strategy (January 2015 to present)

In FY 2016-17, the program provided support for the Division Transit Project and Southwest Corridor Light Rail Project and the Southwest Corridor Plan and Shared Investment Strategy.

Accomplishments in FY 2016-17 include:

- Worked with TriMet and ODOT to define and develop new projects in priority high capacity transit (HCT) or Mobility Corridors. These could include on-street bus rapid transit projects or urban circulators. (ONGOING)
- Worked with local jurisdictions in regional HCT priority corridors to develop land use plans that support the System Expansion Policy elements of the RTP. (ONGOING)
- Supported local project development efforts on mobility corridors. (ONGOING)
- Completed local and regional plan amendments (2016-2017)
- Continued to support the Division Transit project (ONGOING)
- Continued to support the SW Corridor Shared Investment Strategy and Transit project (ONGOING)
- Supported the Regional Transit Strategy (2016-2017)
- Launched a new economic investment area (2016-2017)

In FY 2017-18, the program provides support for the Division Transit Project and Southwest Corridor Light Rail Project and the Southwest Corridor Plan and Shared Investment Strategy and the study of an Enhanced Transit Corridor approach for the region.

Accomplishments in FY 2017-18 include:

- Worked with TriMet and ODOT to define and develop new projects in priority high capacity transit (HCT) or Mobility Corridors. These could include on-street bus rapid transit projects or urban circulators. (ONGOING)
- Worked with local jurisdictions in regional HCT priority corridors to develop land use plans that support the System Expansion Policy elements of the RTP. (ONGOING)
- Supported local project development efforts on mobility corridors, including supporting the study of an Enhanced Transit Corridor approach for the region. (ONGOING)
- Continued to support the Division Transit project (ONGOING)
- Continued to support the SW Corridor Shared Investment Strategy and Transit project

(ONGOING)
- Continued support for the Regional Transit Strategy as part of the 2018 RTP Update (2017-2018)
- Worked with jurisdictions and community partners in a new economic investment area along McLoughlin Boulevard (ONGOING)

Methodology:

Metro participates in local project-development activities for regionally funded transportation projects. In addition, as provided by the State Transportation Planning Rule (TPR), Metro is required to complete a regional Transportation System Plan that identifies the need for transportation facilities and their function, mode, and general location. The 2000 RTP called for completion of 18 specific corridor refinements and studies for areas where significant needs were identified but that required further analysis before a specific project can be developed. Section 660-012-0025 of the TPR requires prompt completion of corridor refinements and studies.

In winter 2005, Metro again consulted with regional jurisdictions to identify the next priority corridor(s) for commencement of planning work. Based on the consultation, in winter 2005-06, JPACT and Metro Council approved a corridor planning work plan update, which called for initiation of five new corridor plans in the next five years. In winter 2007-08, Metro commenced work on one of the corridor planning efforts identified in that work program, the Regional High Capacity Transit System Plan.

In fall 2009, Metro worked with technical committees and local jurisdictions to prioritize the five remaining corridors, and develop a phased approach to accomplish all remaining refinement plans by 2020. During that process, Mobility Corridor #15 (East Multnomah County connecting I-84 and US 26) and Mobility Corridors #2 and #20 (in the vicinity of I-5/Barbur Blvd, from Portland Central City southward to approximately the “Tigard Triangle”) have emerged as strong candidates for corridor refinement planning in terms of technical factors, as well as local urgency and readiness.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Work with TriMet and ODOT to define and develop new projects in priority high capacity transit (HCT) or Mobility Corridors. These could include on-street bus rapid transit projects or urban circulators. (ONGOING)
- Work with local jurisdictions in regional HCT priority corridors to develop land use plans that support the System Expansion Policy elements of the RTP. (ONGOING)
- Continue to support local project development efforts on mobility corridors and enhanced transit corridors. (ONGOING)
- Continue to support the Division Transit project (ONGOING)
- Continue to support the SW Corridor Shared Investment Strategy and Transit project (ONGOING)
- Work with jurisdictions and community partners in a new economic investment area in the Columbia Corridor (ONGOING
- Continue support for the Regional Transit Strategy as part of the 2018 RTP Update (2017-2018)
- Work with jurisdictions and community partners in a new economic investment area along McLoughlin Boulevard (ONGOING)

Entities Responsible for Activity:

- Metro – Lead agency
- TriMet – cooperate/collaborate
- ODOT – cooperate/collaborate
- Multnomah, Clackamas and Washington Counties – cooperate/collaborate Other Local Cities – cooperate/collaborate

Schedule for Completing Activities:

These activities are ongoing and continue each year. The focus shifts depending on the major activities to be supported in the Investment Areas section and with updates to the Regional Transportation Plan.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2010-11	$141,080	0.89
2011-12	$155,681	0.865
2012-13	$149,211	1.02
2013-14	$343,290	1.745
2014-15	$282,228	1.315
2016-17	$112,589	0.5

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	64,893	STBG	$	85,013
Interfund Transfers	$	26,500	Metro	$	9,730
Materials and Services	$	3,350			
TOTAL	**$**	**94,743**	**TOTAL**	**$**	**94,743**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.5
TOTAL	**0.5**

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	394,878	Regional Corridor Planning STBG	$	432,984
Interfund Transfers	$	174,502	STBG	$	136,563
Materials and Services	$	821,985	Metro	$	76,040
			Other Anticipated Funds	$	745,777
TOTAL	**$**	**1,391,364**	**TOTAL**	**$**	**1,391,364**

Full-Time Equivalent Staffing

Regular Full-Time FTE	2.85
TOTAL	**2.85**

Division Transit Project (Powell/Division Transit and Development Project)

Staff contact: Elizabeth Mros-O'Hara, Elizabeth.Mros-OHara@oregonmetro.gov

Description:

The Powell/Division Corridor Transit Implementation Plan coordinates land use and transportation planning efforts for an investment strategy that defines a transit project for a Small Starts application (the Division Transit Project), develops supportive land use actions and identifies and prioritizes related projects to stimulate community and economic development. The transit project would connect several low income areas with major education and workforce training sites including Portland State University, Oregon Health & Science University, Portland Community College and Mount Hood Community College as well as Portland and Gresham job centers. This corridor extends from Central City Portland east to Gresham in the vicinity of Powell Boulevard and Division Street.

Based on a transit alternatives assessment and public input, the project steering committee recommended a Locally Preferred Alternative (LPA) for the transit project that includes the transit mode (bus rapid transit), the route (from downtown Portland on the transit mall to Southeast Division Street to the Gresham Transit Center, and the general stop locations (approximately 1/3 mile apart). In addition, the project partners identified land use actions and station area investments that would support livable communities in the corridor and included them in the City of Portland and City of Gresham Local Action Plans. Outcomes of these efforts will be implemented by local jurisdictions. The transit alternatives assessment is continuing into the conceptual design which if further defining the bus service and amenities, and other transit and associated pedestrian, bicycle and roadway improvements needed to provide high quality and high capacity transit service in this corridor. This process provided the foundation for TriMet's successful application to enter into Project Development with the Federal Transit Administration and sets the stage for a future Small Starts funding application and the initiation of environmental approvals under the National Environmental Policy Act (NEPA).

Based on outreach and analysis, the Steering Committee recommended a Locally Preferred Alternative (LPA) in November and the LPA was adopted by the local jurisdictions in December 2016. The project began the NEPA process by documenting potential impacts and benefits in accordance with federal requirements and began the NEPA process in earnest as the design is further refined in 2017 and 2018.

With local adoption of the LPA, TriMet is leading the design, traffic, and outreach with support from Metro and other project partners. Metro Council adopted the LPA at the same time they amended the Regional Transportation Plan in June 2017.

TriMet is leading the outreach with Metro collaboration to gather input on how to further refine the LPA. The project's conceptual design is being further developed, and Metro is leading the NEPA process by conducting a Documented Categorical Exclusion.

The land use investment strategy pieces are being led by the local jurisdictions which have adopted Local Action Plans outlining their vision for implementing land use and economic development that complements the transit investment of the Division Transit Project.

Objectives:

- Develop a transit solution that efficiently serves high demand corridor in the near term while recognizing the limited local capital and operational funding for near term implementation.
- Develop a Powell/Division Corridor community investment strategy that identifies and prioritizes needed projects to serve locally desired land uses and stimulate community and economic development centered on a transit line.
- Establish agreements on local, regional and state actions to support implementation of the community investment strategy.
- Develop multimodal solutions that distribute both benefits and burdens of growth, support active lifestyles and enhance the natural environment.
- Actively engage public in developing the criteria to prioritize transportation investments and land use changes.
- Conduct transit alternatives assessment to determine the best mode, alignment, associated service changes and capital improvements of a high capacity bus route.
- Initiate environmental approvals under the National Environmental Policy Act (NEPA).
- Incorporate refined transportation planning project into RTP.

Previous Work:

Multi-modal Corridor Refinement
The 2000 Regional Transportation Plan (RTP) identified a significant transportation need in 18 corridors but specified that additional work was needed before a specific project could be implemented. In FY 2000-01, the Corridor Initiatives Program prioritized completion of the corridor plans and refinements. Per that recommendation, Metro initiated and led corridor studies including the Powell/Foster corridor. The phase I Powell/Foster plan was completed and the findings were adopted by JPACT and the Metro Council in FY 2003/04.

In winter 2005, Metro again consulted with regional jurisdictions to identify the next priority corridor(s) for commencement of planning work. Based on the consultation, in winter 2005/06, JPACT and Metro Council approved a corridor planning work plan update, which called for initiation of five new corridor plans in the next five years. In winter 2007/08, Metro commenced work on one of the corridor planning efforts identified in that work program, the Regional High Capacity Transit System Plan.

As part of the regional Transportation Plan update, in 2009, Metro worked with technical committees and local jurisdictions to identify and prioritize remaining corridor needs. Five corridors were found to need refinements and a phased approach was established to accomplish all remaining refinement plans by 2020. Mobility Corridor #15 (East Multnomah County connecting I-84 and US 26) and Mobility Corridors #2 and # 20 (in the vicinity of I-5/Barbur Blvd, from Portland Central City southward to approximately the "Tigard Triangle") were designated as the next priorities based on technical factors, as well as local urgency and readiness.

The East Metro Connections and Southwest Corridor Plans commenced shortly thereafter and were completed in June 2012 and commenced in December 2012, respectively. The East Metro Connections Plan includes a study of bus service issues, including bus rapid transit (BRT) route from central Portland to Mount Hood Community College within the Powell / Division corridor.

High Capacity Transit Corridors
In July 2009, the Metro Council adopted the Regional High Capacity Transit (HCT) System Plan. The HCT plan identifies and prioritizes corridors for implementation based on a set of evaluation criteria consistent with the goals of the RTP and the region's 2040 growth concept. The HCT plan was adopted by the region as part of the Regional Transportation Plan in June 2010. In July 2011, the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council adopted the High Capacity Transit System Plan Expansion Policy guidelines to further describe the process for moving projects forward.

Both the HCT plan and the system expansion policy identify Portland Central City to Gresham in the vicinity of Powell Corridor as a Near-Term regional priority corridor. The rigorous HCT process included the application of 25 evaluation criteria approved by the Metro Council and Joint Policy Advisory Committee on Transportation. System Expansion policy targets were applied to both the Southwest and Powell corridors. While on many measures such as transit supportive land use and community support, regional network connectivity and integrated transportation system development, the corridors scored equally, Powell measured higher in Housing and Transportation Affordability Benefit and Region 2040 Connections. The Southwest corridor scored higher on TOTAL corridor ridership and funding potential. Both corridors are currently moving forward with collaborative efforts with local, state and regional partners.

East Metro Connections Plan
The East Metro Connections Plan (EMCP) included a recommendation for future study of HCT in the Powell/Division Corridor. A BRT in the Powell/Division corridor has strong regional and jurisdictional support. The recommendations from the EMCP study included detailed transit findings from the analysis and near term implementation plans.

Methodology:

This project builds on previous work including the Powell/Foster study (Metro, 2004), the Outer Powell Boulevard Conceptual Design Plan (City of Portland, 2011) and the East Metro Connections Plans work. In 2013-14 the project partners worked collaboratively to develop the land use and transportation scope(s) and budget(s).

The project scope will be to improve the land use and transportation conditions and mobility in the Powell/Division Corridor to support vibrant communities with transportation that helps to sustain economic prosperity, healthy ecosystems, and community assets; minimizes contributions to global warming; and enhances quality of life. This work program started with locally identified land use plans and priorities and economic development strategies. The transportation analyses will identify measures to support the land use strategies and improve mobility (particularly transit) in the corridor. Metro will be the local lead agency that will consider and compare various transit alternatives, including mode, alignment / routing, service and capital improvements, as well as a no build scenario. The work program is expected to take approximately 24-48 months to complete depending on funding and partner preferences.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Evaluation and refinement of promising options and related transportation improvements and land use investments (Summer 2014)
- Adoption of the Powell-Division Transit Action Plan by local jurisdictions and Metro Council (2015)

- City of Gresham Local Action Plan outlining actions Gresham can take to promote desired change around future station areas complementary to the transit investment (November 2015)
- Conceptual design of transit alternative(s) (Summer 2016)
- Traffic and Transportation technical report (Summer 2016)
- Land use and development technical report (Summer 2016)
- Draft and Final Transit and Development Action Plan (Fall 2015)
- Environmental scan and initiation of NEPA class of action (Winter 2016)
- Adoption of Locally Preferred Alternative by the Local Jurisdictions (Winter 2016)
- Design refinement of Locally Preferred Alternative to 10% (Spring 2017)
- Metro adoption of the Locally Preferred Alternative and amendment to the Regional Transportation Plan (Spring 2017)
- TriMet Application for a rating to qualify for FTA Small Starts funding (Summer 2017)
- City of Portland Powell-Division Transit and Development Project Local Action Plan creating a 5-year work plan for the City to promote equity-focused community, workforce, and economic development to complement transit investment, promote affordable housing and support existing economic development activities. (Summer 2016)
- Complete Historic and Cultural Analysis (Spring 2018)
- Coordination with TriMet and partners to refine project design for analysis – 35% (Spring 2018)
- Continued coordination with TriMet and partners on project design refinement (Spring/Summer 2018)
- Coordination with local jurisdictions on land use and community development opportunities (2018-2019)
- Complete NEPA analysis (Winter 2018)

Entities Responsible for Activity:

Metro – Lead NEPA analysis/ Historic and cultural analysis and cooperate/collaborate
Oregon Department of Transportation – cooperate/collaborate
TriMet – Lead Agency after adoption of the Locally Preferred Alternative, leading design and outreach
Corridor Jurisdictions (including Cities of Portland and Gresham and Multnomah County) - cooperate/collaborate
City of Portland- cooperate/ collaborate
City of Gresham- cooperate/collaborate
Multnomah County- cooperate/collaborate

Schedule for Completing Activities:

- Coordination with TriMet and partners to refine project design for NEPA analysis – 35% (Spring 2018)
- Complete NEPA analysis (Winter 2018)
- Complete Historic and Cultural Analysis (Spring 2018)
- Coordination with TriMet and partners to refine project design (Winter/Spring 2018)
- Coordination with local jurisdictions on land use and community development opportunities (2018-2019)

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2012-13	$221,775	0.96
2013-14	$441,348	2.455
2014-15	$771,226	2.58
2015-16	$1,234,623	4.75
2016-17	$2,533,045	5.85

FY 2017-18 Cost and Funding Sources:

Requirements:			Resources:	
Personal Services	$	520,576	Regional Corridor Planning STBG	$ 1,122,610
Interfund Transfers	$	212,586	Metro	$ 89,364
Materials and Services	$	1,234,610	Other	$ 755,798
TOTAL	**$**	**1,967,772**	**TOTAL**	**$ 1,967,772**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	4.125
TOTAL	4.125

FY 2018-19 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	$	80,571	Regional Corridor Planning STBG	$	500,000
Interfund Transfers	$	34,215	Metro	$	57,227
Materials and Services	$	442,441			
TOTAL	**$**	**557,227**	**TOTAL**	**$**	**557,227**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	0.6
TOTAL	**0.6**

Southwest Corridor Plan

Chris Ford, chris.ford@oregonmetro.gov

Description:

The Southwest Corridor Plan coordinates land use and transportation planning efforts to develop a shared investment strategy that identifies and prioritizes needed projects to serve locally desired land uses and stimulate community and economic development. This corridor extends from Central City Portland south to the City of Sherwood in the vicinity of Barbur Boulevard/Highway 99W. The plan is a partnership between Metro, Washington County, the Oregon Department of Transportation, TriMet and the cities of Portland, Sherwood, Tigard, Tualatin, Beaverton, Durham, and King City. A major feature of the Plan's shared investment strategy is a proposed light rail transit (LRT) system extending from the Portland transit mall to Bridgeport Village via downtown Tigard. In conjunction with the study of the LRT, Metro is working with project partners on the Southwest Corridor Equitable Development Strategy to support achieving regional and local goals related to inclusive development, affordable housing, workforce development, and access to education and other ladders of opportunity aligned with major regional investments in transit and other transportation improvements.

Objectives:

- The proposed LRT project entered the federal environmental review process in late 2016, and it will continue until mid 2019.
- The Southwest Corridor Steering Committee will select the final LRT alignment – the locally Preferred Alternative – during the environmental review process.

Previous Work :

- In 2015-16, the project steering committee substantially narrowed the alignment options still under consideration, and recommended light rail over bus rapid transit as the transit mode.
- The SW Equitable Development Strategy began in 2017, including formation of a project oversight committee that meets bimonthly.
- In spring 2018, the Draft Environmental Impact Statement (DEIS) was released for public review and comment.
- The Southwest Corridor Steering Committee selected a Preferred Alternative for local endorsement and adoption in June 2018.

Methodology and Entities responsible :

Technical and planning staff from partners meets several times every month to examine and evaluate new information in order to brief the project steering committee, which works to make project recommendations on a consensus model. Specific partner roles include:

- Metro: lead local agency on environmental review process; support TriMet with regional coordination, analysis and public engagement
- TriMet: planning and design lead after Metro Council adoption of locally preferred alternative

- Oregon Department of Transportation: cooperate/collaborate, including reviewing and commenting on draft NEPA materials and involvement in negotiating analysis methods and mitigation strategies
- Partner jurisdictions: same as ODOT

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19

- Adoption of the SW Corridor LRT Preferred Alternative into the Regional Transportation Plan update (October 2018)
- Metro Council considers adoption of a Land Use Final Order for the Southwest Corridor Light Rail Project (October 2018)
- TriMet submits to Federal Transit Administration for entry into Project Development phase of New Starts (December 2018)
- Begin funding commitments toward estimated capital costs by local agencies and jurisdictions (continues into 2020)
- Post-DEIS transit design advancement in support of Final Environmental Impact Statement (FEIS) (mid 2018 into early 2019)
- Preparation and release of FEIS (early to mid 2019)
- Continue to implement the work plan for the Equitable Transit Oriented Development (eTOD) grant received from the Federal Transit Administration (FTA) for corridor wide planning, culminating in identification of a comprehensive SW Corridor Equitable Development Strategy (mid 2019)
- Begin the station area planning process, examining access needs and land use and development opportunities (TBD)
- Continued ODOT and project partner staff meetings to review and discuss project planning and designs (ongoing)
- Continued public engagement process (ongoing)
- Continued collaboration with project partners to support local community land use visions (ongoing)
- Work toward identifying funding and implementation options for SW Corridor transportation improvements (roadway, bicycle and pedestrians) and parks, trails and habitat projects listed in the Southwest Shared Investment Strategy but not included in the LRT Preferred Alternative (ongoing)

Schedule for Completing Activities:

- Federal environmental review: mid 2019
- Completion of equitable development strategy: mid 2019
- Commitment of non-federal matching funds: late 2020
- Request for federal matching funds: mid 2021
- Signing full funding grant agreement with FTA: early 2022
- Start LRT construction: 2020
- Opening of LRT line: 2027

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	$2,476,000	7.615
2012-13	$2,450,844	11.4
2013-14	$1,956,046	11.4
2014-15	$2,208,202	5.485
2015-16	$3,626,399	6.05
2016-17	$3,776,791	6.6

FY 2017-18 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	$	908,067	Metro	$	286,585
Interfund Transfers	$	381,788	Other	$	2,027,370
Materials and Services	$	1,024,100			
TOTAL	**$**	**2,313,955**	**TOTAL**	**$**	**2,313,955**

Full-Time Equivalent Staffing

Regular Full-Time FTE	7.435
TOTAL	**7.435**

FY 2018-19 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	$	889,282	FTA - SWEDS	$	216,977
Interfund Transfers	$	401,493	Metro	$	342,486
Materials and Services	$	1,428,500	Other Anticipated Funds	$	2,159,811
TOTAL	**$**	**2,719,275**	**TOTAL**	**$**	**2,719,275**

Full-Time Equivalent Staffing

Regular Full-Time FTE	7.15
TOTAL	**7.15**

FY 2017-18 ODOT Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	150,000	SPR	$	150,000
TOTAL	**$**	**150,000**	**TOTAL**	**$**	**150,000**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	1.25
TOTAL	**1.25**

Economic Value Atlas (EVA)

Staff contact: Jeffrey Raker, Jeffrey.Raker@oregonmetro.gov

Description:
The purpose of this work is to create a more robust data-based tool for estimating economic outcomes from public investments in transportation and other infrastructure investment scenarios. Metro, together with key partners and stakeholders, will develop an Economic Value Atlas (EVA) that serves as a spatial representation of existing economic and workforce conditions, opportunities for a productive and inclusive regional economy, and supply chain factors that impact the region's ability to export its products and services. The EVA will help translate stated economic goals for the region into a strategy that guides Metro's transportation (freight and passenger) and land use planning and investment decisions based on economic conditions and needs.

Objectives:

- Create a common understanding of the Portland –Vancouver region's economic conditions and economic and workforce development performance needs.
- Develop enhanced economic data, geospatial information, metrics for economic performance, and related decision-support tools.
- Engage key economic and workforce development organizations as well as other stakeholders in evaluating conditions and metrics for stated economic aspirations:
    - Infrastructure and land use assets/opportunities.
    - Efficient movement of goods, services, and people.
    - Traded-sector jobs and productivity.
    - Exports and supply chain conditions.
    - Broader economic performance.
    - Economic inclusion/opportunity.
- Use the EVA to inform Metro's planning and investment decisions and external strategies and actions to support economic and workforce development in the region.

Previous Work:
The Economic Value Atlas builds on and enhances current and previous work completed by Metro and its partners, including:

- Metro plans and initiatives:
    - Urban Growth Report and Metro Investment Areas Division projects
    - Regional Industrial Site Readiness project (2014)
    - Regional Transportation Plan (RTP), Regional Freight Plan, 2014 Cost of Congestion Report, and 2008 Regional Infrastructure Analysis.
- External Plans and Initiatives
    - Greater Portland Inc. (GPI) Comprehensive Economic Development Strategy, Greater Portland 2020 Action Plan, and Metropolitan Export Initiative + 2012 Export Plan
    - Prosper Portland Strategic Plan and cluster projects
    - Value of Jobs Coalition reports
    - Port of Portland plans and studies
    - State Business Oregon and Brownfields programs

Methodology:

Metro serves as project manager for this effort, with significant support from Greater Portland Inc., Port of Portland, City of Portland and Business Oregon. Phases of the project include:

- Phase 1 - Engagement + Partner Development
  - Economic Development Listening Tour
  - Establish Working Group
  - Expert Input on Cluster + Cross-Sector Challenges + Options
  - Staff Participation In Key economic and workforce development partner meetings and events
- Phase 2 - Regional Economic Analysis
  - Coalesce + Establish Economic Indicators
  - Visual/Spatial Mapping of Regional Economy + Clusters
  - Economic Value Atlas
- Phase 3 –Guidance on Metro Plans + Initiatives
  - Use EVA to ID Future Investment Areas
  - Integrate Findings Into RTP + MTIP
  - Integrate metrics/criteria into 2019-2020 RFFA
  - Integrate analyses/findings into future multi-criteria evaluation
- Prospective Future Phases – Guidance on external policy/actions, advance cluster- specific and cross-sector action plan(s), and build out ongoing Metro role in economic and workforce development.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Economic Value Atlas – Online Decision-Support Tool (SECOND QUARTER FY 2018-19)
- Implementation Plan – Guidance on Metro Plans + Initiatives (SECOND QUARTER FY 2018-2019)
- Stakeholder engagement (ONGOING)

Entities Responsible:

- Metro – Lead Agency
- ODOT – Contract Manager
- Greater Portland Inc – Collaborate/Cooperate
- Port of Portland – Collaborate/Cooperate
- City of Portland – Collaborate/Cooperate
- Business Oregon – Collaborate/Cooperate
- Joint Policy Advisory Committee (JPACT)
- Metro Policy Advisory Committee (MPAC)
- Transportation Policy Alternatives Committee (TPAC)

Metro Technical Advisory Committee (MTAC)

Schedule for Completing Activities:

- Listening Tour (Completed)
- Establish Working Groups – EVA Task Force + Technical Work Group (Completed)
- Site Tours (3 Completed + 2 scheduled)
- Market Scan (Completed)
- Final Economic Performance Indicators (THIRD QUARTER FY 2017-2018)
- Early Mapping (THIRD QUARTER FY 2017-2018)
- Economic Value Atlas – Online Decision-Support Tool (SECOND QUARTER FY 2018-2019)
- Implementation Plan – Guidance on Metro Plans + Initiatives (SECOND QUARTER FY 2018-2019)

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2015-16	$325,000	0.5
2016-17	$177,214	0.85

FY 2017-18 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	$	216,067	STBG – EVA	$	53,860
Interfund Transfers	$	95,058	Metro	$	291,265
Materials and Services	$	34,000		$	
				$	
TOTAL	**$**	**345,125**	**TOTAL**	**$**	**345,125**

Full-Time Equivalent Staffing

Regular Full-Time FTE	1.89
TOTAL	**1.89**

FY 2018-19 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	$	209,236	STBG - EVA	$	25,557
Interfund Transfers	$	88,853	Metro	$	308,781
Materials and Services	$	36,250			
TOTAL	**$**	**334,339**	**TOTAL**	**$**	**334,339**

Full-Time Equivalent Staffing

Regular Full-Time FTE	1.75
TOTAL	**1.75**

I-84 Multimodal Integrated Corridor Management

Staff Contact: Caleb Winter, caleb.winter@oregonmetro.gov

Description:

US DOT's Intelligent Transportation Systems (ITS) Joint Program Office (JPO) awarded Metro and agency partners an Integrated Corridor Management Deployment Planning Grant. Integrated Corridor Management (ICM) grants will help combine numerous information technologies and real-time travel information from highway, rail, transit and bike operations.

This work aligns with the Regional TSMO Plan, supporting the vision to "collaboratively and proactively manage [the region's] multimodal transportation system." The ICM study furthers the goals and objectives of the TSMO plan including reliability for travelers and goods movement; transportation safety and security; environment and quality of life; and, providing comprehensive multimodal traveler information to people and business.

As TSMO partners strive towards real-time information for operations and travelers, this study takes strategies a step forward. ICM is described as a "system of systems" which refers to both the technology and coordination protocols between agencies. ICMs in other regions identify a multitude of scenarios including crashes, weather hazards and major events. A real-time coordinated response will help provide safe and reliable transportation options.

Travelers can use real-time information to avoid congestion and find alternate routes or transportation systems, such as transit or bike. Shippers can receive information concerning the entire network, not just one route. Such tools can help engineers make better decisions about congestion management by recommending where traffic should flow and onto which systems commuters should be shifted based on up-to-the-second data.

Objectives

- Implement a systematic multimodal approach, complete with performance measures and evaluation approaches, in accordance with multimodal mobility corridor concepts.
- Balance mobility, safety and access considerations.
- Improve multimodal access for corridor users.
- Better manage freight mobility in the corridor.
- Leverage intelligent transportation system (ITS) technologies to become even more active and integrated.
- Balance state and local needs in transportation planning and operations.

Previous Work

Previous projects to this ICM study are those implemented under the TSMO Plan, coordinated by the TSMO Regional Mobility Program in the UPWP, and related projects by agency partners. ODOT manages and operates I-84 with a data communications network, signals, ramp meters, cameras, and

variable message signs. TriMet operates three MAX lines and bus service throughout the corridor, monitored with an updated CAD/AVL system and communications. Multnomah County manages six of the Willamette River bridges, including the Burnside, Broadway, Hawthorne and Morrison. City of Gresham shares fiber optics and will install arterial variable message signs. City of Portland operates approximately 382 signalized intersections within the proposed corridor, including 16 traffic cameras. The agencies in the corridor already cooperate to share equipment, share data and coordinate incidents from operations centers.

The TSMO Regional Travel Options (RTO) program supports transportation demand management in the corridor working with both residents and employees in Portland and Gresham to reduce drive-alone trips and increase trips by transit, biking and walking. ODOT and TriMet serve travel information at TripCheck.com and TriMet.org.

Portland State University houses and manages PORTAL, the region's database archive of traffic, transit, bike and walk data, plus operating conditions such as weather and incident data.

Methodology:

Metro will serve as project manager for this effort, with significant support from a project team from partner agencies and support through TransPort, the TSMO subcommittee to the Transportation Policy Alternatives Committee (TPAC). This project will follow the process for completing an Integrated Corridor Management Deployment Planning Grant, described in the US DOT ITS JPO guidance documents and their direction to grantees.

The project will complete the following components:

- Stakeholder Participation Plan – identifying the process to generate input and support from a cross section of stakeholders at key points in the concept development
- Project Management Plan (PMP) – preparing the ICM guiding document
- System Engineering Management Plan (SEMP) framework – preparing a structure for systems engineering as the ICM project progresses towards implementation
- Vision, Goals and Objectives - refining the desired vision, measurable goals and objectives for ICM in the I-84 corridor.
- ICM Operational Alternatives - developing an initial set of operational alternatives to achieve the desired vision, measurable goals and objectives
- Infrastructure Improvements – comparing existing/planned assets with ICM asset requirements to identify a set of improvements
- Relationships and Procedures – identifying issues and recommending actions for ICM operations
- Final Report – preparing a final document

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

Tangible products are primarily expected in FY 2017-2018; however, if additional work is desired by stakeholders to finalize the report, the date of completion will be extended.

- Final report (1ST Quarter FY2018-2019)

Entities Responsible for ICM Activity:

- Metro – Lead Agency ODOT – Contract Manager
- ODOT, TriMet, Multnomah County, City of Portland, City of Gresham, PSU, Port of Portland, TransPort – Cooperate/Collaborate
- FHWA – Cooperate/Collaborate
- US DOT ITS JPO – Cooperate/Collaborate

Schedule for Completing Activities:
Please refer to schedule information provided in the Major Project Deliverables/Milestones section.

FY 2017-18 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	63,137	ICM-DPG-2013/ICM Deployment	$	191,680
Interfund Transfers	$	25,663	Metro	$	6,845
Materials and Services	$	150,800	Local Partners	$	41,075
TOTAL	**$**	**239,600**	**TOTAL**	**$**	**239,600**

Full-Time Equivalent Staffing	
Regular Full-Time FTE	0.4
TOTAL	**0.4**

MAX Red Line Improvements Project

Staff contact: Elizabeth Mros-O'Hara, Elizabeth.Mros-Ohara@oregonmetro.gov
Malu Wilkinson, Malu.Wilkinson@oregonmetro.gov

Description

The MAX light rail system provides high capacity transit connecting the major centers of our region. The MAX Red Line has connected the City of Beaverton, downtown Portland, Gateway Regional Center, and Portland International Airport since 2001. Since its opening, there has been substantial growth in the corridor and more demand for reliable transit connecting these important centers. Currently, the Red Line has two single track sections near Gateway/99th Ave and Portland International Airport, which result in inbound and outbound trains having to wait for each other. If a train is off schedule, these wait times can impact the entire Max System as trains rely on the same tracks to serve different parts of the region. Adding a second set of tracks in these areas will reduce delays for riders on all five lines. In addition, Max riders west of Beaverton Transit Center have been requesting Red Line service to better connect a growing part of the region.

The Red Line improvements west of the Beaverton Transit Center include improving track and switches and adding signals and a new operator break facility at the Fair complex/Hillsboro Airport Max Station allowing Red Line trains to serve ten more west side stations. These stations are currently served by the Blue Line which is often overcrowded. Improvements will allow TriMet to increase train frequency to better meet rider demand.

Improved transit will support anticipated redevelopment at the Port of Portland such as the expansion of the Portland International Airport and potential redevelopment at the Gateway Regional Center.

Objective

Complete a 2-year design process for the Max Red Line double tracking and other improvements to increase light rail reliability on all five Max lines and to improve carrying capacity to meet transit demand west of the Beaverton Transit Center. Construct improvements in the 2021-2022 timeframe with an opening targeted for 2023. This work will improve mobility and transit performance throughout the region.

Work Completed in 2017-18 included:

- Initiation of discussions with jurisdictions and stakeholders to coordinate design and better transit access.
- Initiation of the transit design and environmental analysis.

Methodology

TriMet and Metro will work with the local jurisdictions and the Port of Portland to scope the project to improve access to major transit origins and destinations, improve reliability of the entire MAX system, and support future redevelopment at the Gateway Regional Center, the Port of Portland properties, and within Beaverton and Hillsboro.

TriMet and Metro will also consult with the federal agencies during the scoping phase.

TriMet is coordinating with local jurisdictions to avoid and minimize any potential impacts associated with improving the Red Line.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019

- Partner agency engagement began summer 2017 and will continue through 2019.
- Public outreach process began fall 2017 and will continue through 2019
- JPACT and Metro Council will be asked to adopt the MAX Red Line improvements into the 2018 RTP.
- Enter Project Development for Small Starts Federal Transit Administration Small Starts Application for Rating 2019
- 30% design by end of 2018
- NEPA complete by 2019
- Begin construction 2020/2021
- Opening 2021/2022

Entity/ies Responsible for Activity:
TriMet and Metro

Other Stakeholders

- Local Cities and Counties
- Port of Portland
- City of Portland
- City of Beaverton
- City of Hillsboro
- Federal Transit Administration

Schedule for Completing Activities:
Please refer to schedule information provided in the *Major Project Deliverables/Milestones* section.

