Implementation Strategies

INTRODUCTION

The State Transportation Planning Rule (TPR) defines a refinement plan as an amendment to a transportation system plan (TSP) that resolves, at the system level, the function, mode, or general location of a transportation project that was deferred during development of the TSP. A refinement plan is necessary when the detailed information required to address a transportation need could not be determined during the TSP process.

In the context of Portland's TSP, studies are similar to refinement plans; however, they may not necessarily address a transportation capacity need or their feasibility may not yet be determined. Studies are intended to address issues that have a transportation component identified by the community or other entities.

Metro's 2010 and 2014 Regional Transportation System Plan (RTP) identified Mobility Corridors and describes a number of plans and includes a number of studies for Portland to conduct to assist with the implementation of the Mobility Corridors. The City has also identified refinement plans and studies through the Comprehensive Plan update and TSP process. This chapter lists (not in order of priority) the refinement plans and studies that either Metro or the City will undertake over the life of the TSP. In some cases, the Oregon Department of Transportation (ODOT) will be the lead agency.

The previous TSP contained Chapter 12: Area Plans which was a summary of plans competed. This chapter was deleted as part of the 2035 TSP update. All plans are available on the City's website.

RTP PLANS AND STUDIES

Relating to the Regional Transportation Plan

The 2014 update to the Regional Transportation Plan highlighted seven “Mobility Corridors” throughout the region in which further refinement studies were needed. Of these seven corridors, parts of four corridors were within Portland City limits (RTP Mobility Corridors 2, 4, 8, and 9). The refinement plans in this section address the need for further study as identified in the Regional Transportation Plan.

Minor Refinement Plans

The purpose statement for each regional refinement plan and study is taken from the RTP

Northeast Portland Highway

Purpose: *Refine long-term improvements to consider additional TSM and access management.*

Freight movement in the future will rely more heavily on NE Portland Highway (US Highway 30 bypass). This route links the Rivergate marine terminals and Portland Airport terminals to industrial destinations throughout the region. It includes Killingsworth and Lombard Streets from I-205 to Martin Luther King (MLK), Jr. Boulevard, and Columbia Boulevard from MLK Jr. Boulevard to N Burgard.

Although NE Portland Highway appears to have adequate capacity to serve expected 2020 demand, a number of refinements are needed in the corridor. The plan should consider the following transportation approaches:

- Improve NE Portland Highway as a strategy to address Banfield corridor and east Marine Drive congestion.
- Develop a long-term strategy to serve freight movement between Highway 30 and Rivergate.
- Implement access management measures along NE Portland Highway.
- Implement and refine identified Columbia corridor changes to address corridor needs of NE Portland Highway from Rivergate to I-205.
- Consider grade separation at major intersections.
- Streamline the NE Portland Highway connection from the Lombard/Killingsworth section to Columbia Boulevard, with an improvement transition point at MLK, Jr. Boulevard.
- Improve the Columbia Boulevard interchange at I-5 to provide full access to NE Portland Highway.
- Construct capacity and intersection improvements between 82nd Avenue and I-205.

The additional work done through the refinement plan will be based on the Columbia Corridor Study, the St. Johns Truck Strategy, and the environmental assessment for the 'East End Connector' transportation project.

Since 2007, two major improvements to the corridor have been completed: the East End Connector and the St. Johns Truck Strategy.

Major Refinement Plans

Major refinement plans are necessary when a transportation need exists, but the mode, function, and general location of a transportation improvement have not been determined, and a range of actions must be considered before identifying a specific project or projects.

Highway 99E (McLoughlin Boulevard)/224 Corridor (encompasses RTP Mobility Corridor 10: Portland Central City to Milwaukie)

Purpose: *Develop a traffic management plan for SE McLoughlin Boulevard from the Ross Island Bridge to I-205.*

Long-term improvements are needed in this corridor to preserve access between the Central City and Clackamas County, provide access to the Clackamas regional center, and support downtown development in the Milwaukie town center. The recently completed South/North light rail study demonstrated a need for high-capacity transit service in this corridor. Both highway and high-capacity transit service are needed over the 20-year plan period to keep pace with expected growth in this part of the region. This refinement plan should include rapid bus transit service, or its equivalent, in the short term and light rail in the long term. Transportation improvements should address the following approaches:

- Implement access management measures throughout the corridor, including grade separations at intersections along Highway 224 between Harrison Street and I-205.
- Discourage spillover traffic from McLoughlin and Highway 224 onto Tacoma Street, 17th Avenue, Johnson Creek Boulevard, 34th Avenue, and Lake Road.
- Monitor and mitigate spillover traffic from McLoughlin and Highway 224 onto other local collectors.
- Consider a reversible high-occupant vehicle (HOV) lane or peak-period priced lane between Ross Island Bridge and the intersection with Harold Street.
- Expand highway capacity to a total of three general-purpose lanes from Harold Street to I-205, and consider reversible HOV or peak-period pricing for new capacity.

