



2016 – 2017 Unified Planning Work Program

Transportation Planning in the
Portland/Vancouver Metropolitan Area

DRAFT – March 18, 2016

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

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

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PORTLAND METROPOLITAN AREA UNIFIED PLANNING WORK PROGRAM 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 2016-17 (from July 1, 2016 to June 30, 2017).

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 25 cities and three counties. It is Metro's responsibility to meet the requirements of Moving Ahead for Progress in the 21st Century (MAP-21), 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 Unified Planning Work Program (UPWP) is developed annually, 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 tasks, listings of various activities, and a summary of the amount and source of state and federal funds to be used for planning activities. The UPWP is developed by Metro with input from local governments, TriMet, 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 involved in regional transportation planning activities for the fiscal year of July 1, 2016 through June 30, 2017.

I. 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 on the program structure and reforms of the prior federal Transportation Act, MAP-21, which created streamlined and performance-based surface transportation program.

MAP-21 requires 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 MAP-21 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).¹ For FY 2016-2017, 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.

¹ Accessed at www.fhwa.dot.gov/planning/processes/metropolitan/mpo/fy_2015/index.cfm on February 20, 2015.

- **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 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 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 the public to participate 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.

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 TIP period.
- A financial plan that demonstrates how the TIP can be implemented.
- Descriptions of each project in the TIP.

E. Transportation Management Area (TMA)

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. Also, at least every 4 years, the MPO must also self-certify concurrent with submittal of an adopted TIP.

F. Air Quality Conformity Process

In areas, such as the Portland metropolitan region, with maintenance plans that identify how the region will continue to meet federal standards for air quality, transportation plans and programs are required to be in conformance with the transportation provisions of the state's air quality plan (the State Implementation Plan or SIP), which demonstrates how the State will meet the standards.

II. METRO OVERVIEW

Metro is now entering its 36 year as the MPO for the Portland metropolitan area. Under the requirements of the MAP-21, 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). Maps for these boundaries can be found starting on page X.

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, updates to the 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 areas located within attainment areas that are required to be subject to ozone regulations, although recent changes mean that air quality conformity no longer is required to be performed for ozone in this region. The region continues to complete air quality conformity for carbon monoxide for projects within the AQMA boundary.

2012 Federal Certification Review

Every four years, Metro as the region's Metropolitan Planning Organization, undergoes certification review with FTA and FHWA to ensure compliance with federal transportation planning requirements. The last quadrennial certification review occurred in October 2012. Metro received a small number of corrective actions that have been addressed through various narratives in the 2016-17 UPWP activities:

- The 2014 RTP Update work program includes the disposition of public comments and will demonstrate the impacts to performance measures like air quality with different funding decisions.
- The 2015-18 MTIP will demonstrate how public comments were addressed and hold at least one public hearing. Additionally, the funding tables will be updated to reflect that all estimated project costs and programmed revenues are in year of expenditure dollars.

The Public Engagement guide was updated to meet new federal requirements in November 2013.

- Regional Transportation Plan – The 2014 RTP Update work program includes the disposition of public comments and will demonstrate the impacts to performance measures like air quality with different funding decisions.
- Metropolitan Transportation Improvement Program – The 2015-18 MTIP will demonstrate how public comments were addressed and hold at least one public hearing. Additionally, the funding tables will be updated to reflect that all estimated project costs and programmed revenues are in year of expenditure dollars.
- Public Involvement - The Public Engagement Guide was updated to meet new federal requirements in November 2013.

The details for addressing these corrective actions are included in the UPWP narratives for each of the above projects. A more detailed response to certification review with a specific work program is also included in the annual self-certification documentation. The table of corrective actions and corresponding actions taken starts on page x.

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 is 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 approve the 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 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 MAP-21, 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 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 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

MAP-21, 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) for the period 2015-2018;
- 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 under the Making a Great Place umbrella – including the Regional Transportation Plan, Freight Plan, TSMO Plan, Regional Transit Plan and supporting updates to our Public Involvement Policy and Title VI Plan – have already been completed. Implementation of these new plans, policies and public involvement procedures began in FY 2013-14, will continue in FY 2016-17 and is reflected in the respective work programs for these ongoing projects.

As these projects move into an implementation phase in the coming fiscal year, a significant part of Metro's staffing resources will be directed to continuing work on the task of developing and testing a series of climate change scenarios pursuant to Oregon House Bill 2001. This work is also reflected in the Climate Smart Communities work program. The 2014 RTP update was adopted in July 2014. The 2015-18 MTIP was also adopted in July 2014.

A Congestion Management Process (CMP) was adopted as part of 2014 RTP in July 2014. It can be found in Chapter 5, pages 29-31. 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 Management and Coordination/Grants Management 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 the fall of 2012 and is covered under this work program.

GLOSSARY OF RESOURCE FUNDING TYPES

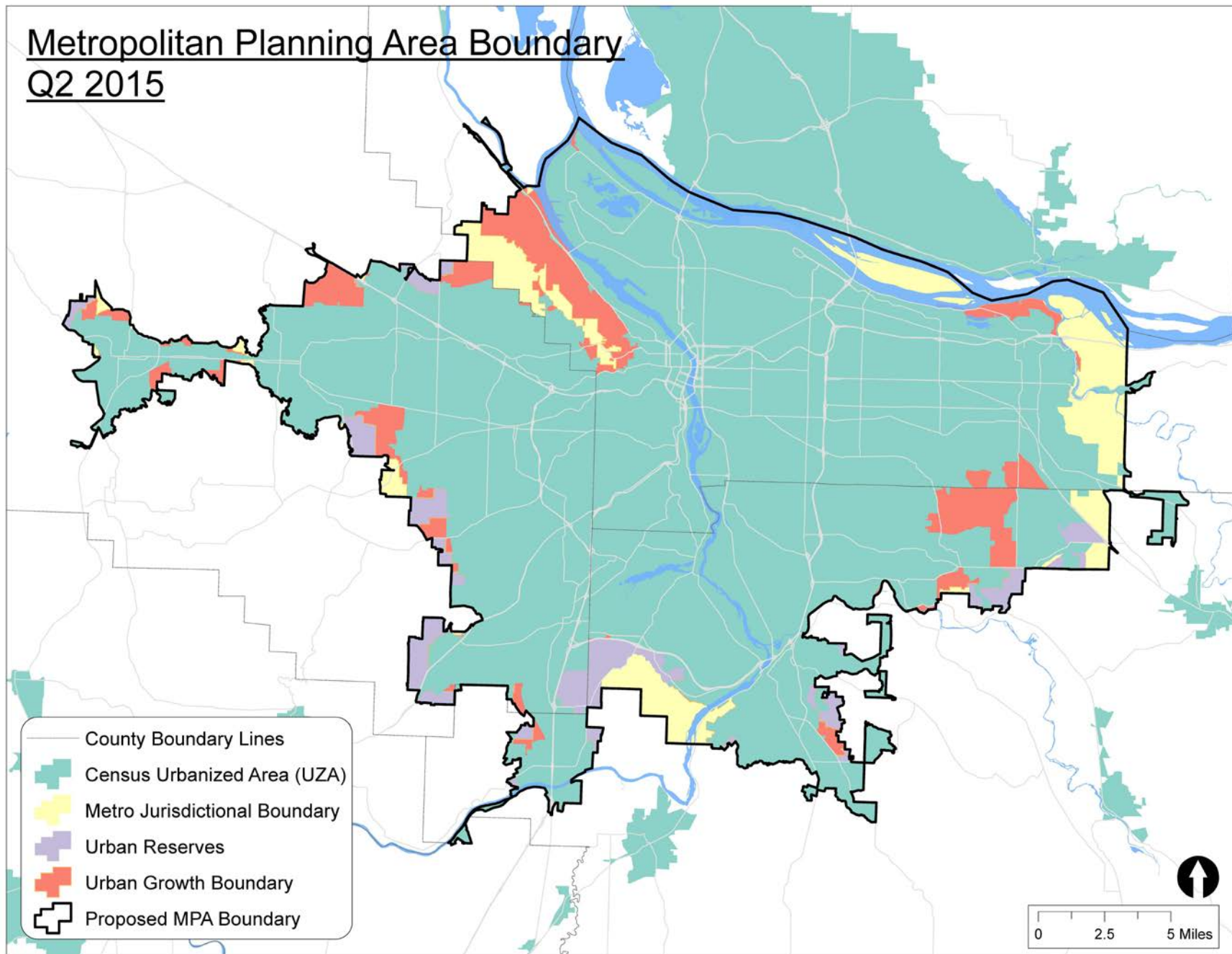
- PL – Federal FHWA transportation planning funds allocated to Metropolitan Planning Organizations (MPO's).
- STP – Federal Surface Transportation Program transportation funds allocated to urban areas with populations larger than 200,000. Part of Metro's regional flexible fund allocation (RFFA) to Metro 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

- This section describes the management process to define the types of adjustments that require an amendment to the UPWP and which of these can be accomplished as administrative actions by staff versus legislative action by TPAC, JPACT and the Metro Council.
- Formal amendments to the UPWP require approval of JPACT and the Metro Council and 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 UPWP project costs. 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 any of 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.
- Administrative amendments will be reported to ODOT and TriMet as they occur. TPAC will receive notification quarterly as with administrative MTIP amendments
- All UPWP amendments require USDOT approval.

Resolution place holder

Metropolitan Planning Area Boundary Q2 2015



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.

Actions completed included for reference

Table 1: Corrective Actions, Recommendations and Commendations Summary 2013 -- Metro

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Study Area Organizational Structure (23 CFR 450.310)	None	There are no significant changes in the area warranting organizational structure changes since the previous (2008) review.	N/A
Metropolitan Planning Area Boundaries (23 CFR 450.312)	None	Based on results from the 2010 U.S. Census, Metro will make boundary adjustments with its next RTP update, scheduled for 2014.	Metro adjusted the MPA boundary as part of the 2014 RTP update.
Agreements and Contracts (23 CFR 450.314)	None	<p>The MPO and its partners are commended for having updated intergovernmental agreements for performing various planning activities.</p> <p>Metro, ODOT, TriMet, RTC, and SMART updated their intergovernmental agreements in 2008 and 2012; the agreements do not warrant any updates at this time.</p>	The 2015-16 UPWP has one MOU update between RTC and Metro.
Unified Planning Work Program (23 CFR 450.308)	None	<p>The next UPWP should include tasks to address corrective actions and recommendations in this report.</p> <p>The status of previous work, planned work, budget and details of tangible products for each planning activity in Metro's UPWP serves as a model UPWP for other MPOs.</p>	The 2015-16 UPWP includes a corrective actions and recommendations table with corresponding comments and actions taken.

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Transportation Planning Process (23 CFR 450.318)	None	<p>Metro is commended for its strong collaborative relationship with transit, local, and state agencies.</p> <p>Metro should continue to develop the mechanism for making safety objectives an operational part of the planning process.</p> <p>Metro has state-of-the-art modeling capabilities in both multi-modal travel forecasts and greenhouse gas (GHG) emissions.</p>	<p>Metro will continue to work on making safety objectives, an operational component of the planning process, through updating the plan's policy framework and performance targets. This emphasis will guide investment priorities.</p>
Congestion Management Process (CMP) (23 CFR 450.316)		<p>As outlined in the CMP, Metro should complete a system performance report.</p> <p>The next RTP update, scheduled for fall 2014, must clearly show the linkages between the outcomes of the CMP performance measures and projects and strategies selected in the RTP.</p>	<p>Metro is currently updating the Mobility Atlas version 2.0. Scheduled for completion in calendar year 2015.</p> <p>Several CMP performance measures are addressed in the 2014 RTP chapter 5 pgs 29-30.</p> <p>During RTP project solicitation process Metro provides guidance to jurisdictions and agencies regarding project priorities. This includes outcomes of the CMP performance measures.</p>

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Regional Transportation Plan (RTP) 23 CFR 450.322)	<p>Next RTP update (June 2014) must include the disposition of all public comments.</p> <p>The next RTP should provide more clarity between the fiscally constrained system and 2035 investment strategy.</p>	<p>Metro is commended for the RTP that includes a unique concept of 24 “mobility corridors”. The mobility corridor concept helps decision makers understand existing system conditions on major transportation networks, and identify needs to prioritize investments.</p> <p>The RTP include discussion of any funding deficit, that may arise, if a planned strategy to be pursued or implemented does not materialize, by an outline of the impacts to the plan and air quality conformity.</p>	<p>The 2014 RTP update addressed two corrective actions identified in the 2012 Federal certification review: A summary of all public comments received and how they were addressed is published in the plan’s technical appendix.</p> <p>Metro produced a 2014 RTP Public Comment Report that includes the full text of every comment received. All RTP documents are available to download here: ftp://ftp.oregonmetro.gov/pub/tran/2014RTP/</p> <p>In addition, Chapter 3 of the plan includes an updated discussion on the differences between the fiscally constrained system of investments and a larger system of investments recommended to meet statewide planning goals if additional revenues become available.</p>

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Metropolitan Transportation Improvement Plan (23 CFR 450.322)	<p>The MTIP must include the disposition of all public comments.</p> <p>Document the formal public meeting conducted to invite public comments.</p> <p>The MTIP shall clearly identify estimated total project cost and YOE costs in the program table.</p>	<p>Metro's MTIP clearly lays out the policy framework, fiscal constraint by year, project prioritization process and its consideration of the congestion management process and amendment process.</p>	<p>The 2015-18 MTIP Appendix A.1, which acts as the public comment report for this MTIP, includes the Public Comment Summary and Responses as well as the stakeholder and community engagement process. The 2015-18 Appendix A.2 contains the text of comments received. Additionally, 2015-18 MTIP Appendix B.1 contains public comments and responses for the 2016-18 Regional Flexible Funds Allocation process, funds from which are reported by Metro in the 2015-18 MTIP.</p> <p>The 2015-18 MTIP is scheduled for adoption by the Metro Council July 31st 2014. The document will update the programming table labels and the description of the "estimated total project cost" to clearly articulate that the project cost estimates are provided in Year of Expenditure dollars (YOE \$).</p>
Financial Planning and Fiscal Constraint (23 CFR 450.322)	None	None	N/A

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Public Outreach (23 CFR 450.316)	The Public Participation Plan (PPP) must be updated to fully meet all Federal planning requirements, including but not limited to the disposition of comments and an updated schedule, by December 31, 2013.	<p>It is recommended that Metro include a prominent, easy-to-use link on the website for the public to submit comments and complaints.</p> <p>Metro should address how frequently the PPP will be updated.</p> <p>Metro should identify how the MPO coordinates with Tribes and public land agencies.</p>	In November 2013, Metro updated its public engagement guidelines to ensure everyone has opportunities to learn about and participate in decision-making. The 2013 Public Engagement Guide documents Metro's updated practices for public engagement and consultation with government and community partners. In accordance with the Federal Highway Administration, 23 CFR 450.316(a), this guide serves as Metro's documented, " <i>process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.</i> " The draft Public Engagement Guide underwent a 45-day public comment period from August 12 to September 30, 2013. This engagement and comment period had the primary goal of engaging a diverse and representative group of stakeholders from across the region and gathering substantive public comment and feedback to help shape, inform and improve Metro's engagement policies.

Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
Air Quality and Conformity (40 CFR 93)	None	Metro does a commendable job in completing air quality conformity findings.	N/A
Self-Certification (23 CFR 450.334)	None	Provide follow-up status of corrective actions and recommendations from the USDOT review in future self-certifications.	No corrective actions for most recent self-certification.

<p>Title VI (23 CFR 200.9)</p>	<p>None</p>	<p>Metro needs to expand the discussion in the Title VI Plan to include how it will analyze impacts of its planning decisions on Environmental Justice populations.</p> <p>Metro is commended for its efforts to develop and implement procedures for addressing Limited English Proficiency in its planning activities (i.e., “<i>Vamonos</i>” project).</p> <p>Metro should provide easier online access to its Title VI Plan and complaint procedures.</p> <p>Metro’s Title VI Plan should document data collection procedures used to capture public participation (by race, ethnicity) in order to measure Title VI program effectiveness.</p>	<p>Metro expanded Title VI discussion by conducting both a qualitative and quantitative civil rights assessment for the 2014 RTP and 2015-18 MTIP. This provided multiple opportunities on how planning decisions impact Environmental Justice populations.</p> <p>Metro redeveloped its website in 2014. This redevelopment includes easier access to the Title VI plan and complaint procedures.</p> <p>Metro gathers demographic and statistical data on race and ethnicity, minority groups, income level, language spoken, and sex of participants and beneficiaries of federally funded programs through census data, public opinion surveys and voluntary self-identification on questionnaires. These procedures are documented in the Title VI Program for Metro and accessible on the Metro website.</p>
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Topic	Corrective Actions	Recommendations/Commendations	Actions Taken
ITS and Management & Operations	None	<p>The Regional TSMO Plan, adopted as a supporting document to the 2035 RTP, emphasizes the effective and efficient management of the transportation system, recognizes ITS investments, and has received programmatic allocation of MTIP funds. It is an excellent integration of M&O, ITS and CMP.</p> <p>The MPO should take a lead role in ensuring that ITS projects funded with Federal funds are compatible with Regional ITS architecture.</p>	Metro is in the early stages of updating the Regional ITS Architecture and a Regional ITS Communications Master Plan. Both projects are scheduled for completion in calendar year 2015.

I. TRANSPORTATION PLANNING

Regional Transportation Plan

Description:

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 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 multimodal transportation system that is safe, healthy, accessible, reliable, equitable 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-, medium-, and long-term investment priorities and actions to address those needs, and local, regional, state and federal transportation funds the region expects to have available to make those investments a reality.

The RTP is maintained and updated regularly to ensure continued compliance with State and Federal requirements and to address 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 approved by the U.S. Department of Transportation and for the region to remain eligible to receive federal transportation dollars. Updates to the RTP are 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 implementation of the RTP.

Objectives:

- 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. (ONGOING)
- Provide inclusive and meaningful opportunities for interested members of the public, transportation providers, historically underrepresented communities (e.g., communities of color, low-income persons, and persons with limited ability to speak English) 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 a Regional Transit Strategy and update the RTP vision, goals and performance targets, RTP Finance Strategy, Regional Transportation Safety Plan, Regional Freight Strategy, and transportation design policies and best practices. (ONGOING)
- Coordinate with other related UPWP planning activities, including the Title VI Environmental Justice, Public Involvement, Regional Transit Strategy, SMART Transit Master Plan, Regional Travel Options Program, Regional Freight Program and related studies, Regional Mobility Program, Metropolitan Economic Value

Atlas, Designing Livable Streets, Southwest Corridor and Powell-Division Transit Development refinement plan activities 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, and SW Regional Transportation Council to support on-going RTP monitoring, the region's Congestion Management Process (CMP), 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 plan. Materials can be downloaded at: www.oregonmetro.gov/rtp. (ONGOING)
- **Provided ongoing elderly and disabled transportation planning support.** (ONGOING)
- **Prepared a Regional Snapshot on Transportation** to document trends affecting travel in the region, and began documenting current system conditions and current plan performance. (APRIL 2016)
- **Prepared an updated population and job growth forecast for the year 2040 in coordination with cities and counties** to support RTP modeling activities. (SPRING 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 and MAP-21, 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 will be addressed through the 2018 RTP update. (JULY 2014)
- **Developed and adopted the first Regional Active Transportation Plan (ATP).** The ATP identified recommendations related to transportation safety and design that will be 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 will be further refined and addressed as part of updating the Regional Transportation Safety Plan through the 2018 RTP update. (MAY 2012)

Methodology:

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 current update began in May 2015. Engagement and outreach activities, planning work and policy discussions to support development of an updated plan will continue in 2016 and 2017, with final adoption of the 2018 RTP and air quality conformity determination scheduled for September 2018. Pending approval by JPACT and the Metro Council, the final plan and air quality conformity determination will be sent to FTA and FHWA to begin their review and certification process in December 2018.

Updates to the plan must 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, the 2014 RTP update, the 2014 Regional Active Transportation Plan, the 2014 Climate Smart Strategy, the 2014 Economic Impacts of Congestion Study, Metro's Equity Strategy, TriMet's Service Enhancement Plans, SMART Master Plan.

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 implementation and related performance measurement requirements as well as any recommendations or corrective actions identified in the 2016 Federal Certification Review.

Several UPWP subarea and modal planning activities will be undertaken throughout FY 2016-17 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, Metropolitan Economic Value Atlas & Infrastructure Investment Action Plan, Designing Livable Streets, Transportation System Management and Operations RTO and Regional Mobility programs, Powell/Division Transit Development Plan and Southwest Corridor Plan. Related ODOT Region 1-led UPWP activities that will also inform the 2018 RTP update, including the Facility Bottleneck and Solutions Feasibility Assessment.

This work plan will be accomplished using the following approach:

- **Document key regional trends and challenges, baseline conditions and needs.** Document key regional trends and challenges affecting travel in the region as well as current conditions, current and future regional transportation needs, and potential solutions for all modes of travel and the movement of goods and freight. This work will include a limited update to the Regional Mobility Corridor Atlas to serve as a factual foundation to inform RTP project priorities in support of the Congestion Management Process. This work will also include convening a technical work group of staff from local jurisdictions, transit providers, TREC at Portland State University, environmental justice leaders and other experts to refine and further advance the region's methodology for conducting a transportation equity analysis for the 2018 RTP. This work will continue in FY 16-17.
- **Update shared vision and outcomes-based policy goals, 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 to respond to MAP-21. This work will continue in FY 16-17.
- **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 continue in FY 16-17 and FY 17-18.