Funding History

This project is being described for the first time in this UPWP, and therefore does not include a discrete funding history.

FY 2018-19 Cost and Funding Sources:

Requirements:			**Resources:**		
Personal Services	$	90,456	Regional Corridor Planning STBG	$	103,407
Interfund Transfers	$	38,412	Metro	$	25,461
TOTAL	**$**	**128,868**	**TOTAL**	**$**	**128,868**

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.7
TOTAL	**0.7**

TriMet Employer Outreach Program

Staff Contact: Adriana Britton, brittona@trimet.org

Description:
The TriMet Employer Outreach Program delivers transportation demand management programs and services to employers through the Metro Regional Travel Options program. TriMet's work with employers contributes toward achieving Metro's Climate Smart strategies goals.

The TriMet program serves employers and colleges of all sizes in the Portland Metro region with non-SOV travel options resources, transportation program assistance, transit pass programs and transportation surveys for Oregon DEQ's Employer Commute Options program. The TriMet outreach program reduces vehicle miles traveled by educating employers, offering promotional campaigns, meeting with employees, producing online communications and supplying educational materials for using transportation options. TriMet supplies transportation survey data in aggregate to the Metro RTO program, plus assists partners with transit operations information and opportunities to participate in TriMet campaigns.

TriMet's RTO efforts contribute to achieving Metro's regional goals of reducing greenhouse gas emissions 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050. The population is expected to increase by 44% between 2010 and 2040 while increasing housing costs are displacing a segment of riders to the outer rings of the region.

TriMet increased service from 2012-2016 and service is now above pre-recession levels. TriMet has continued adding service at regular intervals through TriMet's "Making Transit Better" initiative. A TriMet analysis released Q1 17-18 shows that overall ridership, primarily off-peak trips, was relatively flat from 2015. However, commute peak trips increased slightly from 2015 to 2016. To improve off-peak transit ridership TriMet proposes adding service to address shifts in housing, addressing travel times, integrating services and monitoring demographic shifts. Within this context, outreach messaging to employers will encourage travel options as a convenient lifestyle choice for off-peak as well as for commute trips.

Objectives:

- Increase participation among employers and colleges to reduce non-SOV trips
- Promote active travel options that improve health and economic benefits
- Coordinate with and support Metro RTO campaigns plus local partner efforts
- Provide transportation services and education to employers and colleges about the variety of travel opportunities available in suburban areas and urban centers

Previous Work:
Key work program accomplishments for fiscal 2016-17 included the following:

- Increased transportation program enrollment to 2,062 from 1,956 worksites a year ago, a 5% increase over the previous fiscal year.
- Employer worksites offering transit subsidies increased to 1,291 from 1,248, a 3% increase over the previous year.

- Increased worksites with TriMet pass programs to 1,250 from 1,207 in the previous year, a 4% increase from the last fiscal year.
- Enrolled 30 new TriMet employer pass program contracts compared with 45 in the previous fiscal year or a 33% decrease in the number of new program contracts.

Methodology:

The transportation options team works with employers to develop and maintain transportation programs to reduce SOV car trips. The programs also include transit pass programs for employers and colleges to encourage transit use. Following are key program components completed in fiscal 2016-17:

Employer and College Outreach:

- Completed 5,727 contacts with 771 employers and colleges of which 110 employers were first-time contacts. The number of contacts decreased by 4% but the number of employers/colleges contacted increased by 23%.
- Participated in 331 planning, informational meetings, with employers, colleges, business associations, community associations, citizens' advisory committees and RTO partner organizations.
- Promoted the 2016 statewide Drive Less Challenge at 14 employer events with 1,500 employee contacts and by email to over 200 employers with pass programs. Distributed over 900 postcards and 50 posters at employer events and meetings.
- Promoted service improvements to follow up on outreach from TriMet's Service Enhancement Plans initiative including the following:
    - Q2 FY16-17 North Hillsboro Link Shuttle. Contacted 51 employers along new service, of these sent 350 promotional flyers to 30 employers, staffed 3 events.
    - Q4 FY16-17 new bus route, Line 97. Mailed letter about new service to over 105 West district employers and conducted call downs; supplied over 1,000 bus schedules plus supplied 429 New Employee Kits.
- Continued a campaign to improve ridership on the MAX Orange Line and related bus service launched in Q1 FY15-16. Designed a new brochure promoting Orange Line service for employers and mailed to 600 businesses in Q3-Q4 FY16-17. Outreach and follow up will continue throughout FY17-18. The mailer follows an off-peak campaign conducted April – June 2016 to increase awareness of the service and destinations in the corridor. The off-peak campaign included bus ads, billboards and a website highlighting destinations near the MAX Orange Line stations.

Employee Communications:

- Promoted transportation options at 69 employer transportation fairs to 5,859 attendees.
- Redesigned the New Employee Kit into a single, streamlined brochure Q1 FY16-17. Distributed 3,354 of the revised New Employee Kits to 188 employers to promote non-SOV travel choices to new employees. The kits are branded with the regional Drive Less Save More campaign and may be accompanied with customized materials for an employer.

Employee Transportation Surveys:

- TriMet processed Employee Commute Option surveys for 241 worksites for 110 companies. Staff assists employers with surveys free of charge whether for Oregon's DEQ program, TriMet's Universal Annual Pass program, or to inform transportation program

choices. The staff supplies results in a report with recommendations for the employer's transportation program.

Employer Transportation Programs:

- TriMet offers a free, Emergency Ride Home, cab voucher program to incentivize employers to subsidize transit. Added 19 employers with ERH programs to 168 for FY16-17 and provided 52 cab rides for FY16-17. TriMet provided 47 rides in the previous year.

Other:

- Conducted outreach to employers by email and phone on three occasions during Q2 and Q3 alerting over 150 employers about protests disrupting multiple transportation modes in Portland's central business district. Advised employers of options for employees' safety.
- Outreach in Q3 by email to 784 employers advising of a 3-week light rail construction project and options to help employees travel through the disruption. Businesses were included in a mailer to over 28,500 addresses in the project area. Staff assisted with on-street outreach during commute hours.
- In Q4 FY16-17, TriMet hosted a public, rider engagement event to leverage APTA's National Dump the Pump Day campaign. The event was paired with social media promotions and included demonstrating TriMet's newest bus. Staff assisted with transportation options questions and transit information.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19

For FY 2018-19, outreach projects will include engaging employers in a suite of service enhancements in planning for Q1 2018 through 2019. Outreach messages will encourage travel options for off-peak trips in addition to commute trips. Staff will promote Metro RTO, partners and TriMet campaigns to employers and colleges. A branding campaign is being developed for the Employer Outreach program and will be implemented beginning Q1 FY18-19. The work plan may be adjusted to incorporate new campaigns plus service additions and changes.

Employer and College Outreach:

- TriMet will continue a 10-year service expansion plan with service additions in Q1 and Q3 FY18-19 plus Q1 and Q3 FY19-20. Multiple outreach phases include engaging employers at the planning stages in FY17-18 plus following up to build awareness about the service changes with employer emails, mailings and events.
- Staff will promote RTO campaigns including national bike month and the bike commuting challenge in Q1 FY18-19 and the statewide Drive Less Challenge in Q2 FY18-19 through online channels and at employer events.
- Staff will promote new opportunities for combining bike and transit trips by leveraging the construction of three, new secure bike-storage facilities for Summer 2018. The Bike and Ride facilities will be located at major light rail transit centers.

Employee Communications:

- Promote transportation options, new bike/ped infrastructure and RTO campaigns at over 80 employer and college fairs/events with a minimum goal of 8,000 participants.
- Promote WES Commuter Rail to build ridership along corridor. Outreach will be

conducted to the 131 employers along the line from Q2 through Q4 FY17-18 to build awareness of the bike/transit connections. Outreach will include creating a mailer to zip codes ½ radius of the line, coordinating transportation fairs, Facebook ads targeting surrounding zip codes, and marketing materials to raise awareness of WES.

Employee Transportation Surveys:

- Complete an average annual goal of surveys for 230 employer worksites for FY18-19. Staff work closely with Oregon DEQ to assist employers who must survey for compliance. The survey is also used for TriMet's Universal Annual Pass program.

Employer Transportation Programs:

- Employers and colleges are aware of the Hop Fastpass™ electronic fare system through previous outreach efforts which began Q3 FY16-17. Staff will continue transitioning employers and colleges to the Hop Fastpass system in FY18-19. As of Q2 FY17-18, 89 employer programs have transitioned to the Hop system. Over 550 programs will be transitioned to the new fare system during a two-year period, plus information will be supplied to train employees to use the electronic fares for riding the system. Additional TriMet staff (non-RTO) will conduct training for employers and colleges.
- Staff will promote the Emergency Ride Home program with the goal of adding a minimum of 12 enrollments annually over the next five years.

Other:

- Staff will assist with a pilot project to encourage commute and off-peak transit trips at new multi-family housing developments with 50 or more units within .25 miles of frequent transit. A New Resident Kit was created that includes transit fares and transit tips. An initial set of 3,500 kits was mailed in Q1 FY16-17 to 60 buildings. Another 5,000 kits will be distributed in Q1-Q4, FY18-19. The second cohort will include the Hop Fastpass™ electronic card to allow reporting of card activations.

Entities Responsible for Activity:

The TriMet Employer Outreach program is staffed by 5.25 people within TriMet's Customer Information Services department. TriMet staff work in partnership with the following stakeholders and entities:

- Metro Regional Travel Options
- ODOT
- FTA
- Regional partner agencies including TMAs
- Employers and colleges in the Metro region
- Cities and counties in the Metro region
- Metro Transportation Policy Alternatives Committee (TPAC)
- Metro Joint Policy Advisory Committee on Transportation (JPACT)
- Metro Policy Advisory Committee (MPAC)
- Other area transit providers, including but not limited to South Metro Area Regional Transit, C-TRAN and Portland Streetcar.

Schedule for Completing Activities:

Please refer to the schedule information provided in the *Major Product Deliverables* sections.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2008-09	$412,409	5.25
2009-10	$424,781	5.25
2010-11	$437,524	5.25
2011-12	$450,649	5.25
2012-13	$464,171	5.25
2013-14	$469,118	5.25
2014-15	$483,193	5.25
2015-16	$497,688	5.25
2016-17	$507,212	5.25
2017-18	$546,270	5.25

FY 2017-18 Costs and Funding Sources:

Requirements:				**Resources:**		
Personal Services	$	**527,997**		PL	$	
Interfund Transfers	$			STP	$	473,772
Materials and Services	$	18,273		ODOT Support	$	
Computer	$			Section 5303	$	
CMAQ	$			*TriMet Support (10.27% match)	$	54,225
				Metro	$	
				Other	$	18,273
TOTAL	**$**	**546,270**		*TOTAL*	**$**	**546,270**

Full-Time Equivalent Staffing

Regular Full-Time FTE		5.25				
TOTAL		**5.25**				

**Updated M&S for FY17-18, actual as of 7/3/2017.

FY 2018-19 Costs and Funding Sources:

Requirements:				**Resources:**		
Personal Services	$	**538,101**		PL	$	
Interfund Transfers	$			STP	$	487,985
*Materials and Services	$	14,000		ODOT Support	$	
Computer	$			Section 5303	$	
CMAQ	$			TriMet Support (10.27% match)	$	50,116
				Metro	$	
				Other	$	14,000
TOTAL	**$**	**552,101**		*TOTAL*	**$**	**552,101**

Full-Time Equivalent Staffing

Regular Full-Time FTE		5.25				
TOTAL		**5.25**				

*Estimated M&S for FY18-19 to be updated with actual M&S in next UPWP.

South Metro Area Regional Transit (SMART) Options Program

Staff Contact: Elli Work [Primary] ,Grants and Programs Manager, work@ridesmart.com
Nicole Hendrix [Secondary], Transit Management Analyst, hendrix@ridesmart.com

Description

South Metro Area Regional Transit (SMART)'s Transportation Demand Management (TDM) program, SMART Options, promotes transportation alternatives to driving alone and assists local employers in establishing transportation worksite programs to comply with Department of Environmental Quality Employee Commute Options (DEQ – ECO) rules. The SMART Options program takes part in coordinated regional travel planning processes through Metro's Regional Travel Options (RTO) Program in addition to collaborating with neighboring area transit agencies and jurisdictions in planning outreach programs and promotions. Beginning in 2001 primarily as a large-employer commuter focused program, SMART Options continues to expand to include community members and visitors in an effort to reduce single occupancy vehicle trips in Wilsonville and the region.

Objectives

- Reduce drive alone trips and increase awareness of transportation options;
- Increase outreach to Limited English Proficiency (LEP) and older adult populations;
- Build transit ridership on SMART, TriMet, CAT, and Cherriots;
- Improve first and last mile connections to transit;
- Work with Wilsonville employers to coordinate commuter vanpools;
- Help achieve regional and state plan goals utilizing strategies in plans; and
- Support the City of Wilsonville's Transit Master Plan and Bicycle and Pedestrian Master Plan.

Previous Work

- In the Spring of 2017, SMART purchased and placed a new Dero bike repair station adjacent to the 48 bicycle lockers located at SMART Central at Wilsonville Station to allow for a more seamless first/last mile connection and build multi-modal transportation.
- Summer marketing interns assisted in vastly improving outreach on SMART social media sites. On Facebook, SMART followers grew from 300 to over 1,000 in two months.
- Coordinated with Ride Connection to promote the new RideWise Travel Trainer located at SMART offices beginning December 2016.
- Walk Smart's Walk at Lunch program occurred weekly from April through September 2017. Average participation each week was 35 people, partnering with 17 Wilsonville businesses.
- A Grants and Programs Manager was hired in June 2017 to bring funding and reports up to date.
- In August 2017, SMART conducted its first on-board demographic survey. 500 surveys were collected over the course of four days. The results of the survey are being used to better market services and adjust service-based customer trends.
- Assisted 11 employers to complete their ECO surveys and trip reduction plans when required by DEQ from July 2016 to June 2017.

Methodology and Entities Responsible

The SMART Options program will continue to work closely with and report to Metro's Regional Travel Options program and relevant working groups to coordinate travel options outreach and activities throughout the region.

- City of Wilsonville's South Metro Area Regional Transit – Product Owner / Lead Agency
- Metro – Collaborate/Facilitate
- RTO Program Partners and Stakeholders – Cooperate / Collaborate
- Neighboring transit providers (TriMet, CAT, Cherriots) – Collaborate
- Transportation Options Group of Oregon - Collaborate
- Federal Transit Administration (FTA) – TDM milestone and financial reports
- Oregon Department of Transportation (ODOT) - Coordinate/Report
- Wilsonville City Council - Approves annual budget
- Ride Connection - Collaborate
- Community groups and organizations involved in transportation issues
- Organizations serving people of color, older adults, disabled, and LEP speaking residents' needs
- Organizations and advisory committees serving regional bicycle, pedestrian, and transit needs
- General public – Provide input
- Wilsonville businesses
- Wilsonville public and higher education schools

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Hire a Bike and Pedestrian Coordinator (July 2018)
- Continued support and implementation of the Drive Less/Save More and Drive Less Connect collaborative marketing campaign through participation in the Drive Less Challenge workgroup and promotion of the program. (ONGOING)
- Prepare for Fall 2018 TMP implementation through extensive outreach process (July 2018)
- Work with large businesses to begin a vanpool program in Wilsonville (ONGOING)
- Assess and meet transit system demands of Oregon Institute of Technology main Portland area campus in Wilsonville (ONGOING)
- Coordinate and host Walk Smart's Walk at Lunch events (April 2019 – September)
- Staff outreach booths at local business fairs and community events (ONGOING)
- Work directly with employers to find the best travel options for their employees (ONGOING)
- Assist with DEQ ECO surveys and trip reduction plans (ONGOING)
- Collaborate with regional partners to promote WES as a viable transportation option (ONGOING)
- Collaborate with local schools to assist with walking and biking to school programs and Safe Routes to School plans and promotions (ONGOING)
- Focused outreach to low-income families and ESL learners (ONGOING)
- Social media campaigns to increase youth ridership and participation in transit options
- Conduct annual bicycle and pedestrian counts at key Wilsonville intersections and trails

to coincide with regional and national efforts (September 2018)
- Actively participate in Metro's Collaborative Marketing Group (ONGOING)

Schedule for Completing Activities

Please review the Major Project Milestones section for expected completion dates and timeline of SMART Options Program projects.

Budget

Funding is utilized for SMART Options Program staffing and services supplemented by TDM grants from Metro, the State of Oregon, and local funds. Local match is provided by the City of Wilsonville employer transit payroll tax, which is currently set at 0.5% per $1,000. Staffing will fund a portion of the Programs Manager, Program Coordinator, (new) Bike and Pedestrian Coordinator and two program interns.

Please note: The funding amounts listed below are a result of SMART staff turnover and an unmet need for a grants manager. SMART is fully staffed as of June 2017 and has been made aware by Metro the funds that are available.

FY 2018-19 Costs and Funding Sources

Requirements:		**Resources**	Ratio	Actual
Staff	$198,486	Federal Grant FY 12	89.73%	$55,000
		Local Match	10.27%	$5,648.5
		Federal Grant FY 13	89.73%	$60,000
		Local Match	10.27%	$6,162
		Federal Grant FY 17	89.73%	$65,000
		Local Match	10.27%	$6,675.5
TOTAL	**$198,486**			**$198,486**

Full-Time Equivalent Staffing:

Grants and Program Manager	.25
Program Coordinator	.50
(New) Bike/Ped Coordinator	1
Options Program Interns (two at .5)	1
TOTAL	**2.75**

ODOT Development Review

Staff contact: Jon Makler, jon.makler@odot.state.or.us

Description:

ODOT reviews local land use actions and participates in development review cases when those actions may have safety or operational impacts (for all modes of travel) on the state roadway system, or if they involve access (driveways) to state roadways. This includes work with jurisdiction partners and applicants, and products may include written responses and/or mitigation agreements. This work includes review of quasi-judicial plan amendments, code and ordinance text amendments, transportation system plan amendments, site plans, conditional uses, variances, land divisions, master plans/planned unit developments, annexations, urban growth boundary expansions and recommendations for industrial land site certifications. ODOT also works to ensure that long-range planning projects integrate development review considerations into the plan or implementing ordinances, so that long-range plans can be implemented incrementally over time.

Objectives:

- Make recommendations for mitigation of safety and operational impacts of development on the state roadway system as appropriate
- Work collaboratively with local jurisdictions and applicants to develop mitigation agreements
- Review land use actions for Transportation Planning Rule (TPR), Oregon Highway Plan, Access Management Rule and ODOT permit compliance and make recommendations as appropriate

Previous Work:

Work during the 2016-2017 fiscal year included review of over 2,000 land use actions, with approximately 150 written responses and 100 mitigation agreements.

Methodology:

General methodology steps include:

- Intake of local/regional jurisdiction notice of land use actions
- Review for impact on state roadway system; review of plan amendments and development site plan review for TPR (comprehensive plan amendment/zone change), Oregon Highway Plan, access and permit considerations as appropriate
- Work with partners and applicants as necessary to determine appropriate mitigation
- Recommend conditions of approval as appropriate regarding the proposed land use action for mitigation of safety and operational impacts of development and ODOT permit requirements

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019

- Products occur throughout the planning period, depending on development/land use proposals and timing of notices
- May include response letters and mitigation agreements

Entities Responsible for Activity:

ODOT – Product Owner/Lead Agency; Cooperate/Collaborate/Make Recommendations

Cities and Counties – Product Owner/Lead Agency for local land use process

Department of Land Conservation and Development (DLCD) – Cooperate/Collaborate

Schedule for Completing Activities:

Please refer to schedule information provided in the *Objectives* and *Tangible Products* sections of this planning activity description.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-2012	$250,000	2.0
2012-2013	$250,000	2.0
2013-2014	$300,000	2.75
2014-2015	$300,000	2.75
2015-2016	$300,000	2.75
2016-2017	$330,000	3.00
2017-2018	$300,000	2.75

Estimated FY 2018-2019 Costs and Funding Sources:

Requirements:				**Resources:**		
Staff Time	$	300,000		SPR	$	300,000
TOTAL	**$**	**300,000**		*TOTAL*	**$**	**300,000**
Full-Time Equivalent Staffing						
Regular Full-Time FTE		2.75				
TOTAL		**2.75**				

ODOT – Transportation and Growth Management (TGM)

Staff contact: Jon Makler, jon.makler@odot.state.or.us

Description:

Oregon's Transportation and Growth Management (TGM) Program supports community efforts to expand transportation choices for people. By linking land use and transportation planning, TGM works in partnership with local governments to create vibrant, livable places in which people can walk, bike, take transit or drive where they want to go. The ODOT/DLCD TGM program provides grants to regional and local jurisdictions to conduct land use and transportation planning.

Objectives:

- Partner with DLCD and regional or local governments to conduct land use and transportation planning efforts receiving TGM grants
- Provide technical assistance with regard to best practices and consistency and compliance with the Oregon Transportation Plan, Oregon Highway Plan, Transportation Planning Rule, and other applicable state transportation plans, regulations and standards

Previous Work (grants ending in FY 2018):

- Beaverton – Active Transportation Plan (end date 11/30/17)
- Cornelius – TSP Update (end date 4/30/18)
- Gladstone – TSP Update (end date 1/31/18)
- Portland – Enhanced Transit Corridors Plan(end date 5/31/18)
- Metro – Transit System Expansion Policy (element of Regional Transit Strategy) (end date 10/31/17)
- Portland - Pedestrian Master Plan Update (tentative end date 6/30/18)
- Washington County - TV Hwy Transit Operations and Access Study (tentative end date 6/30/18)
- Molalla TSP Update (June 2018)

Current Work

- Washington County – First/Last Mile (June 2019)
- Portland – Columbia Corridor Plan (June 2019)
- Gresham – Clackamas-Columbia Corridor (June 2019)
- Multnomah County – Scenic Gorge Congestion Management (2018)
- South Clackamas Transit Master Plan (June 2019)

Methodology:

Methodology is dependent on work product, but generally includes standard planning steps (identifying the problem, existing conditions, policy framework, needs assessment, development of alternatives, evaluation of alternatives, recommendations, funding strategies) consistent with the Oregon Highway Plan, Transportation Planning Rule and the Regional Transportation Plan and Functional Plan.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019

Interim and Final Deliverables for each of the following grant projects, as described in each individual grant Agreement:

- Portland: Columbia Corridor Refinement Plan
- Gresham: Concept Plan for Clackamas-Columbia Corridor
- South Clackamas Transit District: Transit Master Plan
- Multnomah County: Congestion Management Plan for Columbia River Historic Highway Corridor
- Washington County: TSP Amendment and Action Plan

Additional TGM applications will be solicited and grants will be awarded in 2018 for project completion by June 2020.

Entities Responsible for Activity (local Product Owner varies by grant):

Oregon Department of Transportation – Product Owner DLCD – Product Owner
Cities and Counties – Product Owner
Metro – Product Owner or Cooperate/Collaborate
TriMet – Product Owner or Cooperate/Collaborate
Community groups and organizations/stakeholders – Coordinate

Schedule for Completing Activities:

Please refer to schedule information provided in the *Current Work* sections of this planning activity description.

Funding History:

Biennium	Total Metro Area Grant Budget	FTE Comparison
2013-2015	$ 870,125	2.0
2014-2016	$ 813,250	2.0
2015-2017	$ 716,705	2.0
2016-2018	$910,280	2.0

Estimated FY 2018-2019 Costs and Funding Sources:

Requirements:				Resources:		
ODOT Staff Time	$			TGM (STBG)	$	
2018-2019 Grants	$					
2018-2019 Grants estimate	$					
TOTAL	$			TOTAL	$	
Full-Time Equivalent Staffing						
Regular Full-Time FTE		2.0				
TOTAL		2.0				

ODOT – Region 1 Active Transportation Strategy

Staff contact: Jon Makler, jon.makler@odot.state.or.us

Description:

Building on the recently completion of the Active Transportation Needs Inventory, this project will enable ODOT Region 1 to engage in the identification and conceptual planning of projects that increase biking, walking and access to transit. The Oregon Transportation Plan set a goal of completing the state biking and walking network by 2030. The 2016 Statewide Bicycle and Pedestrian Plan and accompanying Implementation Plan establish a framework for pursuing this.

Objectives:

- Identify priority active transportation investments
- Develop facility cross-sections and project plans (not to exceed 30% design)
- Support mobility corridor efforts throughout the region to ensure facilities for walking and biking

Previous Work:

- Region 1 Active Transportation Needs Inventory (FY 2013 - 2017)

Methodology:

- Develop region-specific implementation actions based on the Oregon Bicycle and Pedestrian Plan
- Select needs on state facilities and initiate project planning
- Collaborate with local agencies in identifying opportunities to link implementation actions with transportation system plan activity (development or implementation)

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:

- Progress report presentations to TPAC and county coordinating committees (plus Portland)

Entities Responsible for Activity:

Oregon Department of Transportation – Lead
Cities and Counties in ODOT Region 1 – Collaborate
Metro – Coordinate
Tri-Met and rural transit providers – Coordinate

Schedule for Completing Activities:

Please refer to schedule information provided in the *Major Project deliverables/milestones* section of this planning activity description.

Funding History:

- Prior to FY18: Approximately $270,000 was invested in the Active Transportation Needs Inventory work that provides a foundation for this effort.
- FY18: $150,000

Estimated FY 2018-19 Costs and Funding Sources:

Requirements:				**Resources:**		
Consultant Services	$	125,000		SPR	$	150,000
Staff Time	$	25,000				
TOTAL	**$**	**150,000**		*TOTAL*	**$**	**150,000**
Full-Time Equivalent Staffing						
Regular Full-Time FTE		0.5				
TOTAL						

ODOT – Region 1 Transportation Data, Tools and Reports

Staff contact: Jon Makler, jon.makler@odot.state.or.us

Description:

In recent years, ODOT has produced several atlas-style documents to support the planning, programming and development of transportation investments around the region. These include the Interchange Atlas, Active Transportation Needs Inventory Atlas, Corridor Bottleneck Operations Study Project Atlas and Active Traffic Management Study. Every year, the data underlying these studies requires management and upkeep. The purpose of this project is to ensure that ODOT and its partners always have up to date and useful data available.

Objectives:

- To support planning, programming and design of a safe and efficient transportation system.
- To ensure ready access to current and reliable data that supports decision making.

Previous Work:

As noted, previous UPWP efforts have led to initial and updated versions of several atlases.

Methodology:

- Continue to invest in data collection (ongoing)
- Identify needs for new data or new data representations (annual review)
- Update published documents (ATNI, e.g.) as appropriate
- Make as much of this data available online (TransGIS, e.g.) as possible
- Perform outreach to raise awareness of data availability and utility

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:

- Annual “Corridor Performance Reports”
- Analysis of freeway off-ramp queuing
- Atlas “user guides” to support business case preparation and project delivery

Entities Responsible for Activity:

ODOT – Product Owner/Lead Agency

Metro – coordinate

TriMet, jurisdictional partners - inform

Schedule for Completing Activities:

Ongoing

Funding History:

FY18: $100,000

Estimated FY 2018-2019 Costs and Funding Sources:

Requirements:				**Resources:**		
Consultant Services	$	70,000		SPR	$	100,00
Staff Time	$	30,000				
TOTAL	**$**	**100,00**		**TOTAL**	**$**	**100,00**
Full-Time Equivalent Staffing						
Regular Full-Time FTE		0.25				
TOTAL		**0.25**				

ODOT – Region 1 Planning for Operations

Staff contact: Jon Makler, jon.makler@odot.state.or.us

Description:

ODOT seeks to leverage its recent work program investments in diagnosing bottlenecks and developing a strategy for active traffic management (ATM). This project will seek to identify and plan for project investments that support Transportation System Management and Operations (TSMO) on highways throughout the region. These investments are meant to improve safety and efficiency for all users of the transportation system.

Objectives:

- Identify and prioritize investment opportunities where TSMO can improve safety and efficiency
- Collaborate with local and regional agencies to find and implement cost-effective TSMO investments
- Enhance ODOT's ability to support local planning efforts with respect to planning for operations

Previous Work:

- Most recently, ODOT has developed the Corridor Bottleneck Operations Study (CBOS) and Active Traffic Management Study, both of which build on 30+ years of traffic management efforts in the region.

Methodology:

- Perform on-going diagnostic analysis of the transportation system, especially before/after studies as projects are built.
- Collaborate with local agencies on the development of transportation system plans, with emphasis on integrating ATM and other strategies to achieve safety and efficiency goals.
- Coordinate this effort with Metro and other partners on the upcoming TSMO Strategic Plan, including its updating and implementation.
- Identify and prioritize TSMO investment opportunities
- Early project planning (not to exceed 30% design)

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:

- Progress report presentations to TPAC and county coordinating committees (including Portland)

Entities Responsible for Activity:

Oregon Department of Transportation – Lead
Metro, TriMet, Jurisdictional Partners – Cooperate/Collaborate

Schedule for Completing Activities:
Ongoing

Funding History (see FY17 UPWP under Before/after study and Facility Bottleneck and Solutions Feasibility Assessment):

Fiscal Year	Total Budget	FTE Comparison
2016-17	$400,000	
2017-18	125,000	

Estimated FY 2018-2019 Costs and Funding Sources:

Requirements:				**Resources:**		
Staff Time	$	25,000		SPR - Region	$	125,000
Project Staff/Consultants	$	100,000			$	
TOTAL	**$**	**125,000**		**TOTAL**	**$**	**125,000**

Full-Time Equivalent Staffing

Regular Full-Time FTE		.25				
TOTAL		**.25**				

Value Pricing Feasibility Analysis

Contact: Mandey Putney, mandey.putney@odot.state.or.us

Description:
Growing congestion on Portland area highways is increasing travel delays and unpredictability. This congestion affects quality of life as travelers sit in cars or on the bus, and impacts the economy through delayed movement of merchandise.

Ongoing efforts to address congestion in the Portland area include investments in transit, bicycle, pedestrian and highway projects. But more is needed to address congestion. ODOT is conducting a feasibility analysis to explore the options available and determine how value pricing could help improve congestion in the Portland metro area.

Oregon's House Bill 2017, also known as Keep Oregon Moving, directs the Oregon Transportation Commission to develop a proposal for value pricing on I-5 and I-205 from the state line to the junction of the two freeways just south of Tualatin, to reduce congestion. The State Legislature directed the OTC to seek approval from the Federal Highway Administration no later than December 31, 2018. If FHWA approves, the OTC is required to implement value pricing.

The OTC formed a policy advisory committee in fall 2017 to provide a recommendation after considering technical findings, likely effects (traffic operations, diversion, equity, environmental and air quality, and others), mitigation opportunities and public input.

Objectives:
- Identify the location(s) best suited for congestion pricing on I-5 and I-205 in the Portland area.
- Engage stakeholders and the public an in a robust and transparent discussion as the Oregon Transportation Commission develops its proposal for the Federal Highway Administration regarding the implementation of congestion pricing on I-5 and I-205 in the Portland region.
- Submit the proposal, per legislative direction, by Dec. 31, 2018.

Previous Work:
- Procured consultant services to provide technical analysis and conduct public engagement
  (fall 2017)
- Formed Policy Advisory Committee in fall 2017; conducted meetings between December 2017 and June 2018.
- Held community open house meetings in early 2018.
- Provided 2013-2015 data to document growing congestion and crash rates on Portland area freeways in the 2016 Transportation Performance Report.

Methodology:

ODOT is the lead agency and is responsible for conducting a transparent feasibility analysis, with input from the public and a 25-member policy advisory committee composed of Metro and local jurisdictions in Oregon and Washington, as well as diverse stakeholder interests. Metro, SW RTC and consultant experts will join ODOT to conduct and review model results. The Metro model and proprietary consultant toll optimization models will be used.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Obtain Oregon Transportation Commission direction on location(s) to include in congestion pricing proposal to Federal Highway Administration, FY19Q2
- Submit proposal to Federal Highway Administration, FY19Q2
- Begin environmental review under National Environmental Policy Act, FY19Q4

Entities responsible for activity:

- OTC and ODOT - Lead Agency
- Washington State Department of Transportation – Collaborate
- Metro – Collaborate, Conduct and review modeling
- SW Washington RTC – – Collaborate, Conduct and review modeling
- Multnomah County – Collaborate
- Washington County – Collaborate
- Clackamas County – Collaborate
- Clark County – Collaborate
- City of Portland – Collaborate
- City of Vancouver – Collaborate

Other Stakeholders:

- Verde
- Federal Highway Administration
- AAA Oregon
- Oregon Environmental Council
- Portland Business Alliance
- Fred Meyer and other large employers
- Community Alliance of Tenants
- Oregon Trucking Association
- The Street Trust
- TriMet and C-TRAN
- Port of Portland
- OPAL Environmental Justice Oregon
- Westside Economic Alliance
- Ride Connection
- I-5 and I-205 commuters and users
- Communities adjacent to I-5 and I-205
- General public

Funding History

This project is being described for the first time in this UPWP, and therefore does not include a discrete funding history.

Estimated FY 2018-19 Costs and Funding Sources:

Requirements:				**Resources:**		
Consultant Services	$	2,800,000		State of Oregon	$	2,800,000
Personal Services - ODOT	$	750,000		State of Oregon	$	750,000
Personal services - Metro	$					
TOTAL	**$**	**3,550,000**		TOTAL	**$**	**3,550,000**
Full-Time Equivalent Staffing						
Regular Full-Time FTE		0.5				
TOTAL		**0.5**				

French Prairie Bridge Connectivity

Staff contact: Zach Weigel, weigel@ci.wilsonville.or.us

Description:
The Interstate 5 Boone Bridge, the only existing connection across the Willamette in the Wilsonville area, is considered unsafe for pedestrians and cyclists. The French Prairie Bridge will provide a critical missing link to restore a seamless, non-highway connection between Portland and Eugene. The bridge will connect the Portland region with the French Prairie area by linking the Ice Age Tonquin Trail with the Champoeg Trail and the Willamette Valley Scenic Bikeway. The French Prairie Bridge would also serve as a needed rapid-incident, emergency response system allowing authorized vehicles a bypass when the Boone Bridge is blocked. The bridge will give ODOT and other responsible authorities the ability to clean-up faster; and police, fire, and other emergency vehicles will have better access to incidents. Currently, when traffic incidents occur near Boone Bridge, I-5 and the entire surrounding freeway system can shut-down for hours.