- Provide a more direct transition from McLoughlin to Highway 224 at Milwaukie in order to orient long trips and through-traffic onto Highway 224 and northbound McLoughlin.
- Provide improved transit access to the Milwaukie and Clackamas regional centers.
- Provide improved pedestrian and bicycle access. Include active transportation component to the plan.

Interstate 205 (RTP Mobility Corridors 7 - Tualatin to Oregon City, 8 -Oregon City to Gateway, and 9 - Gateway to Clark County)

Purpose: *Develop a traffic management plan from I-5 to Clark County.*

Improvements are needed in the I-205 corridor to address existing deficiencies and expected growth in travel demand in Clark, Multnomah, and Clackamas Counties. The refinement plan should address the following needs and opportunities:

- Provide for some peak-period mobility for longer trips.
- Preserve freight mobility from I-5 to Clark County, with an emphasis on connections to Highway 213, Highway 224, and the Sunrise corridor.
- Maintain an acceptable level of access to the Oregon City, Clackamas, and Gateway regional centers and the Sunrise industrial area.
- Maintain acceptable levels of access to Portland Airport, including air cargo access.
- Use the physical configuration of highway improvements to shape urban form in the City or urban reserve area.
- Provide improved pedestrian and bicycle access. Include active transportation component to the plan.

The plan should consider the following potential transportation changes:

- Auxiliary lanes from Airport Way to I-84 east
- Express lanes, peak-period pricing, or HOV lanes as strategies for expanding capacity
- Relative value of specific ramp, overcrossing, and parallel route improvements
- An eastbound HOV lane from I-5 to the Oregon City Bridge
- A truck climbing lane south of Oregon City
- Rapid bus service from Oregon City to Gateway
- Extension of rapid bus service north from Gateway into Clark County
- Light rail
- Refinements to 2040 land use assumptions for this area to expand potential employment in the area and improve the jobs/housing imbalance

- Reevaluation of the suitability of Beavercreek as an urban reserve area, based on the ability to provide a transportation infrastructure that can adequately serve that area

Metro is dividing the I-205 refinement plan into two segments. The first segment stretches from Highway 224 north to Vancouver and includes the current work being done through the South Transit Corridor Study and the transit part of the I-5 Trade Corridor Study. The second segment is south from Highway 224 and is completely outside Portland's boundaries.

Hayden Island Access

In coordination with regional, state and federal partners, develop and evaluate access options to Hayden Island from Marine Drive. Access would include Pedestrian, Bike, Transit, Auto and Freight to support the Hayden Island plan.

North Willamette River Crossing

Purpose: *Study the need for a new bridge from US Highway 30 to Rivergate.*

Analysis for the RTP showed a strong demand for travel between NE Portland Highway from the Rivergate industrial area and Highway 30/St Helens Road on the west side of the Willamette River. The St. Johns Bridge currently carries this traffic, but has limitations and will not be adequate in the long term to carry freight and other traffic. The St. Johns Truck Strategy recommends a number of changes to balance freight mobility needs with the vitality of the St. Johns town center. The Truck Strategy provides an interim solution to demand in the corridor and does not attempt to address long-term access needs to Rivergate and Highway 30. The refinement plan should incorporate the following:

- Building on the St Johns Truck Strategy, recommendations to provide adequate freight and general access to Rivergate, while considering potentially negative impacts on the future development of the St. Johns town center
- The potential for a "streamlined" northeast Portland connection from I-205 to Rivergate
- A long-term management plan for the St. Johns Bridge if the plan recommends a new crossing

Since 2007, preliminary traffic modeling has been done to show how a new Willamette River crossing north of St Johns would impact truck volumes through the neighborhood. As a part of the St Johns Truck Strategy, access improvements have been made within the St. Johns neighborhood to facilitate freight access.

Additional analysis should look at a new pedestrian/bicycle bridge across the Willamette from Kelley Point to Sauvie Island, a new pedestrian/bicycle path to the North Portland Railroad Bridge, and additional analysis related to the need for a motor vehicle bridge.