- **Update Congestion Management Process (CMP) Reporting.** This work will include a limited update to 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 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 continue in FY 16-17 and FY 17-18.
- **Update RTP Financial Strategy:** 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 and ODOT 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 charges. This work will result in a new financially constrained revenue forecast that meets federal requirements as well as a more aspirational "strategic" revenue forecast that meets state requirements. This work will continue in FY 16-17.
- **Update regional policies and strategies.** Update policy elements of the RTP (Chapter 2) and regional functional plans 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 occur in FY 16-17 and FY 17-18.
- **Update shared investment strategy and action plan.** Update regional strategies for safety, transit, freight, active transportation and management of the transportation system and related near-term, medium-term and long-term investment priorities, actions and partnerships to support implementation. This will include developing recommendations on emerging concepts related to driverless vehicles, disaster resilience and shared mobility. Analysis of the two investment scenarios will also include demonstrating the priorities meet the federal Clean Air Act and the state-mandated greenhouse gas emissions reduction target for light-duty vehicles as well as performing a transportation equity analysis. This work will occur in FY 16-17 and FY 17-18.
- **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 project and refine regional parking policies and tools to better reflect the range of parking management approaches available. This will also include background work to support the greenhouse gas emissions analysis that will be completed for the 2018 RTP update. This work will continue in FY 16-17 and FY 17-18.
- **Update Regional Transportation Safety Strategy.** Continue work to update the Regional Transportation Safety Strategy. 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. This work will occur in FY 16-17.

- **Update Regional Freight Strategy.** Continue work to update the Regional Freight Strategy in coordination with the Regional Freight Program. This work will continue in FY 16-17 and FY 17-18.
- **Develop Regional Transit Strategy.** Continue work to develop a Regional Transit Strategy, including:
 - Collaborate and coordinate with TriMet and SMART to develop a regional transit vision and report on MAP-21 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 transit system expansion policies to inform investment priorities.
 - Provide oversight of contractor deliverables.

This work will continue in FY 16-17 and FY 17-18.

Tangible Products Expected in FY 2016-2017:

- 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 rulemaking participation and implementation**, 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)
- A series of **Regional Leadership Forums** through which the Metro Council convenes joint meetings of JPACT and MPAC and invited business and community leaders to hear from local and national leaders and experts, discuss community input and technical work, and provide policy direction to staff on updating the plan's policies, performance targets, investment priorities, and implementation actions. (FIRST, SECOND AND THIRD QUARTERS)
- **Public engagement and events** to engage stakeholders in thinking about key trends and challenges affecting travel in the region and innovative partnerships and strategies for improving the region's transportation system, consistent with the adopted Public Engagement Plan for the 2018 RTP update. (ONGOING)
- **Baseline/Existing Conditions and Needs Assessment Report** that documents key trends and current systems conditions for all modes of travel and the movement of goods and freight to support the Congestion Management Process. The information will inform identification of current and future regional transportation needs, potential solutions and the project solicitation process for updating investment priorities in the RTP. (SECOND QUARTER)
- **Draft updated RTP vision, goals and RTP performance targets** that address the region's six desired outcomes, RTP goals, and federal planning factors and MAP-21 goal areas. (SECOND QUARTER)
- **Draft updated RTP Financial Strategy** that estimates how much funding will be needed to implement priority investments, as well as operate and maintain the system as a whole, over the life of the plan. (THIRD QUARTER)
- **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 aspirational “strategic” system that fit within revenue projections and demonstrate progress toward achieving the plan’s goals and performance targets. (THIRD QUARTER)

- **Draft updated Regional Transportation Safety Strategy** that defines policies, investments and actions to improve safety for all users of the transportation system. (FOURTH QUARTER)
- **Draft updated RTP financially constrained project list** to refine project costs, scope or timing, and to add or delete projects consistent with the updated draft financial strategy and following policy direction from the Metro Council and JPACT. (FOURTH QUARTER)
- **Draft RTP strategic project list** to refine project costs, scope or timing, and to add or delete projects consistent with the updated draft financial strategy and following policy direction from the Metro Council and JPACT. (FOURTH QUARTER)
- **Reports, memoranda 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 the 2018 RTP update. (ONGOING)
- **Participation in the TriMet-led update to the region’s Coordinated Transportation Plan for Elderly and People with Disabilities (CTP).** (ONGOING)

Entities Responsible for Activity:

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

Other stakeholders:

- | | |
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| <ul style="list-style-type: none"> • 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 and Port of Vancouver • Federal Highway Administration (FHWA) • Federal Transit Administration (FTA) • Environmental Protection Agency (EPA) • Oregon Transportation Commission (OTC) | <ul style="list-style-type: none"> • Land Conservation and Development Commission (LCDC) • Department of Land Conservation and Development (DLCD) • Oregon Department of Environmental Quality (DEQ) • Oregon Health Authority • Other 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 |
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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
*2011-12	\$2,110,058	11.965
*2012-13	\$1,497,674	9.099
*2013-14	\$698,555	3.980
*2014-15	\$1,105,379	3.130
2015-16	\$1,462,908	6.000

**The total budget and FTE comparison for FY 2011-12 and FY 2012-13 includes both the Regional Transportation Planning and Climate Smart Communities work. These two projects have been split into separate narratives for the 2013-15 UPWP.*

FY 2015-16 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$ 335,957	PL	\$ 788,755
Interfund Transfers	\$ 491,422	5303	\$ 253,298
Materials and Services	\$ 78,000	Metro	\$ 63,326
Contingency	\$ 200,000		
TOTAL	\$ 1,105,379	TOTAL	\$ 1,105,379

Full-Time Equivalent Staffing

Regular Full-Time FTE	3.13
TOTAL	3.13

FY 2016-17 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$ 1,033,116	PL	\$ 844,902
Interfund Transfers	\$ 532,330	STP	\$ 395,333
Materials and Services	\$ 31,200	5303	\$ 247,180
Contingency	\$ 100,000	Metro	\$ 209,231
TOTAL	\$ 1,696,646	TOTAL	\$ 1,696,646

Full-Time Equivalent Staffing

Regular Full-Time FTE	8.555
TOTAL	8.555

Regional Transit Strategy

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.

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, and 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.

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)

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. (FALL/WINTER 2016)
- Integrate appropriate Regional Transit Plan investments and strategies in draft 2018 RTP. (2016-2017)

Tangible Products Expected in FY 2016-17:

- Regional Transit Plan Vision (FIRST QUARTER)
- Draft refinements to RTP transit policy, performance measures and System Expansion Policy (SECOND AND THIRD QUARTERS)
- Reports documenting technical analysis and outreach activities. (ONGOING)
- Draft Regional Transit Strategy (FOURTH 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

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	39,443
Interfund Transfers	\$	21,937

Resources:

STP	\$	23,000
Metro	\$	38,379

TOTAL	\$	61,379	TOTAL	\$	61,379
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Full-Time Equivalent Staffing

Regular Full-Time FTE	0.275
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TOTAL	0.275
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FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	54,382
Materials and Services	\$	114,000
Interfund Transfers		26,134

Resources:

STP	\$	72,247
ODOT TGM IF-15 Grant	\$	100,000
Metro	\$	22,269

TOTAL	\$	194,516	TOTAL	\$	194,516
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Full-Time Equivalent Staffing

Regular Full-Time FTE	0.375
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TOTAL	0.375
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Metropolitan Transportation Improvement Program

Description:

The Metropolitan Transportation Improvement Program (MTIP) is a critical tool for implementing monitoring 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. Additionally, the program administers the allocation of urban Surface Transportation Program (STP), Congestion Mitigation/Air Quality (CMAQ) and Transportation Alternatives Program (TAP) funding through the regional flexible fund process. Projects are allocated funding based upon technical and policy considerations that weigh the ability of individual projects to implement federal, state, regional and local goals. Funding for projects in the program are constrained by expected revenue as defined in the Financial Plan.

The MTIP is also subject to federal and state air quality requirements, and a determination is made during each allocation to ensure that the updated MTIP conforms to air quality regulations. 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 significant public-involvement efforts, consistent with Metro's public involvement plan.

The UPWP budget includes contingency funding in anticipation of \$25,000 of Metro general fund for scoping and early implementation of recommendations to improve data administration and reporting on transportation planning and investments. These funds are anticipated to be considered in the Metro budget process but are subject to Metro Council approval.

Objectives:

Manage a cooperative, continuous, and comprehensive process to prioritize projects from the RTP for funding. (ONGOING)

- MTIP: Effectively administer the existing MTIP, including:
- 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)
- Continue to coordinate inter-agency consultation on air quality conformity. Conduct public outreach, reports, and public hearings required as part of the conformity process. (ONGOING)
- Maintain a financial plan to balance project costs with expected revenues. (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)
- Maintain Transtracker database with project programming, amendment, obligation information and revenue information. (ONGOING)
- Implement new MAP-21 requirements of the MTIP and CMAQ funding process as MAP-21 rule making is finalized.

MTIP Update: Allocate the 2019-21 Regional Flexible Funds and prepare for adoption of the 2018- 21 MTIP. The MTIP update may need to address any new requirements of expected federal rule making to implement MAP- 21 legislation. (ONGOING)

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 2015-16 fiscal year included:

- Adoption of the 2018-2021 MTIP Policy Report.
- Adoption of a project charter for the development of the 2018-21 MTIP and coordination with ODOT, TriMet and SMART in the allocation and programming of funding to projects administered by those agencies.
- Completion of the 2015 Obligation Report.
- Administration of the MTIP, including processing of more than two hundred MTIP amendments, project selection, financial plan and scope/schedule adjustments.
- Support of more than 30 locally administered projects in implementing conditions of approval and best design practices.
- Support in administering eleven local project development plans.

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.

Tangible Products Expected in FY 2016-17:

- Adoption of the 2019-21 Regional Flexible Fund allocation (RFFA).
- Adoption of the 2018-21 MTIP.
- Air quality conformity determination for the 2018-21 MTIP.
- Amendments to current MTIP (ONGOING).
- 2015 Obligation Report (DECEMBER 2016).
- Completion of several project development plans (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

Appendix A

For project development planning activities under jurisdiction of the Federal Highway Administration and summarized in the "Corridor Planning and Projects of Regional Significance" section of the UPWP, the following administrative roles and responsibilities apply unless otherwise agreed to in an intergovernmental agreement.

Metro Planning & Development shall:

- Ensure project development planning activity is properly included in the UPWP
- Ensure the scope and budget addresses relevant contingencies of the project development award
- Assign a Project Manager to all project development plans
- Coordinate with ODOT project development manager on the programming of project development funding and assignment of work to ODOT project manager.

Metro Project Manager shall:

- Participate in meetings as necessary for development of plan scope, schedule and budget.
- Organize Metro staff participation in project development planning activities as defined in the scope and budget.
- Include ODOT and local agency project managers on all project related correspondence and meetings.
- Communicate to ODOT project manager:
- Recommendation of approval of the Local Agency's scope, schedule, and budget
- Recommendation of approval of the Consultant scope, schedule, and budget
- Review of tasks/work invoiced for payment to ensure consistency with scope, schedule and budget and provide recommendation of payment based on consistency
- Approval of all amendments/change orders
- Approval of Quarterly Reports as submitted by the local agency project manager

ODOT shall:

- Assign a Project Manager from Local Agency Liaison Section to be lead project manager on all project development plans
- Ensure all project development plans have a consistent administrative process at ODOT

ODOT Project Manager shall:

- Carry-out the project development plans in a process similar to that which already exists for capital projects, with the exception of the following:
- Approve billing invoices upon Metro recommendation and review of eligibility and ODOT contract rules
- Include Metro project manager on all project related correspondence and meetings
- Execute agreement with local agency upon Metro recommendation
- Ensure Metro project manager approves Local Agencies scope, schedule and budget
- Ensure Metro project manager verifies the adequacy of implementing scope, schedule and budget and recommends payment of invoices
- Ensure Metro project manager approves all amendments/change orders
- Ensure Metro project manager receives a copy of Quarterly Report

Local Agency/Product Owner shall:

- Assign a Project Manager
- Enter into an intergovernmental agreement with ODOT for administration of the project

Local Agency/Product Owner Project Manager shall:

- Propose a project scope, schedule and budget consistent with the original application for project funds
- If using consultant services, propose a project scope, schedule and budget for those services and comply with state and federal procurement rules
- Manage consultant services for completion of tasks within scope, schedule, budget and eligible expenses
- Submit invoices for payment (agency and consultant) to Metro and ODOT project managers
- Submit Quarterly reports on time to Metro and ODOT project managers
- Submit change orders to Metro and ODOT project managers
- Include Metro project manager on all project related correspondence and meeting announcements

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
2011-12	\$689,479	4.75
2012-13	\$556,234	3.54
2013-14	\$560,466	3.26
2014-15	\$1,020,003	5.375
2015-16	\$1,086,933	5.6

FY 2015-16 Cost and Funding Sources:

Requirements:

Personal Services	\$	620,497
Interfund Transfers	\$	326,006
Materials and Services	\$	73,500

Resources:

PL	\$	265,300
STP	\$	272,687
5303	\$	335,161
Metro	\$	146,855

TOTAL	\$	1,020,003	TOTAL	\$	1,020,003
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Full-Time Equivalent Staffing

Regular Full-Time FTE	5.375
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TOTAL	5.375
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FY 2016-17 Cost and Funding Sources:

Requirements:

Personal Services	\$	665,731
Interfund Transfers	\$	326,762
Materials and Services	\$	72,500
Contingency	\$	100,000

Resources:

PL	\$	351,653
STP	\$	255,959
5303	\$	425,563
Metro	\$	131,818

TOTAL	\$	1,164,993
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TOTAL	\$	1,164,993
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Full-Time Equivalent Staffing

Regular Full-Time FTE	5.8
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TOTAL	5.8
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Air Quality Program

Description:

The Air Quality Program ensures 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.

The state and federal component of the Air Quality Program is the Air Quality Conformity Determination (AQCD) which is a technical analysis to determine the air quality impacts of the RTP and MTIP. An AQCD determination is made during the update to each MTIP and RTP or when amendments to the MTIP or RTP warrant a re-evaluation of air quality impacts. The AQCD analysis requires special coordination with staff from Oregon Department of Environmental Quality (DEQ) and other regional, county, city and state agencies and is guided by rules set forth in the Portland Area Second 10-Year Maintenance Plan, which is a component of the State Implementation Plan (SIP). The SIP is overseen by DEQ and approved by the U.S. Environmental Protection Agency (EPA). The Portland Area Second 10-Year Maintenance Plan is set to expire in October 2017. When Metro seeks approval of an AQCD the review and approval process are done in consultation with DEQ and EPA, but joint approval is issued by the Federal Highway Administration and Federal Transit Administration.

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

Objectives:

- Continue to implement the provisions set forth by the Portland Area Second 10-Year Maintenance Plan SIP. (ONGOING)
- Serve and continue to coordinate inter-agency consultation on air quality conformity and related issues in the Portland metropolitan region. Conduct public outreach, produce conformity reports, and hold public hearings required as part of the conformity process. (ONGOING)
- Continue to maintain and implement emissions modeling tools for air quality analyses and transportation conformity demonstration purposes. Implement any new updates to emissions modeling tools as they emerge. (ONGOING)
- Ensure near and long-term transportation investments in the region, as identified in the MTIP and RTP, are consistent with Federal air quality rules and regulations. (ONGOING)
- Ensure amendments to near and long-term transportation investments, as identified in the MTIP and the RTP, 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 and transportation conformity. (ONGOING)
- Consult, participate, and prepare, if necessary, any end of SIP or maintenance plan related closeout, per recently issued guidance from EPA.
- 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 2015-16 fiscal year included:

- Metro staff attending EPA Region X transportation conformity workshop and refresher course;
- Working in 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 federal transportation conformity, the AQCD is conducted through an extensive technical analysis where the methodology is reviewed and approved by local, regional, state, and federal partners through an interagency consultation process. The methodology review in interagency consultation includes technical tool selection, investment evaluation, as well as the schedule for technical tasks and public involvement for the AQCD. The AQCD also undergoes a significant public involvement process, which is consistent with Metro's public involvement plan.

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

Tangible Products Expected in FY 2016-17:

- Conduct pre-scoping of air quality conformity determination for the 2018-2021 MTIP and the 2018 RTP. Products may include pre-consultation meeting with FHWA, FTA, EPA, state, and regional partners. (Fall 2016)
- Conduct full interagency consultation with partners for the air quality conformity determination on the 2018-2021 MTIP. (Early 2017)
- Conduct transportation conformity and air quality analysis for the 2018-2021 MTIP. (Spring 2017)
- Develop draft air quality conformity determination and report findings for the 2018-2021 MTIP. (Spring 2017)
- 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)
- If necessary, conduct transportation conformity and air quality analyses on MTIP and RTP amendments to ensure the amendments are consistent with federal air quality regulations. (AS NEEDED)

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)

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2015-16	26,689	0.15

FY 2015-16 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	17,151	PL	26,689
Interfund Transfers	9,539		
TOTAL		TOTAL	26,689
<hr/>			
<u>Full-Time Equivalent Staffing</u>			
Regular Full-Time FTE	0.15		
TOTAL			0.15
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FY 2016-17 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	19,137	STP	25,424
Interfund Transfers	9,197	Metro	2,910
TOTAL		TOTAL	28,334
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<u>Full-Time Equivalent Staffing</u>			
Regular Full-Time FTE	0.155		
TOTAL			0.155
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-			

Title VI - Environmental Justice

Description:

Metro's transportation-related public involvement policies and procedures respond to mandates in Title VI of the 1964 Civil Rights Act and related regulations; 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 and state census information and supplemented by more granular 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, 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) developing communication techniques that increase the accessibility of information. (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 an internal language assistance guide to help staff take advantage of resources to provide access for people who do not speak English well.
- Continued an internal training for communication and public involvement staff on how to use telephonic interpretation service to provide language assistance at Metro outreach events. Forms are required for all planning department related outreach events.
- Continued the language hub on the Metro website to communicate services and civil rights in 13 non- English languages.
- Submitted a Title VI Compliance Report covering 12 months of activity through June 30, 2015 to the Oregon Department of Transportation on Aug. 30, 2015, to comply with Federal Highway Administration civil rights reporting requirements.
- Updated a Limited English Proficiency Plan and Implementation Plan based on new Factor One (of the Department of Justice Four Factor Analysis) data and analysis.
- Submitted a Title VI Program, including the above Limited English Proficiency Plan and Implementation Plan, to the Federal Transit Administration Civil Rights Officer to comply with FTA civil rights guidance.
- Updated the Limited English Proficiency Factor One (of the Department of Justice Four Factor Analysis) data and analysis for the Southwest Corridor Plan and the Powell Division Transit and Development Project corridors.
- Updated agency's civil rights web page, www.oregonmetro.gov/civilrights with federal compliance related reports.
- Conducted focus groups of historically underrepresented populations, including communities of color, immigrant communities and youth, in partnership with Metro's Diversity, Equity and

Inclusion team to better understand needs, priorities and engagement preferences of those populations.

- Used email and Metro News posts to keep environmental justice stakeholders informed of Regional Transportation Plan update and Metropolitan Transportation Improvement Program comment period and decision-making milestones.
- Developed a work plan for the Transportation Equity Analysis as a component of the 2018 Regional Transportation Plan update.

Methodology:

Metro's work to ensure compliance with Title VI 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 agencies; implementing outreach strategies that help EJ populations overcome barriers to participation; demographic data collection and mapping; 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 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.

Metro addresses compliance agency-wide as well 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, adopted by the Metro Council Nov. 15, 2012. 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.

Tangible Products Expected in FY 2015-2016:

- Submit a Title VI Compliance Report covering 12 months of activity through June 30, 2015 to the Oregon Department of Transportation, to comply with Federal Highway Administration civil rights reporting requirements. (First Quarter 2015-16; completed August 30, 2015)
- Implement Metro's diversity action plan to promote diverse representation of citizen representatives on Metro advisory committees. (Ongoing)
- LEP Plan implementation: complete all tasks identified in the LEP Plan through June 2016 including action items like updating the agency's (Department of Justice) Four-Factor Analysis and Limited English Proficiency Plan. (Throughout 2015-16)
- Update corridor-specific (Department of Justice) Four-Factor Analysis using 2014 American Community Survey and public schools data for Southwest Corridor Plan and Powell-Division Transit and Development Project in anticipation of further NEPA analysis in FY 2015-16 forward (Second Quarter 2015-16; completed October 29, 2015).
- Work 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

and identify any need to avoid, minimize or mitigate impacts to communities of concern prior to final adoption. (Throughout 2015-16)

- Work with environmental justice leaders and communities of concern to assess transportation needs that might be addressed through policy updates in the 2018 Regional Transportation Plan. (Ongoing)
- Work with local jurisdictions to clarify and create resources and guidelines to help local jurisdictions comply with Title VI and the Executive Order on Environmental Justice when updating and implementing their Transportation System Plans (Fourth Quarter 2015-16).
- Conduct specific engagement to populations of color, limited English proficiency populations and low- income populations for corridor projects (Southwest Corridor Plan, Powell-Division Transit and Development Project). (Ongoing)
- Coordinate with the development and implementation of the Metro Equity Strategy. (Ongoing; the Equity Strategy is scheduled for Metro Council approval Fourth Quarter 2015-16)

Tangible Products Expected in FY 2016-2017:

- Submit a Title VI Compliance Report covering 12 months of activity through June 30, 2016 to the Oregon Department of Transportation, to comply with Federal Highway Administration civil rights reporting requirements. (First Quarter 2016-17)
- LEP Plan implementation: complete all tasks identified in the LEP Plan through June 2017, 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)
- Annually update staff language resource list to provide in-house translation services as needed for multiple languages. (Ongoing)
- Coordinate with the development of the Metro Equity Strategy. (Ongoing)
- Conduct specific engagement to populations of color, limited English proficiency populations and low- income populations for corridor projects (Southwest Corridor Plan, Powell-Division Transit and Development Project). (Ongoing)
- Work 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 and identify any need to avoid, minimize or mitigate impacts to communities of concern prior to final adoption. (Throughout 2015-16)
- Work with environmental justice leaders and communities of concern to assess transportation needs that might be addressed through policy updates in the 2018 Regional Transportation Plan. (Ongoing)
- Coordinate with the implementation of the Metro Equity Strategy. (Ongoing)

Entities Responsible for Activity:

Metro – Lead Agency
Oregon Department of Transportation –
Cooperate/Collaborate TriMet – Cooperate/Collaborate
Local jurisdictions—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
2011-12	\$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	0.70

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services \$ 93,927
Interfund Transfers \$ 27,731

Resources:

PL \$ 113,658

TOTAL	\$ 113,658	TOTAL	\$ 113,658
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Full-Time Equivalent Staffing

Regular Full-Time FTE 0.70

TOTAL	0.70
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FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services \$ 93,353
Interfund Transfers \$ 44,862

Resources:

PL \$ 138,216

TOTAL	\$ 138,216	TOTAL	\$ 138,216
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Full-Time Equivalent Staffing

Regular Full-Time FTE 0.70

TOTAL	0.70
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Designing Livable Streets

Description:

Metro's "Designing Livable Streets" Program was established to provide a set of tools for achieving regional livability goals, including safety and health, and to encourage local jurisdictions to design streets that better support the 2040 Growth Concept. The Program started with the release of the *Creating Livable Streets* handbook in 1997. Since then the program has grown to include a suite of handbooks: *Green Streets*, *Trees for Green Streets*, *Green Trails: Guidelines for Environmentally Friendly Trails*, and *Wildlife Crossings: Providing safe passage for urban wildlife*.