Objectives:
- Safe bicycle and pedestrian access
- Improved connectivity between the Willamette Valley Scenic Bikeway and new regional Ice Age Tonquin Trail.
- Emergency and post-disaster route for police, fire and response vehicles and equipment.
- Tourism development
- Practical, cost-effective transportation solution with multiple public benefits.

Previous Work:
A preliminary alternatives analysis and selection of preferred location occurred in previous City master planning efforts. The current work effort will revisit these previous studies to determine if the conclusions are still valid before initiating feasibility analysis for the proposed location and concept planning efforts.

Methodology:
The French Prairie Bridge will be the only bike-ped bridge over the Willamette River located within a 30- mile (48 km) stretch between Newberg and Oregon City. The lack of any river crossing other than Interstate-5 at Boone Bridge forces cyclists to take significant risks by traveling on a six-lane freeway with no separation from high-speed trucks and cars.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:
- Bridge Type Selection Report summarizing final bridge selection process and decision making.
- Funding alternatives memorandum analyzing different funding options for design and construction completion of the final selected bridge type, size and location.
- Preliminary 30% Construction Plan, Specification & Estimate (PS&E) for final selected bridge type, size and location.

Entities Responsible for Activity:

- Lead Agency: City of Wilsonville
- Partners and Stakeholders: Metro – funding partner
- Oregon Department of Transportation – Cooperate/Collaborate
- Clackamas County - The City of Wilsonville and Clackamas County to determine ownership of the bridge and land commitment to the bridge on each shore of the Willamette.
- Federal Highway Administration (FHWA) Old Town Neighborhood Association Charbonneau Country Club
- Cycle Oregon, BTA, and other organizations and advisory committees serving regional bicycle and pedestrian needs
- Tualatin Valley Fire and Rescue District (TVFRD) Clackamas County Sheriff's Office
- Friends of French Prairie Travel Oregon

Schedule for Completing Activities:

- August 2018: Bridge Type Selection Report summarizing final bridge selection process and decision making.
- December 2018: Funding alternatives memorandum analyzing different funding options for design and construction completion of the final selected bridge type, size and location.
- March 2019: Preliminary 30% Construction Plan, Specification & Estimate (PS&E) for final selected bridge type, size and location
- Project is scheduled to conclude in FY 2018-19.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2013-14	$16,437.00	
2014-15	$39,498.00	
2015-16	$49,997.00	
2016-17	$500,613.00 ($320,287 Metro)	

FY 2017-18 Costs and Funding Sources:

Requirements:			**Resources:**		
City Staff and Professional Consultant Services	$	760,000	Metro	$	600,000
			Other	$	160,000
TOTAL	$	760,000	TOTAL	$	760,000

Full-Time Equivalent Staffing

Regular Full-Time FTE

FY 2018-19 Costs and Funding Sources:

Requirements:		**Resources:**	
City Staff and Professional Consultant Services	$ 430,000	Metro	$ 300,000
		Other	$ 130,000
TOTAL	**$ 430,000**	**TOTAL**	**$ 430,000**

Full-Time Equivalent Staffing

Regular Full-Time FTE

TOTAL

Interstate 205: Stafford Road to OR99E

Staff contact: Michael Mason, Michael.w.MASON@odot.state.or.us

Description:

The Interstate 205: Stafford Road to OR99E project will plan and design for the addition of one auxiliary lane between I-205 and OR99E, as well as seismic and lane widening on the Abernethy Bridge connecting Oregon City to West Linn in Clackamas County. The crash rate in the project area is nearly three times the state average. By widening the freeway and bridge, improving the ramps, and implementing Active Traffic Management (ATM) strategies, the number of dangerous crashes is expected to decrease by up to 21%. The project area is a regional bottleneck because I-205 is reduced from three lanes in each direction to two lanes in each direction between Stafford Road and OR99E. The rest of I-205 to the north and south of this section is three lanes in each direction. This project will alleviate significant delays currently experienced by local, regional, national and international motorists and freight movers. The ODOT-led planning and design work has several elements, including:

- Project Management
- Public and Stakeholder Involvement Outreach and Communications
- Transportation Planning
- Design Engineering
- Traffic Analysis and Management
- Graphics and Visual Imaging

Objectives:

The objectives of the planning and design work are to:

- Refine the project design work that has been completed during the past 15 years
- Establish a clearer cost estimate and project scope
- Pursue completion of a design acceptance package through consultant work
- Better understand the environmental impacts (noise, in-water work, ROW, for example) of the project
- Determine a construction staging strategy
- Support efforts to secure funding for final design and construction phases

Previous Work:

The project is informed by several past technical and planning works, including the 2003 East Portland Freeway Stafford Road to OR99E Reconnaissance Report, the 2006 I-205 Storm Sewer Atlas and the 2006 I-205 Traffic Analysis Reconnaissance Report. In 2015, ODOT completed the Conceptual Widening and Seismic Retrofit Technical Memorandum. ODOT has submitted two applications for funding under the Federal FastLane Grant program (now known as Infrastructure for Rebuilding America (INFRA).

Methodology:

- Determine the amount of funding available for planning and design work
- Develop scope of work for preliminary planning and design work based on funding
- Create a public involvement plan that includes outreach to neighborhoods, stakeholders and jurisdictional partners
- Establish a proof of concept report that confirms past assumptions and feasibility of project
- Conduct design verification
- Based on previous work and input from stakeholders, develop a draft design acceptance plan
- Finalize design acceptance plan based on feedback from draft

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

ODOT expects the project team to provide a final design acceptance package during this fiscal period.

Entities Responsible for Activity:

- Oregon Department of Transportation – Product owner
- Clackamas County, West Linn and Oregon City – Cooperate
- Stakeholders, Community Organizations – Cooperate

Schedule for Completing Activities:

- Proof of Concept – 9/28/2017
- Cost to Complete – 12/31/2017
- Design Verification – 1/10/2018
- Draft Design Acceptance Plans – 4/25/2018
- Final Design Acceptance Plans – 8/31/2018

Funding History:

2015-2018 STIP -- $2,500,000 approved by OTC on 3/17/16 for planning phase.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2016	$2,500,000	4.0

FY 2018-19 Cost and Funding Sources:

Requirements:		**Resources:**	
Consultant Services	$56,000	STBG	$80,000
Staff Time	$24,000		$
			$
TOTAL	**$80,000**	**TOTAL**	**$80,000**

Clackamas County – Trolley Trail Bridge: Gladstone to Oregon City

Staff Contact: Joel Howie, PE (Clackamas County) jhowie@clackamas.us, Jacque Betz (City of Gladstone), betz@ci.gladstone.or.us

Description:

The project will study the feasibility of replacing the recently demolished Union Pacific Railroad's Portland Avenue Historic Trolley Bridge for pedestrians and bicyclists. The project would provide a much-needed active transportation link across the Clackamas River and become the signature landmark for the popular new Trolley Trail.

Gladstone and Oregon City, designated as a town center and a regional center, respectively, in Metro's 2040 Growth Concept and 2035 Regional Transportation Plan, are separated by the Clackamas River. The Gladstone side of the river is home to many schools and community centers serving traditionally underserved populations, and the Oregon City side is the site of a high-density commercial and residential development. The most direct route connecting the two centers across the river is the 99E/McLoughlin Boulevard Bridge, but it lacks bicycle faclities and its sidewalks are substandard. Additionally, the Oregon Department of Transportation has stated that adding bicycle facilities to the bridge roadway would conflict with traffic and freight movement along McLoughlin Boulevard, a state highway.

Objectives:

The following are the objectives of the project related to FY 2018-19 with this UPWP:

- County will develop a Request for Qualifications document for engineering consultant services to conduct the feasibility study. County and City will review consultant qualifications submittals and rate the consultants. County will develop a draft scope of work and provide to the highest rated consultant. County will negotiate the final scope of work and fee estimate with the highest rated consultant. If reasonable, request a contract with the consultant. If unreasonable, repeat negotiation process with the second highest rated consultant and beyond until a reasonable fee estimate is reached.
- Upon completion of the consultant contract, the following are the expected tasks to be included in the feasibility study:
    - project management and project meetings;
    - public involvement;
    - geotechnical evaluation of foundation alternatives;
    - environmental scoping including wetland reconnaissance, permitting requirements such as Clean Water Act Section 404 (US Army Corps of Engineers), Oregon Removal-Fill Law (Oregon Department of State Lands), Endangered Species Act (U.S. Fish & Wildlife Service and National Marine Fisheries Service), and stormwater Management Guidelines (DEQ), rare plant survey, no effects documentation and cultural resources investigation; identification of local permitting requirements including floodplain regulations;
    - investigation of existing utility impacts and possible utilties to be carried on the new

bridge;
- evaluation of river hydraulics and scour potential;determination of needed streambank restoration;
- evaluation of structural alternatives including new bridge types and possible re-use of existing surplus bridge structures; alternative bridge Type, Size and Location (TS&L) Plans based on evaluation and alternative cost estimates;
- maintenance plan and cost estimate;
- identification of needed agency agreements and maintenance plan requirements;
- and trail concept planning for connections to Gladstone and Oregon City trails.

Previous Work:
No previous work has been completed in the last couple of years related to the feasibility of a new bridge for the Trolley Trail to connect Gladstone and Oregon City.

Methodology:
Clackamas County is responsible for implementing the RFQ and being the holder of the consultant contract. Both Clackamas County and the City of Gladstone are responsible for reviewing and providing comments on the draft feasibility study and associated draft reports.

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19:
The project will result in a draft and final feasibility report. The draft report is expected to be included in FY 2018-19, but the final report is expected in FY 2019-20. It is anticipated that the feasibility study will have the following reports included in the appendices:

- Geotechnical evaluation of foundation alternatives;
- Environmental scoping document including wetland reconnaissance, permitting requirements such as Clean Water Act Section 404 (US Army Corps of Engineers), Oregon Removal-Fill Law (Oregon Department of State Lands), Endangered Species Act (U.S. Fish & Wildlife Service and National Marine Fisheries Service), and stormwater Management Guidelines (DEQ), rare plant survey, no effects documentation and cultural resources investigation; identification of local permitting requirements including floodplain regulations;
- Evaluation of river hydraulics and scour potential and determination of needed streambank restoration;
- Evaluation of structural alternatives including new bridge types and possible re-use of existing surplus bridge structures; alternative bridge Type, Size and Location (TS&L) Plans based on evaluation and alternative cost estimates; maintenance plan and cost estimate;
- Trail concept plans for connections to Gladstone and Oregon City trails.

Schedule for Completing Activities:
Draft feasibility study: January 2019
Final feasibility study: March 2019

Budget for Project:
The project budget is $225,000 with a grant amount of $201,892. The City of Gladstone will provide the remaining $23,108 as the required 10.27% match of the grant. It is expected that $150,000 of the $225,000 will be expended in FY 2018-19.

Hillsboro Regional Center – Oak, Baseline, and SE 10th Avenue Study

Karla Antonini karla.antonini@hillsboro-oregon.gov

Description of Project:

In Hillsboro, the Baseline/Oak couplet (Oregon Highway 8, or OR8) is a critical transportation element connecting western Washington County through Hillsboro's Downtown. While it serves as the primary route bringing freight and commuters into Hillsboro's Downtown core, as well as carrying regional travel to and from western portions of the County, it has long imparted some negative impacts on the City's residents and businesses. As the "front door" for many drivers, the two streets create a pass through, commercial strip presenting challenges for potential customers and pedestrians. The streets create a barrier between the low-income, ethnically diverse neighborhood to the south, and the City's Downtown core (including important government and commercial functions) lying to the north. Both streets have existing sidewalks, yet are less than desirable to walk or bike along, and are difficult to walk or bike across due to safety issues. This also makes bus stops difficult for pedestrians to access. The couplet, while providing high visibility due to the annual daily traffic of 33,000, is not highly supportive to business investment along the corridor due to the poor condition of the sidewalk zone, the rapidly-moving traffic (30 mph through a Central Business District), and the lack of on-street parking (except on one side of Oak) to support storefront business access and better buffer the pedestrian zone from auto and freight traffic. Moreover, the couplet fails to direct drivers and pedestrians to the nearby Main Street business district, thus eliminating potential customers for the Main Street merchants.

This project seeks to support redevelopment along the Oak/Baseline couplet by providing a comfortable, human-scale environment for residents and business customers while at the same time accommodating auto and truck traffic along the State highway. It also seeks to increase accessibility by persons using all modes of transport to priority community service destinations such as City and County offices, the Health & Education District, the 10th Street commercial corridor as well as the Main Street district, with its restaurants, retailers and arts and entertainment venues. The project will also enhance access to the regional light rail system located in the heart of the Downtown, as well as bus access to the TriMet Line 57 Frequent Service route, and routes 46, 47, and 48, and the Yamhill County fixed-route bus service at MAX Central Station, located one block north of the Oak-Baseline couplet.

Objectives of the Project:

- To select a preferred design alternative that improves the conditions on Baseline, Oak and 10th Avenue to make it a more pleasant and inviting environment for all modes of travel, pedestrians and residents.
- To select a preferred design alternative that allows for easier access to the north and south of Oak and Baseline Streets for the low income, ethnically diverse neighboring residents to access services from the Health & Education District, the Downtown area, and the SW Industrial Area.
- To select a preferred design alternative that catalyzes private and public development in the Hillsboro regional center as envisioned in land use planning policies.
- The concept plans will include proposed plans, cross-sections, locations of pedestrian and bicyclist facilities and amenities, transit facilities and amenities, and concept-level traffic, bicycle, and pedestrian signal and related technology system modifications and enhancements.

- The final report will describe the preferred concept for improving the Baseline, Oak and 10th Avenue corridor and scope of work for implementation (Design Exceptions, Corridor Plan approvals, list of future permits, plan amendments, legal actions, etc.).
- Obtain Design Concurrence from ODOT Region 1 Roadway and State Traffic Engineer's office for preferred concept.

Previous Work in the program/project:

Scope of work submitted to ODOT for comment

Completed a Project Change Request form to expand the project limits on Oak and Baseline Streets to SW Adams Street and on SE 10th Avenue from SE Maple Street to E Main Street to better capture the streetscape impacts.

Working on amending the work scope for the project.

IGA submitted to ODOT for execution.
Bulleted report of progress in the past 1 or 2 years only.

Methodology and Entities responsible for the project

- City of Hillsboro – Lead Agency
- Metro – Cooperate/Collaborate
- Oregon Department of Transportation – Cooperate/Collaborate
- TriMet – Cooperate/Collaborate
- Greater Hillsboro Chamber of Commerce - Collaborate

Other stakeholders:

- Washington County
- Forest Grove
- Cornelius
- Metro Regional Freight Technical Advisory Committee
- Regional Transportation Council (RTC) of metropolitan Washington County
- Oregon Transportation Commission (OTC)
- Land Conservation and Development Commission (LCDC)
- Department of Land Conservation and Development (DLCD)
- Community groups and organizations involved in climate planning, equity, land use and transportation issues
- Organizations serving minority, elderly, disabled, and non-English speaking residents needs
- Organizations and advisory committees serving regional bicycle, pedestrian, and transit needs
- General public

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-19

Work scope finalized
Obligate funds for the project
RFP written, reviewed and finalized
ODOT/Metro Review of RFP
Contract with refined scope (includes one month for RFP release and interviews)
Consultant selected and work begins

Bulleted report of each part of the program/project that includes the timeline for completion (including coming years, if known).

Schedule for Completing Activities

November 2017: work scope finalized
December 2017: Obligate funds for the project
January 2018: RFP written, reviewed and finalized
February 2018: Contract with refined scope (includes one month for RFP release and interviews)
March 2018: Consultant selected
Schedule will require project carryover into FY 2018-19

Budget for Project

Federal: $500,000
Local: $57,227
Total: $557,227

Lake Oswego to Portland Trail Plan: Tryon Cove Park Area

Staff contact: Mel Huie, Mel.Huie@oregonmetro.gov

Description:
The plan will determine a trail alignment from Tryon State Natural Area to Foothills Park in Lake Oswego, OR. The proposed trail would be multi-use (bike and pedestrian) and be one to two miles long. Trail alignment(s) would be on public owned properties and/or public Right-of-Ways, and include a future trail bridge over Tryon Creek. This trail segment would connect to the Willamette River Greenway and the rest of the regional trail system. Environmental studies and cost estimates for engineering and construction will be conducted. Roles and responsibilities for trail ownership and maintenance will be recommended. A Technical Advisory Committee of local jurisdictions and ODOT will work with Metro on the plan.

The Trail Study results shall not preclude future transit and/or streetcar options in this corridor. The ultimate goal is to have a transit and trail project built. Any interim trail shall not diminish transit or rail options in the Willamette Shore Line Corridor and maintain existing vintage trolley service.

Objectives:

- Identify a trail alignment to connect Tryon Creek State Natural Area on the west side of Hwy. 43 to the Willamette River and to Foothills Park.
- Identify an alignment and type of trail bridge over Tryon Creek connecting to the existing Foothill Park Trail.
- The proposed trail alignment shall not preclude future transit and/or streetcar options in this corridor and maintains the existing vintage trolley service.
- Coordinate with other partners/agencies on the future trail plan.
- Analyze environmental and constructability issues along the preferred alignment(s).
- Produce preliminary design documents identifying the trail alignment and cost estimates for any acquisitions of trail easements/fee simple, design P/E, construction and maintenance.
- Make recommendations as to ownership and maintenance responsibilities of future trail and define how trail, with transit, can be a viable future option.
- Coordinate the trail alignment so that it is compatible with the existing historic trolley service in the corridor and a potential future streetcar

Previous Work:
The Metro's Regional Trails plan and the RTP have incorporated this trail segment into their visions. This trail alignment is identified in the Transportation System Plan and Trails and Pathways Plan of the City of Lake Oswego and the Regional Transportation Plan (RTP). From 2005-2007 an Alternatives Analysis study of transit options in the corridor included an examination of trail alignments. In 2007, the Lake Oswego to Portland Transit Steering Committee adopted a Locally Preferred Alternative that directed the project to provide further refinement on the trail concept for the corridor. In 2009, Metro convened a trail refinement process with local partners. The

culmination of this work was a report that provides general strategy to develop a trail from Lake Oswego to Portland's South Waterfront District.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019

This will be refined when the project scope is finalized in early 2018. The Trail Plan may include the following:

- Planning background report summarizing planning activities, project need statement and project solution statement. Quarter 1
- Base map, profiles, typical sections and narrative describing field location data. Quarter 1
- Reconnaissance level report of flow and drainage conditions, regulatory requirements to be addressed, and preliminary drainage and water quality options. Quarter 2
- Report describing anticipated trail bridge structure and foundation needs. Quarter 3
- Description of future maintenance needs and the responsible agencies. Quarter 3
- Cost estimates for future project phases (engineering, right-of-way (ROW), construction).
- Identify coordination with regulatory agencies (Oregon Division of State Lands, NOAA Fisheries, etc.) and permit processes needed to complete project. List of regulatory agencies and contacts Quarters 1-2
- Coordinate with ODOT during planning process. Quarterly project status reports Quarters 1-3
- Environmental Baseline Report to address federal environmental requirements. Quarter 2
- Cost estimates for final design, preliminary engineering, and construction. Quarter 3
- Final trail plan in paper and digital versions Quarter 3

Entity/ies Responsible for Activity:

- Metro – Lead Agency
- Clackamas County – Cooperate / Collaborate
- City of Lake Oswego – Cooperate / Collaborate
- City of Portland – Cooperate/Collaborate
- State of Oregon Parks and ODOT – Cooperate/Collaborate

Schedule:

January/February 2018 to March 2019

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2016-17	0	NA
2018-19	TBD	NA

FY 2018-19 Costs and Funding Sources:

Requirements:		**Resources:**	
Personal Services			
Interfund Transfers			
Materials & Services			
Consultant Services	$111,445		
TOTAL	**$ $111,445**	**TOTAL**	**$ $111,445**
Full-Time Equivalent Staffing	N.A.		
Regular Full-Time FTE	N.A.		

Southwest in Motion Plan

Staff Contact: Denver Igarta, Denver.Igarta@portlandoregon.gov

Description:

Southwest In Motion (SWIM) will be a planning process that identifies a 5-year active transportation implementation strategy for all of Southwest Portland. It will incorporate several identified projects in the RTP, the Portland Bicycle Plan for 2030, Barbur Concept Plan, Southwest Corridor Plan, and community-led Platinum Bicycle Facility Strategy in Southwest.

Objectives:

- Create a five year active transportation implementation strategy for the Southwest district of Portland. The strategy will include a hierarchy of identified improvements to address pedestrian and bicycle safety and access issues.

Previous Work:

The process for developing the implementation strategy will be modeled after the successful East Portland in Motion (EPIM) project. The process for developing SWIM will also incorporate numerous previous planning projects.

Methodology:

- Assemble existing conditions information based on an inventory of transportation infrastructure and priority destinations within the project area.
- Assemble census data regarding area demographics.
- Solicit public comment to identify community priorities through a public meetings and open house events.
- Develop active transportation project candidate list with cost estimates
- Prioritize project list and develop implementation strategy.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

The following outlines the major tasks and deliverables anticipated for this project:

Task 1: Project Management

Provide status reports, cost reports and reimbursement requests. Review consultant invoices, completion reports, cost summaries and list of final products. Review and edit consultant deliverables. Prepare summaries of stakeholder meetings including agendas, information materials and comments. Prepare completion of project close-out.

Task 2: Stakeholder Involvement

Develop a review structure for local staff, stakeholder interests and partnering agencies to provide input on the identification of active transportation system needs and priorities. Provide adequate opportunity for

stakeholder participation and input throughout the project duration and respond to stakeholder values and issues.

Task 3: Background and Existing Conditions Analysis

Prepare a map of the existing conditions deficiencies.

Task 4: Identify Needs,

Identify existing pedestrian and bicycle system deficiencies within project area from existing planning projects, neighborhood priorities based on input from neighborhood association requests and individual requests received by PBOT.

Task 5: Develop Project List

Define potential capital transportation improvement projects and cost estimates based on identified needs and constraints.

Task 6: Recommended Implementation Strategy

Recommend both short and long-term capital transportation system improvements and/or other policy and operational strategies based on evaluation of project list priorities and cost feasibility analysis.

Entities Responsible for Activity:

The City of Portland will be the lead agency for this project. It is anticipated that the Bureau of Transportation will conduct the technical planning and engineering analysis and cost estimates and final report preparation, with the potential support of consultants for some tasks.

Lead agencies/partners:

Portland Bureau of Transportation - Lead Agency/Project Manager

Other stakeholders:

- Portland Pedestrian Committee
- Portland Bicycle Committee
- Tri-Met
- Community groups and organizations involved in climate planning, equity, land use and transportation issue

Schedule for Completing Activities:

The project started FY 16/17, but was delayed due to staffing changes. PBOT finalized new project manager assignment, and the project began in earnest in August 2017. The project duration is estimated to be 16 months. With finalization of the plan in early FY 18/19

Funding History:

NA

Budget for Project:

The project budget is $303,132 with an Federal (STP) grant amount of $272,000 and a local match from the City of Portland of $31,132. It is expected that $75,000 of the $303,132 will be expended in FY 2018-19.

Portland Central City Multi-Modal Safety Improvements

Staff contact: Gabriel Graff, Gabriel.Graff@portlandoregon.gov

Description:

The purpose of this plan is to develop a strategy to address safety and access issues resulting from competing demands on transportation infrastructure in Portland's central city. Planning for and investing in active transportation modes along with freight, transit and vehicular access will help the region attain its economic, climate, and social equity targets by providing a truly multi-modal central city. Today, the City of Portland and its many stakeholders are faced with a multitude of modal plans and competing, sometimes overlapping policies. The result is a lack clarity on how to balance these competing demands with extremely limited space in the region's most important economic and social service hub. This project will result in a strategy that identifies a multi-modal transportation network that complements adjacent land uses, preserves capacity for important uses, and accommodates and encourages the already significant active transportation use in the central city today.

Objectives:

- Identify and prioritize pedestrian, transit priority, and bicycle safety improvements in the Central City while balancing the needs of other users of the right of way.
- Develop conceptual design for potential improvements to a level sufficient to identify trade-offs and meaningfully engage the public and stakeholders
- Produce a 5-10 year prioritized project list and related strategic implementation plan of protected bikeway, transit priority and pedestrian safety improvement projects

Previous Work:

This project will build on the Central City 2035 plan currently being completed by Bureau of Transportation and the Bureau of Planning and Sustainability. To date, the project team has begun existing conditions and best practice analysis, performed two field visits, and held our first Technical Advisory Committee meeting.

Methodology:

The project will begin with a thorough review of bicycle and pedestrian conditions in key locations throughout the Central City, including major roadways, bridgeheads and significant portals. The investigation will culminate in a complete analysis of current conditions for multimodal access in downtown. The project advisory committee will use the report to identify the major issues and needs. The project will include analysis of best practices throughout North America for bicycle and pedestrian infrastructure.

Following the completion of the needs report and the review of best practices the advisory committee will begin to develop a wide range of improvement scenarios that will be further refined into a tangible and discrete set of improvements that can be implemented in the next two years using federal funds. The project will also include an extensive outreach process that will

include a community discussion of the benefits to the businesses and the public from increased multimodal access and safety.

Major project deliverables/milestones planned for this reporting period of the UPWP, 2018-2019:

- Prioritized project list brought before Portland City Council
- Implementation plan finalized
- Final report on project's Planning and Development phase complete

Entities Responsible for Activity:

The City of Portland will be the lead agency for this project. The technical work is being performed by City of Portland staff and consultant team members.

Lead agencies/partners:

- Portland Bureau of Transportation - Lead Agency/Project Manager
- Metro - Partner agency
- Oregon Department of Transportation - Partner agency

Other stakeholders:

- Tri-Met
- Multnomah County

Schedule for Completing Activities:

The Planning and Development phase of this project is anticipated to be completed by September 2018.

Funding History:

NA

FY 2018-19 Costs and Funding Sources:

Requirements:			**Resources:**		
PBOT Staffing	$	885,379	CMAQ		$1,046,03
Consultant Staffing	$	368,139	Local Match		$208,480
TOTAL	**$**	**1,235,518**	**TOTAL**	**$**	**$1,253,51**

Herman Road Active Transportation Project

Application lead staff**:** Zoe Monahan | (503) 691-3020 | zmonahan@ci.tualatin.or.us
Project Manager: Jeff Fuchs, PE | (503) 691-3034 | jfuchs@ci.tualatin.or.us
Project Engineer: Dominique Huffman, PE | (503) 691-3036 | dhuffman@ci.tualatin.or.us

Description:
This project will improve bike lanes, sidewalks, and transit stops along Herman Road between the employment district, neighborhoods, and downtown. These facilities will improve safety and mobility for all roadway users along Herman Road where currently, bicycles, pedestrians, automobiles, transit, and trucks share two 12-foot vehicle travel lanes because there are no bike lanes or sidewalks. The project will also add buffered bike lanes and other Active Transportation components where there are existing sidewalks and bike lanes along Herman Road.

Objectives:

- Identify and design safe bicycle and pedestrian improvements
- Use Public engagement to develop bicycle and pedestrian alternatives on Herman Road and select the preferred alternative
- Prepare preliminary design work to complete a gap in the active transportation corridor to provide a safe connection between residential and employment areas in northwest Tualatin.

Previous Work:

Improvements to Herman Road were identified in the City of Tualatin's Transportation System Plan (TSP), which was adopted in 2014.

Methodology and Entities responsible for the project:

Methodology:

- Develop public engagement plan
- Develop base map of the project area for design and visualization
- Identify right of way and environmental requirements
- Develop and refine alternative design solutions
- Select preferred alternative
- Develop design to 30% level

Entities Responsible for the Project:

- City of Tualatin – Lead agency
- Washington County – Funding Partner
- Metro – Funding Partner
- ODOT – Cooperate and Collaborate

Other Stakeholders:

- Tualatin Chamber of Commerce
- Tualatin Aging Task Force
- Commercial Citizen Involvement Organization
- Westside Economic Alliance
- Westside Transportation Alliance
- Washington County Coordinating Committee

- TriMet
- Ride Connection
- Adjacent Property Owners

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY2018-29

Phase 1 – FY 2018 -2019 and FY 2019 -2020

- Public engagement (Q1 & Q2 2019)
- Develop alternate design solutions (Q3 & Q4 2019)
- Select preferred solution (Q1 & Q2 - 2020)
- 30% - Plan, specifications and project estimate (Q3 & Q4 2020)

Phase 2 – unfunded

- 30 -99% - Plan, specifications and project estimate
- Begin right of way, utility coordination and railroad coordination
- Assess and mitigate environmental impacts

Phase 3 – unfunded

- Construct active transportation improvements

Schedule for Completing Activities:

Refer to Phase I – FY 2018 -2019 in the Major Project deliverables/milestones section above.

Funding History:

Fiscal Year	Total Budget	FTE Comparison

FY 2017-18 Cost and Funding Sources:

Requirements:		Resources:	
	$		$
	$		$
			$
	TOTAL $	**TOTAL**	**$**

Full-Time Equivalent Staffing

Regular Full-Time FTE	1.0-2.0
TOTAL	**1.0-2.0**

FY 2018-19 Cost and Funding Sources:

Requirements:		**Resources:**	
Preliminary Planning	$	RFFA	$625,000
	$	MSTIP	$70,000
		City of Tualatin	$30,000
			$
TOTAL	**$**	**TOTAL**	**$ 725,000**

Beaverton Creek Trail: SW Hocken Avenue to Westside Trail

Staff Contact: Rene' Brucker, rbrucker@thprd.org

Description:

This project will design/engineer a 1.5-mile long multiuse off-street regional trail along the TriMet light rail corridor and Beaverton Creek between the Westside Regional Trail and SW Hocken Avenue in Beaverton. The trail will be a 12-foot wide hard surface (asphalt) and may include sections of permeable pavement if appropriate) and will include 2-foot wide gravel shoulders. Boardwalks, and possibly a bridge, may be needed in sections to cross wetlands and/or floodplain areas at the east end of the project. Fencing is anticipated where the trail will parallel the TriMet light rail line towards the west end of the project. Street crossings, four in total, are anticipated at SW 153rd and SW Hocken Avenue (collector streets) and at SW Shannon Place and Schottky Terrace (local streets). The crossing at SW 153rd will include upgrades to the light rail track crossing to accommodate the trail and the crossing at SW Hocken Avenue is anticipated to include a signalized mid-block crossing in order to connect to an existing on-street section of the Beaverton Creek Trail.

Objectives:

- Provide an off-street transportation option for bicycles and pedestrians where only on-street routes currently exist.
- Provide multi use trail connections to existing east/west and north/south trails, such as the Westside Trail, Beaverton Creek Trail and Waterhouse Trail, as well as to downtown Beaverton.
- Strengthen the project area's non-motorized active transportation system and improve user safety.
- Work collaboratively with local jurisdictions, stakeholders and the community.
- Improve connections to residential neighborhoods, underserved communities, commercial and employment center, transit services, schools, parks and recreation, natural areas and open space, other essential public facilities and off street trails throughout the region.

Previous Work:

Work competed in the 2016-2017 fiscal year included:

- Completed the project prospectus and developed the Scope of Work and RFP for the final review by ODOT, ODO and DOJ.
- Contacted adjacent property owners to provide information on the proposed trail corridor and gather information from them on their knowledge of the area.
- Contacted local jurisdictions informally to provide and gather information on the proposed trail corridor.

ODOT's DOJ finalized RFP for a design consultant is to be advertised prior to the end of 2017 (Qtr 2)with the phase I planning to be completed within 12 months (Qtr 2, 2018). The goals of the phase I planning are to determine the actual trail alignment, to develop the prospectus and complete a 30% design package to be advanced with an amendment into phase II preliminary engineering, ROW acquisition and final design (Qtr 2, 2018 thru Qtr 3, 2020). Construction administration/construction engineering and inspections phase III may be advanced with an amendment (Qtr 4, 2020 thru Qtr 4, 2021).

Methodology and Entities responsible for the project:

Tualatin Hills Park & Recreation District (THPRD) coordinates with and reports to ODOT and provides quarterly and yearly updates to Metro. THPRD provides project management and works collaboratively with ODOT in the project management role.

- Metro – program and update the Regional Transportation Plan
- Oregon Department of Transportation (ODOT) – oversight and management of project funding, contract negotiations and changes and provision of technical expertise and support services
- Federal Transit Administration (FTA) – coordination to minimize impacts to transit services
- TriMet – coordination to minimize impacts to transit services and ROW negotiations
- Tualatin Hills Park & Recreation District (THPRD) – oversight and management of day-to-day project activities, ROW negotiations and coordination with ODOT, local jurisdictions and stakeholders
- Community groups and organization involved in transportation issues – input and review of project development plans
- General Public – input and review of project development plans

Major Project deliverables/milestones planned for this reporting period of the UPWP, FY 2018-2019

- Continuing in phase I. Determine the preferred trail alignment.
- Complete a 30% PE package and develop a prospectus.
- Prepare amendment for phase II PE, ROW acquisition and final design.
- Quarterly progress reports to Metro.
- Begin phase II, preliminary engineering, ROW acquisition and final design

Schedule for Completing Activities:

Phase I planning - Qtr 2 2017-2018 thru Qtr 2, 2018 - 2019.
Phase II - Qtr 2, 2018-2019 thru Qtr 3, 2019-2020.
Phase II - Qtr 4, 2019-2020 thru Qtr 4, 2020-2021.