Powell Boulevard/Foster Road

Purpose: *Resolve outstanding transportation issues in the Pleasant Valley, Damascus and south Gresham areas.*

The Powell Boulevard/Foster Road Corridor represents both a key transportation challenge and an opportunity to meet 2040 regional land use goals. The Powell/Foster Corridor is a top priority among corridors requiring refinement plans. Despite policy changes to level-of-service standards that permit greater levels of congestion, significant multimodal improvements will be needed in order to continue to serve transportation needs of the communities and industrial areas in southeast Portland and Gresham. The corridor is also critical to providing access to the planned growth areas in Pleasant Valley, along with Damascus and Springwater that have recently been added to the Urban Growth Boundary. In addition, the corridor is constrained by significant topographical and environmental features.

As a result of the findings from Phase 1 of the Powell Boulevard/Foster Road Corridor Plan, which was completed in 2003, specific multimodal projects have been identified that address transportation needs on Powell Boulevard between inner SE Portland and Gresham, and on Foster Road west of Barbara Welch Road. System level decisions for transit service were also made for the corridor.

Several outstanding transportation problems in the Pleasant Valley, Damascus and south Gresham areas, require additional planning work before specific multimodal projects can be developed and implemented. The Phase 2 plan should be closely coordinated with concept plans for Damascus and the Springwater area, in order to incorporate the updated land use and transportation assumptions. It should examine the following transportation solutions and strategies:

- Determine the appropriate cross-section on Foster Road between Barbara Welch Road and Jenne Road and the project timing, to meet roadway, transit, pedestrian and bike needs.
- Explore the possibilities for potential new street connection improvements in the Mount Scott area that reduce local travel demand on Foster Road and improve access to the Pleasant Valley area.
- Develop conceptual designs and determine right-of-way for an improvement and extension of SE 174th Avenue between Powell Boulevard and Giese Road, or another new north-south roadway in the area, to accommodate travel demand and improve access to Pleasant Valley. The alignment should consider engineering feasibility, land use and environmental effects, safety, and overall costs.
- Further define the three-lane Highland Drive and Pleasant View Drive option that was recommended as part of Phase 1. This option needs to address design, operational, and safety-related issues.
- Work with local jurisdictions to provide for access management on arterials serving Pleasant Valley and Damascus.

- Address other regional north-south transportation needs identified by the Damascus Concept Plan and Springwater concept planning effort. Further evaluate alignment issues, engineering cost estimates, and right-of-way impacts of future roadway projects north of Damascus that are identified as part of the concept planning effort.

Since 2007, Gresham and Multnomah County submitted an application for a TGM grant to study the issues identified above; if the grant is approved, the City of Portland has agreed to contribute to complete its portion of the study. Additionally, the Metro East Metro Connection plan explored some of the Powell/Foster concerns.

Portland Central City to Tigard (RTP Mobility Corridor #2 – Southwest Corridor)

Purpose: *Identify needed improvements for motor vehicles, trucks, bicycles, pedestrians, and high-capacity transit travel in the Barbur/I-5 corridor from I-405 to the north Tigard interchange.*

This corridor provides access to the Central City and to neighborhoods and commercial areas in the inner southwest quadrant of the region. Barbur Boulevard is designated in the RTP as a multimodal facility with potential light rail or rapid bus service, and also serves a regional role for motor vehicle, bicycle, and pedestrian systems. I-5 in this corridor is designated as a Main Roadway route for freight and a Principle Arterial for motor vehicles, extending southward beyond the region.

Even with priority system improvements, segments of both Barbur Boulevard and I-5 in this corridor experience significant congestion and poor service levels, especially from the Terwilliger interchange northward. However, high-capacity transit along Barbur and other expanded bus services are expected to experience promising ridership levels. Significant localized congestion occurs along the intersecting street segments of Bertha, Terwilliger, and Capitol Highway/Taylors Ferry. Broad street cross-sections, angled intersections, and limited signalized crossing opportunities along Barbur create traffic safety hazards and inhibit walking to local destinations and access to transit services.

The I-5 right-of-way presents a substantial barrier to local street system connectivity, contributing to congestion at the limited number of crossing points. The relatively steep freeway grade presents a safety hazard and contributes to significant roadway noise impacts on adjacent neighborhoods. The corridor is also located in the vicinity of several significant natural resource areas, including the Stephens Creek, Fanno Creek and Tryon Creek watersheds.

Several recent planning studies and actions will provide guidance for future transportation analyses and refinement planning. The South Portland Circulation Study report provides a circulation concept for the Ross Island bridgehead area and Naito Parkway. The Barbur Boulevard Streetscape Plan provides guidance for pedestrian and streetscape improvements. The Barbur Concept Plan also provides guidance. The West Portland Town Center Study

recommends various transportation improvements for this area. The City did not adopt or act upon this study, but some portions may be useful for future considerations.