The Designing Livable 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. Additionally, transportation projects funded with federal Regional Flexible Funds must follow the design guidelines. This program also addresses Federal context-sensitive design solutions initiatives and MAP-21 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 handbooks 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, relationship of transportation design to public and environmental health, providing for effective freight and goods movements in multi-modal environments, trail design, cycletracks and other protected bikeways and bicycle and transit interaction. These themes will be reflected in a comprehensive update to the published documents planned for FY 2014-15. At the same time, different formats and methods for sharing the information (e.g. digital, design workshops) need to be considered.

Working with experts within Metro and partners across the region, an update of the Program will determine how Metro can continue to best serve cities, counties and residents working to develop livable and complete streets in the region.

Objectives:

- Cities, counties and agencies have most up-to-date state of the practice guidance in transportation design to facilitate implementing transportation projects that achieve desired goals and outcomes, and that help balance multiple modes for functioning complete streets.
- Support context sensitive design and best practices in transportation projects by developing and updating design guide handbooks as needed.
- Increase knowledge, understanding and acceptance of best practices and context sensitive design, through a variety of formats including: handbooks; Program website with tools and resources; visual library of best practices; forums, workshops and tours.
- Implement regional street-design policy and recommendations in Regional Transportation Safety Plan by participating in local project development and design activities, including technical advisory committees, design workshops and charrettes, 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 handbooks.
- Develop shared strategies with partner agencies and structure the Program to increase awareness and use of the Program 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.

Previous Work:

- First handbook, *Creating Livable Streets*, was published in 1997, and updated in 2002. All handbooks in the Program are provided to partner agencies and residents to the region free of charge and are available for sale to interested parties.
- *Green Streets: Innovative Solutions for Stormwater and Stream Crossings* and *Trees for Green Streets* handbooks, published in 2002, serve as companion publications to *Creating Livable Streets*. The handbooks take a watershed-based approach to transportation planning by providing methodologies and design solutions to minimize the negative impacts of stormwater runoff caused by the impervious surfaces of streets. The handbooks were developed as new technologies were emerging; an update will capture state of the art practice.
- In early 2007, Metro added engineering staff to enhance technical outreach and advocacy for the program.
- In FY 2007-08, staff worked with the Regional Freight Technical Advisory Committee to develop recommended changes and additions to the *Creating Livable Streets* handbook to better accommodate freight movement in urban street design standards. Recommendations will be incorporated into the next update of the handbook.
- In May 2007 Metro completed the *Freight and Goods Movement Plan: Truck and Street Design Recommendations Technical Report*, providing design recommendation that will be addressed in the FY2015-16 update of the handbooks.
- In FY 2008-09, *Wildlife Crossings* handbook was published. This is an emerging program element that seeks to minimize the impacts of roadway projects on wildlife populations and helps implement Title 13 of Metro Code, which builds upon the Title 3 regional standards for water quality and erosion control and upon local provisions for habitat under city and county comprehensive plans. Wildlife crossings that are designed to protect habitat by restoring or maintaining habitat connectivity may help satisfy Title 13 policy requirements.
- In May 2012 Metro completed the Regional Transportation Safety Plan which provides recommendations for addressing unsafe roadways for all modes of travel. The Creating Livable Streets Program provides tools to help implement the recommendations.
- In 2014, the Regional Active Transportation Plan was adopted and provides high-level design guidance for regional bicycle, pedestrian and trail facilities and will be referred to in the update of the handbooks.
- In 2014, co-hosted a Transportation and Land Use Forum with DLCD with three nationally recognized transportation engineers. Sponsored the 2014 Oregon Active Transportation Summit which featured sessions on design, including day-long trainings of the NACTO Bikeway and Urban Street Design Guides.
- In FY 2015-16 the project got underway and completed the following elements: Finalized the work scope and timeline for program update; developed a communication plan as part of the 2018 RTP update; developed a project fact sheet and webpage; identified members and meeting dates for the technical work group; conducted expert interviews on the topics included in the update – these interviews informed finalization of the work plan and the Consultant scope of work; finalized the Consultant scope

of work and IGA with ODOT; developed presentation and walking tour with Mark Fenton in coordination with the Regional Snapshot program; developed an agenda of workshop(s) and/or best practice tour(s) and regional forums for the course of the project; developed six draft case studies for the project; developed Concept plan for Program webpage, tools, technical assistance and resources; initiated development of a photographic library of examples of livable streets and communities in the region; initiated development of schematics and visualizations of regional transportation concepts.

Methodology:

Metro has traditionally participated in local project-development activities for regionally funded transportation projects. During FY 2016-17, the Designing Livable Streets Program will continue to focus those activities on projects that directly relate to implementation of Region 2040 land use components, including active transportation projects and other multimodal projects funded through the Metropolitan Transportation Improvement Program (MTIP).

Updates to the handbooks and additional activities in FY 2016-17 will be managed by Metro but guided by the input of stakeholders. Metro will utilize surveys, interviews, and scans of other programs to provide information on how well the Program is serving the region, and identify gaps and opportunities, and to provide information on state of the practice to inform update of handbook content. This information will be utilized to refine and expand the initial work scope. Metro staff will work cross departmentally within Metro, specifically for elements relating to trails, stormwater/green streets, trees for green streets, and wildlife crossings. In addition to the activities described above, the Program will provide opportunities for partners in the region to learn more about new approaches with on-the ground workshops and forums.

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 and DLCD, will be actively sought out in order to more effectively increase understanding, awareness and acceptance of Livable Streets.

To update the *Creating Livable Streets, Green Streets, and Trees for Green Streets* handbooks and to develop a new handbook on Regional Trail Design, Metro staff will work with experts within Metro, with a consultant team and with peer workgroups, to review and revise content for design guidance. The update will incorporate recommendations from the *Metro Freight and Goods Movement Plan: Truck and Street Design Recommendations Technical Report* (May 2007) on designs that balance freight needs with pedestrians and other transportation modes; incorporate recommendations from the *Regional Transportation Safety Plan* (May 2012) for designs that are safer for all modes; and incorporate design guidance recommendations from the *Regional Active Transportation Plan* (July 2014) for designs for regional pedestrian and bicycle routes.

Building on suggestions, requests for changes and extensive recommendations in regional freight, safety and active transportation plans, Metro will also seek input early on from a variety of stakeholders to frame the project. A technical work group will meet approximately six times over the course of the update to the handbooks to provide expert peer review of the handbook revisions and program design.

Two standing Metro committees will also serve in an important coordination role, given their geographic and agency-representative makeup. The Transportation Policy Alternatives Committee (TPAC) serves as the region's formal technical advisory body on transportation issues. TPAC will be presented with regular updates on the progress of the study, and have opportunities to review the technical work on the project. The Joint Policy Advisory Committee on Transportation (JPACT) and citizen-elected Metro Council will serve as the approval

bodies for Regional Transportation Plan and Regional Transportation Functional Plan amendments that result from the handbook updates.

Tangible Products Expected in FY 2016-17:

- Workshop(s) and/or best practice tour(s) and regional forum
- Best practices scan
- Updated Program webpage with resources including schematics, photo library, library of external resources, community and personal stories and case studies
- Updated draft of Creating Livable Streets handbook
- Updated draft of Green Streets handbook
- Updated draft of Trees for Green Streets handbook
- New draft handbook on Regional Trail Design
- Draft updated policy language for the 2018 RTP
- Updated draft RTP design classification maps

Entities Responsible for Activity:

Metro – Lead Agency

Partner Agencies – Stakeholders/ Collaborate

Oregon Department of Transportation –

Cooperate TriMet – Cooperate / Collaborate

Schedule for Completing Activities:

Update of the handbooks and related activities are planned to be completed within 18-24 months.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2014-15	\$234,581	1.1
2015-16	\$324,761	1.4

FY 2015-16 Cost and Funding Sources:

Requirements:

Personal Services	\$	193,721
Interfund Transfers	\$	107,741
Materials and Services	\$	23,300

Resources:

PL	\$	89,760
STP	\$	78,852
Guidebooks STP	\$	100,000
Metro	\$	56,150

TOTAL \$ 324,761

TOTAL \$ 324,761

Full-Time Equivalent

Staffing

Regular Full-Time FTE	1.4
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TOTAL 1.4

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	140,877
Interfund Transfers	\$	67,701
Materials and Services	\$	273,300

Resources:

PL	\$	35,790
STP	\$	124,855
Livable Streets STP	\$	250,000
Metro	\$	71,233

TOTAL	\$	481,878
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TOTAL	\$	481,878
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Full-Time Equivalent**Staffing**

Regular Full-Time FTE	1.0
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TOTAL	1.0
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Public Involvement

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 citizen involvement opportunities, of individuals and of community, business and special interest groups. (ONGOING)
- Provide communications to encourage citizen participation in Metro processes that are understandable, timely and broadly distributed. (ONGOING)
- Provide citizens with an opportunity 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, documented in the *Southwest Corridor Plan public engagement summary, Oct. 2014-July 2015*, July 2015.
- Conducted public engagement Powell-Division Transit and Development Project, documented in public engagement reports in March 2014, June 2014, September 2014, March 2015 and June 2015.
- Convene the first annual community summit as discussion groups with historically underrepresented populations, seeking input from the public to help shape public involvement processes.

Methodology:

Metro's public involvement practices follow the agency's Public Engagement Guide (formerly the Public Involvement Policy for Transportation Planning) which reflects changes in the prior federal transportation authorization act, Moving Ahead for Progress in the 21st Century Act (MAP-21); the guide will be updated to reflect changes in the current federal transportation authorization act, Fixing America's Surface Transportation Act (FAST Act). 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.

Tangible Products Expected in FY 2015-2016:

- Convene the annual community summit, seeking input from the public to help shape public involvement processes. (Annual event)
- Conduct an online survey of public involvement through Metro's online panel, Opt In, currently made up of more than 23,000 members as part of the annual agency public involvement report. (Annual activity)
- Produce the annual public involvement report for Metro, reviewing and evaluating public involvement processes across the agency. (Third Quarter 2015-16)
- Continue to engage the public in the SW Corridor through development of a locally preferred alternative decision for a transit project (NEPA) and other project implementation. (Ongoing)
- Continue to engage the public in the Powell-Division corridor through initiation of a transit project (NEPA) and other project implementation. (Ongoing)
- Initiate and continue outreach and public comment opportunities the 2018 Regional Transportation Plan update. (Ongoing)
- Conduct outreach and public comment opportunities for the policy update for the Metropolitan Transportation Improvement Program as well as project solicitation and public review for regional flexible funds included in that program. (Throughout 2015-16)

Tangible Products Expected in FY 2016-2017:

- Convene the annual community summit, seeking input from the public to help shape public involvement processes. (Annual event)
- Conduct an online survey of public involvement through Metro's online panel, Opt In, currently made up of more than 23,000 members as part of the annual agency public involvement report. (Annual activity)
- Produce the annual public involvement report for Metro, reviewing and evaluating public involvement processes across the agency. (Annual activity)
- Continue to engage the public in the SW Corridor through development of a locally preferred alternative decision for a transit project (NEPA) and other project implementation. (Ongoing)
- Continue to engage the public in the Powell-Division corridor through initiation of a transit project (NEPA) and other project implementation. (Ongoing)
- Continue outreach and public comment opportunities the 2018 Regional Transportation Plan update. (Ongoing)
- Conduct outreach and public comment opportunities for the policy update for the Metropolitan Transportation Improvement Program as well as project solicitation and public review for regional flexible funds included in that program. (Through Second Quarter 2016-17)

Entities Responsible for Activity:

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

NA

Transportation System Management and Operations - Regional Mobility Program

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). Most of the required CMP activities related to performance measurement and monitoring are covered as part of the Regional Mobility Program.

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 Plan.
- Guide preparation of a master plan for the region's ITS communications infrastructure.
- Update the region's ITS Architecture Plan for consistency with the National and State ITS Architecture Plans, and with the Regional TSMO Plan.
- Continue to strengthen the Transportation Policy Alternatives Committee's (TPAC) institutional capacity regarding TSMO by establishing an ad hoc TPAC subcommittee focused on joint demand and system management policy and funding decisions.
- 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 2015-16, the Regional Mobility Program:

- Administered TSMO projects sub-allocated in the 2012-15 MTIP and 2016-2018 MTIP. Participated in project coordination meetings.
- Continued the Congestion Management Process (CMP) including the Regional Mobility Corridor Atlas version 2.0 focusing on creation of new maps and including safety data and demographics.
- Launched update of Regional ITS Architecture and 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 Plan update.
- Provided input to transit signal priority planning for Powell/Division and Southwest Corridor high capacity transit projects.

- Participated in forming the Transportation Incident Management (TIM) Coalition for the Portland area.
- Participated at federal level: Held an Integrated Corridor Management kick-off meeting with FHWA and ICM partners (June 2015); attended TRB (January 2016) workshop on Decision Support System and Regional TSMO committee meetings; viewed Connected Vehicle and Smart City Challenge webinars (Fall 2015/Winter 2016); hosted FHWA Operations workshop on Traffic Management Capability Maturity Framework (TMCMF).

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 will provide 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 lead a master planning effort for the region's ITS communications network. 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, consistent with the Regional TSMO Plan. 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 2040 RTP, local TSPs and MTIP programming. The program will continue to enhance Portal, a regional archived data user service managed by Portland State University, to expand the generation, collection, archiving, and use of multimodal performance data in a way that will enhance the region's ability to diagnose and address congestion.

Tangible Products Expected in FY 2016-17:

- Manage projects funded with FY2016-2018 MTIP to advance priority projects as identified in the 2010-2020 Regional TSMO Plan (ONGOING)
- Provide strategic and collaborative program management including coordination of activities for TransPort, Portal Technical Advisory Committee, ITS Architecture Subcommittee, ITS Network Managers Team, Transportation Incident Management (TIM) Coalition 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)
- Begin to scope project to upgrade or replace the Regional Signal System and form partnerships. (ONGOING)
- Begin scoping TSMO Plan Update by exploring topics including equity, safety, resiliency, connected vehicles, automated vehicles, vehicle-to-X communications, transit signal priority, mobility as a service (e.g., public-private partnerships), performance measures, big data analytics and asset management. (ONGOING)
- Regional ITS Architecture Update (See UPWP narrative)
- ITS Communications Master Plan (See UPWP narrative)
- I-84 Multimodal Integrated Corridor Management (ICM) Deployment Plan (See UPWP narrative)
- Support Congestion Management Process including the Regional Mobility Corridor Atlas Update (ONGOING)

Entities Responsible for TSMO Activity

Polymaking Cooperation, Collaboration & Grant Recipients
Metro Council Metro (Lead Agency)

Joint Policy Advisory Committee on Transportation (JPACT)
Transportation Policy Alternatives Committee (TPAC)

TransPort and subcommittees (includes Portal Technical Advisory Committee, ITS Architecture Subcommittee, ITS Network Managers Team, Transportation 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 *Objectives* and *Tangible Products* sections of this planning activity description.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	\$192,225	1.13
2012-13	\$60,000	0.76
2013-14	\$269,963	1.49
2014-15	\$281,804	0.41
2015-16	\$193,736	0.9

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	122,889
Interfund Transfers	\$	68,347
Materials and Services	\$	2,500

Resources:

TSMO ~ STP	\$	112,288
STP	\$	61,550
Metro	\$	19,897

TOTAL	\$	193,736	TOTAL	\$	193,736
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Full-Time Equivalent Staffing

Regular Full-Time FTE	0.9
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TOTAL	0.9
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FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	75,773
Interfund Transfers	\$	36,414
Materials and Services	\$	2,500

Resources:

TSMO ~ STP	\$	60,000
STP	\$	42,908
Metro	\$	11,779

TOTAL	\$	114,687	TOTAL	\$	114,687
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Full-Time Equivalent Staffing

Regular Full-Time FTE	0.55
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TOTAL	0.55
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Transportation System Management and Operations Program - Regional Travel Options (RTO)

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 2012-2017 RTO Strategic Plan. (ONGOING)
- Support regional coordination and collaboration around travel options marketing. Convene marketing working group of partners. Provide support for partner agency marketing activities. Lead development of regional marketing initiatives. Facilitate Portland-region implementation of ODOT transportation options marketing initiatives. (ONGOING)
- Administer and monitor the RTO grants program. 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)
- 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 the vehicle miles traveled and 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 ridematching services to region, including participation in multi-state online ridematching system and vanpool program. (ONGOING)

Previous Work:

In FY 2013-14, the Regional Travel Options Program:

- Managed 13 grant projects awarded via the 2013-15 RTO grant solicitation process totaling \$2.1 million. Grant projects are scheduled to be completed by June 30, 2015.
- Began work on the 2015-17 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 ridematching 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 Commute Challenge," "Bike Month," "Carefree Commuter Challenge," and others.
- Completed a program evaluation report, covering activities during the 2011-13 timeframe. The report measures the effectiveness of program investments and provides input for future program policy and funding decisions.

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 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.

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 moved to the triple-bottom line framework to better align with RTP performance measures. In keeping with the RTP mode share targets, a primary RTO performance measure is shifting mode share to 50% non-drive-alone trips by 2035.

Tangible Products Expected in FY 2015-16:

Regional Travel Options:

- Develop and update tools to support coordination of RTO partners marketing activities including a marketing plan, calendar and shared marketing materials. (ONGOING)
- Develop, reprint and distribute an updated version of the Bike There! map through area retail outlets, distribute free copies of the map to youth and programs that serve low-income and transportation underserved populations. (ONGOING)
- Manage and support Drive Less Connect ridematching database. (ONGOING)
- Monitor and report progress on programs and projects carried out by Metro, TriMet, SMART, and RTO grant recipients. (ONGOING)
- Coordinate with City of Vancouver and C-TRAN on bi-state commute programs. (ONGOING)
- Implement and manage FY 13-15 Regional Travel Options grants. (ONGOING)
- Solicit and award FY 15-17 Regional Travel Options grants. (ONGOING)

Entities Responsible for RTO Activity:

Metro Council – Policy making

Joint Policy Advisory Committee on Transportation (JPACT) – Policy making Transportation Policy

Alternatives Committee (TPAC)

– Policy making

Oregon Transportation Research and Education Consortium (OTREC) – 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

Portland State University – Grant Recipient Lloyd TMA – Grant Recipient

Swan Island TMA – Grant Recipient

Westside Transportation Alliance TMA – Grant Recipient

Portland Parks and Recreation – Grant Recipient Ride Connection – Grant Recipient

Community Cycling Center – Grant Recipient Bicycle Transportation Alliance – Grant Recipient

Gresham Area Chamber of Commerce – Grant Recipient

Drive Oregon – Grant Recipient Verde – Grant Recipient

City of Portland – Grant Recipient
 City of Wilsonville/Wilsonville SMART – Grant Recipient
 Home Forward – Grant Recipient TriMet – Grant Recipient
 Clackamas County – Cooperate/Collaborate, Grant Recipient
 Multnomah County – Cooperate/Collaborate Washington County – 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

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
2011-12	\$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

FY 2015-16 Cost and Funding Sources:

Requirements:

Personal Services \$ 480,399
 Interfund Transfers \$ 198,255
 Materials and Services \$ 1,602,164

Resources:

FTA – STP \$ 1,603,578
 ODOT-FHWA-STP \$ 443,000
 Metro \$ 234,240

TOTAL	\$ 2,280,818	TOTAL	\$ 2,280,818
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Full-Time Equivalent Staffing

Regular Full-Time FTE 4.25

TOTAL 4.25

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	439,542
Interfund Transfers	\$	211,229
Materials and Services	\$	1,604,600

Resources:

FTA – STP	\$	1,830,379
ODOT-FHWA-STP	\$	303,000
Metro	\$	121,993

	\$	2,255,371		\$	2,255,371
TOTAL			TOTAL		

Full-Time Equivalent Staffing

Regular Full-Time FTE	3.75
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TOTAL	3.75
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Regional Freight Program

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.

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 Plan, including the programs identified in Chapter 10 of the Plan, 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 and MAP-21 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 such as the I-5 Columbia River Crossing.
- Complete the work scope (lead by Portland Bureau of Transportation) for the Regional Over-Dimensional Truck Route Study.

Previous Work:

In FY 2014-16, major freight program tasks completed include:

- Continued to participate in monthly Portland Freight Committee and quarterly State Oregon Freight Advisory Committee.
- Participated in consultant selection, detailed scoping, budget revisions, and executing intergovernmental agreement for the Regional Over-Dimensional Truck Route Study.
- Provided mapping to the City of Portland and their consultant for the Priority Regional Over-Dimensional Truck Route Corridors.
- Participated in and provided over-site for the kick-off meeting and Project Management Team (PMT) meetings of the Regional Over-Dimensional Truck Route Study.
- 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 2016-17 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 updating the Regional Freight Plan 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 plan and stimulate jobs and economic activity.

Tangible Products Expected in FY 2016-17:

- Update Freight Element of 2018 RTP (2017)
- Lead and prepare materials for the Regional Freight Work Group (2016-2017)
- 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).
- Participate in Regional Over-Dimensional Truck Route Study project management, review all work tasks and deliverables identified in scope of work, and participate in all stakeholder activities. (2016)

Entity/ies 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 *Objectives* and *Tangible Products* sections of this planning activity description.