Entities Responsible for Activity:

- Metro
- Oregon Department of Transportation (ODOT)
- Federal Transit Administration (FTA)
- TriMet
- Tualatin Hills Park & Recreation District (THPRD)
- Community groups and organization involved in transportation issues
- General Public

Other Stakeholders:

- City of Beaverton
- Washington County
- Oregon Department of Transportation (ODOT)
- TriMet

- Metro Council
- Federal Highway Administration (FHWA)
- Interested Public

Budget for Project FY 2018-2019

- $1,141,000 – Total Budget
  - $800,000 – Federal Funds (for project development and preliminary engineering
  - $91,000 – Local Funds for project development and preliminary engineering
  - $250,000 – Local Funds for right-of-way

Metro No. 932635

MEMORANDUM OF UNDERSTANDING
BETWEEN METRO AND
SOUTH METRO AREA REGIONAL TRANSIT
IMPLEMENTING
MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT (MAP-21)

This MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into by and between **METRO**, the Portland Urbanized Area Metropolitan Planning Organization (MPO), acting by and through its elected officials, hereinafter referred to as METRO, and the **SOUTH METRO AREA REGIONAL TRANSIT**, acting by and through its elected officials, hereinafter referred to as SMART, collectively referred to as the Parties.

WITNESSETH,

WHEREAS, by authority granted in ORS 190.110, units of local government or state agencies may enter into agreements for the performance of any or all functions and activities that parties to the agreement, or their officers or agents, have the authority to perform, and

WHEREAS, intergovernmental agreements defining roles and responsibilities for transportation planning between the MPO for an area and the public transit operator(s) for the area are required by MAP-21 and the Code of Federal Regulations (CFR), Chapter 23, Section 450.314; and

WHEREAS, METRO and SMART are mutually interested in the implementation of a multimodal transportation system and the Parties agree to consultation and coordination in the development of the Regional Transportation Plan (RTP), Metropolitan Transportation Improvement Program (MTIP), Regional Travel Options (RTO) program, multi-modal corridor studies, Transit Environmental Impact Statements/ Preliminary Engineering, Unified Planning Work Program (UPWP), and SMART's short-term Transit Investment Plan; and

WHEREAS, the Metropolitan Transportation Planning program is in the mutual interest of METRO and SMART and they mutually agree to appropriate funding shares to support the program; and

WHEREAS, METRO and SMART have responsibilities for complying with Federal, State, and Local regulations related to transportation and the provision of public transit; and

WHEREAS, METRO and SMART acknowledge that SMART is represented by the position for the "Cities of Clackamas County" on the Joint Policy Advisory Committee on Transportation (JPACT) and the Transportation Policy Alternatives Committee (TPAC).

NOW THEREFORE, the premises being in general as stated in the foregoing, it is agreed by and between the Parties hereto as follows:

TERMS OF AGREEMENT

1. Pursuant to the authority above, METRO and SMART agree to define roles and responsibilities in carrying out the metropolitan transportation planning process, as further described in this MOU.
2. The term of this MOU will begin on July 1, 2014 and will terminate on June 30, 2017.
3. This MOU may be revisited and modified as needed, when the Parties so determine.

METRO Agrees to:

1. Adopt and maintain the RTP and the MTIP as required by the Oregon Transportation Planning Rule and for coordination of METRO and SMART public involvement processes.
2. Provide for a coordinated, cooperative, and continuing transportation planning and programming process.
3. Manage the operation of JPACT and TPAC.
4. Develop the Congestion Management Process that is inclusive of transit, transportation demand management, and traffic operations strategies as required by federal regulations.
5. Coordinate with the Oregon Department of Transportation (ODOT) to develop and maintain regional Intelligent Transportation Systems (ITS) architecture for traffic and transit operations.
6. Conduct multimodal corridor alternative analyses, in cooperation with SMART and affected local governments, in corridors needing a major transportation investment, as called for in local or regional transportation plans.
7. Be the federally designated lead agency for transit New Starts planning as prescribed by the process administered by the Federal Transit Administration through the conduct of a multi-modal corridor alternatives analysis and selection of a locally preferred alternative (or similar designation) as adopted by the METRO Council and other participating agencies. This will apply to major transit projects that have been identified in local or regional transportation plans and are expected to seek federal funds.
8. Lead the preparation of National Environmental Policy Act (NEPA) documents, including draft and final environmental impact statements in cooperation with SMART and affected local governments, in those corridors where a transit project has been designated as the locally preferred alternative or other similar designation by the METRO Council following completion of a multimodal corridor alternatives analysis or where a locally developed transit project anticipates seeking federal funding.
9. Prepare data as necessary to fulfill the requirements of the Federal Transit Administration's New Starts Reporting requirements.
10. Prepare for METRO Council adoption any ordinances, resolutions, and reports required to meet appropriate federal, state, and regional requirements in the development and advancement of federally funded major transit projects.
11. Conduct air quality conformity determinations for transportation plans, programs, and projects as required by federal and state regulations.
12. Develop, maintain, and analyze transportation-related data and GIS information for use in transportation planning studies.
13. Maintain and update regional travel forecasting models for the Portland metropolitan area, that provide base year and future year travel estimates for person trips, transit trips, and walk/bike trips.
14. Consult with SMART on development of the annual UPWP and include work elements of interest to SMART to the extent feasible within funding constraints.
15. Coordinate with SMART on early, ongoing, and responsive public involvement activities, as required by federal, state, and locally mandated rules and regulations, in the transportation planning and programming process.

SMART Agrees to:

1. Coordinate and consult with METRO on development of transit plans and programs as they relate to performance of the regional transportation system. These include but are not limited to: a short-term Transit Investment Plan, Employee Commute Trip Reduction Plans, ADA Paratransit Service Plans, transit management system planning, development of appropriate ITS architecture, SMART annual service plan, High Capacity Transit (HCT) planning, access to jobs and reverse commute programs, other transit services planning, pedestrian access to transit planning, and park-and-ride facility planning. SMART shall also provide program and policy development guidance and technical

assistance in preparing transit elements of the RTP that relate to the SMART system and its interface with the Tri-County Metropolitan Transportation District of Oregon (TriMet) and other public and private transit providers. This includes development of proposed transit networks for regional travel forecasting models.

2. Coordinate closely with METRO regarding transit system projects requiring a major transportation investment such as a New Starts or Small Starts projects, and the development of related transit Environmental Impact Statements/Preliminary Engineering. Such efforts may include but are not limited to assistance in route and transit system planning, design, and estimating capital and operating costs.
3. Cooperate with METRO to continue to improve the cost-effective delivery of planning and preliminary engineering services where required and to ensure planning and engineering work for New Starts projects are adequately funded.
4. Coordinate with METRO in collection and analysis of transit related data utilized to complete National Transit Database (NTD) reports.
5. Submit the following for review and/or consideration of adoption by JPACT and the METRO Council:
   a. The short-term Transit Investment Plan with documentation of its consistency with the RTP.
   b. The annual Paratransit Service Plan with documentation of compliance with Federal regulations and the RTP.
   c. Projects for inclusion in the MTIP/STIP.
6. Consult with METRO on development of the annual UPWP to include work elements of interest to SMART to the extent feasible within funding constraints.
7. Assist METRO with preparation of the annual Regional Travel Options Report.
8. Coordinate with SMART's JPACT and TPAC representatives to address policy issues that affect transit in the region.
9. Provide annual funding toward work elements of interest to SMART in METRO's transportation planning work program.
10. Coordinate public involvement activities with METRO in the transportation planning and programming process, as required by state and federal planning regulations,

IT IS MUTUALLY AGREED:

The undersigned agencies in the State of Oregon, in accordance with CFR, Chapter 23, Section 450.314 (MPO Agreements) do hereby mutually agree to consult and coordinate in carrying out transportation planning and programming the Portland Urbanized Area as required by this Subpart.

Martha Bennett
Chief Operating Officer
Metro

4/28/14
Date

STEPHAN A. LASHBROOK
TRANSIT DIRECTOR
SMART

4/18/14
Date

FY 2018-19 Unified Planning Work Program Funding Summary

3/13/2018

		FFY 2018 PL [1]	FFY 18 Sec 5303[2]	FY 17 Sec 5303[2] Carryover	STBG[2] FFY 18 In Lieu of Dues	STBG[2] FY 17 Carryover	TriMet Support	ODOT Support Funds	Corridor & Systems Planning FFY 18 STBG[2]	Corridor & Systems Planning FY 17 STBG[2] Carryover	RTO STBG/ 5307[2]	TSMO STBG[2] FFY 18	Creating Livable Streets STBG[2]	EVA STBG[2]	RTO ODOT[2]	TSMO Strategic Plan STBG[2] Funds	SWEDS FTA	Other Anticipated Funds[3]	Metro/Local Match	Total
	ODOT Key #	21271	21271	19801	21271	19281			20887	19294/1929	19290/1929	21041	19843	19902						
	METRO																			
General MPO Transportation Planning																				
1	**Transportation Planning**	665,787	33,759	-	307,521	90,224	-	-	-	-	-	-	-	-	-	-	-	-	49,388	1,146,679
2	**Regional Transportation Plan Update**	253,272	168,253	77,410	43,913	-	-	-	-	-	-	-	-	-	-	-	-	-	33,143	575,991
3	**Regional Transit Strategy**	16,230	4,137	-	25,045	45,257	-	-	-	-	-	-	-	-	-	-	-	-	8,520	99,189
4	**Metropolitan Transportation Improvement Program (MTIP)**	49,999	369,158	-	630,434	44,536	-	-	-	-	-	-	-	-	-	-	-	-	119,505	1,213,632
5	**Air Quality Program**	43,674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43,674
6	**Civil Rights**	156,544	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156,544
7	**Transportation System Management& Operations (TSMO) - Regional Mobility Program**	-	-	-	8,979	-	-	-	-	-	-	69,010	-	-	-	-	-	-	8,926	86,915
8	**Transportation System Management& Operations (TSMO) - Regional Travel Options**	-	-	-	-	-	-	-	-	-	2,802,835	-	-	-	172,219	-	-	-	130,646	3,105,700
9	**Regional Freight Program**	-	-	-	49,242	-	-	-	-	-	-	-	-	-	-	-	-	-	5,636	54,878
10	**Data Management, Data Visualization and Performance Measurement**	211,448	-	-	-	-	236,582	183,490	-	-	-	-	-	-	-	-	-	55,000	911,868	1,598,388
11	**Economic Demographic and Land Use Forecasting Maintenance**	162,105	-	-	7,286	-	-	-	-	-	-	-	-	-	-	-	-	-	114,966	284,357
12	**Travel Forecast Maintenance**	659,383	-	-	-	-	19,196	98,527	-	-	-	-	-	-	-	-	-	-	250,652	1,027,758
13	**Technical Assistance Program**	-	-	-	67,979	-	8,418	25,828	-	-	-	-	-	-	-	-	-	-	7,780	110,005
14	**MPO Management and Services**	276,999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276,999
15	**Regional Safety Program**	-	-	-	24,774	-	-	-	-	-	-	-	-	-	-	-	-	-	2,835	27,609
MPO Planning Projects																				
1	**Mobility Policy Refinement Planning**	-	-	-	52,934	-	-	-	-	-	-	-	-	-	-	-	-	-	6,059	58,993
2	**Complete Streets**	2,500	-	-	26,374	134,271	-	-	-	-	-	-	50,000	-	-	-	-	-	21,856	235,001
3	**Transportation System Management& Operations -- Plan Update**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	271,728	-	-	31,100	302,828
4	**Economic Demographic and Land Use Forecasting Development & Application Program**	65,417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115,869	181,286
5	**Travel Forecast Development & Application**	505,473	-	-	-	-	-	15,682	-	-	-	-	-	-	-	-	-	-	-	521,155
6	**Corridor Refinement and Project Development**	-	-	-	-	136,563	-	-	432,984	-	-	-	-	-	-	-	-	745,777	76,040	1,391,364
7	**Powell-Division Transit Corridor Project**	-	-	-	-	-	-	-	-	500,000	-	-	-	-	-	-	-	-	57,227	557,227
8	**Southwest Corridor Plan**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216,977	2,159,811	342,486	2,719,274
9	**Economic Value Atlas (EVA)**	-	-	-	-	-	-	-	-	-	-	-	-	25,557	-	-	-	-	308,781	334,338
10	**Red Line Enhancement**	-	-	-	-	-	-	-	103,407	-	-	-	-	-	-	-	-	-	25,461	128,868
	Metro Subtotal	3,068,831	575,307	77,410	1,244,481	450,851	264,196	323,527	536,391	500,000	2,802,835	69,010	50,000	25,557	172,219	271,728	216,977	2,960,588	2,628,744	16,238,652
	GRAND TOTAL	3,068,831	575,307	77,410	1,244,481	450,851	264,196	323,527	536,391	500,000	2,802,835	69,010	50,000	25,557	172,219	271,728	216,977	2,960,588	2,628,744	16,238,652

[1] PL funds include $1,016,912 carryover from FY 17 and ODOT match

[2] Federal funds only, no match included

[3] Reflects Local Contributions to projects; sales; Regional Bonded Funding via TriMet

Southwest Washington Regional Transportation Council

Unified Planning Work Program
for
Fiscal Year 2019
July 1, 2018 to June 30, 2019

May 1, 2018

Southwest Washington Regional Transportation Council
1300 Franklin Street
Vancouver WA 98660

Telephone: (360) 397-6067
Fax: (360) 397-6132
Relay Service: #711 or (800) 833-6388

RTC's Website: http://www.rtc.wa.gov

Southwest Washington Regional Transportation Council

Unified Planning Work Program
for
Fiscal Year 2018
July 1, 2018 to June 30, 2019

May 1, 2018

This Unified Planning Work Program has been financed in part through grants from the Federal Highway Administration, Federal Transit Administration, and the Washington State Department of Transportation.
The views expressed in this Program do not necessarily represent the views of these agencies.

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Preparation of this document was funded by grants from the Washington State Department of Transportation, U.S. Department of Transportation (Federal Highways Administration and Federal Transit Administration) and local funds from RTC member jurisdictions.

Title VI Compliance

The Southwest Washington Regional Transportation Council (RTC) assures that no person shall, on the grounds of race, color, national origin, or sex as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 (P.L. 100.259), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. RTC further assures that every effort will be made to ensure nondiscrimination in all of its programs and activities, whether or not those programs and activities are federally funded.

Americans with Disabilities Act (ADA) Information:

Materials can be provided in alternative formats by contacting

Southwest Washington Regional Transportation Council (RTC)

(360) 397-6067 or info@rtc.wa.gov

Relay Service: #711 or (800) 833-6388

FY 2019 UPWP for Clark County: Contents

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FISCAL YEAR 2019 UPWP: INTRODUCTION

UPWP PURPOSE

The Unified Planning Work Program is prepared annually by the Southwest Washington Regional Transportation Council (RTC). The financial year FY 2019 UPWP runs from July 1, 2018 through June 30, 2019. RTC's UPWP is developed in coordination with Washington State Department of Transportation, C-TRAN and local jurisdictions. As part of the continuing transportation planning process, all regional transportation planning activities proposed by the MPO/RTPO, Washington State Department of Transportation and local agencies are documented in the UPWP.

The UPWP focuses on transportation tasks that are priorities for federal and state transportation agencies as well as local jurisdictions. The planning activities relate to multiple modes of transportation and address planning issues significant to the Regional Transportation Plan (RTP) for the Clark County urban region and the Regional Transportation Plans for the rural counties of Skamania and Klickitat. The current federal transportation Act, The Fixing America's Surface Transportation Act (FAST Act) provides direction for regional transportation planning activities. The FAST Act was signed into law by President Obama on December 4, 2015. It sets the policy and programmatic framework for transportation investments. The "FAST Act" stabilizes federal funding to state and metropolitan regions for transportation planning and project improvements, sets new policy direction and funding levels for the federal aid transportation program, and among key initiatives adds new competitive grants which promote investments in the nation's strategic freight corridors. In addition, the FAST Act retains the multi-modal emphasis of the federal program by ensuring funding of transit programs as well as the Transportation Alternatives Program. FAST builds on the program structure and reforms of the prior federal Transportation Act, MAP-21, which created a streamlined and performance-based surface transportation program.

UPWP OBJECTIVES

The Work Program describes regional transportation planning issues and projects to be addressed during the next fiscal year. Throughout the year, the UPWP serves as the guide for planners, citizens, and elected officials to track transportation planning activities. It also provides local and state agencies in the Portland/Vancouver and RTPO region with a useful basis for coordination.

UPWP AMENDMENTS

If necessary, the Work Program is kept current during the course of the fiscal year by UPWP amendments carried through an RTC Board resolution adoption process.

SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL (RTC): MPO/RTPO

RTC is the Metropolitan Planning Organization (MPO) for the Clark County, Washington portion of the larger Portland/Vancouver urbanized area (See Figure 1, map). An MPO is the legally mandated forum for cooperative transportation decision-making in a metropolitan planning area. RTC's Metropolitan Planning Area (MPA) boundary is countywide. RTC was established in 1992 to carry out the regional transportation planning program.

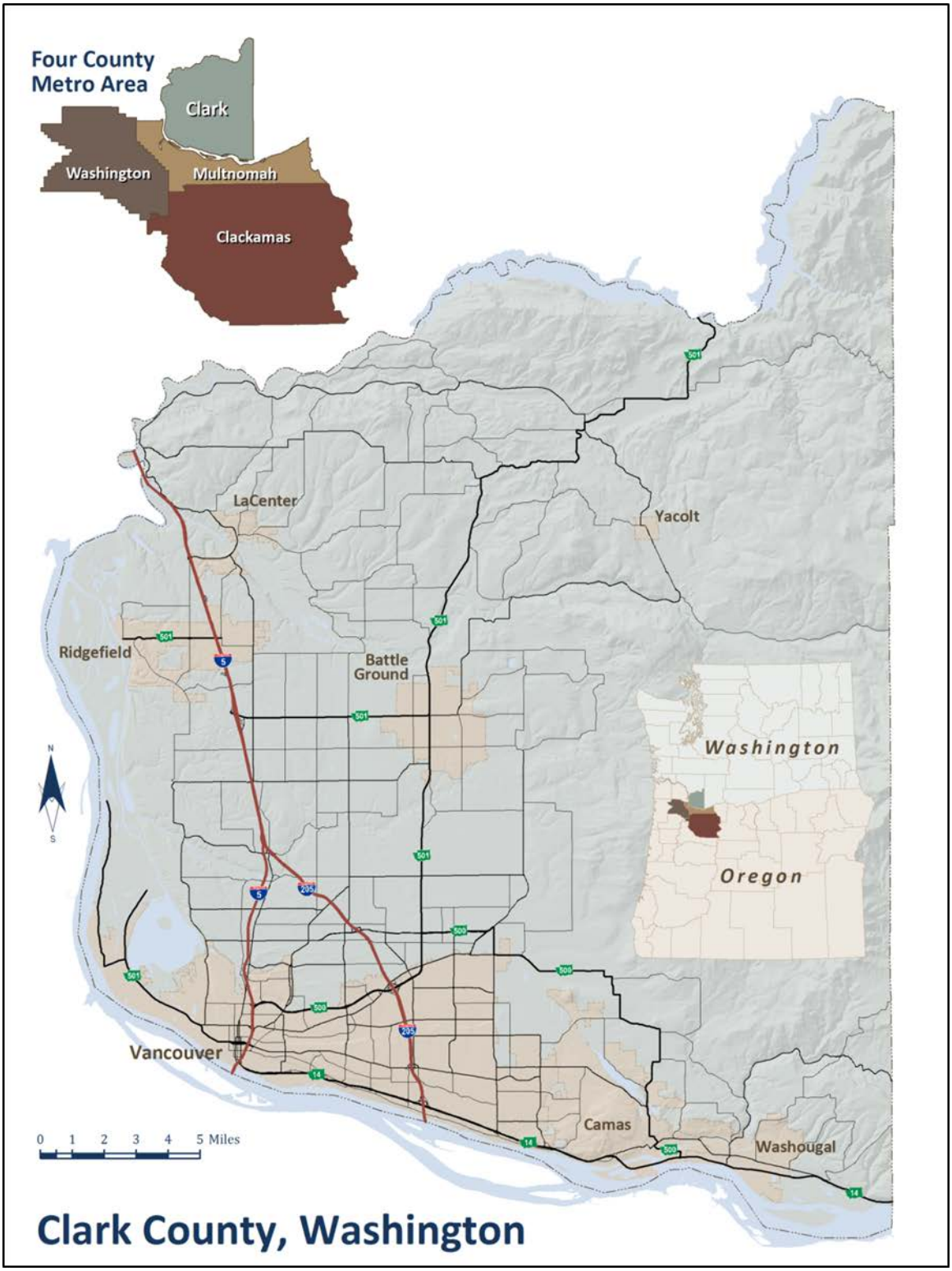


Figure 1: RTC, Metropolitan Planning Organization (MPO)

The Metropolitan Planning Area (MPA)/MPO region includes the whole of Clark County

Figure 2: Southwest Washington Regional Transportation Council (RTC): Extent of Regional Transportation Planning Organization (Clark, Skamania and Klickitat counties).

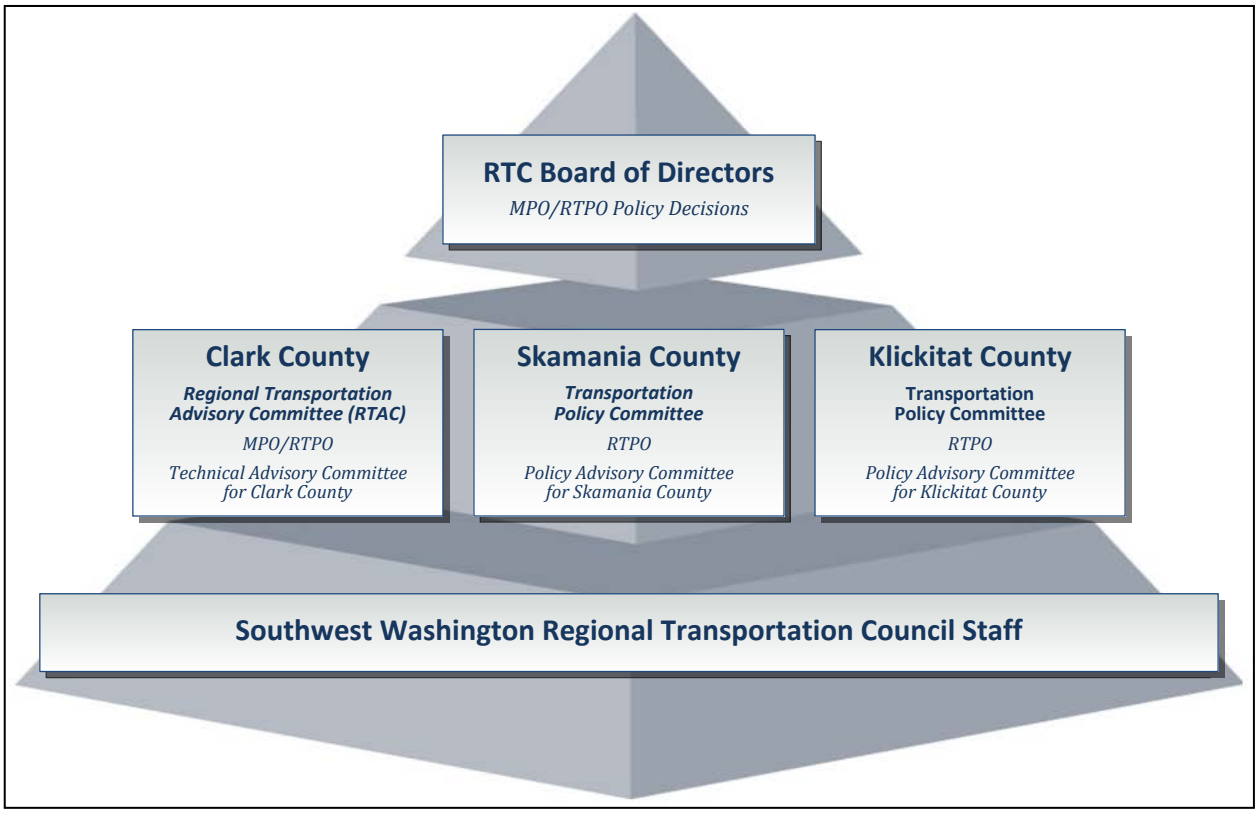
Following passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, the region became a federally-designated Transportation Management Area (TMA) because it has a population of over 200,000. TMA status brings additional transportation planning requirements that the MPO must carry out. UPWP requirements are specified in 23CFR450.308 and 23CRF420.111.

RTC is also the Washington State-designated Regional Transportation Planning Organization (RTPO) for the three-county area of Clark, Skamania and Klickitat (Figure 2, map). RTPO requirements are specified in RCW47.80.010 through RCW47.80.070 and WAC 468-86.

PARTICIPANTS, COORDINATION AND FUNDING SOURCES

The Regional Transportation Council (RTC) Board of Directors is the policy decision-making body for RTC, both as MPO and RTPO. Within the Clark County MPO region, the Regional Transportation Advisory Committee (RTAC) advises the RTC Board on technical transportation issues. Consistent with the 1990 State Growth Management Act, Transportation Policy Committees for Skamania and Klickitat Counties provide policy advice for the two rural counties. Membership of RTC, the RTC Board, the Regional Transportation Advisory Committee (RTAC), Skamania County Transportation Policy Committee and Klickitat Transportation Policy Committee are listed on pages vi through ix.

Figure 3: RTC's Agency Structure



A. Clark County

The primary transportation planning participants in Clark County include the following: the Southwest Washington Regional Transportation Council (RTC), C-TRAN, Washington State Department of Transportation (WSDOT), Clark County, the cities of Vancouver, Camas, Washougal, Ridgefield, Battle Ground and La Center and the town of Yacolt, the ports of Vancouver, Camas-Washougal, and Ridgefield, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). In addition, the state Department of Ecology (DOE) is involved in the transportation program as it relates to air quality and, in particular, the State Implementation Plan (SIP) for carbon monoxide and ozone. The Human Services Council for the region coordinates with RTC on human services transportation issues. As the designated MPO for the Clark County region, RTC annually develops the transportation planning work program and endorses the work program for the entire metropolitan area that includes the Metro Portland region. RTC is also responsible

for the development of the Regional Transportation Plan, the metropolitan Transportation Improvement Program, the Congestion Management Process and other regional transportation studies.

C-TRAN regularly adopts a Transit Development Plan (TDP) that provides a comprehensive guide to C-TRAN's shorter-term development. The TDP provides information regarding capital and operating improvements over the next six years. The TDP, required by RCW 35.58.2795, outlines those projects of regional significance for inclusion in the Transportation Improvement Program within the region. C-TRAN adopted a longer-range transportation plan, C-TRAN 2030, in June 2010 to guide the future development of the transit system and adopted a Plan update in December 2016. Following a June 1, 2005 decision, C-TRAN's service boundary is limited to the city of Vancouver and its urban growth boundary, and the city limits only of Battle Ground, Camas, La Center, Ridgefield, Washougal, and the Town of Yacolt. In September 2005, voters approved an additional 0.2 percent sales tax for C-TRAN, avoiding significant service reductions, preserving existing service, and restoring service to outlying cities. C-TRAN operates a fixed route bus system on urban and suburban routes, The Vine Bus Rapid Transit route as well as express commuter bus service to Portland, Oregon. C-TRAN also provides general purpose dial-a-ride, deviated fixed route, and Americans with Disabilities Act (ADA)-compliant paratransit service.

The Washington State Transportation Commission has responsibility for updating Washington's Transportation Plan; the long-range transportation policy plan for the state of Washington. WSDOT prepares statewide multimodal plans. RTC coordinates with the Transportation Commission and WSDOT to ensure that transportation needs identified in regional and local planning studies are incorporated into statewide plans. RTC also cooperates with WSDOT and local jurisdictions in involving the public in development of transportation policies, plans and programs. WSDOT, the Clark County Public Works Department and City of Vancouver Public Works Department conduct project planning for the highway and street systems in their respective jurisdictions. Coordination of transportation planning activities includes local and state officials in both Oregon and Washington states. Bi-State Coordination is described on page x.

Agreements

Mechanisms for local, regional and state coordination are described in a Memorandum of Agreement (MOA) and Memorandum of Understanding (MOU). These memoranda are intended to assist and complement the transportation planning process by addressing:

- The organizational and procedural arrangement for coordinating activities such as procedures for joint reviews of projected activities and policies, information exchange, etc.
- Cooperative arrangements for sharing planning resources (funds, personnel, facilities, and services).
- Agreed upon base data, statistics, and projections (social, economic, demographic) as the basis on which planning in the area will proceed.

In FY 2015, the RTC Board authorized the Executive Director to enter into a Metropolitan Planning Agreement with the Washington State Department of Transportation (WSDOT) and the Clark County Public Transit Benefit Authority (C-TRAN) to fulfill the requirements of federal code 23 USC

Part 450.314. The Metropolitan Planning Agreement (November 6, 2014) documents coordination and consultation processes and expectations among RTC, WSDOT, and C-TRAN to carry out respective federal transportation planning requirements. The adopted MPA replaced two separate 1995 agreements, one with WSDOT and one with C-TRAN. The MPA reflects updated federal metropolitan transportation planning procedures and requirements, applicable federal laws and administrative procedures that have evolved or changed since 1995. A Memoranda of Understanding (MOU) between RTC and Southwest Washington Air Pollution Control Authority (SWAPCA), renamed the Southwest Clean Air Agency (SWCAA), is also in place. The RTC/SWCAA MOU was adopted on January 4, 1995 (Resolutions 01-95-02).

An MOU between RTC and Metro was first adopted by the RTC Board on April 7, 1998 (RTC Board Resolution 04-98-08). The Metro/RTC MOU is currently reviewed triennially with adoption of the UPWP. The Metro/RTC MOU was last reviewed in 2015 and adopted along with the FY 2016 UPWP in May 2015 (RTC Board Resolution 05-15-08, May 5, 2015).

SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL: MEMBERSHIP 2018

Clark County	Washington State Department of Transportation
Skamania County	Port of Vancouver
Klickitat County	Port of Camas/Washougal
City of Vancouver	Port of Ridgefield
City of Washougal	Port of Skamania County
City of Camas	Port of Klickitat
City of Battle Ground	Portland Metro
City of Ridgefield	Oregon Department of Transportation
City of La Center	*Legislators from the following Washington State Districts:*
Town of Yacolt	14th District
City of Stevenson	17th District
City of North Bonneville	18th District
City of White Salmon	20th District
City of Bingen	49th District
City of Goldendale	
C-TRAN	

SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL: BOARD OF DIRECTORS

RTC Board of Directors 2019

Jurisdiction/Agency	**Represented By:**
City of Vancouver	Council Member Anne McEnerny-Ogle (RTC Vice-Chair) Council Member Bart Hansen
Clark County	Council Chair Marc Boldt Councilor Eileen J. Quiring Councilor Jeanne E. Stewart
Small Cities East: City of Camas City of Washougal	Council Member Melissa Smith, Camas
Small Cities North: City of Battleground City of Ridgefield City of La Center Town of Yacolt	Councilor Ron Onslow, Ridgefield (RTC Chair)
Skamania County: Skamania County City of North Bonneville City of Stevenson Port of Skamania County	Commissioner Tom Lannen, Skamania County
Klickitat County: Klickitat County City of Bingen City of Goldendale City of White Salmon Port of Klickitat	Commissioner James Herman, Port of Klickitat
C-TRAN	Shawn Donaghy, CEO
WSDOT	Kris Strickler, Southwest Regional Administrator
Ports: Port of Vancouver Port of Camas-Washougal Port of Ridgefield	Commissioner Scott Hughes, Port of Ridgefield
ODOT	Rian Windsheimer, Region One Manager
Metro	Councilor Shirley Craddick, Metro
14th District	Senator Curtis King Representative Norm Johnson Representative Gina McCabe
17th District	Senator Lynda Wilson Representative Paul Harris Representative Vicki Kraft

RTC Board of Directors 2019

Jurisdiction/Agency	Represented By:
18th District	Senator Ann Rivers Representative Liz Pike Representative Brandon Vick
20th District	Senator John Braun Representative Ed Orcutt Representative Richard DeBolt
49th District	Senator Annette Cleveland Representative Monica Stonier Representative Sharon Wylie

SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL

Regional Transportation Advisory Committee Members

Jurisdiction/Agency	Represented By:
Regional Transportation Council	Matt Ransom [Chair]
Clark County, Planning	Gary Albrecht
Clark County, Public Works	Susan Wilson
City of Vancouver, Public Works	Chris Malone
City of Vancouver, Community Development	Jennifer Campos
City of Camas	Jim Carothers
City of Washougal Port of Camas-Washougal	Rob Charles
City of Battle Ground Town of Yacolt	Mark Herceg
Cities of Ridgefield City of La Center Port of Ridgefield	Brenda Howell
C-TRAN	Roger Hanson
WSDOT	Michael Williams
Port of Vancouver	Jim Hagar or Magan Reed
ODOT	Kristen Stallman
Metro	Tom Kloster
Human Services Council	Colleen Kuhn

B. SKAMANIA COUNTY

The Skamania County Transportation Policy Committee was established in 1990 to oversee and coordinate transportation planning activities in the RTPO Skamania region. RTC Staff chairs the meeting.

SKAMANIA COUNTY TRANSPORTATION POLICY COMMITTEE

Jurisdiction/Agency	Representative
Skamania County	Tom Lannen, County Commissioner
City of Stevenson	Ben Shumaker, Planning Manager
City of North Bonneville	Sam Hughes, City Administrator
Port of Skamania County	Pat Albaugh, Port Manager
WSDOT, Southwest Region	Michael Williams, SW Region Planning Manager

C. KLICKITAT COUNTY

The Klickitat County Transportation Policy Committee was established in 1990 to oversee and coordinate transportation planning activities in the RTPO Klickitat region. RTC Staff chairs the meeting.