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	\$108,585	0.53

FY 2015-16 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	69,778	STP	\$	97,434
Interfund Transfers	\$	38,808	Metro	\$	11,152
TOTAL			\$	108,585	TOTAL \$ 108,585

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.53
TOTAL	0.53

FY 2016-17 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	77,311	STP	\$	102,709
Interfund Transfers	\$	37,153	Metro	\$	11,755
TOTAL			\$	114,464	TOTAL \$ 114,464

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.55
TOTAL	0.55

I. RESEARCH AND MODELING

GIS Mapping and Land Information

Description:

The Data Resource Center (DRC) provides Metro and the region with geospatial data services including: aggregation, standardization, storage systems, applications, and analytic products. DRC performs the following primary activities:

- Data Development: DRC maintains a collection of more than 100 land-related geographic datasets (Regional Land Information System - RLIS), which are the foundation for providing services to the DRC's clients. The data support land use and transportation planning, parks and natural areas planning and management, solid waste management, performance measurement, transport forecast modeling, and land use forecast modeling.
- Client Services: DRC provides technical assistance, Geographic Information System (GIS) products, and analytic services to internal Metro programs, local jurisdictions, TriMet, the Oregon Department of Transportation (ODOT), and external customers. The latter include local government partners and RLIS subscribers.
- Policy and land use performance measures: DRC maintains spatial data from which it produces maps, statistics, and data visualizations for monitoring the performance of Metro's policies and growth management programs.
- Transportation System Monitoring: The DRC manages a wide array of transportation-related data to benchmark characteristics of the transportation system. The work elements include compiling region-wide data, reviewing and interpreting regional and national reports, and processing of data requests.

Objectives:

The primary DRC objective is to ***provide a solid data and analytic foundation for decision support, planning support, and program management support*** to Metro and the region. This includes:

- Spatially-enabled land use and transportation data to support Metro's forecast modeling needs
- Up-to-date land use information for mapping and visualization
- Spatial analysis and decision support for Metro programs and regional partners
- Efficient data development processes that are coordinated with local jurisdictions, state agencies, and other partners

Previous Work:

- Provided custom mapping and analysis to Metro Planning and Development Department
- Provided custom mapping and analysis to Metro Sustainability Center (the tasks of which are now part of the Property and Environmental Services or Planning & Development Departments)
- Maintained RLIS datasets, providing quarterly updates to subscribers
- Managed contract to acquire regional orthophotography
- Developed and analyzed regional demographic data
- Mapped regional employment sites
- Updated regional bicycle network 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
- Developed and implemented a traffic count data collection contract with input from local jurisdictions, ensuring that cutlines and count locations were not duplicative of other agencies' traffic count collection efforts (and collected and compiled regional counts
- Provided RLIS and ad hoc data to members of the public and private entities through DRC public information support

Methodology:

Metro's Urban Growth Boundary (UGB) administrative mandates require the collection and maintenance of the land use information in RLIS. The Metropolitan Planning Organization (MPO) mandates for transportation planning require the maintenance of population and employment data for the bi-state region, as well as transportation system data. In addition, the Metro Council requires regularly-updated information to monitor progress toward regional goals. DRC performs analysis to turn collected data into performance measures that provide monitoring and decision support.

Forecast model applications require the use of data including travel costs (auto operating and driving cost per mile, parking costs, transit fares). In addition, model applications must be validated against observed system performance data such as traffic counts, vehicle miles traveled and transit patronage. Accordingly, Metro assembles select traffic counts annually and coordinates with local jurisdictions to avoid duplication of efforts.

DRC also innovates in response to client needs for new analytic techniques or data during the course of the year. These ad hoc activities give scope for creative new solutions and increase DRC value to Metro planning and operations efforts.

Tangible Products Expected in fiscal years 2016-2017:

- Fulfill the needs of Metro Planning and Development Department, including analytic and cartographic products to serve the Regional Transportation Plan update and other tasks as needed (ONGOING)
- Fulfill the needs of Metro Property and Environmental Services and Parks & Nature Departments, including analytic and cartographic products, data system upgrades, and application development as needed (ONGOING)
- RLIS Live quarterly updates (ONGOING)
- New versions of the regional bicycle network and trail counts data (ONGOING)
- New regional aerial orthophoto products
- Updated regional demographic and socio-economic data (e.g., income, race, ethnicity, age, employment, education) (ONGOING)
- 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
- Updated strategic plan for data management and sharing to sustain centralized, consistent and cost-effective storage and maintenance of regional data. (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)
- 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 (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)
- 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)
- Respond to transportation monitoring data requests (e.g., traffic counts, daily Vehicle Miles of Travel (VMT) per capita) (ONGOING)
- Enhance existing Metro land use and transport system monitoring data acquisition, analysis, and reporting resources (ONGOING)
- Collect and standardize key transportation-related performance measures for improved reporting, visualization and distribution (ONGOING)
- Continue providing RLIS and ad hoc data 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)

Entities Responsible for Activity:

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

Schedule for Completing Activities:

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

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2011-12	\$1,600,932	9.74
2012-13	\$1,530,797	8.91
2013-14	\$1,812,176	9.48
2014-15	\$1,856,376	7.88
2015-16	\$1,753,816	6.111

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	729,684
Interfund Transfers	\$	524,132
Materials and Services	\$	500,000

Resources:

PL	\$	313,434
STP	\$	486,186
Metro	\$	450,000
Other	\$	504,275

TOTAL	\$	1,753,816	TOTAL	\$	1,753,816
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Full-Time Equivalent Staffing

Regular Full-Time FTE	6.111
TOTAL	6.111

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	771,406
Interfund Transfers	\$	507,912
Materials and Services	\$	201,790

Resources:

PL	\$	222,944
STP	\$	39,046
ODOT	\$	53,920
TriMet	\$	65,850
Metro	\$	987,156
Other	\$	112,192

TOTAL	\$	1,481,108	TOTAL	\$	1,481,108
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Full-Time Equivalent Staffing

Regular Full-Time FTE	6.15
TOTAL	6.15

Economic, Demographic and Land Use Forecasting

Description:

The socio-economic research center (SERC) is a business line within Metro's Research Center (RC). SERC provides historical and forecast estimates of economic activity, population, and land use distribution to Metro's transportation and land use 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. SERC 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 study transportation corridor needs, formulate regional transportation plans, analyze the economic impacts of potential climate change scenarios, and 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.

SERC 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, SERC 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 primary objective of the SERC 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. SERC sees that forecasts are peer reviewed and coordinated with local jurisdictions per state law.

To provide this information SERC maintains sets of econometric models and pre- and post-processor modules that produce regional growth projections for economic and demographic data series. RC updates model inputs and equations on a periodic basis to ensure that the forecast products remain relevant and valid.

Previous Work:

Survey, Data Acquisition, and Research

- Residential Housing Preference Survey. Conducted a pilot household preference survey for the Metro region in 2010. The stated preference survey was designed to determine if tastes and preferences for housing might shift in future years as regional demographics evolve. SERC used summary statistics from the survey to inform the 2014/2015 Urban Growth Report process. Deeper examination of the data to inform potential new parameters for the land use model is underway.
- Buildable Land Inventory - the equilibrium land use model – MetroScope needs land supply estimates based on observed data that incorporate the regulatory framework, development constraints, and development incentives. SERC refined the methods for the Buildable Land Inventory during the 2010 urban growth report and the most recent regional forecast allocation and identified additional research that would further refine the redevelopment aspects of the inventory.

Model Maintenance

- Regional macro-economic model – Updated model inputs through routine revisions and periodic re-benchmarking to observed land use. Re-estimated and re-calibrated to the latest regional population and employment estimates. Validated the model and demonstrated good consistency between forecasts and history after revisions and re-benchmarking have been taken into account.

- 2015 update of MetroScope land use model – updated to a base year of 2015 using Census ACS data and BLS employment data. The 2018 RTP update will rely on a land use forecast that pivots from this latest land use model update.
- MetroScope viewer update – data visualization tool updated to accept the new 2010 census tract configurations (was previously set to 2000 census tracts for the region); additional data series added to the viewer and less useful data series dropped in favor of keeping a streamlined data interface
- Mapback procedure – updated the mapback procedure (which allocates land use from the MetroScope zone system to TAZs) with a base year and latest Census and employment data.

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 SERC 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 perceived 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, data-driven estimates, and surveys to inform appropriate changes to model structure, model inputs, and model output interpretation.
- Innovation--Respond in creative ways to ad hoc requests for analytic improvements.

Model Maintenance

- Validation--Conduct appropriate validation exercises for forecast models.
- Upkeep--Maintain model software in sustainable software frameworks.

Tangible Products Expected in FY 2016-17:

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

- Metro is assessing the potential value of forming a standing committee that can help sustain such activity and advise on model enhancements (potentially 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)
- First data products from the new Land Development Monitoring System (LDMS) in the form of residential rental price and supplier redevelopment location, type, and frequency, with associated analytic findings in the form of market performance measures
- Developer Supply treatments – if data support the concept, create a BLI pre-processor to further distinguish parcels which have a positive likelihood of available redevelopment from the larger pool of parcels that have the potential to redevelop. A later phase, if LDMS data support it, may seek to incorporate an improved supply module into the main body of the MetroScope model.
- 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.
- 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.

Model Maintenance

- Regional macro model – 1) re-estimate and re-calibrate regional model for upcoming forecast needed for the 2018 urban growth management decision; 2) port the econometric macro model from the AREMOS software platform to a more modern database and software, Eviews. (vendor is no longer supporting the maintenance of the old software)
- MetroScope model re-validation exercise – validate the model to a 2015 base year as the basis for devising a five year land use model and data improvement program
- 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 (non-governments) – collaboration and consensus building

Schedule for Completing Activities:

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

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 risen. 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

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	321,072
Interfund Transfers	\$	279,027

Resources:

PL	\$	125,425
STP	\$	6,822
ODOT Support	\$	148,621
TriMet Support	\$	161,322
Metro	\$	157,909

TOTAL	\$	600,099	TOTAL	\$	600,099
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Full-Time Equivalent Staffing

Regular Full-Time FTE	2.528
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TOTAL **2.528**

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	191,966
Interfund Transfers	\$	126,395
Materials and Services	\$	67,820

Resources:

PL	\$	76,290
STP	\$	147,066
ODOT Support	\$	87,420
TriMet Support	\$	58,572
Metro	\$	16,833

TOTAL	\$	386,181	TOTAL	\$	386,181
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Full-Time Equivalent Staffing

Regular Full-Time FTE	1.528
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TOTAL **1.528**

Model Development Program

Description:

The Model Development Program includes work elements necessary to keep the travel demand model responsive to issues that emerge during transportation analysis. The major subject areas within this activity include travel behavior surveys, new models, model maintenance, and statewide and national professional involvement.

The activity is very important because the results from travel demand models are used extensively in the analysis of transportation policy and investment.

Objectives:

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

Thus, the primary objective for this program is to *ensure the compliance of the modeling tools and techniques*. This is achieved in the work elements found in the Travel Behavior Survey, New Model, Model Maintenance, and Statewide and National Professional Involvement categories.

Previous Work:

Travel Behavior Surveys

- The last travel behavior survey for this region was conducted in 2011. The data serves as a basis to understand the degree that various stimuli (demographics, urban form, cost, travel time, lifestyle choices, etc.) affect traveler's 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 model 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.
- Truck Model: A SHRP2 C-20 IAP grant was awarded to Metro. A consultant team has been selected and contract put in place. Work has begun in implementing a prototype model framework using national data. In addition, a data capture plan has been prepared that defines the methodology to collect local data from establishments, logistic firms, and other sources. These data will be used to refine the prototype model to ensure that it more closely reflects the conditions in Portland. To meet the match requirement, Metro is performing various tasks throughout the project (e.g., national zonal definition and network coding).
- Bike Routing Algorithm: The routing algorithm is being reviewed to potentially include a variety of simplifying features to ease the application of the tool.

Model Maintenance

- Modeling Network Attributes: Metro 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: The model input data was modified. Such things 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 modified 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 and several affiliated subcommittees.
- Transportation Research Board Committees: Staff served on the TRB Transportation Planning Applications Committee. This committee is instrumental in forming model application guidelines.

Methodology:

Survey, Data, and Research

- 2020 Travel Behavior Survey: Work will begin to plan for the next regional travel behavior survey. Research is necessary to ensure that the survey will capture all relevant information and be conducted in a comprehensive and cost effective manner. As in 2011, Metro will likely partner with other Oregon modeling agencies and the Southwest Regional Transportation Council to maximize the geographic span and cross agency utility of the data. It is important that the work begin now to ensure that proper budgetary and coordination steps are completed in a timely manner. In addition, new and emerging data capture technologies need to be investigated.
- Performance measures: Devise relevant and meaningful performance measures based on forecast products for decision support in transportation alternatives analysis

New Models

- Activity Based Model (DASH): Key efforts in FY2017 include the development of staff expertise, the model validation and sensitivity testing, and the derivation/implementation of a tool acceptance program.
- Trip Based Model (Kate): The *Kate* model was developed during FY2015-16. This model will serve as a basis to initiate further enhancements. Particular focus will be given to the enhancement of the estimation procedures for pedestrian travel. This effort may begin in the spring of 2016.
- Truck Model: The SHRP2 C-20 work will continue to progress through the work of the consultant team. Once the prototype tool development is complete and the local data collected, the model will be refined so that it will capture the conditions particular to the Portland region. The work effort is described in the Behavior Based Freight Model narrative. As necessary, Metro will complete tasks to meet matching requirements for the MTIP dollars being integrated into the project.
- Bike Routing Algorithm: Based upon information gathered in FY2016, the routing algorithm may be refined to facilitate its use.
- 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.
- Innovation: Respond in creative ways to ad hoc requests for analytic improvements

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.

- 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.
- 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 their expertise.

Statewide and National Professional Engagement

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

Tangible Products Expected in FY 2016-2017:

Survey and Research

- 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. The survey implementation plan will be documented. (Quarter 4)
- New performance measures to support the RTP update.

New Models

- Activity Based Model: Documentation that summarizes the validation and sensitivity testing methodology and results. (Quarter 3). Meetings with regional modelers to share the validation and sensitivity testing results. (Quarters 1, 2, 3, and 4).
- Trip Based Model: Documentation that reflects the refinements made to the model. (Quarter 4)
- Truck Model: Completion of milestones as defined in the consultant scope of work. (Quarter 4)
- Bike Routing Algorithm: Documentation that reflects the refinements (if any). (third quarter)
- Creative analytic solutions to ad hoc transportation analysis, visualization, and performance measurement needs from the Planning & Development and other Metro Departments through innovation activities

Model Maintenance

- Modeling Network Attributes: Modified networks that reflect current assumption sets. (As warranted).
- Travel Demand Model Input Data: Modified model input data that reflect current assumption sets. (As warranted).
- Travel Demand Model Computer Code: Modified model application code. (As warranted)

Statewide and National Professional Development

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

Entities Responsible for Activity:

Survey and Research

Metro- Product Owner/Lead Agency

New Models

Metro – Product Owner/Lead Agency

- Truck model work in collaboration with the Port of Portland and ODOT

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 *Objectives* and *Tangible Products* sections of this planning activity description.

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 Model Development 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), the maintenance of the model input data (Model Maintenance), 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	\$875,765	3.56
2015-16	\$934,920	3.723

FY 2015-16 Cost and Funding Sources:

Requirements:

Personal Services	\$	500,211
Interfund Transfers	\$	434,709
	\$	

Resources:

PL	\$	374,318
STP	\$	104,507
ODOT Support	\$	50,000
TriMet Support	\$	55,298
Metro	\$	350,797

TOTAL	\$	934,920	TOTAL	\$	934,920
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Full-Time Equivalent Staffing

Regular Full-Time FTE	3.723
TOTAL	3.723

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	730,056
Interfund Transfers	\$	480,687
Materials and Services	\$	148,760

Resources:

PL	\$	694,718
STP	\$	297,342
ODOT Support	\$	61,510
TriMet Support	\$	93,583
Metro	\$	212,350

TOTAL	\$	1,359,503
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TOTAL	\$	1,359,503
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Full-Time Equivalent Staffing

Regular Full-Time FTE	5.471
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TOTAL	5.471
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Behavior-Based Freight Model

Description:

This project will replace Metro's current trip-based truck model that utilizes fixed commodity flows with a truck tour model designed to reflect decisions made by shippers, receivers, truck operators, terminal managers, and others. The model will simulate movement of individual shipments throughout the supply chain, including transshipment facilities. Shipments are allocated to truck of various classes, and the movements of all freight vehicles are simulated over the course of a typical weekday. Metro's freight model will also be coordinated with the economic and commercial transport modules of the Statewide Integrated Model (SWIM2).

Metro was selected to receive one of four Freight Model Implementation Assistance grants under the federal SHRP2 C20 Freight Demand Modeling and Data Improvement Project. These funds will be used for model development. Model development and implementation will require collection of behavioral data from shippers and receivers representing a wide range of industries, common and contract freight carriers, business that operate non-freight commercial vehicles, warehouse managers, and logistics agents. The establishment surveys will gather data about industry type and size, commodities shipped and received, shipment size and frequency, and truck fleet data. Truck operators will be asked to complete diaries that provide details on all truck movements, including type and quantity of goods delivered and picked up at each stop, over a 24-hr period. Additional freight data, such as GPS truck tracking data and truck counts may also be collected. Freight data collection will be funded with \$350,000 in Surface Transportation Program (STP) funds as part of the MTIP Regional Freight Analysis and Project Development program.

Objectives:

Develop tools to enable a more comprehensive analysis of infrastructure needs and policy choices pertaining to the movements of goods. The following are examples:

- Infrastructure needs to support the region's export sectors
- Effects of vehicle length or weight restrictions on roads and bridges
- Local market potential for electric-powered freight vehicles
- Policies that affect location of warehouse and distribution facilities

Develop more detailed network assignments by truck type, which support regional environmental analysis, as well as local traffic operations and engineering analysis.

Develop freight forecasts that are responsive to changes in economic forecasts, changing growth rates among industrial sectors, and changing rates of economic exchange and commodity flows between sectors.

Replace trip-based truck model with more realistic tour-based model.

Previous Work:

The current truck model was initially implemented in 2002, based on commodity flow forecasts prepared for the Port of Portland and derived from the federal Freight Analysis Framework (FAF). A major model enhancement occurred in 2007, using data obtained in the Portland Freight Data Collection Project, including extensive vehicle classification counts, origin-destination surveys, and estimates of activity at transshipment facilities. The truck model was most recently updated in December, 2013 using new commodity flow forecasts prepared for the Port of Portland, Metro, and other partner agencies. They include commodity flow estimates for the 2010 base year, and forecasts for 2020, 2030, and 2040 based on FAF3 and TransSearch databases.

Methodology:

Metro will implement a metropolitan truck tour model using the framework developed for Federal Highway Administration (FHWA), and previously implemented as a metropolitan demonstration project for the Chicago Metropolitan Agency for Planning (CMAP) and implemented in a statewide application for the Florida Department of Transportation. The model specification will be customized for our region and model parameters will be re-estimated using data to be collected in a locally-funded establishment survey. The model will include a representation of the national supply chain, utilizing simulated commodity flows between industrial sectors and allocating external flows into and out of the region to local producer and consumer entities, consistent with economic forecasts from the national Freight Analysis Framework (FAF).

The SHRP2 C20 funds will be used to hire qualified consultants to 1) develop Model Implementation and Data Plans, 2) transfer the current FHWA truck tour model framework to our region, 3) update the model specification and re-estimate parameters using local surveys, and 4) add model components to simulate movement of heavier classes of non-goods commercial vehicles (e.g., utility, construction), for which data will also be obtained in the local surveys.

The STP funds will be used to implement the Data Plan. Qualified consultants will be hired to 1) design, test, and conduct business establishment surveys and truck diary surveys and utilize other instruments to obtain behavioral data for model specification and parameter estimation, 2) collect truck counts, vehicle tracking data and other data for model calibration, and 3) prepare a report summarizing data methodology and results. STP and local matching funds will be used to develop land use, economic, demographic, and freight network infrastructure data for use in model development.

The consultants will be required to:

1. Prepare an Implementation Plan, detailing initial demonstration model transfer, software requirements, integration into the current Metro travel models, SWIM2 data exchange, and desired enhancement/customization of the demonstration model;
2. Prepare a Data Plan outlining all data needs including currently available land use, economic, demographic, and transport infrastructure data, desired behavioral data to be obtained in the establishment surveys and truck diaries, contingency data resources to be used if the local survey data are not available within the project time frame, or to fill in gaps for shipment types not adequately captured in the local survey, and both existing and desired data to be obtained for model calibration and validation, such as truck counts, GPS vehicle tracking data (e.g., ATRI), and a portion of the local survey data set. After reviewing a range of survey data options, Metro has allocated \$350,000 in STP funding for the model freight data, with an additional \$40,059 in donated in-kind services to be used as the local matching funds;
3. Implement the enhanced demonstration model, to include national supply-chain representation and non-freight commercial vehicles;
4. Implement the Data Plan;
5. Prepare a memorandum describing key findings from the local surveys, with a plan for updating the model specification and re-estimating model parameters to reflect local behavior;
6. Implement, calibrate and validate the updated model. Both truck flows by vehicle type and shipments by commodity type will be validated;
7. Provide monthly progress reports;
8. Provide a final report.

Tangible Products Expected in FY 2015-16:

Survey Instruments (Mobile and web-based applications) Land Use,
Economic, Demographic, and Infrastructure Data Initial
Implementation of FHWA Demonstration Model

Tangible Products Expected in FY 2016-17

Survey Report / Model Update Memorandum Calibrated and
Validated Behavior-Based Freight Model Final Report

Entity Responsible for Activity:

Metro Research Center – project management, data
Port of Portland – technical advisor, data, private sector outreach
Oregon Department of Transportation – contract administration, technical advisor, data Southwest
Washington Regional Transportation Council – technical advisor, data
Port of Vancouver – technical advisor, data
Washington Department of Transportation – technical advisor, data

Schedule for Completing Activities:

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

FY 2014-17 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$ 25,000	SHRP2 C20 IAP	\$ 350,000
Interfund Transfers	\$ 15,059	STP	\$ 350,000
Materials and Services	\$ 700,000		\$
		Local Matching Funds	\$ 40,059

	\$ 740,059		\$ 740,059
TOTAL		TOTAL	

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.15
TOTAL	0.15

Technical Assistance Program

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, City of Hillsboro, and the City of Portland).
- Provided data and modeling services to private consultants and other non-governmental clients (e.g., modeling support services to Lane Council of Governments).
- 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.

Tangible Products Expected in FY 2013-15:

- Data and modeling services to jurisdictions and regional agencies (Upon request)
- 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:

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
2012-13	\$172,786	0.979
2013-14	\$280,087	1.39
2014-15	\$119,216	0.5
2015-16	\$118,744	0.407

FY 2015-16 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$ 55,298	STP	\$ 75,360
Interfund Transfers	\$ 48,057	ODOT Support	\$ 26,379
Materials and Services	\$ 15,389	TriMet Support	\$ 8,380
		Metro	\$ 8,625
TOTAL		TOTAL	
	\$ 118,744		\$ 118,744

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.407
TOTAL	0.407

FY 2016-17 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$ 47,863	STP	\$ 62,161
Interfund Transfers	\$ 31,514	ODOT Support	\$ 22,150
Materials and Services	\$ 19,044	TriMet Support	\$ 6,996
		Metro	\$ 7,114
TOTAL		TOTAL	
	\$ 98,421		\$ 106,433

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.35
TOTAL	0.35

II. MPO ADMINISTRATIVE SERVICES

Management and Coordination Grant – Grants Management

Description:

Grants Management and MPO Coordination provides overall ongoing department management and administration and includes 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)
 - Metropolitan Policy Advisory Committee (MPAC)
 - Transportation Policy Alternatives Committee (TPAC)
 - Metro Technical Advisory Committee (MTAC)
 - Regional Freight Committee
 - TRANSPORT Subcommittee of TPAC
 - Ad-hoc working groups

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 programs unique to urban areas are effectively implemented, including ongoing coordination and consultation with state and federal regulators.

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.

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 three times each year and operates under its own bylaws. Metro 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 biennial updates and periodic amendments, as needed to advance regional planning projects (ONGOING)

- Complete an annual self-certification review of compliance with federal transportation planning requirements (ONGOING)
- 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 2014-15 fiscal year included:

- Adoption of the revised 2013-15 UPWP.
- Completion of quarterly and year-end planning progress reports submitted to FTA and FHWA via ODOT.
- Coordination with the 2014-15 Metro budget.
- Completion of the 2012 Quadrennial Review.
- Completion of the 2014 annual self-certification.
- Organization of twelve JPACT, twelve TPAC meetings, and regional freight committee meetings, as well as coordination of agenda items on Metro Council, MPAC, MTAC meetings as needed.
- Execution of planning related contracts, procurements and grants.
- Provision of MPO staff support.

Tangible Products Expected in FY 2015-16:

- Update to the federally mandated Metropolitan Planning Area (MPA) boundary.
- Update of the MPO Public Participation Plan.
- Full implementation of the MOVES mobile emissions model.
- Adoption of the 2015-16 UPWP.
- Completion of quarterly and year-end planning progress reports submitted to FTA and FHWA via ODOT.
- Coordination with the 2015-16 Metro budget.
- Completion of the 2015 annual self-certification.
- Organization of twelve JPACT, twelve TPAC meetings, and regional freight committee meetings, as well as coordination of agenda items on Metro Council, MPAC, MTAC meetings as needed.
- Execution of planning related contracts, procurements and grants.
- Provision of MPO staff support.

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:

- 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)
- Oregon MPO Consortium (OMPOC)

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
2012-13-14	\$1,231,613	7.84
2013-14	\$1,644,305	8.44
2014-15	\$321,436	1.52
2015-16	\$305,930	1.45

FY 2015-16 Cost and Funding Sources:

Requirements:

Personal Services	\$	177,974
Interfund Transfers	\$	80,856
Materials and Services	\$	47,100

Resources:

PL	\$	253,014
STP	\$	19,164
Metro	\$	33,752

TOTAL	\$	305,930	TOTAL	\$	305,930
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Full-Time Equivalent Staffing

Regular Full-Time FTE	1.45
TOTAL	1.45

FY 2016-17 Cost and Funding Sources:

Requirements:

Personal Services	\$	150,132
Interfund Transfers	\$	72,148
Materials and Services	\$	88,338
Contingency	\$	100,000

Resources:

PL	\$	610,618
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TOTAL	\$	610,618	TOTAL	\$	610,618
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Full-Time Equivalent Staffing

Regular Full-Time FTE	1.1
TOTAL	1.1

III. METRO CORRIDOR PLANNING AND PROJECTS OF REGIONAL SIGNIFICANCE

Portland to Lake Oswego Trail Master Plan with Trail Connections to Tryon Creek State Natural Area and to mouth of Tryon Creek/Willamette River

Description:

The purpose of the Portland to Lake Oswego Trail Plan is to determine the feasibility of the trail and select a multi-use trail alignment(s) connecting Tryon Creek State Natural Area/Tryon Creek mouth at Willamette River in Lake Oswego / Clackamas Co. to Powers Marine Park in Portland, which is just south of the Sellwood Bridge.. The focus of this study will be planning, environmental study, field work, conceptual design, alignment recommendations, cost estimates and recommending ownership and maintenance roles of multimodal trail facility by trail partners and government jurisdictions. The study includes connections between Foothills Park, Tryon Cove, Tryon Creek State Natural Area, Fielding Road and Elk Rock Tunnel. This will be coordinated with ODOT's Highway 43 Culvert Replacement or new bridge project.

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, analyze and recommend the most appropriate trail alignment between Lake Oswego and Elk Rock Tunnel (south portal).
- Identify trail routes to connect to Tryon Creek State Natural Area and along Tryon Creek to the Willamette River, as well as a future trail bridge over Tryon Creek to Foothills Park and Trail.
- Identify trail alignment and connections that do not preclude future transit and/or streetcar options in this corridor and maintain existing vintage trolley service.
- Coordinate with other partners/agencies on future trail connection from Elk Rock Tunnel (south portal) to new Sellwood Bridge. The future trail connection will be identified in a future study or will rely on past plans (e.g. Metro's Streetcar with Trail Plan, December 2010) conducted by Metro and its partners. Past plans will be updated as necessary if future funding is secured.
- Define constructability issues with preferred alignments.
- Produce design documents identifying the trail alignment and cost estimates for any acquisitions of trail easements/fee simple, design P/E, construction and maintenance, in sufficient detail to satisfy the needs of jurisdictional partners.
- Make recommendations as to ownership and maintenance responsibilities of future trail and define how trail, with transit, can be a viable future option.
- Ensure trail is compatible with existing historic trolley service in the corridor.

Previous Work:

The Regional Trails master plan and the RTP have incorporated this trail segment into their plans. This project is identified in the Transportation System Plan of the Cities Lake Oswego and Portland 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.

Methodology:

This will be refined when the project scope is finalized. The Master Plan may include the following:

- Planning background report summarizing planning activities, project need statement and project solution statement.
- Base map, profiles, typical sections and narrative describing field location data.
- Reconnaissance level report of flow and drainage conditions, regulatory requirements to be addressed, and preliminary drainage and water quality options.
- Report describing anticipated structure and foundation needs.
- Description of future maintenance needs and the responsible agencies.
- 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.
- Coordinate with ODOT during planning process.
- Environmental Baseline Report to address federal environmental requirements.
- Cost estimates for final design, preliminary engineering, and construction.

Tangible Products Expected 2016-18:

- To be determined upon completion of the scope, schedule and budget. Potential deliverables include:
- Final report documenting existing conditions, the preferred alignment, a concept design for multimodal trail alignment design
- Cost estimates for design and construction, as an appendix to the final report
- The area of study is from Lake Oswego to Elk Rock Tunnel.

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

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2016-17		NA
2017-18		NA

FY 2016-18 Cost and Funding Sources:

Requirements:		Resources:	
Materials and Services	\$ 111,445	STP	\$ 100,000
		Local Match	\$ 11,445
TOTAL \$ 111,445		TOTAL \$ 111,445	

Powell/Division Transit Corridor Plan

Description:

The Powell/Division Corridor Transit Implementation Plan will coordinate land use and transportation planning efforts for an investment strategy that defines a transit project for a Small Starts application, 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.

The transit corridor plan will inform and help define the transit route, stop locations and connections and identify land use actions and investments to support livable communities. Outcomes of these efforts will be implemented by local jurisdictions. A transit alternatives assessment will further define the mode, route, service, 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).

In 2016, Metro will begin the NEPA process documenting the project impacts and benefits consistent with federal requirements. Metro will also continue to lead the outreach and analysis to lead to a recommended Locally Preferred Alternative (LPA) and the adoption of the LPA by the local jurisdictions and the Metro Council. Metro will support the design, traffic, and outreach work that TriMet will lead upon regional adoption of an LPA in 2016 and 2017 and support the partner coordination moving forward.

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 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 24-36 months to complete depending on funding and partner preferences.

Tangible Products Expected in FY 2014-17

- 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)
- 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)
- Locally Preferred Alternative Report (Spring 2016)
- Complete NEPA analysis (Fall 2017)

Entities Responsible for Activity: [to be finalized as part of scoping/chartering]

Metro – Lead Agency

Oregon Department of Transportation – cooperate/collaborate TriMet –

cooperate/collaborate – TriMet to lead conceptual design after

adoption of the Locally Preferred Alternative

Corridor Jurisdictions (including Cities of Portland and Gresham and Multnomah County) -

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
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

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	563,563
Interfund Transfers	\$	257,410
Materials and Services	\$	413,650

Resources:

Powell/Division STP	\$	440,969
Other Anticipated Funds	\$	793,969

TOTAL	\$	1,234,623	TOTAL	\$	1,234,623
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Full-Time Equivalent Staffing

Regular Full-Time FTE	4.75
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TOTAL **4.75**

FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	686,085
Interfund Transfers	\$	334,547
Materials and Services	\$	462,650

Resources:

Powell/Division STP	\$	500,000
Other Anticipated Funds	\$	897,717
Metro	\$	85,566

TOTAL	\$	1,483,283	TOTAL	\$	1,483,283
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Full-Time Equivalent Staffing

Regular Full-Time FTE	5.85
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TOTAL **5.85**

Southwest Corridor Plan

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, Multnomah County, Washington County, the Oregon Department of Transportation, TriMet and the cities of Portland, Sherwood, Tigard, Tualatin, Beaverton, Durham, King City and Lake Oswego.

The Refinement Phase of the Southwest Corridor Plan will be completed in May 2016, with the plan's Steering Committee recommending a narrowed set of high capacity transit design options and associated roadway and active transportation projects to carry into a Draft Environmental Impact Statement (DEIS).

Previous Work:

Corridor Refinement (Transportation). 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.

The 2035 RTP identifies five corridors where more analysis is needed through a future corridor refinement 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. The Southwest Corridor Transportation Plan (Corridor Refinement Plan) is identified in the 2035 Regional Transportation Plan – RTP (Mobility Corridors #2 and # 20 in the vicinity of I-5/Barbur Blvd, from Portland Central City to approximately the “Tigard Triangle”). The plan will complete one of the two corridor refinement plans that were prioritized to begin in FY09/10 by the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council.

High Capacity Transit (HCT). In fall/winter 2009/10, Metro and regional partners applied the HCT System Expansion Policy to advance one of the three Near Term Regional Priority corridors as defined in the 2035 RTP. The Southwest HCT Corridor (HCT Corridor #11, Portland to Sherwood in the vicinity of Barbur Blvd/OR 99W) has been evaluated through a rigorous prioritization process and emerged as the top Near Term Regional Priority by JPACT and Metro Council based on the System Expansion Policy targets measurable at the time.

Southwest Corridor Plan. The adoption of the Southwest Mobility Corridor and Southwest HCT Corridor by JPACT and Metro Council as top priorities for advancement effectively established the Southwest Corridor Plan as a single, integrated planning effort. Major accomplishments by year include:

FY 2010-11:

- Defined a framework for integrated planning and decision-making for community investment strategy, began scoping and chartering process, developed scope and budget with local match

- Worked with City of Portland, City of Tualatin, City of Tigard and City of Sherwood to identify and provide technical support to their land use planning efforts in the Southwest Corridor
- Developed a detailed work plan, including technical work and public engagement
- Convened project advisory committees.

FY 2011-12:

- Adopted project charter, defining the agreements between 13 project partners
- Established decision-making structure, including Steering Committee
- Completed evaluation of existing conditions and developed evaluation criteria
- Approved Southwest Corridor Vision, Goals and Objectives

FY 2012-13:

- Identified wide range of projects in four categories: high capacity transit; roadway; active transportation; and parks and natural resources
- Narrowed high capacity transit projects to six options for further study
- Combined local land use visions into one corridor land use vision to guide investments
- Defined five shared investment strategies based on the corridor land use vision
- Evaluated the shared investment strategies
- Steering Committee recommendation to Metro Council, JPACT, city councils on preferred shared investment strategy
- Significant public outreach throughout the year, including an online interactive “planning game” to assess public values on investments in four categories and to identify desired transit connections between key places

FY2013-14:

- Completed Phase 1 of the SW Corridor Plan
- The Steering Committee issued a shared investment strategy recommendation to:
 - Invest in transit, including 1) directing TriMet to develop and implement the Southwest Service Enhancement Plan to improve local service in the corridor, and 2) investing in high capacity transit in the corridor to help achieve local visions for development, revitalize and encourage private investment, and improve movement of people. The recommended general alignment connects Portland to Tualatin, via Tigard, with between 50% and 100% of the alignments in exclusive right of way, and includes bus rapid transit (BRT) and light rail (LRT) as modes for further consideration.
 - Invest in a *shared investment strategy* of roadways and active transportation, including projects that either leverage and support the potential high capacity transit line, or highly support the community land use vision
 - Invest in parks, trails and natural areas to support community visions and leverage future transportation investments
 - Develop a collaborative funding strategy for the Southwest Corridor Plan including local, regional, state, and federal sources
- Completed the Southwest Corridor Transit Alternatives Analysis
- Developed regulatory framework toolkit describing key transit supportive policies and regulatory tools recommended for further action by local partners to help foster transit ready communities in support of the land use vision
- Local jurisdictions adopted resolutions in support of the shared investment strategy
- JPACT and Metro Council adopted the shared investment strategy

- Initiated Refinement Phase to narrow transit design options for further study in DEIS
- Continued public outreach to gather opinions regarding transit options, roadway, active transportation, parks, trails, and nature projects
- Initiated Implementation and Development Southwest (IDSouthwest), a committee of Southwest Corridor community leaders created to encourage public-private partnerships in the corridor and to help implement early opportunity projects in the corridor
- Initiated development of work plan and decision/process architecture for DEIS for HCT alternatives

FY 2014-15

- Implemented early opportunity projects, including the Tualatin River Greenway and OR-99W improvements
- Refined definition of HCT alternatives
- Evaluated HCT alternatives based on capital cost, travel time, accessibility to transit, environmental impacts, development and redevelopment potential, property impacts, and traffic impacts
- Refined HCT alignments and HCT-supportive multimodal projects based on technical evaluation and community input
- Identified and addressed key questions about HCT alignment options and funding strategies during a focused refinement period
- Produced draft recommendations for new local bus routes, route extensions, route changes, and service upgrades in TriMet's Southwest Service Enhancement Plan
- Developed streamlined schedule to facilitate local decision-making and conserve resources by further refining mode, alignment, and terminus prior to entering DEIS
- Initiated place-focused outreach strategy to further refine HCT alignments and share information about roadway and active transportation projects throughout the corridor

2015-16

- Continued early opportunity project implementation, including roadway, active transportation, safety, parks and habitat projects
- Continued place-focused, corridor-wide and online public outreach to gather input on HCT alignment, mode and terminus
- Place-based analysis of HCT alignment options, evaluated against criteria (transit performance, access and development, mobility, cost, engineering complexity, and community and environmental impacts) linked to the stated project goals
- Began in-depth community planning process along Barbur Boulevard for HCT and related active transportation design
- Refined HCT alignments based on technical evaluation and community input
- Selected the travel mode for the HCT system (BRT or LRT)
- Collected information on funding sources for roadway and active transportation projects in the corridor and identified an overarching financing strategy
- Identified a strategy for catalyzing and guiding land use and development resulting from the HCT and related shared investment projects
- Concluded the Refinement Phase by recommending and, after public review and input, confirming a preferred package of HCT alignment, mode, and terminus and supporting roadway and active transportation projects for further study in DEIS

Major Products and Activities Expected in FY 2016-17

- Begin the Environmental Review and Project Development Phase
- Advance design of HCT alignment options to 10% completion prior to beginning the DEIS
- Determine which shared investment strategy projects to include in the DEIS
- Initiate the DEIS process, including scoping, agency coordination plan and selection of consultants
- Begin analysis of potential project impacts and mitigations
- Evolve preliminary station locations into conceptual designs and begin the station area planning process, examining access needs and land use and development opportunities
- Continue in-depth community planning process along Barbur Boulevard for HCT and related active transportation design
- Public outreach to gather input on issues to include in DEIS scoping
- Continue early opportunity project implementation, including roadway, active transportation, safety, parks and habitat projects
- Refine timeframes and potential funding sources for priority roadway and active transportation projects throughout the corridor
- Continue to collaborate with project partners to support community vision

Future Years:

- 2017-2018: Publish DEIS for HCT investment in Southwest Corridor, select Locally Preferred Alternative (LPA)
- 2018-2019: Secure local funding commitment, advance HCT design to 30% completion

Entities Responsible for Activity:

Metro – Lead Agency – Overall Southwest Corridor Plan – Lead agency for Refinement
Oregon Department of Transportation – cooperate/collaborate TriMet –
cooperate/collaborate
Corridor Jurisdictions – cooperate/collaborate

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	\$2,028,207	5.485
2015-16	3,629,399	6.05

FY 2015-16 Cost and Funding Sources:**Requirements:**

Personal Services	\$	666,951
Interfund Transfers	\$	336,348
Materials and Services	\$	2,626,100

Resources:

Other Anticipated Funds	\$	3,629,399
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TOTAL	\$	3,629,399	TOTAL	\$	3,629,399
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Full-Time Equivalent Staffing

Regular Full-Time FTE	6.05
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TOTAL	6.05
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FY 2016-17 Cost and Funding Sources:**Requirements:**

Personal Services	\$	767,539
Interfund Transfers	\$	376,115
Materials and Services	\$	1,024,100

Resources:

Other Anticipated Funds	\$	1,883,132
Metro	\$	284,622

TOTAL	\$	2,167,754	TOTAL	\$	2,167,754
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Full-Time Equivalent Staffing

Regular Full-Time FTE	6.6
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TOTAL	6.6
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Corridor Refinement and Project Development (Investment Areas)

Description:

The Resource and Project Development Division and 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. (Aug 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*. (Aug 2012 to Jan 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. (Jan 2013 to Jan 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. (Mar 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. (Aug 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. (Feb 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. (Feb 2014 to present)
- Entered into Project Development for Powell Division BRT with FTA as a Small Starts Project. (2015)
- 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)

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.

Tangible Products Expected in FY 2016-17:

- 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)
- Develop an approach for shared funding for the Powell-Division BRT project to move through FTA Project Development. (2015-2016)
- 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)
- Support local project development efforts on mobility corridors. (ONGOING)
- Complete local and regional plan amendments (2016-2017)
- Continue to develop the Powell-Division Transit and Development project (ONGOING)
- Continue to support the SW Corridor Shared Investment Strategy and Transit project (ONGOING)
- Support the Regional Transit Strategy (2016-2017)
- Launch a new economic investment area (2016-2017)

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:

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
2010-11	\$141,080	0.89
2011-12	\$155,681	.0865
2012-13	\$149,211	1.02
2013-14	\$343,290	1.745
2014-15	\$282,228	1.315
2015-16	\$112,589	0.5

FY 2015-16 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	70,583	PL	\$	38,604
Interfund Transfers	\$	39,256	5303	\$	59,188
Materials and Services	\$	2,750	Metro	\$	14,797
TOTAL			TOTAL		
	\$	112,589		\$	112,589

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.5
TOTAL	0.5

FY 2016-17 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	67,633	STP	\$	91,422
Interfund Transfers	\$	32,502	Metro	\$	10,464
Materials and Services	\$	1,750			
TOTAL			TOTAL		
	\$	101,886		\$	101,886

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.55
TOTAL	0.55

Economic Value Atlas (EVA)

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. This includes:

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
 - Portland Development Commission cluster projects
 - Value of Jobs Coalition reports
 - Port of Portland plans and studies
 - State Business Oregon and Brownfields programs

Methodology:

Metro will serve 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 2018 RTP Update + 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.

Tangible Products Expected in FY 2016-17:

- Scope development and consultant selection (FIRST QUARTER 2016-17)
- Creation of working group (FIRST QUARTER 2016-17)
- Market assessment of traded sector economy (SECOND QUARTER 2016-17)
- Economic Value Atlas (FOURTH QUARTER 2016-17)
- 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:

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

FY 2016-17 Cost and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	101,076	STP	\$	325,000
Interfund Transfers	\$	60,831	Metro	\$	64,309
Materials and Services	\$	210,708			

		\$	372,615			\$	372,615
TOTAL				TOTAL			

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.85
TOTAL	0.85

Regional Intelligent Transportation Systems (ITS) Communications Master Plan

Description:

The Portland metropolitan region is considered a leader in the application of intelligent transportation system (ITS) strategies. Examples of ITS solutions include traffic control at intersections, metering vehicles at freeway on-ramps, providing real-time traveler information for transit riders, and detecting roadway incidents. These ITS solutions depend on real-time communications between field devices and traffic operations centers. As the region becomes more sophisticated in deployment of ITS solutions, there is a need to plan for the communication network to ensure that it is advanced enough to accommodate the increasing rate of data transfer in a fast, resilient, and secure environment.