KLICKITAT COUNTY TRANSPORTATION POLICY COMMITTEE

Jurisdiction/Agency	Representative
Klickitat County	Commissioner Jim Sizemore
City of White Salmon	Kevin English, Public Works
City of Bingen	Mayor Betty Barnes
City of Goldendale	Karl Enyeart, Public Works Director
Port of Klickitat	James Herman, Port Commissioner
WSDOT, Southwest Region	Michael Williams, SW Region Planning Manager

D. BI-STATE COORDINATION

Both RTC, the MPO for the Clark County, Washington portion of the Portland-Vancouver metropolitan region, and Metro, MPO for the Oregon portion of the Portland-Vancouver region, recognize that bi-state travel is significant within the region. To address bi-state regional transportation system needs, RTC representatives participate on Metro's Transportation Policy Alternatives Committee (TPAC) and Joint Policy Advisory Committee on Transportation (JPACT). Metro is represented on RTC's Regional Transportation Advisory Committee (RTAC) and RTC Board of Directors. Currently, several locations on the I-5 and I-205 north corridors are at or near capacity during peak hours resulting in frequent traffic delays. The need to resolve increasing traffic congestion levels and to identify long-term solutions continues to be a priority issue. Oregon is currently studying Value Pricing and includes Clark County representatives on relevant Committees. Also of bi-state significance is continued coordination on air quality issues though the region has now reached air quality attainment status for both ozone and carbon monoxide.

The Bi-State Transportation Committee was established in 1999 to ensure that bi-state transportation issues are addressed. The Committee was reconstituted in 2004 to expand its scope to include both transportation and land use according to the Bi-State Coordination Charter. The Committee is now known as the Bi-State Coordination Committee. The Committee's discussions and recommendations continue to be advisory to the RTC, the Joint Policy Advisory Committee on Transportation (JPACT), and Metro on issues of bi-state transportation significance. On issues of bi-state land use and economic significance, the Committee is advisory to the appropriate local and regional governments.

E. RTC STAFF

Figure 4 provides an overview of RTC staff with areas of work.

RTC: Staffing	
Position	**Duties**
Executive Director	Overall MPO/RTPO Planning Activities, Coordination, and Management
Project Manager	Vancouver Area Smart Trek: Transportation System Management and Operations (TSMO)/Intelligent Transportation System (ITS), New Technologies, I-205 Bus on Shoulder Feasibility Study, Air Quality
Sr. Transportation Planner	Regional Transportation Plan, Unified Planning Work Program, Human Services Transportation Plan, Active Community Environments, Commute Trip Reduction, Freight Planning
Sr. Transportation Planner	Transportation Improvement Program (TIP), Project Programming, RTPO: Klickitat and Skamania Counties, Congestion Management Process, Traffic Counts, Freight Traffic Data, Safety
Sr. Transportation Planner	Regional Travel Forecast Model, Data
Sr. Transportation Planner	Geographic Information System (GIS), Mapping, Data Graphics, Webmaster
Sr. Transportation Planner	Regional Travel Forecast Model, Air Quality, Demographics
Staff Assistant	RTC Board of Directors' Meetings, Bi-State Coordination Committee Meetings, Appointment Scheduling
Office Assistant	General Administration, Reception, Regional Transportation Advisory Committee (RTAC) Meetings, Website
Accountant	Accounts Payable, Grant Billings

Figure 4: RTC Staff

PLANNING EMPHASIS AREAS

The UPWP is reflective of the national focus to encourage and promote the safe and efficient management, operation and development of transportation systems to serve the mobility needs of people and freight within and through urbanized areas as well as foster economic growth and development. The UPWP describes the transportation planning activities and summarizes local, state and federal funding sources required to meet the key transportation policy issues during the

upcoming year. The UPWP implements federal, state and local transportation planning emphasis areas (PEAs). The Federal Highway Administration, the Federal Transit Administration and Washington State Department of Transportation identify transportation planning emphasis areas intended to guide the development of work programs for both metropolitan and statewide transportation planning processes.

In FY 2019, continuation of usual planning activities as documented on the following pages is expected as well as specific areas of emphasis including the transition from MAP-21 to implementation of the federal "FAST Act", regional planning cooperation and planning for access to essential service using ladders of opportunity. Tribal consultation, annual reporting, updating of interlocal agreements, participation in statewide planning efforts, website updating, corridor planning and development of state and local performance measures and performance targets are expected to continue.

FEDERAL

The "FAST Act", Fixing America's Surface Transportation Act, is the current Federal Transportation Act signed into law by President Obama on December 4, 2015. In FY 2019, FHWA and FTA want MPOs to continue to focus on compliance with the FAST Act, meeting the requirements of 23 CFR 450.308 and 23 CFR 420.111; 49 USC § 5303, 49 USC § 5305 and FTA Circular 8100.1C and reflect this in the Unified Planning Work Program for the upcoming Fiscal Year. Specific Planning Emphasis Areas are unchanged from FY 2018 include:

MAP-21 and FAST Act Implementation:

- *Transition to performance based planning and programming* -. As analysis and application of the FAST Act evolves, RTC and WSDOT will continue to work in close coordination. RTC will continue to rely on WSDOT providing necessary information regarding implementation of the FAST Act and on final rules associated with MAP-21 target setting.

Models of Regional Planning Cooperation:

- *Promote cooperation and coordination across MPO boundaries and across State boundaries, where appropriate, to ensure a regional approach to transportation planning.* This is particularly important where more than one MPO or State serves an urbanized area or adjacent urbanized areas, such as RTC and Metro serving as MPOs in the Portland-Vancouver region. It is suggested by the federal government that this cooperation could occur through the development of joint planning products, and/or by other locally determined means. Coordination across MPO and across State boundaries includes the coordination of transportation plans and programs, corridor studies, and projects across adjacent MPO and State boundaries. It also includes collaboration among State DOTs, MPOs, and operators of public transportation on activities such as: data collection, data storage and analysis, analytical tools, and performance based planning.

Ladders of Opportunity:

- *Access to essential services - as part of the transportation planning process, identify transportation connectivity gaps in access to essential services.* Essential services include housing, employment, health care, schools/education, and recreation. This emphasis area could

include MPO and State identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of the public, including traditionally underserved populations, to essential services. It could also involve the identification of solutions to address those gaps.

The FHWA and FTA expect the MPO's UPWP to continue to include metropolitan planning core functions and major activities including:

- Program administration
- UPWP
- Public and stakeholder participation and education
- Tribal consultation
- Data acquisition, analysis and reporting
- Regional Transportation Plan
- Transportation Improvement Program including project identification, prioritization, and selection procedures
- Congestion Management Process (required in TMAs)
- Intelligent Transportation Systems (ITS)
- Planning consultation and services
- Special studies and plans
- Title VI Plan and Annual Report

MPOs are required to continue coordination and consultation with tribal governments. MPO's are also required to self-certify that the metropolitan transportation planning process is being carried out in accordance with the applicable laws. Transportation Management Areas (TMA's), such as RTC, undergo a quadrennial MPO Certification Review by Federal Highway Administration and Federal Transit Administration. RTC's next certification review is due in late 2020/early 2021.

Under FAST, the scope of the transportation planning process is continued with consideration of projects and strategies that will address the federal planning factors listed in CFR 450.306 to:

- Support 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 accessibility and mobility of people and 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, for people and freight;

- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

STATE

Washington State's Growth Management Act established Regional Transportation Planning Organizations as the venues for identifying regional transportation priorities and coordinating transportation planning with local comprehensive plans at all jurisdictional levels. "Efficient multimodal transportation systems based on regional priorities and coordinated with county and city comprehensive plans" is one of thirteen statewide planning goals established by the Growth Management Act (GMA). The regional transportation plans prepared by RTPOs have an important role in achieving consistency between state, county, city, and town plans and policies. UPWP work elements should continue to reflect general RTPO duties defined in RCW 47.80.023 and WAC 468-86. These duties include working with local jurisdictions on Growth Management Act/Comprehensive Plan including certification of local Comprehensive Plan transportation elements, implementation of State transportation policy goals, and addressing top statewide themes. Although Tribes are not subject to GMA, RTPOs are encouraged to coordinate and invite participation with neighboring tribes on the development of their regional transportation plans.

The UPWP should support and address the six legislative transportation system policy goals of RCW 47.04.280. These goals are:

1. Economic Vitality: to promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
2. Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
3. Safety: To provide for and improve the safety and security of transportation customers and the transportation system.
4. Mobility: To improve the predictable movement of goods and people throughout Washington state.
5. Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment.
6. Stewardship: To continuously improve the quality, effectiveness, and efficiency of the transportation system.

MPOs and RTPOs are to work with WSDOT on state planning activities to ensure that MPO/RTPO plans and priorities are reflected in statewide and corridor efforts and that relevant aspects of statewide transportation plans are incorporated into RTC's Regional Transportation Plan.

Continued Coordination between WSDOT and the MPOs may include:

- Washington Transportation Plan
- Highway System Plan
- FAST Act and MAP-21 Target Setting Collaboration on Final Rules
- Coordinated Public Transportation - Human Services Transportation Plan
- Corridor Sketch Initiative – which lays a foundation to further study a corridor and needed investments in the corridor
- Statewide Travel Demand Model
- Practical Solutions
- Active Transportation Plan (update of 2008 Bike/Ped Plan)
- Rail Plan

STATE AND FEDERAL EMPHASIS AREAS

Both state and federal emphasis areas focus on the following:

Tribal Consultation. MPO/RTPOs are encouraged to coordinate and invite participation with tribal governments on development of transportation plans and programs.

Annual Reporting. There are federal and state requirements to complete an annual report to document regional transportation planning activities and expenditures.

Interlocal Agreement. Interlocal agreements are the legal instruments used to establish or change organization of an MPO/RTPO and its boundaries.

Statewide Planning Efforts. MPOs are encouraged to participate in statewide planning efforts with respect to the various state modal plans and the statewide long-range transportation plan.

Corridor Sketches. A corridor sketch is a way for WSDOT to work jointly with partners to capture and document consistent baseline information about a highway corridor that informs future investment decisions.

Performance Measures. WSDOT will continue to consult with FHWA and FTA, as well as collaborate with MPOs as the State works towards setting targets in response to the various federally required performance measures.

LOCAL

RTC's FY 2019 UPWP will continue its fundamental metropolitan transportation planning program with activities such as development of a 2018 update to the long-range Clark County Regional Transportation Plan, update of the region's Transportation Improvement Program and project grant request coordination, update to the transportation system Congestion Management Process, intelligent transportation system management program, data collection and analysis, travel model forecasting, and project coordination as well as Regional Transportation Planning Organization planning in Klickitat and Skamania counties.

THE REGION'S KEY TRANSPORTATION ISSUES:

RTC's UPWP describes the region's regional transportation planning process that is led by the RTC Board and informed by data and its analysis. RTC provides the multi-jurisdictional forum for the region's collaborative transportation decision making process. A key issue in planning for the region's transportation system continues to be the transition being made to establish a performance-managed transportation system and investment decision-making process as now required by federal rules. RTC's regional planning process will need to assist member agencies to focus on smart investments and innovations in priority corridors to meet the multi-modal demands on the regional transportation system. RTC's project programming process will change accordingly to continue to maximize opportunities to use federal transportation resources on our regional transportation needs. The 2018/19 Work Plan includes activities to continue the reformulation of the program to meet the performance based investment criteria.

Growth in the region continues apace bringing increased pressures on the transportation system. Local partners are mindful of the interconnectedness of transportation infrastructure investment, jobs and economic development and are aware of the continued need to invest in regional transportation infrastructure and services as well as to maintain the condition of current assets. The regional planning strategy will be to focus on smart investment of capital to provide solutions to the identified needs in the Regional Transportation Plan.

Key transportation issues for the region include:

- **Support Growth and Development:** The region's transportation system needs to support both existing needs and growth in the region. Washington Office of Financial Management estimated Clark County population at 471,000 in 2017, up by 9,990 people from the 2016 population of 461,010; a 2.1% annual growth rate. OFM's 2017 medium series projection forecasts that Clark County's population will increase by over 172,000 people to 643,552 by 2040.
- **Regional Project Funding**: RTC recognizes the need for timely transportation system investments. In this region, need for transportation improvement exceeds the funding available to meet the needs. Transportation projects are identified in the Congestion Management Process and Regional Transportation Plan and programmed for funding in the Transportation Improvement Program. Recognizing the need to make prudent investments of the limited transportation dollars, RTC analyzes project applications to fund the most critically needed improvements. RTC works with a Grant Program Policy and Scoring Review Committee to periodically review the policy and scoring criteria for the regional flexible funding grant programs (STBG/CMAQ) that helps to support transportation system improvement. Working with RTAC and the RTC Board, staff develops recommendations for the annual call-for-projects. Documentation of the grant programs' policies and procedures are summarized in a TIP Programming Guidebook. RTC is developing a regional grant online database and mapping tool.
- **2040 Regional Transportation Plan**: A 2040 update to the Regional Transportation Plan for Clark County is scheduled for adoption in late 2018. After scoping of the update in spring 2017,

staff has begun work on several focus areas for the Plan update including finance, active transportation planning, future technology related to the VAST program, and Environmental Justice. There will be a call for projects identified in local jurisdictions' Capital Facilities Plans and identified in plans of transportation agencies followed by project evaluation. MAP-21 and Fast Act performance metrics will also be integrated into the RTP update. The RTP update process will also include a 10-year project priority evaluation.

- **Regional Studies**: A number of regional studies will be underway in FY 2019 including an update to the Human Services Transportation Plan covering Clark, Skamania and Klickitat counties, an update to Skamania and Klickitat County Regional Transportation Plans, a 10-year ITS Network Needs Assessment as part of Vancouver Area Smart Trek (VAST), the Urban Freeway Corridors Operations Study, and RTC's technical support for WA SB-5806 I-5 Legislative Task Force, C-TRAN's Mill Plain Bus Rapid Transit project development, and the Hood River Bridge EIS. RTC's role in the Oregon Transportation Commission's Portland Metro Area Value Pricing Feasibility Analysis is as a technical reviewer and stakeholder.
- **MAP-21/FAST Act Implementation**: With enactment of the federal FAST Act (December 2015) with its continued focus on the performance management structure established by its predecessor Act, MAP-21, RTC anticipates continuing to engage regional partners in the establishment of performance measure targets, data collection, and reporting systems to implement key policy goals of the Federal Transportation Act. After setting safety performance targets in January 2018, RTC anticipates setting bridge and pavement and system performance and CMAQ targets later in 2018.
- **Partnership Building**: Building partnerships and linkages among like or affiliated agencies and groups is an important tool in facilitating collaborative regional planning and investment decision-making. RTC staff will continue to commit considerable effort to building information sharing, research, and targeted project partnerships and alliances in order to facilitate maximum return on investment for regional, state, and locally funded transportation investments. RTC will continue to nurture and build upon existing partnerships with Oregon's Metro through the existing Bi-State Coordination Committee structure and with partners such as the Clark County Transportation Alliance, Columbia River Economic Development Council, Identity Clark County and Mid-Columbia Economic Development District. RTC will also continue to partner with RTC member agencies with RTC providing technical support and task work for them.

UNFUNDED PLANNING ACTIVITIES

RTC is asked to include a list in the UPWP of planning activities that could be undertaken by RTC if additional funding and/or staff were made available to support regional transportation planning activities. These unfunded planning activities include:

- Additional Active Transportation planning beyond that to be included in the 2018 RTP update. Work may include integration of a regional complete streets policy, mapping, system inventory, counts, and work in partnership with local Bike/Ped Committees, and Safe Routes to School planning. Cost estimate: $50,000.

- Complete an enhanced Regional Transportation Safety Analysis for highway, bicycle and pedestrian modes. Cost estimate: $50,000.

- Columbia Connections Strategy - Participate in a coordinated regional study with Oregon and Washington planning partners. The Study's purpose is to evaluate a sub-district within the region in proximity to the Columbia River, and to develop a clear understanding of the economic and community interactions and conditions within this sub-district. Potential outcomes could include: define a shared set of desired economic outcomes and the strategies and investments to realize them, consistent with community values; to identify partnerships and stakeholders; and, define values and goals for the area and to identify the infrastructure and service needs and develop policy commitments, projects, and programs to enhance quality of life in the area. Cost estimate: $50,000-$100,000 (scope dependent).

- Additional freight study tasks including additional data collection and compilation, addressing regional freight issues and freight access. Cost estimate: $25,000.

- Additional research and analysis on Dynamic Traffic Assignment (DTA) to support regional travel forecasting capabilities. Cost estimate: $25,000.

- Bi-state corridor planning beyond efforts covered under the RTP, VAST, and Coordination and Management (Bi-State Coordination Committee) work elements. Cost estimate: $25,000 to $50,000 depending on scope of study.

1. REGIONAL TRANSPORTATION PLANNING PROGRAM

1A. REGIONAL TRANSPORTATION PLAN

The Regional Transportation Plan (RTP) for Clark County is the region's long-range transportation plan. The Plan's purpose is to promote and guide development of a multimodal transportation system for the efficient movement of people and goods, using environmentally sound principles and fiscal constraint. The Plan for Clark County covers a county-wide-area, the same area encompassed by the Metropolitan Area Boundary. To meet planning requirements, the RTP has a planning horizon of at least 20 years. The most recent update to the Regional Transportation Plan for Clark County was adopted in December 2014 with a horizon year of 2035. The Plan maintains consistency between federal, state and local plans. The 2014 RTP is consistent with local land uses outlined in local Comprehensive Growth Management Plans. The RTP also reflects the Washington Transportation Plan 2030 (WTP, December 2010) in place at time of RTP adoption now supplanted by WTP 2035 and WTP Phase 2 (January 2015 and December 2017), as well as the state's Highway System Plan (HSP). The RTP is also compliant with MAP-21, the federal transportation act in place at the time of RTP adoption in 2014. The Plan provides a vision for an efficient future transportation system and direction for sound transportation investments.

In FY 2019, work will focus on completing an update to the RTP for Clark County (RTP). The RTP update will focus on compliance with MAP-21's and the current federal FAST Act performance based planning and programming requirements. Several focus areas were identified in the scoping of the RTP update in spring 2017 as needing focused attention including an update to the RTP's financial plan, active transportation planning for bike/pedestrian needs, the impact of future technology on transportation and updating the 10-year project priority list. The Plan update will update consistency between federal, state and local plans.

Work Element Objectives and Activities: Regional Transportation Plan

- Develop and implement the Clark County RTP to comply with federal law and guidance including RTP updates or amendments to reflect changing land uses, demographic trends, economic conditions, financial trends, regulations and study results and to maintain consistency between state, local and regional plans. Regular update and amendment of the Regional Transportation Plan (RTP) is a requirement of the Federal Transportation Act, currently the FAST Act, and the state Growth Management Act (GMA). Existing federal laws require Plan update in air quality attainment areas such as Clark County at least every five years and the state requires the Plan be reviewed for currency every two years. Whenever possible, major update to the RTP for Clark County will be scheduled to coincide with update to the County and local jurisdictions' land uses in the comprehensive growth management plans. The RTP update process will address federal transportation policy interests and reflect the latest versions of statewide plans such as Washington's Transportation Plan (WTP), Highway System Plan (HSP), State modal plans and Corridor Sketch Initiatives. At each RTP update, the results of recent transportation planning studies are incorporated and new or revised regional transportation system needs are identified and documented. RTP development relies on analysis of results from the 20-year regional travel forecast model as well as results from a six-year highway capacity needs analysis and 20-year transit planning. The Plan addresses the transportation priorities of the region.

- Address the federal planning factors required of the metropolitan planning process as listed on page xii-xiii. The current RTP (2014) provides an overview of how these factors are being addressed.
- Develop an RTP that complies with Washington's state law, the Revised Code of Washington (RCW), and guidance provided in the Washington Administrative Code (WAC).
- Involve the public in RTP development.
- Reflect updated results from the Congestion Management Process. The latest monitoring report on the region's transportation congestion management is the 2016 Congestion Management Report (RTC Board adoption, August 2017); to be used as a tool to help the region make decisions on transportation project needs to be identified in the RTP.
- Address bi-state travel needs and review major bi-state policy positions and issues.
- Address regional corridors, associated intermodal connections and statewide intercity mobility services.
- Help maintain federal clean air standards consistent with the Clean Air Act Amendments, 1990.
- Reflect regional freight transportation issues.
- Address active transportation, bicycling and pedestrian, modes.
- Describe concurrency management and its influence on development of the regional transportation system as well as concurrency's use as a tool to allow for the most effective use of existing transportation systems.
- Describe transportation system management and operations, Intelligent Transportation System (ITS) applications, as well as Transportation Demand Management (TDM) strategies and Commute Trip Reduction efforts to make a more efficient transportation system.
- Consult with environmental resource agencies and evaluate the environmental impacts and mitigation strategies related to the regional transportation system as required by FAST, the Clean Air Act and State laws.
- Develop an RTP with identified projects and strategies that can be implemented subsequent to RTP adoption through more detailed corridor planning processes and eventual programming of funds for project construction and implementation after programming of funds in the Transportation Improvement Program (TIP).
- Maintain consistency between state, regional and local transportation plans as required by the state's Growth Management Act. This includes certification of the transportation elements of local Growth Management Plans and their review for consistency with the RTP.
- Address planning for the future transit system guided by C-TRAN's 20-Year Plan, currently C-TRAN 2030 (June 2010, updated December 2016).
- Monitor transportation system performance and report on transportation system performance.
- Coordinate the RTP with regional and local land use plans. In Washington State, local jurisdictions address land use planning in Comprehensive Plans required by Washington State's Growth Management laws. The GMA sets up RTPO's as the venues for identifying regional priorities and coordinating transportation planning at all jurisdictional levels with local comprehensive plans. WSDOT encourages RTPOs to work as partners with local governments

in the early stages of local comprehensive plan and countywide planning policy development to more effectively identify and resolve consistency issues.

Relationship to Other Work Elements: Regional Transportation Plan

The RTP takes into account the reciprocal connections between land use, growth patterns and multimodal transportation system needs and development. It also identifies the mix of transportation strategies needed to address future transportation system issues. The RTP for Clark County is interrelated with all other RTC transportation planning work elements. In particular, the RTP uses information, data and analysis resulting from the Congestion Management Process to identify transportation needs and solutions. The RTP also serves to identify transportation projects and strategies to be funded by programming in the metropolitan Transportation Improvement Program (TIP).

FY 2019 Tasks and Products: Regional Transportation Plan

The most notable product in FY 2019 will be publication of an updated RTP for Clark County with adoption of the Plan anticipated in late 2018. The Plan will be developed by engaging planning partners and the public in work on the RTP update and by focusing on modal elements. The update will address federal rulemaking regarding transportation performance based planning and programming and will address consistency between state, regional and local plans. Scoping of the 2018 RTP update was carried out in spring 2017 and decision on a 2040 population and employment horizon year forecast was made in September 2017.

The 2018 RTP update will focus on addressing the following modal elements and planning issues:

- Federal Functional Classification – reflect any changes in the next update to the RTP.
- System Performance – Report on transportation system performance measures, monitoring and target setting used to analyze transportation system performance and level of service assumptions and used to guide transportation investment decisions, project and strategies identified in the RTP. The FY 2018 RTP update will address compliance with the federal FAST Act and on transitioning to the federally-required performance-based planning and programming approach for surface transportation investments now that Federal Rulemaking is complete. The aim is to have a more effective investment process for federal transportation funds. RTC staff will continue to work with state, regional and local planning partners, including C-TRAN the local transit service provider, and other MPO's in the state to develop targets for the national performance measures and to provide input on how the performance measures are set to meet the seven national transportation goals. The performance measures and associated targets will be integrated into RTC's RTP update per the timelines included in the federal rules.
- Practical Solutions – RTC will work with WSDOT to identify practical solutions to transportation issues in an effort to maximize benefits. This approach to identifying transportation solutions, including projects and strategies, will likely impact the list of transportation projects identified in the 2018 RTP update.
- Safety – An update to the Safety Assessment for Clark County was completed in spring 2014 and was incorporated into the 2014 RTP update. RTC will continue to work with WSDOT and

partner agencies in FY 2019 to compile, categorize, analyze and evaluate crash data and address transportation safety issues in an updated Safety Assessment. In addition, RTC will work with local agencies to continue work on Complete Streets/Safe Streets to ensure streets are designed for all users dependent on the context of the transportation facility. RTC staff is working with the City of Vancouver on Vancouver's Transportation System Safety Analysis scheduled for completion in summer 2018.

- Transit – The RTP includes recommendations and guidance provided by the region's transit development plans, notably C-TRAN's 20-Year Transit Development Plan, C-TRAN 2030, (C-TRAN, June 2010; now updated) and the Clark County High Capacity Transit System Study (RTC, December 2008). The 2018 RTP update will reflect C-TRAN's updated 20-Year Transit Development Plan adopted by the C-TRAN Board in December 2016. C-TRAN opened its first Bus Rapid Transit corridor, The Vine, in the Fourth Plain corridor in January 2017 and is now working on a second BRT corridor on Mill Plain which will be addressed in the 2018 RTP.
- Efficiencies – It is recognized that the most efficient use of the existing transportation system can be realized through implementation of Transportation Demand Management (TDM) and Transportation System Management strategies. RTC will continue to coordinate with planning partners in developing the Congestion Management Process, Transportation System Management and Operations through RTC's VAST program (see VAST element) and Commute Trip Reduction plans. The solutions identified in these TDM and TSM Plans will be incorporated into the next RTP update. TDM planning in the region uses a broader definition of demand management and identifies policies, programs and actions including use of commute alternatives, reducing the need to travel as well as spreading the timing of travel to less congested periods, and route-shifting of vehicles to less congested facilities or systems.
- The Regional and Local Commute Trip Reduction Plans were last updated in 2015. RTC works with local partners to implement transportation demand strategies outlined in local and regional Commute Trip Reduction plans. Affected local jurisdictions, as currently determined by the State's CTR law, are: Vancouver, Camas, Washougal, and unincorporated Clark County. Local and Regional CTR Plans, as well as a Downtown Vancouver Growth and Transportation Efficiency Center (GTEC) Plan, were initially adopted by RTC in October 2007 with minor updates in 2013 and 2015.
- Active Transportation – The RTP reflects work with local jurisdictions and agencies to ensure that bicycling and pedestrian modes are addressed. RTC will continue to work with local partners to plan for pedestrian and bicycle policies and transportation needs to support transportation options, community quality and health. The State Growth Management Act requires that two components relating to active communities be addressed in local growth management plans: (1) a pedestrian and bicycle component, and (2) land use policies that promote greater physical activity. RTC staff will continue to participate in the Clark Communities Bicycle and Pedestrian Advisory Committee and report on the Committee's activities to the Regional Transportation Advisory Committee. RTC will likely work with a consultant in FY 2018/19 to complete an enhanced RTP section on active transportation.
- Changing Demographics and Lifestyles – the 2018 RTP update will address changing demographics and lifestyles and how these may affect transportation demand in the region. In FY 2019, RTC will continue to work with local agencies and institutions such as the Clark

County Commission on Aging such to implement transportation recommendations of the Clark County's Aging Readiness Task Force to address changing transportation needs with an aging population as documented in the Clark County Aging Readiness Plan.

- Human Services Transportation Planning - The process to develop the region's Human Services Transportation Plan and human services transportation project priorities is led by RTC with the latest HSTP for Clark, Skamania and Klickitat Counties update adopted in 2014 to support funding applications for WSDOT's consolidated public transportation grant program. RTC will continue to coordinate with local stakeholders and human service transportation providers to address the special transportation needs of the elderly, people with disabilities, and low-income populations. The HSTP prioritizes special needs transportation projects across all three counties of the RTC RTPO region in preparation for biennial statewide Consolidated Grants Program applications. Under federal law, HSTPs must be updated at least every four years with RTC's next HSTP update due in late 2018 (FY 2019), see separate HSTP UPWP element description. RTC will continue to be involved in the Accessible Transportation Coalition Initiative (ATCI) which brings together stakeholders with interest and representative of communities with special transportation needs.
- Freight Transportation – Elements of the Clark County Freight Mobility Study (RTC, December 2010) were incorporated into the 2011 RTP and continued in the 2014 RTP update ensuring that the significance of freight transportation and its importance to the local economy is documented. RTC has subsequently conducted data collection to provide input to freight transportation planning. RTC will continue to prepare materials relating to freight transportation and work with partners and business interest groups, such as Identity Clark County and the FACT Coalition, to focus attention on needed multi-modal freight investments and critical economic corridors within the region. RTC will work with local partners to determine whether there is opportunity to apply for freight grant funds including the federal INFRA program. The recommendations from freight alliances, partnerships and updated Freight Study will be integrated into the next RTP update. RTC will also coordinate with WSDOT's Freight Division to inform WSDOT of freight needs in the region and with the Freight Mobility Strategic Investment Board (FMSIB).
- Emerging Transportation Technologies - Regional transportation system development is at an evolutionary point where emerging transportation technologies that can impact transportation networks and performance are developing rapidly. The RTP update will address these emerging technologies with the perspective that the region needs to be aware of the desired transportation outcomes and the emerging technologies should be used to provide for transportation mobility, access and equity for passenger, freight and goods movement.
- Air Quality and Climate Change – Strategies to reduce Vehicle Miles Traveled per capita and to help reduce greenhouse gas emissions were addressed as part of the requirements of RCW 70.235.020, RCW 47.01.440 and Governor's Executive Order 09-05 – Washington's Leadership on Climate Change now superseded by Governor's Executive Order 14-04. RTC will continue to address VMT reduction strategies as part of the regional transportation planning process.
- Corridor Planning –corridor planning efforts were incorporated into the 2014 RTP update and new plans will be incorporated into the 2018 RTP update. Recommendations from the I-205 Corridor Bus on Shoulder Feasibility Study (report, May 2017) will be incorporated into the

RTP update. Recommendations from the I-205 Access and Operations Study informed the 2014 RTP update supporting the RTP goals for efficiency, safety, and performance of the region's multimodal transportation system. RTC will also continue to coordinate with WSDOT on necessary updates to the Corridor Sketch Initiative and on implementation of WSDOT's ramp signal study.

- Financial Plan – The financial Plan section of the RTP update will include the costs of system maintenance, preservation, safety improvement and operating costs. RTC will work with local and state transportation interests to bring attention to transportation system funding needs.
- Consistency – RTC will continue work with planning partners to maintain consistency between state, local, and federal transportation plans. Many local Comprehensive Growth Management Plans were updated in 2016 and the 2018 RTP update will incorporate local plan updates. Certification of the transportation elements of the cities' and county's comprehensive growth management plans is required under Washington State's Growth Management Act and RTC will continue to work with local jurisdictions as certifications are requested.
- Consultation between RTC and state and federal environmental agencies to address environmental mitigation strategies as part of the RTP update process and coordination with tribal governments will continue. (Ongoing)
- The RTP update development process involves the Regional Transportation Advisory Committee whose members provide technical review and recommendations for the RTP work element with RTC staff providing RTP informational briefings. The RTC Board is also updated, as needed, on the RTP update. At monthly Board meetings, time is set aside to allow citizens to comment on metropolitan transportation planning issues (ongoing).
- RTC involves the public in development of the metropolitan transportation planning process and, in particular, in development of RTP elements. Opportunities for public participation are offered with website information, media releases, communication with neighborhood groups, and stakeholders on the regional transportation planning process. Consultation with interested resource agencies and tribes with interests in the transportation system in the Clark County region continues. In FY 2018, RTC is working with a WSU-V student to investigate public opinion on the region's transportation system and in FY 2018/19 may use consultant assistance to deploy some form of stakeholder engagement process in developing the 2018 RTP update.

FY 2019 Funding: Regional Transportation Plan Work Element

FY 2019 Revenues:	**$**	**FY 2019 Expenses:**	**$**
• Federal FHWA PL	$120,132	• RTC	$226,166
• Federal FTA	$37,890	• Consultant*	$75,000
• Federal STBG	$70,000		
• State RTPO	$31,310		
• Other Local Funds	$12,400		
• MPO Funds	$29,434		
	$301,166		**$301,166**

Federal $ are matched by State and local MPO Funds. *Minimum required match:* *$35,587*

** RTC's Budget reflects a CY 2018 allocation of $75,000 in resources for potential technical support from consultants to assist in enhancing the RTP section on active transportation and/or assistance in public and stakeholder engagement.*

1B. TRANSPORTATION IMPROVEMENT PROGRAM

The metropolitan Transportation Improvement Program (TIP) is a multi-year program of federally funded and regionally significant transportation projects within the Clark County, Washington region. The TIP includes a priority list of projects to be carried out in the next four years and a financial plan that demonstrates how it can be implemented. The projects programmed in the TIP originate from project recommendations made in the Regional Transportation Plan (RTP) or are developed into projects from a series of program recommendations such as preservation, maintenance, and safety. The TIP is developed by the MPO in a cooperative and coordinated process involving local jurisdictions, C-TRAN and the Washington State Department of Transportation (WSDOT) together with public outreach and participation. RTC's TIP and Public Participation Plan satisfy the public participation requirements for the Program of Projects (POP). Projects listed in the TIP indicate a commitment for funding of these projects and project costs are expressed in Year of Expenditure (YOE) dollars.