This project will complete a master plan for the region's ITS communications network, looking at current and future needs, and identifying communication technologies to support these needs. The outcome of the project will be a plan that will be used by TransPort to guide infrastructure investment.

Objectives

- Identify gaps in the existing regional communications network and solutions to address needs of partner agencies.
- Define best practices for lifecycle planning, security protocols, and compatibility.
- Engage broad range of communication network users in planning effort.
- Look ahead to new technologies to position the region for the future.
- Incorporate communications plan outcomes into Regional ITS Architecture.

Previous Work

In June 2010, the region adopted the *Regional Transportation System Management and Operations (TSMO) Plan*, which provides the Portland metropolitan area with a 10-year strategic investment guide focused on the region's Intelligent Transportation System (ITS) and Transportation Demand Management (TDM) infrastructure and programs. Under the direction of the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council, the Metropolitan Transportation Improvement Program (MTIP) established a programmatic allocation of funding at \$1.5 million per year since 2010 that has been used to implement the Regional TSMO Plan.

The region has an established sub-committee of Transport, the region's TSMO committee, focused specifically on ITS communications collaboration. Assembled in 1997, the Cooperative Telecommunications Infrastructure Committee (CTIC) is made up of operations and IT staff from ODOT, TriMet, Clackamas County, Washington County and the cities of Beaverton, Gresham and Portland. Through the collaborative effort, bandwidth on existing fiber optic communication networks is exchanged to avoid duplication where jurisdictions overlap. The agencies have a quid pro quo system of exchanging bandwidth, where only use of the network is swapped among the stakeholders. A unique feature of this project is that no funding has changed hands throughout the development of the fiber network. Each agency focused on installing the portions of the network that support the individual agency's operations, and the efforts were coordinated to eliminate redundancy. A collective architecture for the project was developed. An intergovernmental agreement exists to document roles and responsibilities for the effort.

Methodology:

Metro will serve as project manager for this effort, with significant support from TransPort and CTIC. This project will be coordinated with the update of the Regional ITS Architecture Update.

The project will complete the following components:

- Stakeholder Engagement – identifying stakeholders and involving them in the master plan process.
- Best Practices – document trends in technology, security, contracting, and life cycle management of communications networks.
- Existing Conditions – inventory location of communication infrastructure, type of communications (wired v. wireless) and other equipment including routers and switches. Document planned infrastructure.
- Planned Network - Identify gaps in existing network using inventory. Using regional and local Transportation Improvement Plan (TIP) lists to identify opportunities for completing network gaps.
- Project Development – Prepare phased list of communications investments.
- Protocols – Document agency to agency communication protocols. Recommend regional protocols for security, compatibility and life cycle management of equipment. Prepare agreement to document cooperation on protocols.
- Final Documentation – Prepare Regional ITS Communications Plan document.

Tangible Products Expected in FY 2016-17:

Fully Executed IGA, Consultant Contract, and Notice to Proceed (3rd Quarter FY 2015-16) Final Portland Regional Communications Master Plan document (4th Quarter FY 2015-16)

Entities Responsible for Activity:

Metro – Lead Agency

ODOT – Contract Manager

TransPort – Cooperate/Collaborate

Schedule for Completing Activities:

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

FY 2016-17 Cost and Funding Sources:

Requirements:

Personal Services	\$	
Interfund Transfers	\$	
Materials and Services	\$	55,723
TOTAL		\$ 55,723

Resources:

STP	\$	50,000
Metro	\$	5,723
TOTAL		\$ 55,723

Regional Intelligent Transportation Systems (ITS) Architecture Update

Description:

The Federal Highway Administration defines *Intelligent Transportation Systems* as "the application of advanced sensor, computer, electronics, and communication technologies and management strategies—in an integrated manner—to improve the safety and efficiency of the surface transportation system". This definition encompasses a broad array of systems and information processing and communications technologies. The Portland metropolitan region is recognized as a national leader in the coordinated implementation of ITS technologies and management strategies.

Starting with the Transportation Equity Act for the 21st Century (TEA-21), federal transportation legislation has required that all ITS projects funded from the Highway Trust Fund be in conformance with the National ITS Architecture and officially adopted standards. With the passage of Moving Ahead for Progress in the 21st Century (MAP-21), provisions strengthen requirements to promote the use of systems engineering methods in the widespread deployment and evaluation of intelligent transportation systems. This requires that ITS projects conform to a regional ITS architecture, which is built on the National ITS Architecture but customized to the unique characteristics of a region. The bottom-line for Portland region is that to continue using federal funding for ITS investments, it must be able to demonstrate it is meeting these requirements.

A regional ITS architecture is a specific regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects. Portland's Regional ITS Architecture was originally developed in 2001 to meet the federal architecture requirements of TEA-21. It was last updated in 2006. Since that time minimal maintenance has been performed and the region has increased its scope and breadth of ITS infrastructure. Several agencies have updated their ITS plans.

This project will bring the 2006 revision of the Portland Regional ITS architecture into line with the most recent version of the National ITS Architecture including updating to Turbo Architecture 7.0, which is a software tool designed to support development of regional and project architectures based on the National ITS Architecture.

Objectives:

- Align regional ITS architecture with the National ITS Architecture 7.0 to maintain consistency with federal regulations.
- Incorporate the Regional TSMO Plan policies into regional ITS architecture, including performance measures.
- Update regional ITS architecture software to Turbo Architecture 7.0
- Ensure regional ITS architecture is consistent with local ITS plans, new devices and connections.

Previous Work:

The original Portland Regional ITS Architecture was prepared in 2001 and updated in 2003, 2005 and 2006. The 2006 version has a 10-year planning horizon of 2005-2015. This document is tied to the 5.1 version of the National ITS Architecture and the 3.1 version of Turbo Architecture. Since the last update, ODOT Region 1, Clackamas County, and Washington County have updated their agency ITS plans. The region has also created the *Regional Transportation System Management and Operations (TSMO) Plan*, adopted in June 2010, which provides the Portland metropolitan area with a 10-year strategic investment guide focused on the region's Intelligent Transportation System (ITS) and Transportation Demand Management (TDM) infrastructure and programs. The Metropolitan Transportation Improvement Program (MTIP)

established a programmatic allocation of funding at \$1.5 million per year since 2010 that has been used to advance TSMO solutions in the region.

Methodology:

Metro will serve as project manager for this effort, with significant support from TransPort, the TSMO subcommittee to the Transportation Policy Alternatives Committee (TPAC). This project will follow the process for completing a regional ITS architecture described in the FHWA Regional ITS Architecture Guidance document. This project will be coordinated with the Regional ITS Communications Master Plan effort.

The project will complete the following components:

- Stakeholder Engagement – identifying stakeholders and involving them in the update process.
- Data Collection – updating inventory of ITS equipment and services in Turbo Architecture 7.0; determining needs and user services/market packages; updating the operational concept to clarify roles and responsibilities in implementing and operating regional ITS elements; and defining functional requirements.
- Interfaces Definition – identifying interconnects and defining information flows between ITS elements in Turbo Architecture 7.0.
- Implementation – Define project sequencing; list agency agreements; and identify ITS standards.
- Final Documentation – Prepare Portland Regional ITS Architecture document.

Tangible Products Expected in FY 2016-17:

Fully Executed IGA, Consultant Contract, and Notice to Proceed (3rd Quarter FY 2015-16) Regional ITS Architecture database (4th Quarter FY 2015-16)

Final Portland Regional ITS Architecture document (1st Quarter FY 2016-17)

Entities Responsible for TSMO Activity:

Metro – Lead Agency

ODOT – Contract Manager

TransPort – Cooperate/Collaborate

Schedule for Completing Activities:

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

FY 2016-17 Cost and Funding Sources:

Requirements:		Resources:	
Personal Services	\$	STP	\$ 50,000
Interfund Transfers	\$	Metro	\$ 5,723
Materials and Services	\$ 55,723		
TOTAL		TOTAL	\$ 55,723

I-84 Multimodal Integrated Corridor Management

Description:

US DOT's Intelligent Transportation Systems (ITS) Joint Program Office (JPO) awarded Metro and agency partners an Integrated Corridor Management Deployment Planning Grant February 24, 2015. 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 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
- 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
- Alternative Analysis – bundling operational strategies into operational scenario packages for modeling and evaluation
- 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
- 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
- Final Report – preparing a final document (I-84 Corridor ICM Regional Concept of Transportation Operations (RCTO))
-

Tangible Products Expected in FY 2016-17:

- Alternative analysis including modeling results and evaluation (1st Quarter FY 2016-2017)
- Project Management Plan, Systems Engineering Management Plan and Final report (RCTO) (4th Quarter FY2016-2017)

Entities Responsible for Activity:

Metro – Lead Agency

ODOT – Contract Manager

ODOT, TriMet, Multnomah County, City of Portland, City of Gresham, PSU – Project Team

TransPort – Cooperate/Collaborate

Schedule for Completing Activities:

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

FY 2016-17 Cost and Funding Sources:

Requirements:

Personal Services	\$	14,982
Interfund Transfers	\$	9,864
Materials and Services	\$	239,601

Resources:

ICM-DPG-2013/ICM	\$	191,680
Deployment		
STP	\$	22,295
Local Partners	\$	41,075
Metro	\$	9,397

	\$	264,447		\$	264,447
TOTAL			TOTAL		

Full-Time Equivalent Staffing

Regular Full-Time FTE	0.109
TOTAL	0.109

IV. OTHER PROJECTS OF REGIONAL SIGNIFICANCE

ODOT – Development Review

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, design and architectural review, 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 2015-2016 fiscal year included review of over 2,000 land use actions, with approximately 80 written responses and 60 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
- 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

Estimated FY 2016-17 Costs and Funding Sources:

Requirements:			Resources:		
Staff Time	\$	330,000	SPR	\$	330,000
<i>TOTAL</i>	\$	330,000	<i>TOTAL</i>	\$	330,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		3.0			
<i>TOTAL</i>		3.0			

ODOT - Transportation and Growth Management (TGM)

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 2016):

- Happy Valley -- Transportation System Plan Update (end date 12/31/2015)
- Lake Oswego – Lake Grove Parking Plan (end date 12/31/2015)
- Portland – Parking Analysis and Tool Kit for Neighborhood Centers and Corridors (end date 2/29/2016)
- West Linn – Transportation System Plan Update (end date 3/31/2016)
- Multnomah County – Sauvie Island and Multnomah Channel Transportation System Plan (end date 8/31/2015)
- Fairview – Transportation System Plan Update (end date 6/30/2016)
- Portland – Growing Transit Communities (end date 6/30/2016)
- Portland – Central City Truck Parking and Loading Plan (end date 6/30/2016)
- Wood Village – Town Center Master Plan and TSP Update (end date 6/30/2016)
- Clackamas County – Monroe Neighborhood Street Design Plan (end date 6/30/2016)
- TriMet – Bicycle Plan (end date 6/30/2016)
- Washington County – Right-sizing the Parking Code (end date 6/30/2016)

Current Work

- Beaverton – Active Transportation Plan (end date 6/30/17)
- Cornelius – TSP Update
- Gladstone – TSP Update
- Portland – Enhanced Transit Corridors Plan
- Metro – Transit System Expansion Policy (element of Regional Transit Strategy)

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 Functional Plan.

Tangible Products Expected in FY 2016-2017:

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

- Beaverton – Active Transportation Plan (end date 6/30/17)
- Cornelius – TSP Update
- Gladstone – TSP Update
- Portland – Enhanced Transit Corridors Plan
- Metro – Transit System Expansion Policy (element of Regional Transit Strategy)

Additional TGM applications will be solicited and grants will be awarded in 2016 for project completion by June 2018.

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* and *Tangible Products* 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

Estimated FY 2016-2017 Costs and Funding Sources:

Requirements:			Resources:		
ODOT Staff Time	\$	240,200	TGM (STP)	\$	910,280
201-2017 Grants	\$	670,080			
2016-2017 Grants estimate	\$	910,280			
TOTAL	\$		TOTAL	\$	910,280
Full-Time Equivalent Staffing					
Regular Full-Time FTE		2.0			
TOTAL		2.0			

ODOT – Before and After Study of ODOT Investments

Description:

ODOT continues to invest significantly in the regional transportation system. Determining how these investments provide a beneficial return to be able to strategically make additional investments in the system is of great importance given limited financial resources. This project continues the previous effort of examining project investments from a pre- and post-construction and implementation phase to compare operating conditions under both scenarios to determine the effects/benefits the project had in solving the original need identified. Key areas of focus include (but are not limited to) the safety and operational impacts of auxiliary lanes, changes in lane configurations, acceleration and deceleration lanes or braided ramps.

Objectives:

Continue previous study effort that:

- Identified a list of potential projects for consideration/assessment
- Gather data from pre- and post- construction
- Update previous report with additional project findings

Previous Work:

- Before and After Study Results (June 2015)

Methodology:

- Develop scope of work for project
- Identify project list for potential before and after review
- Connect consultants with internal staff to gather data potential data to determine if project has enough data to move forward into evaluation
- Use previous methodology/criteria (or establish new/different criteria depending on project and data available) to evaluate the success or effect of the project compared to pre-conditions
- Document results and update previous report with new data
- Monthly (or bi-weekly) check-in with consultants and staff on project progress and milestones/deliverables
- Identify lessons learned, successes, and next steps at the end of the project

Tangible Products Expected in 2016-2017:

- Scope for project (Q1)
- Procurement and contracting (Q1)
- Draft list of potential projects and final list of projects to move forward for evaluation (Q2)
- Draft report with findings (Q3)
- Final updated report with new projects (Q4)

Entities Responsible for Activity:

Oregon Department of Transportation – Lead Agency Metro,
TriMet, Jurisdictional Partners – Inform

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
2014-2015	\$30,000	0.25

Estimated FY 2016-17 Costs and Funding Sources:

Requirements:			Resources:		
Consultant Services	\$	60,000	SPR	\$	75,000
Staff Time	\$	15,000			
<i>TOTAL</i>	\$	75,000	<i>TOTAL</i>	\$	75,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		0.25			
<i>TOTAL</i>		0.25			

ODOT – 82nd Avenue of Roses Implementation Plan

Description:

The 82nd Avenue of Roses Implementation Plan will identify improvements to 82nd Avenue between NE Killingsworth in Portland and SE Johnson Creek Boulevard in Clackamas County. 82nd Avenue is state highway OR 213, designated a District Highway. In the project area, it has a five-lane cross-section with two through lanes in each direction and a center turn/median lane. There are no bike facilities on the highway. Sidewalks are substandard in width through much of the corridor and non-existent in some sections. 82nd Avenue is one of the region's key transit corridors, with the 72 bus ranking amongst TriMet's busiest. Stakeholders, including state legislators, have advocated for an implementation plan to identify projects that will improve the highway corridor. This ODOT-led planning work will include several elements, including:

- Project Management
- Public and Stakeholder Involvement: Facilitation, Outreach and Communications
- Multi-Modal Transportation Planning
- Conceptual Design Engineering
- Traffic Analysis and Management
- Funding and Financial Analysis
- Land Use Analysis
- Graphics and Visual Imaging

Plan Objectives:

The following is a list of key objectives expected to be completed during the planning work on 82nd Avenue:

- Overall objectives: analysis to inform discussion and implementation recommendations for the future of 82nd Avenue, including safety and sense of place.
- A summary report of past planning documents along the corridor. Past planning work should not be discarded and should inform the current planning work
- Analysis and recommendations for improvements of focus areas. For selected focus areas, sidewalks, bike facilities, access management, transit ridership and other data will be gathered and analyzed to produce a set of proposed improvements
- A financial feasibility analysis. This document will identify sources and likelihood of funding, which will help inform the scale of the plan's project list
- A jurisdictional transfer memo. This memo will look at what a transfer of ownership of 82nd Avenue (from ODOT to City of Portland) means and will recommend next steps. It will not make a recommendation on whether to pursue jurisdictional transfer
- A cross-section memo. This memo will look at different cross-sections and will inform the conversation on jurisdictional transfer analysis and other plan products
 - A decision-making structure with a Steering Committee, Community Advisory Committee and a Technical Advisory Committee. The Steering Committee made up of representatives of agencies with implementation authority will make plan decisions, the Community Advisory Committee made up of corridor stakeholders will make recommendations to the Steering Committee, and the Technical Advisory Committee will provide technical feedback on work products

Previous Work:

Plan information will be informed by past 82nd Avenue planning work including but not limited to the 82nd Avenue of Roses High Crash Corridor Safety Plan, City of Portland Comprehensive Plan, City of Portland Transportation System Plan, Clackamas County Transportation System Plan, ODOT Region 1 sidewalk inventory, ODOT Pedestrian Analysis, Metro 2040 Plan, 82nd Avenue Community Forum Summary Report, Imagine 82nd, Powell-Division High Capacity Transit Plan products, ODOT Statewide Transportation Improvement Program,

Pedestrian Network Analysis (TriMet), Lents 5-year Action Plan and the Jonesmore Station Area Plan. The project kicked off in FY16, including scope development, consultant selection, formation of committees and delivery of technical memoranda on planning context, jurisdictional transfer and financial feasibility.

Methodology:

- Develop scope of work for 82nd Avenue Plan
- Determine the level of investment that is feasible for plan implementation
- Select via the community and steering committees the criteria that should be used to determine focus areas along the corridor
- Within selected focus areas, gather information on safety, bike inventory, sidewalk inventory, land use, crosswalk locations and other data
- Develop project sets for the focus area based on data collected and stakeholder input
- Develop an implementation plan that identifies agency and partner commitments for project development in the short-term
- Make recommendations for future study

Tangible Products Expected in 2016-2017:

- Analysis of Cross-Sections Options Memo
- Focus Area Selection
- Project Sets for Focus Areas
- Final Report

Entities Responsible for Activity:

Oregon Department of Transportation – Product Owner

City of Portland Bureaus of Transportation and Planning & Sustainability, Metro, TriMet, Clackamas County – Cooperate and/or Fund projects

Stakeholders, community organizations - Cooperate

Schedule for Completing Activities:

Please refer to schedule information provided in the *Tangible Products* section.

Funding History:

\$200,000 of ODOT funding in FY 2014-2015 for scope development, community-based interviews, and beginning consultant work.

Estimated FY 2016-2017 Costs and Funding Sources:

Requirements:			Resources:		
Consultant Services	\$	75,000	SPR	\$	100,000
Staff Time	\$	25,000			
<i>TOTAL</i>	\$	100,000	<i>TOTAL</i>	\$	100,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		0.5			
<i>TOTAL</i>		0.5			

ODOT – Facility Bottleneck and Solutions Feasibility Assessment

Description:

The purpose of this activity is to create a useful baseline and future assessment that analysts throughout the region can rely on for corridor and project level investigations as well as in support of developing the 2018RTP update. One element of this project documents previous project/planning efforts within the region on state facilities to identify a range of potential solutions and assess their current feasibility. The other element focuses on the current state of state highway facilities with respect to users, volume levels, safety, reliability, and other relevant existing data. Project is expected to focus initially on Interstate facilities and Oregon Highway Plan (OHP) –designated freight routes.

Objectives:

- Document previous planning outcomes/projects along state facilities
- Provide detailed information of physical characteristics of major ODOT and regional facilities
- Define and identify recurring and non-recurring bottleneck locations
- Determine best practices from other state DOTs on identifying bottlenecks and documenting existing and future conditions and issues related to mobility, reliability, safety, and operations
- Provide a user friendly product which documents the current state of facilities and problem/issue areas (bottlenecks) on state facilities

Previous Work:

- Previous studies/reports, spanning the last thirty years.

Methodology:

- Determine corridors and sub-areas to be included in assessment
- Document applicable policy framework including federal law, Oregon Transportation Plan (OTP), Oregon Highway Plan (OHP), Transportation Planning Rule (TPR), and Regional Transportation Plan (RTP), including the Regional Congestion Management Process, Mobility Corridor Atlas, RTP section 5.3, Implementation of the Mobility Corridor Strategy (Corridor Refinement Planning), and Regional Transportation Functional Plan (RTFP)
- Develop criteria for evaluating previously identified projects/solutions, based on policy framework and including engineering and financial feasibility
- Gather existing data and determine validity, missing information, and any reasonable new information to be collected
- Research best practices from other state DOTs on identifying bottlenecks and documenting existing and future conditions and issues related to mobility, reliability, safety, and operations, for inclusion in draft/final report
- Document previous planning outcomes/projects (examples include CBOS and Interchange Atlas)
- Analysis and documentation of existing and future conditions on each of the selected corridors
- Identify recurring and non-recurring bottleneck locations
- Evaluate previously identified projects/solutions
- Identify feasible solutions for possible inclusion in the 2018 RTP
- Provide a public information process that informs about the project

- Review Title IV mapping and relation to identified projects
- Monthly (or bi-weekly) check-in with consultants and staff on project progress and milestones/deliverables
- Identify lessons learned, successes, and next steps at the end of the project

Tangible Products Expected in 2016-17:

- Draft report
- Final report

Entities Responsible for Activity:

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

Schedule for Completing Activities:

Draft report is expected to be finalized in Summer 2016, with the Final report being completed in Winter 16/17.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2016-17	\$300,000	

Estimated FY 2016-2017 Costs and Funding Sources:

Requirements:			Resources:		
Staff Time	\$	100,000	SPR - Region	\$	300,000
Project Staff/Consultants	\$	200,000	STP	\$	-
<i>TOTAL</i>	\$	300,000	<i>TOTAL</i>	\$	300,000
Full-Time Equivalent Staffing					
Regular Full-Time FTE		2.5			
<i>TOTAL</i>		2.5			

ODOT – Interagency Coordination and ODOT Policy and Plan Implementation

Description:

ODOT coordinates with and provides technical assistance and policy direction to local jurisdictions as they develop or update their transportation system plans (TSPs), TSP refinement plans, modal plans, corridor plans; parking management plans; concept plans; 2040 Center, Main Street, Station Community and Corridor Plans; land use plans; and other legislative plan amendments.

Objectives:

- Provide policy direction and technical assistance for local long-range transportation and land use planning efforts to ensure consistency and compliance with the Oregon Transportation Plan, Oregon Highway Plan, Transportation Planning Rule, and other applicable state transportation plans, regulations and standards; to ensure state transportation needs are reflected in local plans; and to ensure the plans are financially realistic.
- Coordinate with Metro, DLCD and TriMet to ensure consistent application and interpretation of state and regional plans and regulations as they apply to local plans.
- Participate in ODOT statewide plan and policy development and implementation guidance to ensure they reflect and are relevant to Portland Metro area conditions.
- Provide technical assistance, education and training regarding statewide policy and implementation.

Previous Work:

- Participation in Sub-regional Transportation Coordination Committee (WCCC TAC, EMCTC TAC, CTAC)
- Information sharing with regional and local jurisdictions on state plan and policy changes and implementation guidance, including assistance with the development of alternative mobility standards and multi-modal mixed use area implementation.
- Participation in local TSPs (TGM-funded TSPs are listed under the TGM Program)
- Participation on City of Portland Transportation Expert Group (TEG) and Agency Coordination meetings
- Participation in UGB and Urban Reserve Area Concept Plans
- Participation in Metro funded Community Planning and Development planning efforts that may affect state highways

Methodology:

Methodology is dependent on work product and generally includes involvement on technical advisory committees, review of draft plan products/documents/modeling results, and information-sharing about statewide plans, initiatives, policy changes, and policy implementation guidance.

Tangible Products Expected in 2016-2017:

- Participation on TSP technical advisory committees, including Hillsboro, Portland.
- Submittal of written and oral comments on draft and final local TSP-related documents
- Participation on Technical Advisory Committees for local legislative plan amendments/plan development
- Attendance at County Coordinating Committees
- Submittal of written and oral comments on draft and final local plan documents

- Continued assistance and training with regard to Oregon Highway Plan and Transportation Planning Rule amendment implementation, including development of guidance and training materials and assistance with multi-modal mixed use area implementation
- Multi-modal mixed use area (MMA) reviews

Entities Responsible for Activity:

Oregon Department of Transportation – Product Owner
 Metro – Cooperate/Collaborate
 TriMet – Cooperate/Collaborate
 Regional partner agencies – Cooperate/Collaborate
 Cities and Counties – Cooperate/Collaborate
 Department of Land Conservation and Development (DLCD) – Cooperate/Collaborate
 Community groups and organizations/stakeholders – 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
2011-12	\$297,057	
2012-13	\$297,057	
2013-15	\$ 660,000	4.3
FY2016	\$ 149,000	1.5

Estimated 2016-17 Costs and Funding Sources:

Requirements:			Resources:		
Staffing Time	\$	149,000	SPR	\$	149,000
<i>TOTAL</i>	\$	149,000	<i>TOTAL</i>	\$	149,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		1.5			
<i>TOTAL</i>		1.5			

ODOT – Metro Regional Long Range Planning Projects

Description:

ODOT participates in regional long range planning projects through policy analysis, traffic analysis, project scoping and prioritization, development and evaluation of transportation performance measures, and other work associated with the implementation of, and any amendments to, Metro's Regional Transportation Plan (RTP), RTP Modal Plans, Growth Management Functional Plan, Regional Transportation Functional Plan, Urban/Rural Reserves, Climate Change Scenario work, and other regional long range planning projects. Work includes participation on regional Technical Advisory Committees or Work Groups, Metro-TriMet-ODOT-DLCD Agency Coordination meetings, and submittal of written and oral comments on draft and final regional plan documents. This work task also includes ODOT attendance at JPACT, TPAC or MTAC, as well as MPO coordination tasks such as review and development of the Unified Planning Work Program (UPWP), processing of UPWP related invoices and amendments, oversight of and administrative assistance with consultant selection and contracting relating to Metro Regional Long Range Planning projects and MTIP-funded Other Projects of Regional Significance.

Objectives:

- Support and provide technical and policy analysis for regional long range planning projects
- Coordinate with Metro, TriMet, DLCD and local jurisdictions on grants and on regional long range plan consistency with the Oregon Highway Plan, Transportation Planning Rule, Oregon Sustainable Transportation Initiative, Regional Transportation Plan, Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

Previous Work:

- Attendance at JPACT, TPAC and MTAC meetings
- Processing of UPWP invoices and UPWP IGA amendments
- Committee participation and draft document/product review for the following long range planning efforts:
 - 2014 Regional Transportation Plan update
 - Regional Active Transportation Plan
 - Climate Change Scenario work
 - Powell-Division Corridor planning work
 - SW Corridor planning work
- Review and comments on draft 2018 RTP Work Program
- Participation in RTP Working Groups and draft RTP-related document/product review and comments
- Coordination with Metro and local jurisdictions regarding the development of potential alternative State Highway mobility standards and transportation performance measures in Metro area

Methodology:

Methodology is dependent on work product and generally includes involvement on RTP Work Groups and technical advisory committees, review of plan products/documents, and information-sharing about statewide initiatives, plans, policies, and policy implementation.

Tangible Products Expected in 2016-2017:

- Participation on RTP Working Groups and TPAC. MTAC and JPACT discussions relating to the 2018 RTP
- Continued coordination and technical assistance in the development and review of potential alternative transportation performance measures in the Metro area
- Committee participation and draft document/product review for the following long range planning efforts such as the Over-Dimensional Truck Route Study
- Attendance at MTAC and TPAC meetings
- UPWP review and development
- Processing of invoices and IGA amendments

Entities Responsible for Activity:

Oregon Department of Transportation – Cooperate/Collaborate

Metro – Cooperate/Collaborate

TriMet – Cooperate/Collaborate

Regional partner agencies – Cooperate/Collaborate

Cities and Counties – Cooperate/Collaborate

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

Community groups and organizations/stakeholders – 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
2011-12	\$77,500	
2012-13	\$77,500	
2013-15	\$ 350,000	2.3

Estimated 2016-17 Costs and Funding Sources:

Requirements:			Resources:		
Personal Services	\$	175,000	SPR	\$	175,000
	\$			\$	
TOTAL	\$	175,000	TOTAL	\$	175,000
Full-Time Equivalent Staffing					
Regular Full-Time FTE		1.5			
TOTAL		2.28			

ODOT – Rose Quarter Facility Plan Refinement

Description:

In 2012, The Oregon Transportation Commission unanimously adopted a facility plan for the I-5 interchange in Portland's Rose Quarter neighborhood. The plan, which was also unanimously adopted by the Portland City Council, calls for a combination of surface street and highway improvements in conjunction with implementation of the N/NE Quadrant Plan (for land use). The Facility Plan left certain key issues unresolved and the purpose of this task is to refine the Plan to ensure the feasibility of its design.

Objectives:

- Continue the partnership with the City of Portland for planning of transportation and land use in the Rose Quarter. This includes community engagement to ensure the refinement process is transparent, especially to participants in the Facility Plan's original development (2010-2012).
- Address structural engineering questions regarding the proposed Hancock Street and Clackamas Street overcrossings of I-5.
- Address geometric and operational solutions for Moda Center egress (caused by the relocation of the southbound I-5 onramp from Wheeler to Weidler).
- If necessary/appropriate, investigate construction phasing strategy as it relates to design and stakeholder impacts.

Previous Work:

- ODOT and the City of Portland collaborated on the 2012 Facility Plan.
- Previous studies, spanning the last thirty years, include the Greeley-North Banfield Plan, the Portland Loop Study and the I-5: I-84 to I-405 Study.
- In 2014, ODOT performed operational and safety analysis of some alternatives for some alignment alternatives, validating the Facility Plan's design.
- In FY16, ODOT procured consultant services for this phase of work, collaborating with PBOT on the statement of work and consultant selection. The consultant began work in January 2016.

Methodology:

This phase of work involves preliminary engineering work, traffic analysis, roadway design and public engagement. There is significant collaboration between ODOT and PBOT throughout.

Tangible Products Expected in 2016-17:

- Pre-DAP plans (10% design level) for refined elements of the facility plan.

Entities Responsible for Activity:

Oregon Department of Transportation – Lead

City of Portland - Collaborate

Metro – Coordinate

TriMet – Coordinate

Community groups and organizations/stakeholders – Cooperate

Schedule for Completing Activities:

Activities will be completed consistent with the project work plan developed by Metro.

Funding History:

Fiscal Year	Total Budget	FTE Comparison
2013-13	\$1,800,000	

Estimated FY 2016-2017 Costs and Funding Sources:

Requirements:			Resources:		
Staff Time	\$	25,000	SPR - Region	\$	100,000
Project Staff/Consultants	\$	225,000	STP	\$	150,000
<i>TOTAL</i>	\$	250,000	<i>TOTAL</i>	\$	250,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		1.5			
<i>TOTAL</i>		1.5			

ODOT – Transportation Asset Management

Description:

The purpose of this project is to integrate statewide efforts by ODOT to fulfill federal requirements for Transportation Asset Management (TAM) with regional practices for project scoping and selection. The investigation will yield analysis of best practices and the advantages and disadvantages of adopting best practices. The project will focus on the management of ODOT assets, such as district highways, but the lessons may be valuable to partner agencies as well.

Objectives:

- Ensure that regional investment decisions consider risks related to different capital and maintenance investment scenarios.

Previous Work:

- ODOT commissioned introductory/exploratory research on the subject in FY15.

Methodology:

- Develop scope of work for project
- Consultant selection
- Preparation of white paper/memorandum
- Workshop to disseminate results
- Final documentation

Tangible Products Expected in 2016-2017:

- Scope for project
- Procurement and contracting
- Draft and final reports
- Workshop

Entities Responsible for Activity:

Oregon Department of Transportation – Lead Agency
Metro, TriMet, Jurisdictional Partners – Coordinate

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
2014-2015	\$80,000	0.50

Estimated FY 2016-17 Costs and Funding Sources:

Requirements:			Resources:		
Consultant Services	\$	45,000	SPR	\$	50,000
Staff Time	\$	5,000			
<i>TOTAL</i>	\$	50,000	<i>TOTAL</i>	\$	50,000
<u>Full-Time Equivalent Staffing</u>					
Regular Full-Time FTE		0.25			
<i>TOTAL</i>		0.25			

Clackamas County Regional Freight ITS Project

Description:

The Clackamas County Regional Freight ITS Project is a two part process. It includes the creation of a Freight ITS Plan in Phase 1 and the prioritized implementation of that plan in Phase 2. The Freight ITS Plan would become an amendment to the County ITS Plan. This project would be consistent with the regional ITS architecture and goals of the Metro TransPort Technical Advisory Committee.

The Freight ITS project will develop a county-wide Freight ITS Plan for the County and all of its Cities. The Phase 2 construction projects are expected to be focused on Freight ITS improvements in the following freight corridors / employment areas:

- OR 224 (Milwaukie Expressway),
- OR 212 / 224 Clackamas Highway, 82nd Drive
- 82nd Drive between the Gladstone Interchange and OR 213N (82nd Avenue)
- The City of Wilsonville, and
- Other areas identified in the planning process

Objectives:

- Identify and engage variety of project stakeholders such as the County, Cities, ODOT, and the freight community to understand desires, goals, barriers and opportunities related to freight mobility and safety within Clackamas County.
- Review existing ITS or other relevant plans and policies to understand the framework available or needed to support freight ITS or low-cost projects.
- Analyze existing conditions for safety, operations, and land use/routing.
- Identify an ITS project “toolbox” of ITS or other low-cost capacity improvements that address existing (or future) safety and operations concerns.
- Review and as needed document any needed changes to architectures or ITS plans at the state, Metro (TransPort) and County levels.
- Develop ITS project selection criteria based on project need, cost and funding availability. Individual projects will be selected and prioritized for adoption in this Clackamas County Freight ITS Plan. Future projects will also be identified for future implementation as additional funding becomes available.
- The Freight ITS Plan will include a set of project specifications or plans as needed. These plans or specifications will be the basis of the procurement process used to implement Phase 2 of the project.
- Incorporate Freight ITS PLAN into the Clackamas County ITS Plan and Clackamas County Transportation System Plan.
- In the second phase of the project, prioritize and select Freight ITS improvement(s) for construction.

Previous Work:

- *None*

Methodology:

This project will be completed in two step process. First a freight mobility study would be undertaken in the three known congested subareas to design a series of ITS freight priority projects that would improve the reliability arterial freight routes within Clackamas County. This ITS Freight Plan would evaluate key barriers to freight movement and recommend specific ITS improvements and other operations and design improvements. The ITS Freight Plan will be amendment to the County ITS Plan.

In the second phase of the project, the list of ITS Freight improvements would be prioritized. This project would then construct as many of the system management the freight priority improvements as possible on the arterial freight routes. This could include a variety of ITS improvement such upgrading traffic signal equipment

and timing or providing travel information to inform freight trip decisions. There may also be some operational project elements such as minor roadway geometric improvements that better accommodate freight while staying in balance with the needs of other modes.

Tangible Products Expected in FY 2016-2017:

- Stake holder involvement and input. (ONGOING)
- Develop Regional Freight ITS Action Plan and incorporation into existing Clackamas County ITS Plan. (FIRST QUARTER)
- Systems Engineering Documentation, if necessary (SECOND QUARTER)
- Prioritize projects from Freight ITS Plan (FIRST QUARTER)
- Full service contract RFP and Selection (SECOND/THIRD QUARTER)
- Preliminary Engineering (THIRD/FOURTH QUARTER)

Entities Responsible for Activity:

Clackamas County	– Product Owner/Lead Agency
Oregon Department of Transportation	– Cooperate/Collaborate
Metro	– Cooperate/Collaborate
City of Wilsonville	– Cooperate/Collaborate
City of Milwaukie	– Cooperate/Collaborate
City of Gladstone	– Cooperate/Collaborate
Washington County	– Cooperate/Collaborate

Schedule for Completing Activities:

Schedule for this project has been pushed back since the last report. With agreement with County, ODOT, and Metro, two separate funds for County Regional Freight ITS Project will be combined into one. This will require STIP/TIP amendment and IGA amendment. Once approved, County will start with the Freight ITS Action Plan using ODOT's consultant contract. During the 2016/17 fiscal year, we anticipate the completion Freight ITS Action Plan document, Systems engineering document, and list of prioritized projects for design and construction. Once the high ranking projects are identified, County will hire a full service design consultant to prepare a PS&E. According to latest schedule, PS&E packet is expected to be completed at the end of 2016-17 fiscal year.

Funding History:

NA

FY 2016-17 Costs and Funding Sources:

Requirements:				Resources:		
Personal Services						
Clackamas County		35,000		CMAQ Fed Fund	\$	311,543
ODOT	\$	15,000		Local Match (Clackamas)	\$	35,658
Metro	\$					
Materials & Services						
Consultant Contract	\$	297,200				
<i>TOTAL</i>	\$	347,200		<i>TOTAL</i>	\$	347,200
Full-Time Equivalent Staffing						
Regular Full-Time FTE						
<i>TOTAL</i>						

TriMet Employer Outreach Program

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 Climate Smart strategies goal of reducing vehicle emissions to 29 percent below 2005 levels in the next 20 years. Metro's most recent RTO evaluation for 2011-13 conducted by Steer Davies Gleave shows the non-drive alone mode split for employers working with the TriMet Employer Outreach program increased from 27.1% in 2009 to 38.5% in 2011. Plus, commuters of RTO program sites that submitted survey data reduced auto usage by 26,587,886 vehicle-miles per year between the 2011 and 2013 evaluation period.

Objectives:

- Increase non-SOV travel for commute trips among employers and colleges
- Market and increase awareness of active travel options that improve health plus provide 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 2014-15 included the following:

- Increased transportation program enrollment to 1,884 from 1,791 worksites a year ago; a 5% increase.
- Employer worksites offering transit subsidies increased to 1,195 from 1,156, a 3% increase from FY 13-14.
- Increased TriMet pass programs offered by 14 worksites to 1,157 from 1,143 in the previous year. The change is a 1% increase from FY13-14.
- Enrolled 33 new TriMet employer pass programs compared with 36 in the previous fiscal year or a -8% difference.

Methodology:

The staff 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 for fiscal 2014-15:

Employer and College Outreach:

- Completed 6,431 contacts with 698 employers and colleges; 166 of these employers were first-time contacts.
- Participated in 585 planning, informational meetings, outreach and public events with employers, colleges, business associations, community associations, citizens' advisory committees and RTO partner organizations.
- Promoted the 2014 statewide Drive Less Challenge by email to 200 key employers with pass programs, plus distributed over 800 postcards at employer events plus in New Employee Kits.
- Supplied transportation options materials and online information quarterly to 12 colleges. Supplied over 24,000 pieces of transit materials for PSU college student orientations and PCC's student outreach project funded by Metro RTO.
- Promoted the upcoming MAX light rail line, bus service additions and the opening of the Tillikum Crossing bridge with a series of events leading up to the September 2015 launch. Promotions in Q4 FY14-15 included two sets of emails to over 200 employers, three sets of fliers with updated public events plus preview rides for 30 employers that began in June and continued into August 2015. The majority of outreach activities continued into FY2016 and will be included in the next annual report.
- Staff supported employer stakeholder meetings for TriMet's Service Enhancement Plans initiative. The initiative will result in plans for future transit service decisions in five areas of the region. The southwest SEP is complete and included input from 95 contacts with employers plus partners. Staff also supported both the East District SEP and North/Central SEP by sending a survey link to 200 employers plus briefings with stakeholder employers.

Employee Communications:

- Promoted transportation options at 86 employer transportation fairs to 9,021 attendees.
- Distributed 2,049 New Employee Kits to 48 employers to promote non-SOV travel choices to new employees. The kits are often customized for an employer and by district – east, west and the central business. The kits are branded with the regional Drive Less Save More campaign.
- Participated in the regional Be Seen Be Safe commuter safety campaign timed with daylight savings change in Q2 FY14-15; staffed four public outreach events at transit centers plus distributed safety kits to 116 employers. TriMet coordinated the campaign in Q1 FY14-15; staff helped distribute approximately 20,000 safety items at transit centers, to RTO partners and to employers.
- Promoted major transit service improvements for Q3 FY14-15 by email to 200 employers. Tailored an email template for distribution to employees.
- Featured a series of transit benefit articles in TriMet's How We Roll Blog and promoted the articles through TriMet's Facebook page:
 - Leveraged the American Public Transportation Association's (APTA) [National Dump the Pump Day](#) featuring transit savings over driving; 238 Facebook shares.
 - Promoted the [health benefits of public transit](#) based on data from the U.S. Centers for Disease Control and the Federal Transit Administration; 194 Facebook shares.

- Published a testimonial piece for May National Bike Month titled, "[Combining biking and transit: one rider's story](#)"; 54 Facebook shares.

Employee Transportation Surveys:

- TriMet processed Employee Commute Option surveys for 287 worksites for 149 companies in FY14-15. Surveys are conducted for any employer free of charge whether for DEQ, TriMet's Universal Annual Pass program and to inform transportation programs. The staff supplies the 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. The program contract was revised in Q4 FY13-14 requiring all participants to re-enroll with the new contract. Active re-enrollment continued into FY14-15. Increased employers with ERH programs from 110 in the last fiscal year to 135 for FY14-15. TriMet provided 58 cab rides for FY14-15.
- Prepared geocode maps for ESCO and Shriners Hospital for employee rideshare and transit options. Supported Shriners' TDM policy changes with information about transit and parking subsidy impacts plus pass program support. Assisted TriMet's Service Planning's geocode and transportation program consultation for Conway employees.

Other:

- Supported Metro's Drive Less Save More individualized marketing project for Milwaukie city residents; coordinated information about schedules for the upcoming MAX Orange Line and related bus service changes. Materials were supplied in FY15-16.
- Supported Metro RTO Summer trips campaign by supporting a new bike/transit video produced by a third-party.

Tangible Products Expected For FY 2015-2016 and FY 2016-2017:

For FY 2015-16, outreach will continue promoting TriMet's new light rail line (MAX Orange Line) which opened fiscal Q1 plus the new transit/ped/bike bridge, offering non-SOV trip opportunities to Portland's southeast quadrant. Staff will also support outreach for TriMet Service Enhancement plans, plus build ridership along new southeast bus routes, MAX Orange Line service, WES Commuter Rail and service additions. Staff will promote applicable Metro RTO and TriMet campaigns to employers and colleges.

Beginning Q3 FY2017 and through FY17-18, TriMet will transition employers on pass programs to electronic fares; staff will support awareness campaigns about the new system. The work plan may be adjusted to incorporate new campaigns plus service additions and changes.

Employer and College Outreach:

- The outreach campaign for the MAX Orange Line, related bus service and the multi-modal Tilikum Crossing Bridge will continue into FY16-17. The outreach activities include building awareness for and staffing opening events, plus follow up to support the use of the new service through FY16-17. Completed work tasks included

identifying employers within a half-mile of the MAX Orange Line and along the related bus lines plus distributing materials and information. Outreach calls and follow up mailers will be made to businesses along transit lines in the southeast part of the district.

- Outreach and briefings with stakeholder employers and colleges for TriMet's Service Enhancement Plans will continue into FY15-16. The project includes five geographical areas in various stages of development.
- Leverage regional campaigns for employee outreach including national bike month, the Bicycle Transportation Alliance's Bike Commute Challenge, the statewide Drive Less Connect Challenge and the Be Seen Be Safe campaign.

Employee Communications:

- Promote transportation options, RTO campaigns and provide direct assistance to employees at employer fairs/events. Annual goal for each of FY15-16 and FY16-FY17 is 80 transportation fairs/events and approximately 8,000 participants.
- Promote service additions implemented Q1 2016 plus service enhancements anticipated for Q3 FY16, Q1 FY17, and Q3 FY17.
- Additional projects may include outreach to communicate Service Enhancement Plans, potential new transit connector service (operated either by TriMet or Ride Connection), TriMet's upcoming bicycle plan, plus the upcoming electronic fare system (Hop Fastpass).