Work Element Objectives and Activities: Transportation Improvement Program

- Develop and adopt the Transportation Improvement Program (TIP) consistent with the requirements of the Federal Transportation Act.
- Review the TIP development process and project selection criteria used to evaluate, select and prioritize projects proposed for federal transportation funding. Project selection criteria reflect the multiple policy objectives for the regional transportation system (e.g. safety, maintenance and operation of existing system, multimodal options, mobility, economic development and air quality improvement). The TIP development process is documented in RTC's Transportation Programming Guidebook. TIP process participants rely on this Guidebook to learn of TIP policies and procedures.
- Understand and implement the federal transportation reauthorization act (FAST Act) regarding the Transportation Improvement Program.
- Coordinate the grant application process for federal, state and regionally-competitive funding programs such as federal Surface Transportation Block Grant program (STBG), federal Transportation Alternatives (TA), state Transportation Improvement Board (TIB) programs, and Safe Routes to School programs, etc.
- Program Congestion Mitigation and Air Quality (CMAQ) funds with consideration given to emissions reduction benefits provided by projects.
- Coordinate with local jurisdictions as they develop their Transportation Improvement and Transit Development Programs.
- Coordinate with transit and human service agencies to address human services transportation needs and develop human services transportation projects.
- Develop a realistic financial plan for the TIP financially constrained by year. The TIP must address costs for projects as well as operations and maintenance of the transportation system.
- Consider air quality impacts.
- Amend the TIP as necessary.
- Monitor TIP project implementation and obligation of project funding.

- Ensure TIP data is input into the State Transportation Improvement Program (STIP) program software and submitted to WSDOT for inclusion in the STIP.

Relationship to Other Work Elements: Transportation Improvement Program

The TIP provides the link between the RTP and project implementation. The process to prioritize TIP projects uses data from the transportation database, guidance and criteria from the Congestion Management Process and regional travel forecasting model output. It relates to the Coordination and Management element's Public Participation efforts described in the UPWP. The TIP program requires significant coordination with local jurisdictions and implementing agencies in the Clark County region.

FY 2019 Tasks and Products: Transportation Improvement Program

- Development of the RTC's 2019-2022 Transportation Improvement Program will be coordinated with planning partners, the public given opportunity to comment on TIP process and projects and the adopted TIP will include programming of projects for all four years. Performance based planning and programming, including performance targets, will be incorporated in the TIP as federal timelines mandate. *(Fall 2018)*
- Update the Transportation Programming Guidebook; TIP Policies and Procedures, if warranted.
- TIP amendments as necessary. *(Ongoing)*
- Coordination of regional transportation projects for federal and statewide competitive programs. *(Ongoing)*
- Reports on tracking of TIP project implementation and obligation of funding for TIP programmed projects. More information on development of a project database to help project tracking efforts is found in the Data/Forecast work element. *(Ongoing)*
- Provide input to update the State Transportation Improvement Program (STIP). *(Ongoing)*
- Public participation in TIP development including providing information and ability to comment online. *(Ongoing)*

FY 2019 Funding: Transportation Improvement Program

FY 2019 Revenues:	**$**	**FY 2019 Expenses:**	**$**
• Federal FHWA PL	$48,053	• RTC	$120,466
• Federal FTA	$15,156		
• Federal STBG	$28,000		
• State RTPO	$12,524		
• Other Local Funds	$4,960		
• MPO Funds	$11,773		
	$120,466		**$120,466**

Federal $ are matched by State and local MPO Funds. *Minimum required match:* *$14,235*

1C. CONGESTION MANAGEMENT PROCESS

The Congestion Management Process focuses on transportation performance within corridors through monitoring of vehicular travel, auto occupancy, transit, travel demand management strategies, system management strategies, and traffic operations in an effort to identify solutions to address congestion. The congestion monitoring program provides valuable information to decision-makers in identifying the most cost-effective strategies to provide congestion relief. The CMP is used to identify system improvements, to guide investments and also to track the effectiveness, over time, of system improvements that are made.

Work Element Objectives and Activities: Congestion Management Process

- Continued implementation of the Congestion Management Process to provide effective management of existing and future transportation facilities and to evaluate potential strategies for managing congestion. The Congestion Management Process is developed, established and implemented as part of the metropolitan planning process and incorporates six elements as outlined in 23 CFR 450.320(c). These elements include multimodal transportation system performance monitoring and evaluation, data collection, coordination with planning partners, evaluation of future system performance, identifying an implementation schedule, responsibilities and funding, and assessment of the effectiveness of implemented strategies. Strategies may include demand management, traffic operational improvements, public transportation improvements, ITS technologies, and, where necessary, additional system capacity.
- Provide the region with a better understanding of how the region's transportation system operates. The Congestion Management Process is intended to be a continuing, systematic process that provides information on transportation system performance.
- Update and enhance the MPO region's transportation database including traffic counts and other database elements such as traffic delay, transit ridership and capacity, travel time and speed, auto occupancy and vehicle classification data (freight truck counts) for Congestion Management Process (CMP) corridors. The transportation database can be referenced and queried to meet user-defined criteria.
- Coordinate with local jurisdictions and local agencies to ensure consistency of data collection, data factoring and ease of data storage/retrieval. Coordination is a key element to ensure the traffic count and turn movement data support local and regional transportation planning studies and concurrency management programs. Traffic count data is collected, validated, factored and incorporated into the existing count program. Data collection includes working with regional partners to develop Portland State University's Portal data archive system for use in the CMP.
- Measure and analyze performance of the transportation corridors in the CMP network. This system performance information is used to help identify system needs and solutions. The data is also used to support transportation concurrency analysis.
- Publish results of the Congestion Management Monitoring process in a System Performance Report that is updated annually. Each year the Report's content and structure is reviewed to enhance its use, access and level of analysis.

- Coordinate with WSDOT and local agencies to help enhance use of the CMP in developing capacity or operational solutions to address transportation deficiencies identified as part of the congestion management monitoring process and then incorporate into updates to the RTP and TIP.
- Provide CMP data and system performance indicators to inform state and local transportation plan updates.
- The CMP database and system monitoring will be integrated with metropolitan planning efforts related to the Regional Transportation Plan's update, federal performance measures, the Transportation Improvement Program, and the VAST/Transportation System Management and Operations process.
- Coordinate with Metro on development of the Congestion Management Process.

Relationship to Other Work: Congestion Management Process

- Congestion monitoring is a key component of the regional transportation planning process. The Congestion Management Process for the Clark County region supports the long-term transportation goals and objectives defined in the Regional Transportation Plan. It assists in identifying the most effective transportation strategies and projects to address congestion. These identified strategies and projects are described and listed in the RTP and programmed for funding in the TIP. The overall Congestion Management Process includes the region's work on transportation demand management, Commute Trip Reduction efforts, and system management efforts addressed under a separate work element; Vancouver Area Smart Trek (VAST). Data and information compiled for the Congestion Management Process relates to the Regional Transportation Data and Travel Forecast work element.

FY 2019 Tasks and Products: Congestion Management Process

- A Congestion Management Process that includes all six CMP elements as outlined in 23 CFR Part 450 Sec. 320). *(Ongoing)*
- Updated traffic counts, turning movement counts, vehicle classification (truck) counts, travel delay and other key data for numerous locations throughout Clark County. Data updates will come from new counts and the compilation of traffic count information developed by the state and local transportation agencies. New and historic data will be made available on RTC's web site (http://www.wa.gov/rtc). Traffic count data is separated into 24 hour and peak one-hour (a.m. and p.m. peak) categories. Scans of traffic counts are stored to help meet other needs and to help future regional travel forecast model enhancement and update. *(Ongoing)*
- Update other CMP corridor data including auto occupancy, roadway lane density, vehicle classification (truck counts), transit ridership, transit capacity, travel time and speed. Data should support the CMP, concurrency and/or other regional transportation planning programs. *(Ongoing)*
- Compare the most recent data with data from prior years (dating back to 1999) to support identifying system needs and transportation solutions as well as monitoring of impacts of implemented improvements. (Summer 2018)
- An updated Congestion Management Report, the *2017 Congestion Management Process*

Monitoring Report, is anticipated in summer 2018.

- The "Areas of Concern" list will be updated in the *Congestion Management Report*. RTC works with local jurisdictions to identify transportation solutions for the corridor segments of concern with linkage between the CMP and implementation of the traffic operations program outlined in RTC's VAST program (see separate VAST work element). *(Spring 2019)*
- Provide information to Federal Highway Administration to help in FHWA's assessment of the Congestion Management Process. *(As needed)*
- Communicate with Metro on RTC's Congestion Management Process and keep informed on development of Metro's Congestion Management Process. *(Ongoing)*
- Plan for regional freight and commercial needs including data collection and reporting. *(Ongoing)*

FY 2019 Funding: Congestion Management Process

FY 2019 Revenues:		**FY 2019 Expenses:**	
	$		**$**
• Federal FHWA PL	$48,053	• RTC	$95,466
• Federal FTA	$15,156	• Consultant*	$25,000
• Federal STBG	$28,000		
• State RTPO	$12,524		
• Other Local Funds	$4,960		
• MPO Funds	$11,773		
	$120,466		**$120,466**

Federal $ are matched by State and local MPO Funds. *Minimum required match:* *$14,235*

*Average annual cost for consultant assistance for traffic data collection e.g. traffic counts, travel time and speed, auto occupancy and vehicle classification data. Consultant is hired on a 3-year contract.

1D. VANCOUVER AREA SMART TREK PROGRAM

The Vancouver Area Smart Trek (VAST) program encompasses the ongoing coordination and management of regional Transportation System Management and Operations (TSMO) and Intelligent Transportation System (ITS) activities. RTC began as lead agency for managing the VAST program in 2001 with a focus on ITS projects and infrastructure.

The TSMO Plan guides the implementation of operational strategies and supporting Intelligent Transportation Systems (ITS) technologies for Clark County and presents a strategic framework for accomplishing transportation system management objectives. It also supports future ITS technology investments and capital improvements necessary to accomplish those objectives. RTC published the first VAST TSMO Plan in 2011 which was updated in 2016. The original plan provided a 10-year vision; the 2016 Plan update provides a 5-year view that better reflects both the nature of TSMO strategies as viable near-term solutions to operational deficiencies as well as the rapid evolution of ITS technologies and operations practices.

The VAST Program has proven to be an effective way for agencies to coordinate and partner on ITS and operational project development and delivery, with successful funding outcomes, monitoring of project development, and project integration. The Vancouver Area Smart Trek Program is a coalition of state, regional and local agencies working together to implement Intelligent Transportation Systems (ITS) and operational solutions to address the region's transportation needs. Partners in the coalition include the City of Vancouver, Washington State Department of Transportation (WSDOT), Clark County, C-TRAN, the City of Camas, the Oregon Department of Transportation, and RTC.

Transportation System Management and Operations

TSMO focuses on low-cost, quickly implemented transportation improvements aimed at making efficient use of existing transportation facilities. Benefits include a more reliable transportation system, reduced delay, and better incident response. TSMO relies on the use of intelligent transportation system (ITS) initiatives and devices and combines advanced technologies, operational policies and procedures, and existing resources to improve coordination and operation of the multimodal transportation network. Examples include traffic signal integration, ramp metering, access management, traveler information, smart transit management, and coordinated incident response to make the transportation system work better.

While there may be no single solution to transportation deficiencies, Transportation System Management and Operations (TSMO) is one of the tools to manage congestion, and improve the safety, security and efficiency of our transportation system. TSMO is a key regional strategy for managing traffic congestion and for addressing transportation system capacity needs where additional highway expansion and/or capital resources are constrained. Currently, TSMO efforts in the region include the following: 1) the continued implementation of the TSMO Plan as a low capital-cost approach to meeting the region's transportation needs, 2) ensuring ITS and TSMO project consistency with the regional Intelligent Transportation System Architecture, and 3) enhancement and utilization of the Portal data element.

The Clark County TSMO Plan provides a strategic framework to guide transportation system management objectives. The Plan builds upon a proven reputation of success and national leadership in interagency coordination. It informs future ITS technology investments and capital improvements necessary to support the objectives over the next 10 years. The 2016 TSMO Plan has three main sections: 1) emerging operational issues and trends that will impact the future direction of transportation systems management and operations; 2) a description of operational improvements to the transportation system over the last five years and envisioned for the next five and; 3) an implementation plan, which documents the ITS communications and equipment needed to build the improvements and support system management and operations.

The regional transportation data resources developed under this element provide a means for tracking congestion and supporting the Congestion Management Process using TSMO performance metrics for recurring and non-recurring sources of congestion. Use of Portal is a key component. Portal is the official transportation archive for the Portland-Vancouver metropolitan region being developed and housed at the Intelligent Transportation Systems Laboratory at Portland State University (PSU). The purpose of Portal is to implement the U.S. National ITS Architecture's Archived Data User Service in the Portland-Vancouver region. PSU works cooperatively with regional partners including WSDOT, ODOT, Metro, the City of Portland, TriMet, and RTC. Currently, the Portal system archives a wide variety of transportation-related data including the freeway loop detector data from the Portland-Vancouver metropolitan region, weather data, incident data, transit data and freight data. There are plans to enhance Portal to improve the user interface and expand the capabilities of the system to include multimodal data sources such as vehicle length information, incident data, travel time, expanded transit data, arterial data and bicycle-pedestrian data from both Oregon and Washington.

Intelligent Transportation Systems

The VAST program addresses the sharing, maintenance, and standards for communications infrastructure and equipment. The ITS element of the VAST Program will continue its focus on ITS, communications and the associated infrastructure and technology. The VAST program encompasses ITS and communications infrastructure as well as ITS technologies for integration of transportation information systems, management systems and control systems for the urbanized area of Clark County.

Work Element Objectives and Activities: VAST

- Address the use of ITS technology through collaboration between planning and traffic operations staff of partner agencies as part of the consolidated VAST program which incorporates ITS and operational management into the planning process.
- Lead the ongoing management of the VAST Program, including the development of cooperative project funding applications and coordination between partner agencies on operational projects and ITS technology. Continue management of the TSMO Steering Committee, the VAST Steering Committee and Communications Infrastructure Committee. VAST program management includes review and endorsement of ITS and communications infrastructure, as well as operational projects, development of ITS and operations policy issues, preparation of joint funding applications, and managing consultant technical support for the VAST program.

- Ongoing planning, coordination and management of the VAST program by RTC to ensure the region is meeting federal requirements for ITS deployment through integration and interoperability.
- Ensure that operational and ITS initiatives are integrated and that consistency with the regional ITS architecture is addressed.
- Continue to develop and implement VAST program projects programmed for Congestion Mitigation/Air Quality (CMAQ) funding in the Transportation Improvement Program. These VAST projects may include freeway management, traveler information, transportation signal optimization, and transit signal priority.
- Assist partner agencies on funding applications for individual operational and ITS projects. Continue process of Committee partnerships for joint project funding applications.
- Focus on performance measurement, metrics, and tools to analyze the benefits of operational strategies and outreach to policy makers and other stakeholders.
- Utilize the emerging issues identified in the 2016 TSMO Plan update to guide the planning efforts and deliberation of the VAST agencies on issues including connected and autonomous vehicles, smart cities, and open and integrated data.
- Collaborate with TSMO Steering Committee members to provide technical support for operational measures consistent with guidance resulting from the FAST Federal Transportation Act. Identify the role the Committee should play to provide input to the operations element of the RTP update.
- RTC will coordinate regularly with TSMO partners to develop guidelines and protocols for regional operations. Performance measures will be further developed for assessing operations and identifying effective TSMO strategies. RTC will collaborate with partner agencies for ongoing refinement of the Portal interface to improve its interface and usability. Improvements to the Portal data archive are defined in the data archive scope of work with PSU and include adding data sources for arterials, display of new transit data, freight information, travel time and identification of field device types and their data collection capabilities. RTC will coordinate with partner agencies as they begin to utilize the data archive.
- RTC participation on the Portal Advisory Committee which considers strategies for the ongoing management and maintenance of the Portal data archive.
- Continue development of standards for fiber optic communications, equipment, and infrastructure through the VAST Communications Infrastructure Committee (CIC). Maintain and continue expansion of the multi-agency shared asset management database and mapping system and facilitate the ongoing development of communications sharing and execution of permits between the VAST agency partners.
- Expand areas of communications infrastructure sharing and integration authorized under the executed Regional Communication Interoperability and Fiber Interlocal Agreement.
- Develop rules, procedures and process, and security issues among VAST partners and gain agreement on a common protocol for VAST to receive detailed communications infrastructure information from agency construction projects.
- Identify additional areas for coordination and improvement of the communications

infrastructure, including coordination of construction, management and maintenance of communications infrastructure for VAST member agencies.

- Provide a forum to host periodic VAST program events to promote regional discussion and education on TSMO and transportation technology issues.

Relationship to Other Work Elements: VAST

The VAST work program is the operations element of the Regional Transportation Plan; the region's long range plan. Operational strategies are identified in the RTP and are programmed for funding in the region's TIP. The TSMO Plan serves to define operational improvement strategies and development of the metrics for measuring performance. The transportation data archive element also feeds into and supports the Congestion Management Process (CMP). The CMP identifies regional transportation needs that can be addressed through application of TSMO strategies.

FY 2019 Tasks and Products: VAST

- Coordinate all VAST activities within Clark County and with Oregon. *(Ongoing)*
- Facilitate the activities of the three VAST related committees. *(Ongoing)*
- Report on the overall effectiveness of the VAST program. *(Ongoing)*
- Maintain the Regional ITS Architecture for the VAST program using the most recent National Architecture and Turbo Architecture. Include documentation of functions, subsystems, and information and data flow connections. *(Ongoing)*
- Work to incorporate the connected and autonomous vehicles element into the next Regional ITS Architecture update.
- Implement ITS technologies and operational strategies on the TSMO corridor(s) within the budget available. (Ongoing)
- Work to determine need for the development of regional policies for the consideration of operational strategies.
- Coordinate with the VAST partners to conduct a 10-year ITS network needs assessment which focuses on the non-fiber component of communications such as the data layer, network topology, and data processes.
- Update and expansion of Portal to include all partner agencies. Collaboration with partner agencies will also address ongoing refinement of Portal to improve data quality, visual interface and usability. *(Ongoing)*
- Manage the ITS element of the work program, including preparation of memoranda of understanding for coordinated ITS implementation, interlocal agreements, and operational and maintenance agreements, fiber sharing permits and other coordination needed between partner agencies to deploy ITS projects. *(Ongoing)*
- Develop policies for operational requirements, acceptable use, security and other policies for the shared ITS network. *(Ongoing)*
- Build-on addition of Clark County onto the bi-state regional ITS network by expanding the number of VAST agencies using it to send real-time data to the Portal data archive.

- Coordinate with VAST agencies to complete agreements with a single vendor for the common management, maintenance and data entry for the asset management database to support continued expansion of the shared communications assets mapping system.
- Update, maintain and utilize the database as new fiber projects are completed. (Ongoing)
- Adopt standards for fiber, equipment, and infrastructure based on priorities set by the Communications Infrastructure Committee. *(Ongoing)*
- Regional ITS goals and policies for the Clark County region and for bi-state ITS issues. *(Ongoing)*
- Manage consultant technical support activities as needed. *(Ongoing)*

FY 2019 Funding: VAST

FY 2019 Revenues:		**FY 2019 Expenses:**	
	$		**$**
• Federal STBG	$236,000	• RTC	$152,832
• MPO Funds (13.5%)	$36,832	• Consultants*	$120,000
	$272,832		**$272,832**

Federal $ are matched by State and local MPO Funds. *Minimum required match:* *$36,832*

Consultants* estimated $120,000 per year for consultant program assistance and Portland State University Portal.

IE. SKAMANIA AND KLICKITAT RTPO

The regional transportation planning work program for Skamania and Klickitat Counties was established in FY 1990 when RTC was designated as the Regional Transportation Planning Organization (RTPO) for Clark, Skamania and Klickitat counties. The Skamania County and Klickitat County Transportation Policy Committees meet regularly to discuss regional transportation issues and concerns. RTC provides transportation planning technical assistance for each County in addition to developing Regional Transportation Plans and monitoring transportation system performance. The Skamania County and Klickitat County Regional Transportation Plans were initially adopted in April 1995 with the most recent updates adopted in June 2014 and amendments in November 2016. Development and traffic trends are monitored and the regional transportation planning database for the region is kept up to date.

Work Element Objectives and Activities: Skamania and Klickitat RTPO

- Conduct a regional transportation planning process.
- Ensure that Regional Transportation Plans are reviewed regularly and opportunity for regular update, if needed, is provided.
- Gather growth and development data to reveal trends to report in the Regional Transportation Plan update.
- Develop and update the regional transportation database.
- Review plans of local jurisdictions for consistency with the Regional Transportation Plans and Washington's Transportation Plan (WTP).
- Continue transportation system performance monitoring program.
- Assist counties in implementing the federal transportation reauthorization act, the FAST Act. This will include continued assistance in development of federal and state-wide grant applications, and development of the Regional TIP.
- Continue assessment of public transportation needs, including specialized human services transportation. Work with regional partners in coordinating with Gorge TransLink, an alliance of transportation providers offering public transportation services throughout the Mid-Columbia River Gorge area as well as to destinations such as Portland and Vancouver. These transportation services are available to everyone regardless of age or income. To help meet the region's special services transportation needs, coordination with the state's Agency Council on Coordinated Transportation (ACCT) will continue.
- Assist partner agencies in conducting regional transportation planning studies.

Relationship to Other Work Elements: Skamania and Klickitat County RTPO

The RTPO work program for Skamania and Klickitat Counties is tailored to the counties' specific needs and issues and, where applicable, coordinated across the RTPO region and with bi-state partners in Oregon.

FY 2019 Tasks and Products: Skamania and Klickitat RTPO

- Continued development of a coordinated, technically sound regional transportation planning process. *(Ongoing)*

- Continued development of a technical transportation planning assistance program. *(Ongoing)*
- Development of the 2019-2022 Regional Transportation Improvement Program. *(Fall 2018)*
- Review and update of Regional Transportation Plans. *(FY 2018)*
- Gather data and update the regional transportation database. *(Ongoing)*
- Regional freight and commerce planning and data collection and reporting. (Ongoing)

FY 2019 Funding: Skamania and Klickitat RTPO

FY 2019 Revenues:	**$**	**FY 2019 Expenses:**	**$**
• State RTPO	$45,310	• RTC	$45,310
	$45,310		**$45,310**

IF. HUMAN SERVICES TRANSPORTATION PLAN UPDATE

Regular update of the region's Coordinated Human Services Transportation Plan (HSTP) continues to be a requirement of the federal transportation act; currently Fixing America's Surface Transportation Act (the FAST Act). The intent of the Human Services Transportation Plan is to identify transportation needs and solutions and thereby improve transportation services for people with disabilities, seniors, and individuals with lower incomes as well as those in rural locations who cannot provide transportation for themselves. The RTC Board adopted the region's first Human Services Transportation Plan for Clark, Skamania and Klickitat Counties in January 2007 and subsequent Plan updates in 2010 and 2014. From the needs identified in the HSTP, human services transportation providers can then develop projects to submit to WSDOT for funding consideration through the consolidated public transportation grant program. Development and update of an HSTP is a condition for receipt of Federal Transit Administration Section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities program, funds. In Washington State, the Consolidated Grant Program combines applications for FTA 5310 funds as well as FTA Section 5311 Rural Area Apportionments and Rural Transit Assistance Program, and state transit funds for paratransit, special needs and rural mobility competitive programs. Projects funded under this program must be derived from a locally developed public transit-human services transportation plan. The MPO/RTPO must work with the local stakeholders and human service transportation providers to develop the Plan and prioritize projects.

Work Element Objectives and Activities

- Develop an update to the consolidated Human Services Transportation Plan for Clark, Skamania and Klickitat Counties. A coordinated plan can help to enhance transportation access, minimize duplication of services, and encourage the most cost-effective transportation. Development of the Human Services Transportation Plan brings together service providers, agencies that distribute funds, riders, and the community at-large to improve special needs transportation throughout the region. Following the template provided by WSDOT Public Transportation Division, the Plan should include the following elements:
- Stakeholder involvement.
- Emergency management collaboration and coordination.
- Data and information on common trip origins and destination, and existing transportation services. Note: this may require collaboration and sub-contracting with County GIS departments to update Plan maps.
- Identify unmet transportation needs including technology.
    - Develop strategies to meet public transportation needs including unmet needs. This should include coordination, and community project priorities.
    - Meet Title VI requirements.
- Outreach, engage and coordinate with stakeholders because stakeholder involvement is the key to successful human service transportation planning. Primary stakeholders include public transportation providers in the region such as C-TRAN, Skamania County Senior Services, and Klickitat County Senior Services. Additional stakeholders may include the Area Agency on Aging and Disabilities of Southwest Washington, assisted living communities, city councils,

community action programs, community colleges, County Councilors and Commissioners, disability organizations, DSHS, foundations, group homes, hospitals and other health care providers, local Medicaid brokers and/or providers, local school districts, major employers or employer organization, non-profit transportation providers, organizations that service low income people, other non-profit organizations, nursing homes, private bus operators, public transit districts, Retired Senior Volunteer Program, senior centers, student/teen organizations, taxicab operators, tribal governments and work-first local planning area representatives. Notable opportunities to engage with local stakeholders in the region include with Gorge Translink for the Columbia Gorge area, with C-TRAN Citizens Advisory Committee, with Clark County's Commission on Aging, the Southwest Washington Healthy Living Collaborative and through the region's Accessible Transportation Coalition Initiative (ATCI).

- Coordinate with regional decision-makers through the Klickitat County Transportation Policy Committee, Skamania County Transportation Policy Committee, the Regional Transportation Advisory Committee in Clark County and the RTC Board of Directors.
- Continue to coordinate with Washington State Department of Transportation (WSDOT) to learn of funding opportunities, data availability and statewide decision-making regarding special needs transportation.

Relationship To Other Work Elements

The HSTP is related to the Regional Transportation Plan for Clark County, the Metropolitan Transportation Improvement Program for project programming, Coordination and Management, and the Skamania and Klickitat RTPO work elements.

FY 2019 Tasks and Products

- An updated Human Services Transportation Plan for Clark, Skamania and Klickitat counties according to the timeline required by WSDOT. The updated Human Services Transportation Plan will be reviewed and approved by the Active Transportation Coalition (ACTI), the stakeholder participant group, and adopted by the RTC Board.
- The updated HSTP will be used as the basis for applying for funds, every two years, through the state's Consolidated Public Transportation Grant Program to meet the transportation needs of people with disabilities, seniors, individuals with lower incomes as well as those in rural locations who cannot provide transportation for themselves. Project applications are likely to be due in fall 2018. RTC will lead the project application process.

FY 2018/19 Expenses:		**FY 2018/19 Revenues:**	
	$		$
RTC and GIS Dept.	$20,000	FTA (through WSDOT) - formula allocation	$20,000
Total	**$20,000**		**$20,000**

1G. URBAN FREEWAY CORRIDORS OPERATIONS STUDY

The Urban Freeway Corridors Operations Study will analyze near term operational, system management improvements, transit enhancements and other multimodal improvements on approximately 35 miles of urban freeways in the Vancouver region that could serve to make the transportation system operate more efficiently and predictably. The strategies could include approaches to get the most out of the existing system by using traffic management tools to optimize the flow of traffic and maximize available capacity as well as low cost capital improvements to address bottlenecks and merge weave conflicts. These improvements could also supplement future planned capital improvements in the study corridors.

While the overall scope of the study will encompass the Vancouver urban area freeway system, an important focus of the study will be on the I-5 corridor from the Columbia River to 179th Street, which was identified in RTC's Congestion Management Process as a crucial need to address as bi-travel demand continues to increase. The study will analyze, identify and recommend implementation of low-cost multimodal operational strategies for the Clark County transportation system

Strategies to improve transportation system management and operations (TSMO) provide a way to better manage roadways to get more efficiency out of the existing system. TSMO strategies are generally lower cost, can be implemented more quickly than capital projects and can reduce the impacts of congestion by reducing delay and improving travel time reliability.

Between 2011 and 2016, Clark County's population increased by almost 36,000 people, more than 8%. The Portland/Vancouver region added over 116,000 jobs, an increase of almost 10.5%, during the same time period. This growth is forecast to continue with population growing from 460,000 today to 600,000 in 2040. Past growth and future trends, as well as an improving economy over the last 5 years, are reflected in worsening traffic congestion on Clark County freeways.

WORK ELEMENT OBJECTIVES: **UFCOS**

Investigate a wide range of transportation operational management strategies including regional management and operations, roadway management and operations, transit management, and traveler information.

A key foundational task for the operational study is origin destination analysis. It will identify access locations onto and leaving the freeway system and trip patterns at interchanges in the study area. O-D analytical tools developed for the UFCOS will also be utilized for other study areas identified by WSDOT.

Specific strategies will include technology based advanced traffic management (ATM) techniques. ATM is intended to dynamically manage regular and non-recurring congestion based on current and predicted traffic conditions. ATM strategies include: adaptive ramp metering, dynamic speeds and dynamic lane control, and queue warning.

Consider integrated corridor management (ICM) strategies. Similar to ATM, ICM relies on advanced technology and real time roadway information for a common management approach to parallel roadway facilities in a single travel corridor. The study will identify applicable corridors for ICM treatment and make recommendations on corridors, segments, and improvements for implementation.

Evaluate low cost capital improvements that could address geometric constraints including bottlenecks and safety. Options could include ramp modifications, lane extensions, and mainline

reconfiguration/restriping improvements that would balance capacity, reduce weaving and merging conflicts, or other operations efficiencies.

Assess current and planned transit service in the study corridors and consider the role of transit enhancements as stand alone improvements or to supplement technology based strategies. It will include improved or expanded transit service along with bus on shoulder as a mobility improvement strategy.

Research and document a range of transportation demand management strategies to determine their contribution and role in managing mobility in the corridor.

A summary of the study activities and tasks is provided below:

- Origin-destination data collection and analysis
- Traffic data collection
- Traffic operational analysis
- Identification and screening of operational strategies and transit enhancements
- Hot spot identification including merge/weave problems and bottlenecks

RELATIONSHIP TO OTHER WORK ELEMENTS: UFCOS

The UFCOS supports goals for the efficiency, safety, and performance of the multimodal transportation system as defined in the Regional Transportation Plan and is consistent with the mix of transportation strategies needed to address future transportation system issues. It also relates to the VAST TSMO/ITS Work Program and the Congestion Management Process in that it will first consider transportation management, operational, and transit strategies to address system performance.

FY 2018/19 PRODUCTS: UFCOS

- Conceptual design and cost estimates
- Findings and recommendations on an integrated set of low cost capital improvements and strategies for implementation.

FY 2018/19 Funding: UFCOS

FY 2018/19 Revenues:	**$**	**FY 2018/19 Expenses:**	**$**
• WSDOT (O-D)	$300,000		
• WSDOT (Ops)	$150,000		
• Federal STBG	$215,000	• RTC	$100,000
• Local Funds	$35,000	• Consultants	$600,000
	$700,0000		**$700,000**

2. DATA MANAGEMENT, TRAVEL FORECASTING, AIR QUALITY AND TECHNICAL SERVICES

2A. REGIONAL TRANSPORTATION DATA, TRAVEL FORECASTING, AIR QUALITY AND TECHNICAL SERVICES

This element includes the development, maintenance and management of the regional transportation database and website to support the regional transportation planning program. The database is used to assess transportation system performance, evaluate level of service standards and calibrate the regional travel forecasting model. The element also includes development and use of the regional travel forecasting model to estimate and analyze future transportation needs, air quality planning to support mobile emissions analysis and conformity determinations, and technical support to local jurisdictions.

Regional Transportation Data and Travel Forecasting

(a.1.) Regional Transportation Data: Work Element Objectives and Activities

- Maintain an up-to-date transportation database and map file for transportation planning and regional modeling that includes functional classification of roadways, traffic counts, transit ridership and transit-related data provided by C-TRAN. The database is used in development of regional plans, regional travel forecast model development and in map-making. Maps are used by RTC as visualization tools to help make transportation plans more understandable.
- Collect, analyze and report on regional transportation data from data sources such as the U.S. Census, the Census Bureau's American Community Survey, Census Transportation Planning Package data, National Household Travel Survey (NHTS) data, travel behavior survey data, and County GIS information.
- Maintain and update a comprehensive traffic count program coordinated with local jurisdictions and agencies.
- Compile crash data for use in development of safety management plans and project priorities.
- Develop a project database for completed and planned transportation projects.
- Analyze growth trends and relate these trends to future year population and employment forecasts. Demographic forecasts for the region are analyzed and used as input for the regional travel forecast model. RTC reviews Clark County-produced region-wide growth totals for population, households and employment allocated to Clark County's transportation analysis zones (TAZs) and incorporates these assumptions into the regional travel model. The TAZ allocation is used by RTC in the travel forecast modeling process.
- Coordinate with Metro on procedures for forecasting the region's population and employment data for future years, including "Metroscope" development; a process that integrates land use development and transportation system change in an integrated model.
- Incorporate transportation planning data elements into the Geographic Information System (GIS) using ArcInfo and coordinate with Clark County's GIS Department to incorporate data into the County ArcGIS system. This includes maintaining GIS layers for the Urban Area Boundary, designated regional transportation system, federal functional classification system of highways

and freight data. Clark County's Maps Online and GIS Workbench is used as a resource by RTC to obtain layers of information such as zoning, comprehensive plan, service district boundaries, and geophysical and environmental elements such as stream channels, floodplains, hydric soils, shoreline buffers, watersheds, and groundwater protection areas, slopes and geologic hazards. These layers of information are used by RTC in considering environmental mitigation in the regional transportation planning process.

- Assist local jurisdictions in analyzing data and information from the regional transportation data base in updating and implementing Comprehensive Plans required under the state's Growth Management Act, capital facilities plan development and transportation concurrency.
- Maintain and update RTC's computer equipment and software.
- Regularly update the content of RTC's website as the primary public participation, information and outreach platform allowing public access to the regional transportation planning program.
- Investigate the application of multimodal cost benefit analysis packages and the potential application to the Regional Transportation Plan. Continue to develop data, including vehicle miles traveled (VMT) and vehicle occupancy measures, for use in air quality and Commute Trip Reduction (CTR) planning.