Employee Transportation Surveys:

- Complete an average annual goal of surveys for 230 employer worksites for FY15-16 and FY16-17. As of Q1 FY15-16, 99 ECO surveys have been processed for 72 companies with a total of 10,587 responses.

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 Workgroup

ODOT

FTA

Regional partner agencies including TMAs Employers in the Metro region

Cities and counties in the Metro region

Transportation Policy Alternatives Committee (TPAC)

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 *Objectives* and *Tangible Products* sections of this planning activity description.

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

FY 2015-16 Costs and Funding Sources:

Requirements:				Resources:		
Personal Services	\$	497,688		PL	\$	
Interfund Transfers	\$			STP	\$	446,576
Materials and Services	\$			ODOT Support	\$	
Computer	\$			Section 5303	\$	
CMAQ	\$			TriMet Support	\$	51,112
				Metro	\$	
				Other	\$	
<i>TOTAL</i>	\$	497,688		<i>TOTAL</i>	\$	
<u>Full-Time Equivalent Staffing</u>						
Regular Full-Time FTE		5.25				
<i>TOTAL</i>		5.25				

FY 2016-17 Costs and Funding Sources:

Requirements:				Resources:		
Personal Services	\$	507,212		PL	\$	
Interfund Transfers	\$			STP	\$	459,973
Materials and Services	\$			ODOT Support	\$	
Computer	\$			Section 5303	\$	
CMAQ	\$			TriMet Support (10.27% match)	\$	47,239
				Metro	\$	
				Other	\$	
<i>TOTAL</i>	\$	507,212		<i>TOTAL</i>	\$	507,212
<u>Full-Time Equivalent Staffing</u>						
Regular Full-Time FTE		5.25				
<i>TOTAL</i>		5.25				

Regional Over-Dimensional Truck Route Study

Description:

Prepare a strategic plan for the efficient and safe movement of over-dimensional truck loads within and through the Portland Metro region. Identify and map the strategic routes for moving over-dimensional freight and identify the existing system constraints. Identify and recommend potential solutions and transportation improvement needs to maintain and enhance the efficient movement of regional over-dimensional freight.

Objectives:

- Identify and map the primary truck routes used for moving over-dimensional loads within and through the Portland Metro region.
- Identify and document existing physical and operational constraints (i.e., low-clearance railroad crossings and bridge structures, utility lines, weight-restricted bridges, inadequate turning radius at key intersections, etc.
- Prepare inventory and assessment of current transportation policies and regulation and permitting practices to identify potential policy changes and permitting efficiency improvements.
- Recommend transportation system improvements and planning-level cost estimates.

Previous Work:

In FY 2014-16, major tasks completed for the Regional Over-Dimensional Truck Route Study include:

- Authorized and executed a multi-jurisdictional Intergovernmental Agreement between the City of Portland, Oregon Department of Transportation, Metro, Multnomah County, Washington County and Clackamas County.
- Solicited request for proposals (RFP) and approved and finalized the consultant selection process.
- Entered into contract with DKS as the Project consultant.
- Prepared the final project budget, scope of work, deliverables and project schedule.
- Formed the Project Management Team (PMT) and Stakeholder Advisory Committee (SAC) for review and oversight of work tasks and deliverables.
- Held Project Kickoff meeting in October 2015 and PMT meetings in December 2015 and February 2016.
- Identified 30 priority regional over-dimensional route corridors with project stakeholders and project management team.
- Prepared base mapping and existing conditions summaries outlining operational characteristics, existing structures and identified system constraints.
- Conducted interviews with freight industry stakeholders and prepared draft technical memorandum.
- Documented and summarized the over-dimensional permitting process for the three Counties (Multnomah, Clackamas, Washington), City of Portland and ODOT.
- Compiled data fields and of single trip permits (STP) issued by ODOT for the past three years and prepared summary tables and key findings for commodities moved, frequent routes used, and average over-dimensional load dimension.
- Prepared first review draft of the Existing Conditions Report.

Methodology:

This project will identify the most commonly used and the preferred routes for the movement of over-dimensional vehicles and document the minimum clearance requirements to accommodate over-sized loads in the Metro region. The focus of this project will be to develop a seamless over-dimensional vehicle route system that

transcends jurisdictional boundaries. Physical and operational constraints that impede safe and efficient freight movement on identified regional truck routes will be defined and recommend transportation improvements and planning-level cost estimates to remove these constraints will be developed.

Tangible Products Expected in FY 2016-2017:

The following outlines the major tasks and deliverables anticipated for this project on FY 2016-2017:

- Project management responsibilities – Ongoing throughout project duration (Task 1)
- Hold four (4) scheduled Project Management Team (PMT) meetings (Task 2)
- Hold four (4) scheduled Stakeholder Advisory Committee (SAC) meetings (Task 2)
- Complete final Existing Conditions Report and associated mapping (Task 3)
- Complete review and final drafts of the System Constraints, Gaps and Needs Report (Task 4)
- Develop evaluation criteria, system improvements and alternatives and refinement memo (Task 5)
- Identify capital system improvements and cost estimate memo (Task 6)
- Prepare Final Report (Task 7)

Entities Responsible for Activity:

The City of Portland will be the lead agency for this project. The selected project consultant (DKS) will conduct the technical planning and engineering analysis and cost estimates and final report preparation. The consultant will also participate in all stakeholder and public involvement activities to provide technical support.

Lead agencies/partners:

Portland Bureau of Transportation - Lead Agency/Project Manager
Metro - Partner agency
Clackamas County - Partner agency
Washington County - Partner agency
Multnomah County – Partner agency
Oregon Department of Transportation - Partner agency

Other stakeholders:

Portland Freight Committee
Cities and counties in the Metro region
Metro Regional Freight Technical Advisory Committee
Port of Portland
Community groups and organizations involved in climate planning, equity, land use and transportation issues

Schedule for Completing Activities:

The project Kickoff Meeting was held on October 2015 and the project duration is estimated to be 12 months long pending approval of the final work product deliverables.

Funding History:

NA

FY 2013-14 Costs and Funding Sources:

Requirements:				Resources:		
		\$		STP		\$100,000
		\$		Local Match		\$11,445
<i>TOTAL</i>		\$	111,445	<i>TOTAL</i>	\$	111,445
Full-Time Equivalent Staffing						
Regular Full-Time FTE						
<i>TOTAL</i>			NA			

FY 2014-15 Costs and Funding Sources:

Total Consultant Contact Total: \$115,000

Total invoices charged: \$8,700

Budget Remaining: \$106,300 (as of November 27th 2015)

French Prairie Bridge Connectivity

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.

Tangible Products Expected in FY 2016-2017:

- Bridge Location Evaluation Report summarizing major bridge elements, connections to existing transportation system, evaluation of environment constraints and impacts, and planning level cost estimates.
- Bridge Type Selection Report summarizing final bridge type, size, and location selection process, including planning level cost estimates.

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:

- December 2016: Complete location and alignment alternatives analysis and prepare final Bridge Location Evaluation Report.
- June 2017: Bridge Selection Report summarizing final bridge type, size, and location selection process, including cost estimates.
- Schedule will require project carryover into FY 2017-18.

Funding History:

As of November 30, 2015, the City has expended \$82,900 in local Parks and Recreation System Development Charges in the development of the project scope of work, Intergovernmental Agreement with ODOT, Request for Proposal documents, and selection of consultant team. Anticipated Costs between December 2015 and June 2016.

Requirements:				Resources:		
City Staff and Professional Consultant Services	\$	155,000		Metro	\$	125,000
				Other	\$	30,000
<i>TOTAL</i>	\$	155,000		<i>TOTAL</i>	\$	155,000
<u>Full-Time Equivalent Staffing</u>						

FY 2016-17 Costs and Funding Sources:

Requirements:				Resources:		
City Staff and Professional Consultant Services	\$	730,000		Metro	\$	580,000
				Other	\$	150,000
<i>TOTAL</i>	\$	730,000		<i>TOTAL</i>	\$	730,000
<u>Full-Time Equivalent Staffing</u>						

South Metro Area Regional Transit (SMART)

Description:

SMART provides transit service within the City of Wilsonville and operates connecting service in Portland, Canby, Tualatin, and Salem. SMART also provides door-to-door dial-a-ride service for Wilsonville seniors and people with disabilities. All service within the City of Wilsonville is free of charge. 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.

SMART coordinates services and connections with TriMet buses and WES commuter rail, Canby Area Transit (CAT) and Cherriots in Salem. The SMART Options program takes part in coordinated regional travel planning processes through Metro's Regional Travel Options (RTO) Program and collaborates with other area transit agencies and jurisdictions in planning outreach programs and promotions.

SMART is operated by the City of Wilsonville and is supported by a Wilsonville payroll tax and by federal, state, and local grant funding. SMART typically does not receive funding for planning, other than annual RTO Program funds for the SMART Options Program. However, SMART has opted to use a portion of Federal FY15 5307 funds to finalize the update to the Wilsonville Transit Master plan. The planning elements associated with these funds are outlined in the Tangible Products section below. This planning project will conclude in FY 16 - 17.

Objectives:

- Reduce drive alone trips and increase awareness of transportation options available in Wilsonville and the region.
- Build transit ridership on SMART, TriMet, CAT, and Cherriots.
- Create service efficiencies with integrated service for fixed-route and dial-a-ride transit service within the I-5 corridor.
- Update the 2006 Transit Master Plan to ensure planning efforts dovetail with regional efforts and enhance overall efficiency of transit service in Wilsonville
- Support the City of Wilsonville's long range plans, focusing on the overlapping projects outlined in the Transit Master Plan, Bicycle & Pedestrian Master Plan and Parks & Recreation Master Plan.

Previous Work:

The SMART Options program began in 2001 and has grown from a large-business – commuter-focused program, to include all business and community members with a focus on reducing drive alone trips in and around Wilsonville.

Key accomplishments for SMART in FY 14-15 included improvements and expansion of the natural gas fueling system, technological upgrades for such things as upgrading SMART's on-vehicle equipment to monitor performance and enhance traveler information and completion of the Transit Integration Project study which recommended service changes to improve connections between fixed route and dial-a-ride services between Wilsonville and Portland.

Marketing and outreach to commuters and residents for local services, rideshare, bicycling, walking, and regional connections continue to be the main focus of SMART Options Program activities.

Methodology:

The SMART Options program will continue to work closely with and report to Metro's Regional Travel Options program and working groups to coordinate travel options outreach and activities throughout Wilsonville and the region. SMART will coordinate with regional transit providers for the update to the Wilsonville Transit Master Plan, and report to FTA and ODOT.

Tangible Products Expected in FY 2016-17:**SMART Options Program:**

- Assess transit system demands due to changing demographics, population and employment growth. (Ongoing)
- Continued support and implementation of the Drive Less/Save More and Drive Less Connect collaborative marketing campaign (ONGOING)
- Implementation of Travel Options projects and programs in conjunction with strategies identified in the City of Wilsonville's Master Plans and the RTO Strategic plan. (ONGOING)
- Support multi-use regional trail efforts such as the Ice Age Tonquin Trail and Graham Oaks Nature Park trails. (ONGOING)
- Continue the *Walk Smart and Bike Smart* programs. (ONGOING)
- Distribute *Wilsonville Walks* maps via local shops and community events (ONGOING)
- Distribute *Wilsonville Bikes* maps via local shops and community events (ONGOING)
- Promote ridesharing as a viable transportation option (ONGOING)
- Coordinate and host bicycle, walking and transit related events. (ONGOING)
- Continue staffing outreach booth at local business fairs and community events. (ONGOING)
- Continue working directly with employers to find the best travel options for their employees. Assist with DEQ ECO surveys and trip reduction plans. (ONGOING)
- Assess future system demands due to new residential and business development in the Frog Pond and Coffee Creek Industrial areas. (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)
- Conduct annual bicycle and pedestrian counts at key Wilsonville intersections to coincide with regional and national efforts. (Fourth quarter of 2016)

Finalize the Wilsonville Transit Master Plan

- Public outreach for service enhancements based upon FY 2015 public input (First quarter 2016)
- Draft final Transit Master Plan (second quarter 2016)
- Adopt Transit Master Plan (Third quarter 2016)

Entities Responsible for Activity:

The City of Wilsonville's South Metro Area Regional Transit – Product Owner / Lead Agency

Metro's RTO Program Partners and Stakeholders – Cooperate / Collaborate

Other stakeholders:

Regional partner agencies

Other area transit providers

Federal Transit Administration (FTA)

Oregon Department of Transportation (ODOT)

Community groups and organizations involved in 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

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
2013-14	75,000	1.0
2014-15	175,000	2.0

FY 2013-15 Costs and Funding Sources:

Requirements:			Resources:		
Personal Services FY16-17			STP Transfer Funds for SMART Options Program	\$	Split from Metro Key #
			FY15 5307 Funds		\$38,000
<i>TOTAL</i>	\$		<i>TOTAL</i>	\$	
Full-Time Equivalent Staffing					
Regular Full-Time FTE		1.5			
<i>TOTAL</i>		1.5			

Cedar Creek Trail/Tonquin Trail: Roy Rogers to Highway 99W

Description:

This planning portion of this project would entail the planning of the trail through the Cedar Creek corridor just north of Highway 99W northward to SW Roy Rogers Road at the northern boundary of the City. The trail will be 10-12 feet wide and be approximately 1.0 miles long. This project will include refining the alignment within the creek corridor, develop the prospectus for the preliminary engineering design, survey, alternative development, costs estimates, evaluate the environmental permitting requirements, and public involvement.

Objectives:

The Project is to plan, for the Cedar Creek Trail to serve as a primary transportation and recreational facility for bicycle and pedestrian travel through the central portion of the City of Sherwood along the Cedar Creek corridor.

Previous Work:

The Cedar Creek Trail Feasibility Study was completed in 2010 and the entire Ice Age Tonquin Trail Master Plan was completed in the winter of 2012 and approved by Metro in the spring of 2013. The regional Ice Age Tonquin Trail extends from the Willamette River north through Wilsonville, Tualatin and Sherwood to the Tualatin River. The City will use the Feasibility Plan and the design work of the other segments of the trail to further refine the alignment as well as coordinate with the other jurisdictions on design elements of the trail.

The City has been awarded Regional Flexible funds for Cedar Creek/Tonquin Trail during the 2014-2015 cycle. After careful review of the prospectus and project scope for the above-mentioned project, the City requested that the project be separated into two projects for the purpose of initiating a project development phase for a portion of the Cedar Creek Trail north of 99W to Roy Rogers. This portion of the trail needs refinement and a greater public involvement phase to determine the most suitable route. The original segment had been ready for preliminary engineering design and was separated from this planning phase.

Here is the work completed or to be completed:

- The City Fully Executed Consultant Contract and Notice to Proceed (1st Quarter FY 2015-16)
- Public Involvement Plan (1st Quarter FY 2015-16)
- Existing Conditions Analysis (2nd Quarter FY 2015-16)
- Development of the Preferred Alignment Concepts (3rd Quarter FY 2015-16)
- Endorsement of the Preferred Alignment Concept by Local advisory groups

The During 3rd Quarter of FY 2015-2016, the City will further evaluate the preferred alignment by conducting field survey work and an initial environmental analysis. After confirming and modifying the alignment, the consultant team will develop the design to 30%. If necessary, the project may extend into the first quarter of FY 2016-2017.

Methodology:

The project has been divided up into the following key components:

- Plan the alignment from the north side of Highway 99W north to Roy Rogers Road within the Cedar Creek Corridor
- Prepare project prospectus-to 30% design

Tangible Products Expected:

- Prepare project prospectus-to 30% design (1st Quarter FY 2016-17)

Entities Responsible for Activity:

City of Sherwood – Product Owner/Lead Agency

Oregon Department of Transportation – Cooperate/Collaborate

Other Stakeholders:

Clean Water Services, Tualatin River National Wildlife Refuge, ODOT, Metro, Washington County – Cooperate/Collaborate

Oregon State Parks and Recreation

Oregon Fish and Wildlife

Cities of Tualatin and Wilsonville

Community groups and organizations Bicycle, pedestrian, and transit needs

Organizations and advisory committees serving regional public

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
2015-16	\$ 467000	NA

03/22/2016

DRAFT -- FY 2016-17 Unified PlanningWork Program FundingSummary

		STP* (FFY 16) Metro	STP* (FFY 14) Metro	Creating Livable Streets STP	Powell/Division STP*	ITS STP*	TSMO STP (FFY 16)	Behavior- Based Freight Model STP	to Lake Oswego Trail Master Plan STP	EVA STP	ODOT Support Funds	FFY 16 Sec 5303*	FFY 14 Sec 5303*	TriMet Support	RTO STP/5307	RTO ODOT STP	SHRP2 C20 IAP	ICM-DPG- 2013 -- ICM Deployment	ODOT TGM I-15 Grant	Other Anticipated Funds	Metro/ Local Match	Total	
ODOT Key #		19281	18007		19293										18013/1801 19290			19529					
METRO																							
Transportation Planning																							
1	Regional Transportation Planning	844,902	323,127	72,206	-	-	-	-	-	-	-	247,180		-	-	-	-	-	-	-	209,229	1,696,644	
2	Regional Transit Plan	-	45,241	27,006	-	-	-	-	-	-	-	-		-	-	-	-	-	100,000	-	22,269	194,516	
3	Metropolitan Transportation Improvement Program (MTIP)	351,653	5,220	250,739	-	-	-	-	-	-	-	321,011	104,552	-	-	-	-	-	-	-	131,818	1,164,993	
4	Air Quality Conformity	-	25,424	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	2,910	28,334	
5	Local Partnership	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
6	Title VI and Environmental Justice	138,216	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	138,216	
7	Creating Livable Streets Program	35,790	124,855		250,000	-	-	-	-	-	-	-		-	-	-	-	-	-	-	71,232	481,877	
8	Transportation System Management& Operations (TSMO) - Regional Mobility Program	-	-	42,908	-	-	60,000	-	-	-	-	-		-	-	-	-	-	-	-	11,778	114,686	
9	Transportation System Management& Operations (TSMO) - Regional Travel Options	-	-	-	-	-	-	-	-	-	-	-		-	1,830,379	303,000	-	-	-	-	121,992	2,255,371	
10	Regional Freight Plan	-	81,266	21,443	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	11,756	114,465	
Research and Modeling																							
1	GIS Mapping and Land Information	222,944	39,046	-	-	-	-	-	-	-	53,920	-		-	65,850	-	-	-	-	112,192	987,156	1,481,108	
2	Economic, Demographic and Land Use Forecasting	76,290	147,066	-	-	-	-	-	-	-	87,420	-		-	58,572	-	-	-	-	-	16,832	386,180	
3	Model Development Program	694,718	297,342	-	-	-	-	-	-	-	61,510	-		-	93,583	-	-	-	-	-	212,349	1,359,502	
4	Behavior-Based Freight Model	-	-	-	-	-	-	350,000	-	-	-	-		-	-	-	-	350,000	-	-	40,059	740,059	
5	Technical Assistance Program	-	62,161	-	-	-	-	-	-	-	22,150	-		-	6,996	-	-	-	-	-	7,115	98,422	
Administrative Services																							
1	Management & Coordination/Grants Management	410,619	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	410,619	
Metro Corridor Plans																							
1	Portland to Lake Oswego Trail Master Plan	-	-	-	-	-	-	-	100,000	-	-	-		-	-	-	-	-	-	11,445	-	111,445	
2	Powell/Division Transit Corridor Plan	-	-	-	500,000	-	-	-	-	-	-	-		-	-	-	-	-	-	897,717	85,566	1,483,283	
3	Southwest Corridor Plan	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	1,883,132	284,622	2,167,754	
4	Corridor Refinement and Project Development	-	-	91,422	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	10,464	101,886	
5	Economic Value Atlas (EVA)	-	-	-	-	-	-	-	-	325,000	-	-		-	-	-	-	-	-	-	47,615	372,615	
6	Regional ITS Commuications Infrastructure	-	-	-	-	50,000	-	-	-	-	-	-		-	-	-	-	-	-	-	5,723	55,723	
7	Regional ITS Architectural Update	-	-	-	-	50,000	-	-	-	-	-	-		-	-	-	-	-	-	-	5,723	55,723	
8	I-84 Multimodal Integrated Corridor Management	-	22,295	-	-	-	-	-	-	-	-	-		-	-	-	-	-	191,680	41,075	9,397	264,447	
Metro Subtotal		2,775,132	1,173,043	505,724	250,000	500,000	100,000	60,000	350,000	100,000	325,000	225,000	568,191	104,552	225,001	1,830,379	303,000	350,000	191,680	100,000	2,945,561	2,295,605	15,277,868
GRAND TOTAL		2,775,132	1,173,043	505,724	250,000	500,000	100,000	60,000	350,000	100,000	325,000	225,000	568,191	104,552	225,001	1,830,379	303,000	350,000	191,680	100,000	2,945,561	2,295,605	15,277,868

* Federal funds only, no match included.

¹ PL funds include \$783,476 carryover from FY 15 and ODOT match.

<i>OTHER PROJECTS OF REGIONAL SIGNIFICANCE</i>									
2/3/2015									
Project	ODOT Key	Jurisdiction	STP	CMAQ	ODOT TGM	TriMet	Federal/ Earmark	Other Funds/ Match(1)	TOTAL
<i>ODOT Planning Program (All Naratives)</i>		<i>ODOT</i>							2,339,280
<i>Clackamas County Regional Freight ITS</i>	18001	<i>Clackamas County</i>		311,543				35,658	347,200
<i>TriMet Employer Outreach Program</i>		<i>TriMet</i>	459,973			47,239			507,212
<i>Regional Over-Dimensional Truck Route Plan</i>	18024	<i>City of Portland</i>	100,000					11,445	111,445
<i>French Prairie Bridge Connectivity</i>	17264	<i>City of Wilsonville</i>						730,000	730,000
<i>SMART</i>	16684	<i>City of Wilsonville</i>	250,000						250,000
<i>Cedar Creek/Tonquin Trail: Roy Rogers to SW Murdock</i>	18026	<i>City of Sherwood</i>							467,000
GRAND TOTAL			809,973	311,543	-	47,239	-	777,103	4,752,137