(a.2.) Regional Transportation Data: FY 2019 Tasks and Products

- Update the regional transportation database with data from the U.S. Census, including Census Transportation Planning Products (CTPP) and the American Community Survey (ACS) which derives data from a smaller sample than the census, as well as the National Household Travel Survey (NHTS). (Ongoing)
- Analysis of Clark County transportation information. The main elements include: transportation measures, use of highway by travel length, peak spread, transit related data and information, and work trip analysis. Trip analysis and travel time calculations are used to address environmental justice issues. (Ongoing)
- A project database for completed and planned transportation projects will be developed. This project database will be designed to complement the TIP and RTP work elements. Initially, the database will include information on the STBG and CMAQ funded projects and is planned to include all proposed RTP projects to enable information and data retrieval for these projects. The intention is to eventually make the project information and data easily accessible on RTC's website.
- Compilation and analysis of data relating to minority and low income populations to support transportation plans for the region and for specific corridors and for specific Title VI requirements. (Ongoing)
- Integration of transportation planning and GIS Arc/Info data. (Ongoing)
- Coordination with Clark County on maintenance and update of the highway network, local street system and federal functional classification system in a GIS coverage. (As needed)
- Update the traffic count database. (Ongoing)
- Continue to work with regional bi-state partners on freight transportation planning including ongoing work to improve truck forecasting ability. Continue to integrate freight traffic data into

the regional transportation database. (Ongoing)

- Technical assistance to local jurisdictions for regional transportation data. (Ongoing)
- Purchase updated computer equipment using RTPO revenues and coordinate with the County's computer division to update computer equipment and software. (As needed)
- Analysis of Commute Trip Reduction (CTR), congestion pricing and Transportation System Management/Intelligent Transportation System (ITS) impacts. (As needed)
- The RTC website is a valuable tool for both disseminating information and receiving feedback from the public, as well as the RTC Board and its member jurisdictions. RTC will continue to maintain the RTC website with current data and information in order to inform and engage the public in the transportation planning process.

(b.1.) Regional Travel Forecasting Model: Work Element Objectives and Activities

- Coordinate with local jurisdictions, state agencies and Metro to develop the regional travel forecast model. The travel forecast model is used as a tool to help analyze the transportation system in the region; its output used to identify deficiencies in the regional transportation system, to develop performance measures and standards and to assess transportation demand management and transit planning applications.
- Increase the ability of the existing travel forecasting procedures to respond to informational needs placed on the forecasting process to inform state, regional and local transportation planning. The model needs to be able to respond to emerging issues, including concurrency, peak hour spreading, latent demand, design capacity, performance measures, air quality, growth management, and life-style changes relating to transportation needs. Staff will continue to research and assess travel forecast model enhancement and enhanced modeling software and tools to further develop traffic operational modeling capabilities and true dynamic assignment techniques that are increasingly important in evaluating new planning alternatives, such as High Occupancy Vehicle operations and impacts, Intelligent Transportation System impact evaluation, congestion pricing analysis, and concurrency analysis.
- Provide a forum for local model developers and users to meet and discuss model development and enhancement.
- Participate in the Oregon Modeling Steering Committee (OMSC), organized as part of the Oregon Travel Model Improvement Program (OTMIP), to learn about model development in Oregon and the Portland region.
- Participate in developing Washington Statewide Multimodal Travel Demand Models and provide technical insight in coordinating the MPO's Regional Travel Models and the Statewide Model.
- Assist WSDOT and local agencies by supplying regional travel model data for use in local planning studies, environmental analyses, development reviews, Capital Facilities Planning and Transportation Impact Fee program updates. RTC will provide WSDOT with transportation model data and analysis to support project design and implementation.
- Provide technical support for local transportation studies and transit analyses using output from the regional travel forecasting model.

(b.2.) Regional Travel Forecasting Model: FY 2019 Tasks and Products

- Re-calibration and validation of regional travel forecast model. (As needed)
- Review and update of model transportation system networks, including highway and transit. (Ongoing)
- Transportation data output and analyses provided to assist C-TRAN in planning for future transit service. (Ongoing)
- Continue implementation of interlocal agreements relating to use of RTC's regional travel forecast model and implementation of sub-area modeling. (As needed)
- Participate and coordinate with Metro on the specification and development of a new tour-based regional model.
- Continue to coordinate with Metro on use of Metro's regional model and to ensure input model data, including census demographic data and land uses, are current. RTC will work with Metro to refine travel forecast methodology using the EMME4 software and will continue to work with Metro to assess the most useful modeling tools for use in the region. (Ongoing)
- Explore and practice 'Scripting tools' and API (Application Programing Interface) in order to run EMME4 efficiently. Learn and practice scripting in Python Code for EMME4 operation.
- Continue to expand RTC's travel modeling scope through research into development of enhanced operational modeling applications and emerging true dynamic assignment techniques increasingly important in evaluating new planning alternatives. At the conclusion of the research, staff will make recommendations regarding the development and implementation of new dynamic modeling tools and their application within RTC's regional transportation analysis role.
- Run the Regional Demand Model to update model horizon year to 2040 for use in the RTP and provide analysis for RTP development.
- Provide benefit-cost analysis of RTP using regional Multi-Criteria Evaluation toolkit.
- Coordinate with small city members to define appropriate sub-area models of RTC regional model that will better support the analytical needs of smaller cities. Develop schedule for small city sub-model development.
- Apply DTA-Lite (one of the DTA tools sponsored by FHWA) to selected subareas/corridors segments and evaluate transportation system performance by time-dependent measures. DTA-Lite has already been used in this region in the City of Vancouver's Westside Mobility Strategy project. Develop a formal procedure for the subarea modeling with DTA-Lite and time dependent performance measures.
- Coordinate with Metro in updating the regional travel forecast model code and structure. (As needed)
- Documentation of regional travel forecasting model procedures. (Ongoing)
- Host Transportation Model Users' Group (TMUG) meetings. (As needed)
- Use regional travel forecasting model data to support RTP and TIP development, state HSP development and support for corridor planning studies, Transportation System Management and Operation (TSMO) applications, and C-TRAN's 20-year Transit Development Plan, etc.

(Ongoing)

Air Quality Planning

In an effort to improve and/or maintain air quality, the federal government enacted the Clean Air Act Amendments in 1990. RTC's region is now in attainment status for both Ozone and Carbon Monoxide (CO).

Under both the 1997 and 2008 Ozone National Ambient Air Quality Standards (NAAQS), the Vancouver/Portland Air Quality Maintenance Area (AQMA) is designated as in "attainment" for Ozone. With the revocation of the 1-hour Ozone NAAQS on June 15, 2005, regional emissions analyses for ozone precursors in RTC's Plan (RTP) and Program (TIP) were no longer required.

For Carbon Monoxide (CO) NAAQS, the Vancouver AQMA was redesignated to attainment with an approved 10-year maintenance plan in 1996. In January 2007, the Southwest Clean Air Agency submitted a CO Limited Maintenance Plan (LMP) to the Environmental Protection Agency for the second 10-year period. The EPA approved this LMP the following year. Based on the population growth assumptions contained in the Vancouver Limited Maintenance Plan (LMP) and the LMP's technical analysis of emissions from the on-road transportation sector, it was concluded that the area would continue to maintain CO standards. As of October 21, 2016, the Vancouver AQMA successfully completed the 20-year "maintenance" period and is no longer required to make a conformity determination.

(c.1.) Air Quality: Work Element Objectives and Activities

- Monitor federal guidance on the Clean Air Act and state Clean Air Act legislation and implementation of requirements. This includes addressing any issues concerning attainment status for Carbon Monoxide (CO) for the Vancouver Air Quality Maintenance Area and the "attainment" area for ozone based on the Environmental Protection Agency's (EPA's) eight-hour ozone standard.
- If necessary, program identified Transportation Control Measures (TCMs) in the metropolitan Transportation Improvement Program (TIP).
- Cooperate and coordinate with State Department of Ecology in research and work on air quality in Washington State and provide support for the Governor's Executive Order 09-05 and RCW 80.80, RCW 70.235.020 and RCW 47.01.440 relating to climate change, greenhouse gas and Vehicle Miles Traveled reduction goals. RTC is one of the four affected RTPOs in Washington State required to collaborate and engage with Washington State Department of Transportation (WSDOT) to implement Sections 2a and 2b of Governor's Executive Order 09-05 – Washington's Leadership on Climate Change. The requirements in RCW 47.01.440 relates to statewide reductions in vehicle miles traveled (VMT), RCW 70.235.020 and chapter 173-441 WAC relates to limiting and reporting of greenhouse gas (GHG) emissions. Subsequent policy directives in state and federal requirements will also be addressed. (Ongoing)
- Coordinate with Southwest Clean Air Agency (SWCAA) depending on current air quality laws and air quality status. RTC's responsibilities include, if necessary, transportation emissions estimates, and conformity determination for regional plans and programs and for adoption of TCMs for inclusion in the MTP and MTIP.

- Although it is not mandatory, RTC will continue to coordinate and cooperate with air quality consultation agencies: DOE, EPA, FHWA, FTA, WSDOT, and SWCAA when needed on any new regulatory and technical requirements that may affect the AQMA as well as emerging issues related to air quality and transportation. RTC will consult with the agencies if requested in the review, update, testing, and use of the Motor Vehicle Emissions Simulator emissions (MOVES) model to ensure accuracy and validity of model inputs for the Clark County region and consistency with state and federal guidance.
- Coordinate with Metro, as needed, to ensure collaboration on possible future conformity requirements and consistency of mobile emissions estimation procedures and air quality emissions methodology that uses the travel-forecasting model in the Portland bi-state region.
- Estimate air quality emissions impacts for projects proposed for funding by the Congestion Mitigation and Air Quality program through the TIP and for the annual CMAQ information report required by WSDOT Highways and Local Programs Division for submittal to FHWA.
- Provide technical support requested from local jurisdictions and agencies in the use of the EPA MOVES emissions model.

(c.2.) Air Quality Planning: FY 2019 Tasks and Products

- Include air quality conformity status and documentation for updates and/or amendments to the RTP and TIP as required by the Clean Air Act Amendments of 1990.
- Consult with local agencies, WSDOT, DOE, EPA, SWCAA, Metro and Oregon Department of Environmental Quality on emerging issues related to air quality and transportation, including any new regulatory requirements regarding air quality or conformity.
- Work to support RCW 80.80 relating to climate change and greenhouse gas reduction including Vehicle Miles Traveled (VMT) and VMT per capita in the region. Also address Governor's Executive Order 14-04. (Ongoing)

Transportation Technical Services

(d.1.) Transportation Technical Services Work Element Objectives and Activities

- Provide technical transportation planning and analysis services for member agencies and provide a common and consistent regional basis for analysis of traffic issues. Consistency is a key element in maintaining, planning for, and building an efficient transportation system with adequate capacity. Technical service activities are intended to support micro traffic simulation models, the input of population, employment and household forecasts, and the translation of land use and growth forecasts into the travel demand model. RTC staff will continue to provide requested transportation technical services related to the implementation of the cities' and County's Comprehensive Growth Management Plans, transportation elements and transportation capital facilities plans.

(d.2.) Transportation Technical Services: FY 2018 Tasks and Products

- Fulfill local jurisdictions' needs for travel modeling and analysis. (Ongoing)
- Use output from the regional travel forecast model in local transportation concurrency analyses. A regular travel model update procedure for base year and six-year travel forecast is

established that can be used in concurrency programs. As part of the process, the travel model is used and applied in the defined transportation concurrency corridors to determine available traffic capacity, development capacity and to identify six-year transportation improvements. (As needed)

- Travel Demand Forecast Model Workshops will be organized and held. Invitees will include staff of local agencies and jurisdictions. These will help to improve understanding of travel demand modeling issues and new advances to promote efficiencies in use of the model in our region. (As needed or requested)
- Use of model results for local development review purposes.
- Technical support for the comprehensive growth management planning process in the Clark County region. An updated Clark County Comprehensive Plan was adopted in June 2016. (Ongoing and as needed)

Relationship to Other Work Elements: Data, Travel Forecasting, Air Quality and Technical Services

This element provides significant support for all of RTC's regional transportation planning activities including developing visualization tools and materials to help make transportation plans more understandable. Output from the database is used by local jurisdictions and supports development of the RTP, TIP, Congestion Management Process and Transit Development Plan. Traffic counts are collected as part of the Congestion Management Process and are coordinated by RTC. This is an ongoing data activity that is valuable in understanding existing travel patterns and future travel growth. The program is also a source of county-wide historic traffic data, and is used to calibrate the regional travel forecast model. Development and maintenance of the regional travel forecasting model is the key tool for long-range transportation planning.

FY 2019 Funding: Regional Transportation Data and Travel Forecasting

FY 2019 Revenues:	
	$
• Federal FHWA PL	$258,283
• Federal FTA	$81,464
• Federal STBG	$150,500
• State RTPO	$67,316
• Other Local Funds	$26,660
• MPO Funds	$63,282
	$647,505
Federal $ are matched by State and local MPO Funds.	

FY 2019 Expenses:	
	$
• RTC	$611,505
• Interlocal agreement with Metro for model development	30,000
• Computer Equipment *Purchase with RTPO funds*	$6,000
	$647,505
Minimum required match:	*$76,512*

3. REGIONAL TRANSPORTATION PROGRAM COORDINATION AND MANAGEMENT

3A. REGIONAL TRANSPORTATION COORDINATION AND MANAGEMENT

This element provides for overall coordination and management required of the regional transportation planning program. Ongoing coordination includes holding regular RTC Board and Regional Transportation Advisory Committee (RTAC) meetings. It also provides for bi-state coordination with Metro to discuss and address both transportation and land use issues of bi-state significance. In addition, this Coordination and Management work element provides for public participation activities as well as the fulfillment of federal and state requirements.

a.1 Program Coordination and Management: Work Element Objectives and Activities:

- Coordinate, manage and administer the regional transportation planning program.
- Organize meetings and develop meeting packets, agenda, minutes, and reports/presentations for the RTC Board, Regional Transportation Advisory Committee (RTAC), Bi-state Coordination Committee, Skamania County Transportation Policy Committee and Klickitat County Transportation Policy Committee.
- Report to the Board and promote RTC Board interests on key transportation issues. These may include Federal Transportation Act implementation and reauthorization, livability, performance measures, legislation and planning regulations, and funding programs.
- Participate on statewide transportation committees and advisory boards such as the Statewide MPO/RTPO Coordinating Committee.
- Provide leadership, coordination and represent RTC Board positions on policy and technical issues at Committee meetings within the Portland-Vancouver region. Specifically, the key committees include: C-TRAN Board, Metro's Joint Policy Advisory Committee on Transportation (JPACT), Metro's Transportation Policy Alternatives Committee (TPAC) and the Bi-State Coordination Committee.
- Coordinate with the Washington State legislative delegation and with the Washington State congressional delegation on regional and bi-state transportation issues. Members of the Washington State legislative delegation from this region are currently ex-officio, non-voting, members of the RTC Board of Directors.
- Represent RTC's interests when working with organizations such as: the Greater Vancouver Chamber of Commerce, the Columbia River Economic Development Council, and the Washington State Transit Association.
- Coordinate with WSDOT on development and implementation of statewide transportation plans such as the Washington Transportation Plan (WTP).
- Address the transportation needs of the elderly, low income and people with disabilities as part of the transportation planning program. An update to the Human Services Transportation Plan (HSTP) for the RTC region was adopted in November 2014 and will again be updated in 2018. RTC will continue to coordinate with the Human Services Council and other stakeholders on issues related to human services transportation needs. Also, RTC will continue to work with Clark County and stakeholders on implementing transportation recommendations of Clark County's Aging Readiness Task Force (Clark County report, adopted February 2012) and

subsequent work of Cark County's Commission on Aging. RTC staff will also work with local planning partners and stakeholders as part of the Accessible Transportation Coalition Initiative (ATCI).

- Coordinate with WSDOT and the state Department of Health as part of the Active Community Environments (ACE) program. RTC will continue to work with local partners and stakeholders on pedestrian and bicycle needs and will continue to represent RTC at monthly meetings of the Clark Communities Bicycle and Pedestrian Advisory Committee. RTC staff will continue to collaborate with statewide ACE stakeholders and participate in meetings of the SW Washington Healthy Living Collaborative. ACE stakeholders include the state Departments of Health, Transportation, and Commerce as well as other Regional Transportation Planning Organizations and local health departments. RTC will work with local partners to review policies and suggest projects to improve non-motorized transportation modes in the region.
- Coordinate regional transportation plans with local transportation plans and projects.
- Coordinate with the Growth Management Act (GMA) planning process. The latest update to the Clark County Comprehensive Growth Management Plan was adopted in June 2016. RTC is required under state law to review and certify the transportation elements of local comprehensive plans to ensure they conform to the requirements of the Growth Management Act and are consistent with the RTP. A Certification Process Guide and accompanying checklist adopted by the RTC Board in March 2016 guides this process.
- Consult with, communicate with, and outreach to tribes with interests in the 3-county region regarding transportation issues.
- Work with environmental resource agencies to ensure a coordinated approach to environmental issues as they relate to transportation and to facilitate early environmental decisions in the planning process. Resource agencies include the State Historic Preservation Office and local jurisdictions' environmental departments.
- When requested, represent the MPO at Environmental Impact Statement (EIS) scoping meetings relating to transportation projects and plans.
- Implement the current federal transportation act, Fixing America's Surface Transportation Act (FAST). Also, monitor new legislative activities as they relate to regional transportation planning requirements and provide comments if requested.
- Participate in training opportunities including transportation webinars and workshops.
- Prepare RTC's annual budget and indirect cost proposal.
- Ensure that the MPO/RTPO computer system is upgraded when necessary to include new hardware and software to allow for the regional transportation planning program to be carried out efficiently. Provide computer training opportunities for MPO/RTPO staff.
- Continue the Bi-State Memorandum of Understanding between Metro and RTC, both acting as Metropolitan Planning Organizations in the Portland metropolitan region but in two separate states; Oregon and Washington.
- Coordinate with Metro's regional growth forecasting activities and in regional travel forecasting model development and enhancement.
- Continue to address bi-state transportation strategies and participate in any bi-state transportation studies.
- Liaison with Metro and Oregon Department of Environmental Quality on air quality planning issues.

- Conduct all regional transportation planning activities, carried out by RTC and its staff, in compliance with the Hatch Act that restricts the political activity of individuals principally employed by state, county or municipal agencies who work in connection with programs financed in whole or in part by federal loans or grants.

(a.2.) Program Coordination and Management: FY 2019 Tasks and Products

- Meeting minutes and presentation materials. (Ongoing)
- Year 2019 Budget and Indirect Cost Proposal. (Fall 2018)
- Use the updated funding formula for allocation of PL funds among MPOs as agreed upon by WSDOT and statewide MPOs.
- Continued consultation with the Tribes with interest in the region.

(b.1.) Bi-State Coordination Committee: Work Element Objectives and Activities

- RTC and Metro jointly staffs the Bi-State Coordination Committee which serves as the communication forum to address transportation and land use issues of bi-state significance. In 2004 a new charter was adopted for the Bi-State Coordination Committee. Since that time, the Bi-State Coordination Committee has been charged with addressing transportation issues of bi-state significance as well as transportation-related land use issues of bi-state significance that impact economic development, environmental, and environmental justice issues. The Committee's discussions and recommendations are advisory to RTC, the Joint Policy Advisory Committee on Transportation (JPACT), and Metro on issues of bi-state transportation significance. On issues of bi-state land use and economic significance, the Committee's advisory recommendations are to the appropriate local and regional governments. There continues to be bi-state interest in Portland/Vancouver population and employment forecasts, transportation plans, freight mobility, and priority projects for federal consideration. The two existing interstate highways now serve business, commercial, freight and personal travel needs, including around 60,000 daily commuters from Clark County to Portland. As part of the Keep Oregon Moving legislation (HB 2017), the Oregon Transportation Commission established a Portland Region Value Pricing Policy Advisory Committee to guide ODOT throughout the value pricing feasibility analysis. Value Pricing is likely to command continued bi-state attention in FY 2019. BNSF rail lines also cross the Columbia river between the two states.

(b.2.) Bi-State Coordination Committee: FY 2019 Tasks and Products

- Meeting materials for the Bi-State Coordination Committee produced by RTC in partnership with Metro. (As needed)
- Coordination with and participation in Metro's regional transportation planning process. (Ongoing)

(c.1.) Public Participation: Work Element Objectives and Activities

- Increase public awareness of and provide information on regional and transportation issues. The federal transportation act requires that public outreach include visualization techniques including web site content, maps and graphics.
- Involve and inform all sectors of the public, including the traditionally under-served and under-represented, in development of regional transportation plans, programs and projects.

Incorporate public participation at every stage of the planning process and actively recruit public input and consider public comment during the development of the Regional Transportation Plan and metropolitan Transportation Improvement Program.

- Annually review the Public Participation Plan (PPP), last updated in November 2016, to ensure the effectiveness of RTC's public participation process and update the Plan as necessary. When changes are made to the PPP, RTC will follow the procedures outlined in federal Metropolitan Planning guidelines.
- Hold public outreach activities that may include meetings relating to the RTP and regional TIP, in coordination with outreach events and activities hosted by local jurisdictions and WSDOT Southwest Region, WSDOT Headquarters and C-TRAN. Also, conduct public participation efforts for special projects and planning studies led by RTC tailored to the specific project or plan.
- Continue to update the RTC web site (http://www.rtc.wa.gov) which allows public access to monthly RTC Board agenda materials as well as information on planning studies being developed by RTC. The website allows public access to RTC's regularly updated traffic count database as well as RTC published reports. Links are also provided to other transportation agencies and local jurisdictions.
- Participate in the public participation programs for transportation projects of the local jurisdictions of Clark.
- Communicate with local media.
- Maintain a mailing list of interested citizens, agencies, and businesses.
- Ensure that the general public is kept informed of developments in transportation plans for the region.
- Respond to requests from various groups, agencies and organizations to provide information and give presentations on regional transportation topics. These requests provide an important opportunity to gain public input and discussion on a variety of transportation issues.
- Support Identity Clark County's efforts to raise awareness and solicit feedback from the public on transportation issues. Identity Clark County is a private, non-profit organization focused on Clark County's community and economic development.

(c.2.) Public Participation: FY 2019 Tasks and Products

- Participate in public outreach activities related to regional transportation planning programs and projects. (Ongoing)
- Document RTC's public participation activities in the annual UPWP report. (Ongoing)
- Media communication through press releases and conversations as well as through regular updates to RTC's website on significant issues and outcomes relating to the regional transportation planning process. Media outlets include local newspapers, radio and television stations. (Ongoing)
- Report on evaluation of the Public Participation Process for effectiveness focusing on methods and tools used.
- Respond to public records requests.

(d.1.) Federal Compliance: Work Element Objectives and Activities

- Comply with federal laws that require development of a Regional Transportation Plan,

Transportation Improvement Program, development of a Unified Planning Work Program and Congestion Management Process. The current federal Transportation Act, is Fixing America's Surface Transportation Act (FAST), enacted in 2015.

- Develop and adopt an annual UPWP that describes transportation planning activities to be carried out in the Washington portion of the Portland Vancouver metropolitan area. The UPWP identifies the key policy decisions for the year and provides the framework for RTC planning, programming, and coordinating activities. A UPWP Annual Report is also published.
- Self-certify that RTC's regional transportation planning program meets the requirements of federal law.
- Participate in the federal MPO certification process held every four years to ensure the metropolitan planning process is being effectively conducted by RTC and Metro, the two MPOs in the Portland-Vancouver region. An MPO planning certification review was carried out in the region in January/February 2017. Corrective actions and recommendations resulting from RTC's MPO certification review are being addressed following the January 2017 review.
- Ensure that required Memoranda of Understanding or Memorandum of Agreement are in place and are regularly reviewed for currency. Currently, MOAs/MOUs are in place between:
    - RTC, WSDOT and C-TRAN
    - RTC and the air quality agency Southwest Clean Air Agency, and
    - RTC and Metro.
- Comply with Section 504 of the Rehabilitation Act of 1973/Americans with Disabilities Act (ADA) of 1990. By the end of FY 2018, RTC has a designated employee to serve as RTC's coordinator for Section 504 and ADA matters, will periodically conduct an ADA self-evaluation identifying access barriers and method and timeline to remove barriers, and has a Section 504/ADA nondiscrimination notice posted internally and externally for employees' and the public's information.
- Gather data, analyze data and assist C-TRAN and local jurisdictions in implementing the federal Americans with Disabilities Act (ADA, 1990). The Act requires that mobility needs of persons with disabilities be comprehensively addressed. C-TRAN published the C-TRAN ADA Paratransit Service Plan in January 1997 and in 1997 achieved full compliance with ADA requirements.
- Report annually on Title VI activities. The Title VI Plan was first adopted by the RTC Board of Directors in November 2002 (Resolution 11-02-21). FTA Circular 4702.1B outlines reporting requirements and procedures for transit agencies and MPOs to comply with Title VI of the Civil Rights Act of 1964. RTC and C-TRAN work cooperatively to provide the necessary Title VI documentation, certification and updates.
- Compliance with related regulations to Title VI, such as the President's Executive Order 12898 (1994) on Environmental Justice and regulations related to Limited English Proficiency (LEP). RTC will work to ensure that Title VI, environmental justice and LEP issues are addressed throughout the transportation planning program and project development phases. Beginning with the transportation planning process, consideration is given to identify and address where programs, policies and activities may have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- Continue to review Clean Air Act Amendments conformity regulations as they relate to regional transportation planning activities and the State Implementation Plan (SIP). Participate in SIP development process led by the Washington State Department of Ecology (DOE), as appropriate. Coordinate with Southwest Clean Air Agency (SWCAA) on air quality plans and seek to implement transportation strategies to promote reductions in mobile source emissions that will help to maintain clean air standards.
- Address environmental issues at the earliest opportunity in the transportation planning process. Participate in scoping meetings for National Environmental Policy Act (NEPA) process. RTC will address environmental mitigation in Plan documents, developed in consultation with Federal, State and Tribal wildlife, land management, and regulatory agencies. As part of the metropolitan transportation planning process, RTC will consult, as appropriate, with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. Consultation may address local and State conservation plans or maps, and inventories of natural or historic resources, as available.

(d.2.) Federal Compliance: FY 2019 Tasks and Products

- Update MPO self-certification documentation including a certification statement in the regional Transportation Improvement Program (TIP) to self-certify that the regional transportation planning process meets federal laws. (late summer/early fall 2018)
- Address any corrective actions and recommendations resulting from the quadrennial federal certification of RTC as MPO for the Clark County region. (spring 2017 onward)
- Adopt the FY 2020 UPWP, prepare an annual report on the FY 2018 UPWP and, if needed, provide amendments to the FY 2019 UPWP. (FY 2018 Annual Report to be published by September 30, 2018 per UPWP guidance and MPO Agreement GCB 1771. The FY 2020 UPWP will be developed in Winter 2018/19 and UPWP amendments on an as-needed basis). Monthly UPWP progress reports with elements and sub-tasks described will be submitted to WSDOT.
- Conduct data analyses and produce maps as support documentation for Title VI, LEP and Environmental Justice (Executive Order 12898) programs. RTC completes updates to its Title VI report as data and information warrants. RTC also commits to assist member jurisdictions in complying with ADA requirements. (Ongoing)

Relationship to Other Work Elements: Regional Transportation Program Coordination & Management

Regional transportation coordination activities are vital to the success of the regional transportation planning program and relate to all UPWP work elements. The UPWP represents a coordinated program that responds to regional transportation planning needs.

FY 2019 Funding: Regional Transportation Program Coordination & Management

FY 2019 Revenues:	**$**
• Federal FHWA PL	$126,138
• Federal FTA	$39,785
• Federal STBG	$73,500
• State RTPO	$32,875
• Other Local Funds	$13,020
• MPO Funds	$30,905
	$316,223

FY 2019 Expenses:	**$**
• RTC	$316,223
	$316,223

Federal $ are matched by State and local MPO Funds. *Minimum required match:* *$37,367*

4. TRANSPORTATION PLANNING ACTIVITIES OF STATE AND LOCAL AGENCIES

Federal legislation requires that all regionally significant transportation planning studies to be undertaken in the region are included in the MPO's UPWP regardless of the funding source or agencies conducting the activities. Section 4 provides a description of identified planning studies and their relationship to the MPO's planning process. The MPO/RTPO, WSDOT, C-TRAN and local jurisdictions coordinate to develop the transportation planning work program.

4A. WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION

The Washington State Department of Transportation (WSDOT) Southwest Region consists of Clark, Cowlitz, Klickitat, Lewis, Pacific, Skamania, and Wahkiakum counties. In total, these seven counties make up an area of 8,895 square miles in Southwest Washington. WSDOT Southwest Region planning office works directly with 3 tribes, 7 counties, 31 cities, 4 transit authorities, 14 airports, 16 ports, 2 Metropolitan Planning Organizations (MPOs) and 2 Regional Transportation Planning Organizations (RTPOs), and multimodal stakeholders on a myriad of transportation issues.

WSDOT Strategic Plan – Results WSDOT

In 2014 WSDOT updated its strategic plan to underpin the agency's commitment to the Governor's Results Washington initiative. **Results WSDOT**, the agency's strategic plan, has six policy goals:

- Goal 1: STRATEGIC INVESTMENTS - Effectively manage system assets and multimodal investments on corridors to enhance economic vitality.
- Goal 2: MODAL INTEGRATION - Optimize existing system capacity through better interconnectivity of all transportation modes.
- Goal 3: ENVIRONMENTAL STEWARDSHIP - Promote sustainable practices to reduce greenhouse gas emissions and protect natural habitat and water quality.
- Goal 4: ORGANIZATIONAL STRENGTH - Support a culture of multi-disciplinary teams, innovation and people development through training, continuous improvement and Lean efforts.
- Goal 5: COMMUNITY ENGAGEMENT - Strengthen partnerships to increase credibility drive priorities and inform decision making.
- Goal 6: SMART TECHNOLOGY - Improve information system efficiency to users and enhance service delivery by expanding the use of technology.

WSDOT Southwest Region planning staff provides functions that support Results WSDOT, along with state and federal transportation planning requirements in the coordination of planning, modeling, data collection and analysis, and programming activities with RTC. When serving on RTC committees, the Southwest Region planning office will look for opportunities to incorporate Results WSDOT into the discussions and decision-making.

FY 2017/18 Work Program Highlights

WSDOT Southwest Region planning office performs several transportation planning and external coordination activities. The activities included below represent multimodal planning strategies

within Results WSDOT that focus on transportation planning; they are not inclusive of all WSDOT projects and programs.

Planning and Administration

- Development Review and Growth Management Act Enhanced Collaboration.
  - Coordinate with regional planning staff (RTC) and with cities and counties early in the development and update of comprehensive land use plans, transportation plans and capital facilities plans to comply with Growth Management Act requirements as well as federal and state regulations.
  - Review and comment on development proposals including the negotiation of developer impacts mitigation measures on the state transportation system.
  - Coordinate access management.
  - Conduct environmental assessments (SEPA/NEPA) reviews and mitigation negotiation.
  - Work with communities and other partners to promote WSDOT's vision of a sustainable and integrated multimodal transportation system by utilizing all available capacity on the system and leveraging our limited resources.
  - Review comprehensive plan updates and amendments, sub-area plans, planned actions, development regulations, etc.
  - Serve as a member of the Statewide Plan Review Work Group.
- Governor's Executive Order 14-04, Washington Carbon Pollution Reduction and Clean Energy Action.
  - Work with RTC to support the update of local comprehensive plans to produce travel and land-use patterns that maximize efficiency in movement of goods and people, and reduce costs and greenhouse gas emissions.
- Practical Solutions.
  - Apply practical solutions approaches in all planning efforts with RTC. Practical Solutions is a two-part strategy that includes least cost planning and practical design, to enable more flexible and sustainable transportation investment decisions.
  - Serve as a member of the Practical Planning Work Group.
- Grant Development and Application Review.
  - Prepare and/or assist with the preparation of applications for various grant programs. Activities might include providing technical assistance on reviewing applications for regional processes.

Regional and Local Planning Coordination

Regional and local planning coordination occurs at both the policy level interacting with local elected officials, legislators, citizens groups, or policy committees; and the technical level with local staffs, technical committees, and citizens groups.

- Assist in the development of regional plans. Help assure consistency among jurisdictions and between state, regional, and local plans.
- Participate with partners on transportation studies, issues, and other coordination related to the bi-state regional transportation system.
- Incorporate tribal concerns and needs into planning studies and transportation plans.
- Coordinate with RTC, tribes, local jurisdictions, ports, transit agencies and state and federal partners in the update and development of various region transportation plans including the Washington Transportation Plan, WSDOT Highway System Plan, along with various other region transportation study efforts.
- Conduct enhanced collaboration efforts with local governments through continuation of the comprehensive plan review workgroup; analysis of policy issue and proposed resolution; development of tools, training, guidance and information resources; and periodic reporting on enhanced collaboration efforts.
- Provide transportation planning technical assistance to regional and local agencies.
- Serve as a technical representative on local planning study teams.
- Serve on METRO TPAC and technical advisory committees (TACs) throughout the region.
- Participate in tribal/WSDOT regional, policy and TAC meetings. In this capacity, participate in regional planning activities, grant proposal review/selection, Regional Transportation Plan development, public transportation coordination/development, Coordinated Human Services Transportation Plan development, and other activities.
- Ensure tribal transportation goals and projects are included in WSDOT and regional transportation efforts.

Multimodal Transportation Planning

Work with regional and local agencies in the development and update of the following processes.

- Statewide Transportation Modal Plans
  - The Highway System Plan
  - The Active Transportation Plan
  - The Washington State Freight System Plan
- Transportation Demand Management (TDM)
- Corridor Analysis Planning (Corridor Sketches)
  - Corridor Plans and Studies
- Develop current and future travel conditions and recommendations consistent with Results WSDOT, Practical Design and Integrated Scoping. Integrated Scoping is a process for transforming corridor sketch strategies into integrated, multimodal, programmed solutions.
- Scenic Byway Coordination.

- Active Transportation Planning.
  - Assist with facility planning, coordination, and development.
  - Complete Streets and modal integration.
- Public Outreach/Public Involvement Processes.
  - Develop, coordinate and/or implement public information/involvement opportunities by conducting surveys, attending public meetings and hearings, and serving on advisory committees.

Data Collection/Analysis

The majority of the region transportation planning activities require some degree of research and/or data collection including demographics, travel behavior, and/or transportation system performance.

- Collect and analyze modal (pedestrian, bicycle, passenger, and freight) data for respective corridor studies/sketches, partner agencies, and others.
- Continue to maintain and collect pedestrian data. Collaborate with partner agencies in the use of WSDOT counters in local data collection.
- Analyze the collected/researched transportation data for use in transportation planning studies.
- Exchange information on current conditions and travel forecasts for a variety of transportation modes, with emphasis on cost-effective and efficient multimodal solutions.
- In coordination with RTC and local partners contribute to developing and implementing plans and activities related to Travel Demand Management/Transportation System Management.

Travel Demand Model

- Participate in the development of the Portland/Vancouver Metropolitan Travel Demand Model.
- Collaborate with RTC and local governments to ensure data collection supports their multimodal planning and modeling efforts.
- Participate in the development of a statewide multimodal travel demand model to help us better understand where people live, how they travel around the state, and how future projects and land use changes may affect it.
- Assist area engineering and traffic offices with the model review, development, and maintenance for select state facilities.
- Continue to assist with model's post-processing of future year volumes.

4B. C-TRAN

C-TRAN has identified the following planning elements for the Unified Planning Work Program (UPWP) FY 2019 (July 2018 through June 2019):

Regional Participation

C-TRAN will coordinate its transit planning with other transportation planning activities in the region in collaboration with the Southwest Washington Regional Transportation Council (RTC). C-TRAN will continue to work with the RTC, WSDOT, city, county and regional agencies, and other transit providers on multi-modal planning, air quality analysis, land use and transportation system planning. C-TRAN will also participate in various regional and bi-state (Washington and Oregon) transportation-related committees and task forces.

Regional Transportation Planning

C-TRAN will be involved in the following regional planning and engineering studies during FY 2019:

1. Regional Transportation Plan and Transportation Improvement Program: C-TRAN will participate in developing revised and updated regional plans and programs.
2. Human Services Transportation Plan: C-TRAN will coordinate and collaborate with regional partners to plan for and deliver human services transportation.
3. Continue participation in regional Transportation System Management and Operations planning led by RTC.
4. C-TRAN will lead efforts to conduct a Before-and-After study of the Bus on Shoulder (BOS) Pilot Project.

Transit Planning

In 2016, C-TRAN completed its first major update to its 20-Year Transit Development Plan, C-TRAN 2030. Several new projects were identified that will be advanced over the next two years (2018-19):

- Mill Plain Blvd has been selected as the next Bus Rapid Transit (BRT) corridor. A Locally Preferred Alternative is in development and should be identified by late 2018.
- AOM Facility Master Plan is in development to identify current and future needs and incorporate them into C-TRAN's expanded site. The plan will include a new Administration-Operations building as well as incorporating electric charging stations for all-electric buses.
- Eastside Park-and-Ride study to identify future needs.
- Mobility On Demand (MOD) – using emerging technologies and innovative partnerships to improve efficiency and responsiveness, in lower ridership areas.
- Expand service by up to 24,000 hours annually.

Short-Range Planning: Following public review and input in 2018, the published 2018-2023 Transit Development Plan will identify capital and operational changes planned over the six-year period.

Service Performance Analysis and Evaluation: C-TRAN will continue ongoing service evaluation and planning to ensure service that meets the agency mission to provide safe, efficient, reliable mobility options. This will include all modes: fixed route, demand response, and vanpool.

Park & Ride Planning and Engineering: C-TRAN will continue to work with local jurisdictions, RTC, and WSDOT to plan for future transit facilities. A new study will look at opportunities in the eastern portion of C-TRAN's service area.

Fisher's Landing Park & Ride Development Plan: C-TRAN has begun work on a transit-oriented development (TOD) feasibility study. The project will determine if the site is economically viable and will give a range of possibilities that could just utilize the remaining undeveloped property or redevelop the entire site while maintaining existing transit functionality.

Technology Improvements:

- Traffic Signal Priority (TSP): C-TRAN, is currently working with other government agencies to expand TSP within Clark County where bus service can benefit. With established corridors on Fourth Plain Blvd and Mill Plain Blvd, the next project in development will be Hwy 99. This new corridor should be operational by fall 2018. Hwy 99 involves both Clark County and the City of Vancouver as regional partners. Future efforts will be an expansion within the Mill Plain corridor to equip additional intersections as well as on 164th Ave to the Fisher's Landing Transit Center.
- Vancouver Area Smart Trek (VAST): C-TRAN will continue working with regional partners on the planning and implementation of Intelligent Transportation System technology. Projects in 2018 include video sharing, data sharing through PSU Portal, and a fiber-sharing plan.
- Improved Bus Technology: C-TRAN will make available real-time GTFS data in 2018. This will allow developers to create apps that give updates to users on bus locations and deviations to scheduled arrivals. C-TRAN is also working on a regional trip planner in coordination with TriMet and Portland Streetcar.

4C. CLARK COUNTY AND OTHER LOCAL JURISDICTIONS

CLARK COUNTY has identified the following transportation planning activities:

- Revise the Clark County Capital Facilities Plan to account for needed improvements that are necessary for our growing population.
- Update the Transportation Improvement Program (TIP).
- Implement the transportation element of the 2016 Comprehensive Plan including the 20-year Capital Facilities Plan.
- Ongoing refinement of the road standards, including the following components: cross sections, alternate road design standards, cross-circulation policies, and land-use friendly road standards.

- Work with the Clark Communities Bicycle & Pedestrian Advisory Committee and other stakeholders to update and implement the Bicycle & Pedestrian Plan.
- Develop neighborhood and sub-area circulation plans for selected unincorporated urban areas in order to reduce direct access to classified arterials and to serve local trips on the local street system.
- Identify the localized critical links and intersection improvements necessary to remove urban holding in selected areas of the Vancouver UGA.
- Amend the Arterial Atlas as directed by the Clark County Councilors through the docket process.
- Continue regional coordination with RTC.
- Implement the transportation and land use recommendations in the Clark County Aging Readiness Plan.
- Research implementation options for the county to use permeable pavement.
- Develop a Complete Streets policy and ordinance.
- Coordinate transportation planning efforts with various jurisdictions, elected officials and the public.
- Unite Intelligent Transportation System (ITS) with transportation planning to provide traffic data in future plans.

CITY OF VANCOUVER has identified the following planning studies and other activities:

Citywide Planning / Studies

- Street Funding Strategy – new revenue and program evaluation.
- 2018-2023 Transportation Improvement Program.
- ADA Program Transition Planning: Sidewalk Management Program.
- Citywide Transportation System Safety Analysis.
- Coordination with WSDOT on Practical Solutions training.
- Mill Plain Central Subarea Plan
- Vancouver City Center Vision Plan Update
- Initiate process to update 2004 Transportation System Plan:
    - Update transportation standard plans and details
    - Update Bicycle Plan
    - Develop Freight Plan.
- Transportation Standards Code updates (Title 11)
    - Annual docket updates.
- Complete Streets Policy implementation and program development

Focus Area Studies/Implementation

- I-5 Corridor River Crossing, City of Vancouver coordination and project involvement.

- Mill Plain Bus Rapid Transit coordination and project involvement
- Implement Lower Grand Employment Area 100% street and stormwater quality design and street standards.
- Implement Fourth Plain Forward Pedestrian Access and Safety Project
- McLoughlin Blvd Complete Street project
- Improvements to Pedestrian and Bicycle Crossings at Arterials.
- Westside Bicycle Mobility Improvement Project
- Jefferson/Kauffman/13th Alignment Improvements.
- BRT/Great Street sidewalk connection project – (CMAQ grant).
- Implement adopted Evergreen Corridor Strategy.
- Port of Vancouver to I-5 Mill Plain Corridor Improvements- coordination with Port of Vancouver, WSDOT and neighborhoods.
- Mill Plain / I-5 Intersection improvements conceptual design- coordination with WSDOT, Port of Vancouver and C-TRAN
- SE 1st Street Multi-Modal and LID Improvements Planning and Design.
- NE 137th Avenue Corridor Improvement project
- 32nd Avenue Extension Feasibility Study.
- Evaluation of freight corridors.
- Collaboration with Vancouver Bike & Pedestrian Stakeholder Group to implement City's Complete Streets Policy.

Capital Improvement Program – Projects and Planning Support

- NE 18th Street Corridor implementation.
- 2017-18 NTSA Traffic Calming Program – project planning and implementation.
- Transportation System Management and Operations/ITS planning and coordination.
    - Vancouver Area Smart Trek (VAST) coordination.
    - Transit Signal Priority system development coordination with RTC/VAST, Clark County and C-TRAN.

Transportation Demand Management

- Administration of countywide Commute Trip Reduction Program and provision of direct services to affected CTR employers.
- Destination Downtown TDM planning and implementation.

CITY OF CAMAS has identified the following:

- Transportation Improvement Program (TIP) – Annual Update.
- Citywide Transportation Plan and Capital Improvements Plan.
- Transportation Impact Fee (TIF) Update.
- SR-500 & Lake Road Intersection Improvements Plan.

CITY OF WASHOUGAL has identified the following studies:

- Continue coordination with WSDOT, the Port of Camas/Washougal and RTC on plans for SR-14 improvements east of Union and grade separation over BNSF Mainline.
- The city will be hiring a consultant to go through an alternatives analysis for the grade separation at the BNSF rail line which will include selecting a preferred alternative, 30% design on the selected alternative and NEPA. This will start in the 1st quarter of 2018 and run until the 3rd quarter of 2019. This project will utilize federal funding.
- Seek grant funding for SR-14 Access Improvement and grade separation over BNSF mainline.
- Seek grant funding for Phase 2 of the Columbia River Waterfront Trail.
- The city will construct this project at beginning in the 4th quarter of 2018 and be completed by June of 2019. There will only be state and local funds in the project.
- Complete revisions to the City-s Transportation Capital Facilities Plan as necessary to remain consistent with recent updates to the City's Comprehensive Plan.
- The city is updating its Transportation Plan to add in the 27th/Index project to make it TIF eligible as well as a pathway along 27th from Main Street to Captain William Clark Park. There will be TIB and local funds in these projects.
- Seek funding for the 32nd Street/Stiles Road Improvements.
- Transportation Improvement Program (TIP) – Annual Update.
- Complete an ADA Transition Plan.

CITY OF BATTLE GROUND has identified the following planning studies:

- Complete annual revision to the City's Six-Year Transportation Improvement Program.
- Work with WSDOT on planning for access points onto SR-503 within Battle Ground.
- Implement the pathways element that is part of Battle Ground's Parks Plan Update.
- Complete an ADA Transition Plan.

CITY OF RIDGEFIELD has identified the following planning studies:

- Complete annual revision to the City's Six-Year Transportation Improvement Program.
- Complete revisions to the City's Transportation Capital Facilities Plan as necessary to remain consistent with yearly updates to the City's Comprehensive Plan.
- Complete reviews of the City's Transportation Impact Fee Program as necessary to support revisions to the Transportation Capital Facilities Plan.
- Continue to work with WSDOT on the improvement of the SR-501 corridor and future access points onto the highway, including the remaining intersection improvement project (roundabouts) at the intersection of SR 501 with 51st Avenue.
- Work with the Port of Ridgefield on construction of the extension of Pioneer Street over the BNSF railroad tracks into the Port.
- Continue work to plan for the extension of Pioneer Street east from 65th Avenue to Union Ridge Parkway.
- Begin more detailed planning of the 219th Street extension west of I-5 in conjunction with the County and WSDOT.

CITY OF LA CENTER has identified the following planning studies:

- Complete annual revision to the city's Six-Year Transportation Improvement Plan.
- Finalize the Transportation Element for the Comprehensive Plan Update, including update to the 20-year Capital Facilities Plan in conjunction with the TIF program.
- Update the Park and Trails Master Plan.
- Continue developing Sign Reflectivity Program.

PORT OF VANCOUVER:

- Complete Fourth Plain Frontage Improvements at Port Building 2501.
- Partner with City of Vancouver to develop feasibility study and seek grant funding for extension of 32nd Avenue to 78th Street.
- Advance development of Terminal 1 waterfront blocks for commercial and residential uses.
- Prepare for bidding and construction of Port of Vancouver Multi-Use Trail Segment 2 in 2018.

PORT OF RIDGEFIELD:

- The Port of Ridgefield is working with the City of Ridgefield to complete and implement the City of Ridgefield Downtown Circulation Plan for the Ridgefield downtown area and waterfront.
- Complete planning and initiate construction of the Pioneer Street extension over the BNSF railroad tracks into the port in coordination with the City of Ridgefield.

PORT OF CAMAS-WASHOUGAL:

- I-5 Improvements: Support improvements to I-5 Corridor that facilitates freight mobility.
- Continue coordination with WSDOT and RTC on plans for SR 14 improvements east of Union.
- Assist in seeking grant funding, possibly from FHWA program sources, for the City of Washougal's Phase 2 continuation of the waterfront trail along the Columbia River.
- Seek and support funding for upgrade to the Port's rail spur into the industrial park.

TRANSPORTATION ACRONYMS

Acronym	DESCRIPTION
AA	Alternatives Analysis
ACE	Active Community Environments
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ATM	Active Traffic Management
ADT	Average Daily Traffic
APC	Automatic Passenger Counter
APP	Arterial Preservation Program (TIB funding program)
APTS	Advanced Public Transportation System
AQMA	Air Quality Maintenance Area
ASA	Automated Stop Announcement
ATCI	Accessible Transportation Coalition Initiative
ATIS	Advanced Traveler Information System
ATMS	Advanced Transportation Management System
AVL	Automated Vehicle Location
AVO	Average Vehicle Occupancy
AWDT	Average Weekday Traffic
BACT	Best Available Control Technology
BAT	Business Access and Transit
BEA	Bureau of Economic Analysis
BLS	U.S. Bureau of Labor Statistics (federal)
BMS	Bridge Management Systems
BNSF	Burlington Northern Santa Fe
BOCC	Board of County Councilors
BOS	Bus on Shoulder
BPAC	Clark Communities Bicycle and Pedestrian Advisory Committee
BRAC	Bridge Replacement Advisory Committee (Washington State)
BRRP	Bridge Replacement and Rehabilitation Program
BRT	Bus Rapid Transit

Acronym	DESCRIPTION
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAC	Citizens' Advisory Committee
CAD	Computer Aided Dispatch
CAPP	County Arterial Preservation Program *(a CRAB program)*
CAV	Connected and Autonomous Vehicles
CBD	Central Business District
CCAC	C-TRAN's Citizens Advisory Committee
CCTA	Clark County Transportation Alliance
CDBG	Community Development Block Grant
CE	Categorical Exclusion
CERB	Community Economic Revitalization Board
CETAS	Collaborative Environmental and Transportation Agreement for Streamlining (Oregon)
CEVP	Cost Estimating Validation Process
CFP	Capital Facilities Plan
CFP	Community Framework Plan
CFR	Code of Federal Regulations
CIC	Communications Infrastructure Committee
CIPP	Capital Improvement and Preservation Program
CMAQ	Congestion Mitigation/Air Quality
CMM	Congestion Management Monitoring
CMP	Congestion Management Process
CMS	Congestion Management System
CO	Carbon Monoxide
CRAB	County Road Administration Board
CRC	I-5 Columbia River Crossing Project
CREDC	Columbia River Economic Development Council
CRESA	Clark Regional Emergency Services Agency
CRFC	Critical Rural Freight Corridor
CTPP	Census Transportation Planning Products
CTR	Commute Trip Reduction
C-TRAN	Clark County Public Transportation Benefit Area Authority

Acronym	DESCRIPTION
CUFC	Critical Urban Freight Corridor
CV	Connected Vehicles
CVISN	Commercial Vehicle Information Systems and Networks
CY	Calendar Year
DBE	Disadvantaged Business Enterprise
DEIS	Draft Environmental Impact Statement
DEQ	Oregon State Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DNS	Determination of Non-Significance
DOE	Washington State Department of Ecology
DOH	Washington State Department of Health
DOL	Washington State Department of Licensing
DOT	Department of Transportation
DS	Determination of Significance
DSHS	Washington Department of Social and Health Services
DTA	Dynamic Traffic Assignment
EA	Environmental Assessment
ECO	Employee Commute Options
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMME	EMME is an interactive graphic transportation planning computer software package distributed by INRO Consultants, Montreal, Canada.
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ETC	Employer Transportation Coordinator
ETC	Electronic Toll Collection
FACT	Southwest Freight and Commerce Task Force
FAF	Freight Analysis Framework
FAST	Fixing America's Surface Transportation Act (2015) – *current Federal Transportation Act*
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year

Acronym	DESCRIPTION
FGTS	Freight and Goods Transportation System
FHWA	Federal Highways Administration
FMS	Freeway Management System
FMSIB	Freight Mobility Strategic Investment Board
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year
FFY	Federal Fiscal Year
GIS	Geographic Information System
GHG	Greenhouse Gas
GMA	Growth Management Act
GPAC	Grants Program Advisory Committee
GTEC	Growth and Transportation Efficiency Center
GTF	Governors' Task Force
HB	House Bill
HBRRP	Highway Bridge Replacement and Rehabilitation Program (federal)
HC	Hydrocarbons
HCM	Highway Capacity Manual
HCT	High Capacity Transportation
HLC	Southwest Washington Healthy Living Collaborative
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HSC	Human Services Council
HSIP	Highway Safety Improvement Program (federal)
HSP	Highway System Plan
HSS	Highways of Statewide Significance
HSTP	Human Services Transportation Plan
HUA	Highway Urban Area
HUD	Department of Housing and Urban Development
HSP	Highway System Plan
ICM	Integrated Corridor Management

Acronym	DESCRIPTION
IM	Incident Management
I/M	Inspection/Maintenance
IMS	Intermodal Management System
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITS	Intelligent Transportation System
IV/HS	Intelligent Vehicle/Highway System
JARC	Job Access and Reverse Commute
JOPS	Joint Operations Policy Statement (between WSP, WSDOT and Washington Fire Chief)
JPACT	Joint Policy Advisory Committee on Transportation (Metro)
LAS	Labor Area Summary
LCDC	Oregon Land Conservation and Development Commission
LCP	Least Cost Planning
LEP	Limited English Proficiency
LMC	Lane Miles of Congestion
LMP	Limited Maintenance Plan *(relating to air quality)*
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
M&O	Management and Operations
MAB	Metropolitan Area Boundary
MAP-21	Moving Ahead for Progress in the 21st Century (2012)
MCEDD	Mid-Columbia Economic Development District
MDNS	Mitigated Determination of Non-significance
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emissions Simulator
MP	Maintenance Plan (air quality)
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program (see TIP)
MTP	Metropolitan Transportation Plan (see RTP)
MUTCD	Manual on Uniform Traffic Control Devices

Acronym	DESCRIPTION
MVET	Motor Vehicle Excise Tax
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHFN	National Highway Freight Network
NHFP	National Highway Freight Program
NHPP	National Highway Performance Program (federal funding program)
NHS	National Highway System
NHTS	National Household Travel Survey
NMFN	National Multimodal Freight Network
NOX	Nitrogen Oxides
NPMRDS	National Performance Management Research Data Set
NPRM	Notice of Proposed Rule Making
NTOC	National Transportation Operations Coalition
NTS	Neighborhood Traffic Safety
O/D	Origin/Destination
ODOT	Oregon Department of Transportation
OFM	Washington Office of Financial Management
OMSC	Oregon Modeling Steering Committee
OTP	Oregon Transportation Plan
P&M	Preservation and Maintenance
P&R	Park and Ride
PBP	Performance Based Planning
PBPP	Performance Based Planning and Programming
PCE	Passenger Car Equivalents
PE	Preliminary Engineering
PE/DEIS	Preliminary Engineering/Draft Environmental Impact Statement
PEA	Planning Emphasis Area
PFN	Primary Freight Network
PHF	Peak Hour Factor
PHFS	Primary Highway Freight System
PIA	Portland International Airport
PM10	Particulate Matter

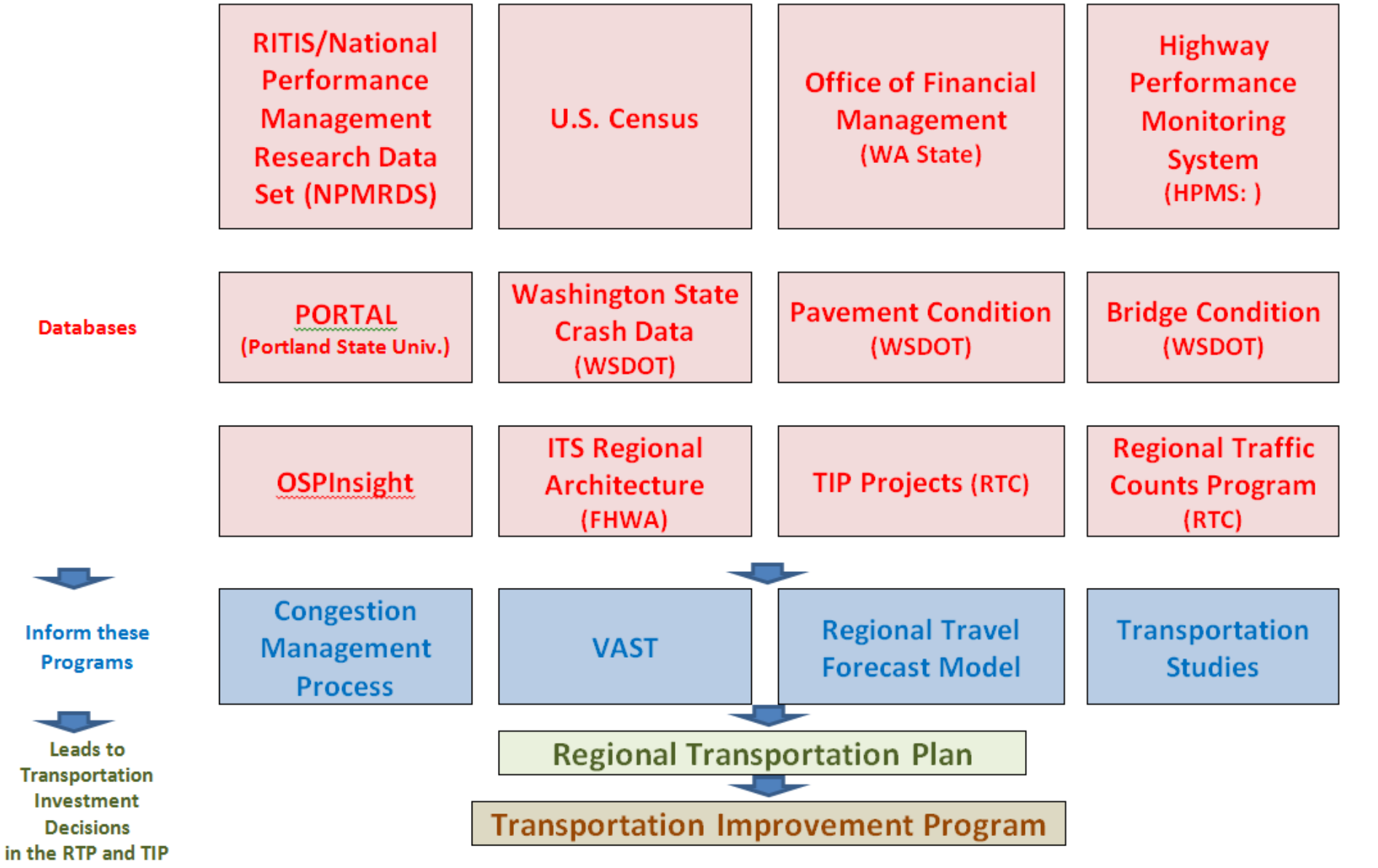
Acronym	DESCRIPTION
PM2.5	Particulate Matter (fine)
PMS	Pavement Management System
PMT	Project Management Team
POD	Pedestrian Oriented Development
PORTAL	Portland Transportation Archive Listing
PPP	Public Participation Process or Public Participation Plan
PSMP	Pedestrian, Safety & Mobility Program
PTBA	Public Transportation Benefit Area
PTMS	Public Transportation Management System
PVMATS	Portland-Vancouver Metropolitan Area Transportation Study
PWTF	Public Works Trust Fund
RAP	Rural Arterial Program *(a CRAB program)*
RCW	Revised Code of Washington
REET	Real Estate Excise Tax
RID	Road Improvement District
RJT	Route Jurisdiction Transfer
ROD	Record of Decision
ROW or RW	Right of Way
RTAC	Regional Transportation Advisory Committee
RTC	Southwest Washington Regional Transportation Council
RTFM	Regional Travel Forecasting Model
RTP	Regional Transportation Plan
RCTO	Regional Concept for Transportation Operations
RTPO	Regional Transportation Planning Organization
RUGGO	Regional Urban Growth Goals and Objectives
RWIS	Road Weather Information Systems
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
SAGES	Statewide Advisory Group for Environmental Stewardship
SCAP	Small City Arterial Program (TIB funding program)
SCPP	Small City Preservation Program (TIB funding program)
SC-SP	Small City Sidewalk Program (TIB funding program)
SEIS	Supplemental Environmental Impact Statement

Acronym	DESCRIPTION
SEPA	State Environmental Policy Act
SGR	State of Good Repair
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SMTP	Statewide Multimodal Transportation Plan
SOV	Single Occupant Vehicle
SP	Sidewalk Program (urban TIB funding program)
SPUI	Single Point Urban Interchange
SR-	State Route
SRTS	Safe Routes to School
STIP	State Transportation Improvement Program
STBG	Surface Transportation Block Grant
SWCAA	Southwest Clean Air Agency
TAM	Transit Asset Management
TAMP	Transportation Asset Management Plan
TAP (or TA)	Transportation Alternatives Program (federal)
TAZ	Transportation Analysis Zone
TCM's	Transportation Control Measures
TDM	Transportation Demand Management
TDP	Transit Development Plan or Transit Development Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TIA	Transportation Improvement Account
TIB	Transportation Improvement Board
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIMACS	Transportation Information, Management, and Control System
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMC	Traffic Management Center
TMIP	Transportation Model Improvement Program
TMS	Transportation Management Systems
TMUG	Transportation Model Users' Group
TMZ	Transportation Management Zone

Acronym	DESCRIPTION
TOD	Transit Oriented Development
TPA	Transportation Partnership Account *(2005 Washington state revenue package)*
TPAC	Transportation Policy Alternatives Committee (Metro)
TPM	Transportation Performance Management
TPMS	Transportation Performance Measurement System
TPR	Transportation Planning Rule (Oregon)
Transims	Transportation Simulations
TSMO	Transportation System Management and Operations
Tri-Met	Tri-county Metropolitan Transportation District
TRO	Traffic Relief Options
TSM	Transportation System Management
TSMO	Transportation System Management and Operations
TSP	Transportation System Plan
TSP	Transit Signal Priority
UAB	Urban Area Boundary
UAP	Urban Arterial Program (TIB funding program)
UDBE	Underutilized Disadvantaged Business Enterprise
UGA	Urban Growth Area
UGB	Urban Growth Boundary
ULB	Useful Life Benchmark
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
USP or SP	Urban Sidewalk Program (TIB funding program)
UZA	Urbanized Area
V/C	Volume to Capacity
VAST	Vancouver Area Smart Trek
VHD	Vehicle Hours of Delay
VMS	Variable Message Signs
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
VOT	Value of Time
WAC	Washington Administrative Code

Acronym	DESCRIPTION
WSDOT	Washington State Department of Transportation
WSP	Washington State Patrol
WTP	Washington Transportation Plan
WVFA	West Vancouver Freight Access

Primary Transportation Databases Used in RTC's Metropolitan Transportation Planning Program in FY 2019



DESCRIPTIONS OF THE PRIMARY TRANSPORTATION DATABASES USED IN RTC'S METROPOLITAN TRANSPORTATION PLANNING PROGRAM IN FY 2019

RITIS/National Performance Management Research Data Set (NPMRDS): An FHWA-acquired national data set of average travel times on the National Highway System for use by FHWA, State Departments of Transportation and Metropolitan Planning Organizations for performance management activities.

U.S. Census Bureau: Population, characteristics, economic and social data from national to census tract and block level acquired through the decennial census carried out in the United States as well as the ongoing American Community Survey.

Washington Office of Financial Management: Population and demographics for Washington State, counties and cities used for state revenue distribution and Washington State Growth Management Act planning purposes.

Highway Performance Monitoring System (HPMS): is a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of the nation's highways. WSDOT collects and compiles HPMS data for submittal to the FHWA.

PORTAL is a single bi-state (Oregon-Washington) transportation data archive that makes use of partner agencies' existing transportation data sources they use for monitoring and management of their respective transportation systems including:

- 20-second loop detector/radar data from freeways (for count, speed and vehicle length)
- Arterial radar data (traffic counts, vehicle length)
- Bluetooth devices (travel time, travel time reliability)
- ATMS.now central signal system software (arrival on green data at intersections)
- Road weather information system *RWIS* stations (weather data) transit data
- Automatic Passenger Counters (ons/offs at stops, segment loads, on-time performance)

Washington State Crash Data (WSDOT): WSDOT collects, processes, analyzes and reports crash data for over 7,000 miles of state routes and over 80,000 miles of public roads. The data is used to support development of Target Zero - Washington State's Strategic Highway Safety Plan. The crash data also supports Washington State and Metropolitan Planning Organizations' work to meet requirements of the U.S. DOT performance based planning requirements in monitoring and reporting on PM1 safety performance measures.

Pavement Condition Database: WSDOT conducts a pavement management system. The pavement monitoring program supports WSDOT's monitoring of pavement performance measures and target setting to meet the national requirements pertaining to PM2, pavement condition reporting, as set by the federal transportation act, MAP-21 and continued under the current federal transportation act, the FAST Act. The pavement condition data is also used by Metropolitan Planning Organizations to meet federal requirements for performance based planning, monitoring, target setting and programming.

Bridge Condition Database: WSDOT conducts a bridge management system. The bridge monitoring program supports WSDOT's monitoring of bridge condition performance measures and target setting to meet the national requirements pertaining to PM2, bridge condition reporting, as set by the federal

transportation act, MAP-21 and continued under the current federal transportation act, the FAST Act. The bridge condition data is also used by Metropolitan Planning Organizations to meet federal requirements for performance based planning, monitoring, target setting and programming.

OSPInsight: is a GIS based shared database used to track the use, availability, and connectivity of fiber and switches, routers and other associated ITS infrastructure. It helps agencies better manage their own fiber and facilitates sharing of fiber assets between agencies.

The **ITS Regional Architecture Database**: a FHWA ITS requirement (Federal regulation 23 CFR 940). Contains data, information and functional flows of various ITS system to ensure that they are interoperable.

TIP Projects Database: RTC maintains a database of TIP completed projects selected for funding since 2010 through RTC's Transportation Improvement Program (TIP).

Regional Traffic Counts Program: RTC maintains a Regional Traffic Count Program database for Clark County, Washington. This database currently contains 622 intersections and their traffic count and turn movement volumes, including scans of the raw data in many cases. There are also supplemental pages of data such as a list of the highest volume intersections, statistics on Columbia River bridge crossings, and congestion management information. The data is used by RTC staff for regional travel forecast model base year model calibration, is used by local jurisdictions for planning and grant application purposes and is used by the private sector including transportation consultants and real estate professionals.

FY 2019 SUMMARY OF EXPENDITURES AND REVENUES: RTC

Note: Numbers may not add due to rounding

SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL
FY 2019 UNIFIED PLANNING WORK PROGRAM - SUMMARY OF REVENUES/EXPENDITURES BY FUNDING SOURCE

		Work Element	NOTES	1. FY 2019 Federal FHWA PL	1. FY 2019 Federal FTA	1. Federal STBG	State RTPO	2. FTA through WSDOT	WSDOT (O-D)	WSDOT (Ops)	Other Local Funds	RTC Local Funds	RTC TOTAL
I	**REGIONAL TRANSPORTATION PLANNING PROGRAM**												
	A	Regional Transportation Plan		120,132	37,890	70,000	31,310				12,400	29,434	301,165
	B	Transportation Improvement Program		48,053	15,156	28,000	12,524				4,960	11,773	120,466
	C	Congestion Management Process		48,053	15,156	28,000	12,524				4,960	11,773	120,466
	D	Vancouver Area Smart Trek Program				236,000						36,832	272,832
	E	Skamania and Klickitat RTPO					45,310						45,310
	F	Human Services Transportation Plan Update						20,000					20,000
	G	Urban Freeway Corridors Operations Study	3.			215,000			300,000	150,000	35,000		700,000
		Sub-Total		216,238	68,202	577,000	101,668	20,000	300,000	150,000	57,320	89,813	1,580,240
II	**DATA MANAGEMENT, TRAVEL FORECASTING, AIR QUALITY AND TECHNICAL SERVICES**												
	A	Reg. Transp. Data, Forecast, AQ & Tech. Services		258,283	81,464	150,500	67,316	0	0	0	26,660	63,282	647,505
		Sub-Total		258,283	81,464	150,500	67,316	0	0	0	26,660	63,282	647,505
III	**TRANSPORTATION PROGRAM COORDINATION AND MANAGEMENT**												
	A	Reg. Transp. Program Coord. & Management		126,138	39,785	73,500	32,875	0	0	0	13,020	30,905	316,223
		TOTALS		**600,659**	**189,450**	**801,000**	**201,859**	**20,000**	**300,000**	**150,000**	**97,000**	**184,000**	**2,543,968**

4/24/2018

NOTES:

1. Minimum local match for federal PL, FTA and STBG funds is provided from State RTPO, MPO and local funds. Local match for FHWA, FTA and STBG funds is assumed at 13.5%.
2. FY 2018 to 2019 program element. $20,000 is the FY 2019 estimated balance of funds available from the total $40,000 budget.
3. The UFCOS Study is a 2-year Study, FY 2018-FY2019. Amounts are for the full 2-year Study including $600,000 for consultant assistance.

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

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