The adoption of the Southwest Community Plan and Comprehensive Plan (SWCP) and Zoning Map resolved many land use issues in the broader area surrounding the corridor. However, a 'Barbur envelope' has been delineated for a future land use and transportation planning process. This area includes a relatively narrow band of properties along Barbur between Miles Street and the City boundary and in the general area of the West Portland town center. Until the plan for this area is completed, the SWCP identifies the town center designation as conceptual only; the exact designation for the area could change as a result of further study.

Transportation solutions in the corridor should consider the following approaches:

- Combined land use and transportation alternatives within the 'Barbur envelope' area, and resulting transportation and livability benefits and impacts
- Regional and local transit services and facilities, and the appropriate transit vehicle type to serve the Barbur corridor within the RTP planning horizon
- Possible new locations or relocations for I-5 on-ramps and off-ramps and street connections across the freeway right-of-way
- Opportunities for new or improved local street connections to Barbur, including locations for possible signalized intersections and reconfiguration of angled intersections for safe, multimodal access
- Facilities to improve bicycle and pedestrian safety along Barbur and access to transit services and local destinations
- Traffic management and intelligent transportation system improvements along the corridor
- Potential mainline freeway improvements, including possible southbound truck climbing lanes and traffic and truck noise mitigation
- Special attention to the Barbur/Capitol/Taylors Ferry intersection and local street connectivity improvements in the West Portland area
- Coordination with previous planning studies and recommendations from the South Portland Circulation Study, Barbur Boulevard Streetscape Plan, and Barbur Boulevard Streamline Project

RTP Studies

Interstate 205 Ramp Study

Purpose: *Evaluate and recommend improvements to I-205 ramps at SE Powell and SE Division to eliminate confusing intersections that direct drivers to frontage roads*

Based on adopted policy, the City designed the freeway ramp and collector-distributor road system on either side of the I-205 freeway to operate so Powell Boulevard on the west side of I-205 and Division on the east side of I-205 provide a continuous route from Portland to Gresham. This design was intended to take automobile and truck traffic off the more transit-oriented Division Street west of I-205 and use Division east of I-205, in combination with the more auto-oriented Powell Boulevard west of I-205, for the bulk of trips between the two centers.

The current design of the ramp termini reflects this policy intent. There has been recent interest, however, in revisiting the turn restrictions and physical restrictions imposed by the policy and design. ODOT and the City have agreed to analyze the type of improvements that might be necessary to remove the turn restrictions at SE 92nd and Powell Boulevard and allow for more balanced turn movements throughout the interchange area.

West Portland/I-5 Access and Crossings Study

Purpose: *Identify possible new connections over I-5 to serve motor vehicles, pedestrians, and bicycle travel*

Because of the barrier effect of I-5 and SW Barbur, the existing street pattern in the vicinity of the West Portland town center/Barbur transit center is incomplete, particularly in the north-south direction. This 'wall' limits connections between cultural, institutional, recreational, and commercial facilities such as Woods Memorial Park, Multnomah Village, the Multnomah Center, Gabriel Park, Jackson Middle School, Capitol Hill Library, Holly Farm Park, PCC-Sylvania, and Markham Elementary School. Topography presents a challenge to making additional connections in the vicinity of the transit center.

I-5 Crossing
The existing pedestrian/bicycle connection across I-5 ramps down from the transit center, crosses I-5 on a pedestrian bridge, then ramps down to SW Willard at 40th. The West Portland Town Center Study (December 1997) recommended enhancing the existing pedestrian bridge crossing by reconfiguring the park-and-ride lot, providing a new local street crossing in the vicinity of the transit center, and potentially capping a portion of I-5. In addition, sidewalk improvements are needed on local streets south of I5 to improve connections to the existing pedestrian bridge.

Local Street Connectivity
Southwest Barbur and I-5 create barriers at the north and south ends of the West Portland town center. Only Capitol Highway and the pedestrian bridge at the transit center cross I-5 in the vicinity of the town center, resulting in a local street network with missing links. Potential locations for local street crossings of I-5 are:

- Replacing the existing pedestrian/bicycle bridge over I-5 with a pedestrian-oriented, local street connection on the 39th/40th alignment, connecting to 40th at Wilbard Street and to SW 35th
- Constructing a new local street that extends SW 48th Avenue south on a new bridge structure to SW Huber Street and then connects to an extension of SW Alfred Street
- Constructing a bicycle/pedestrian bridge between the Ash Creek and Crestwood neighborhood and the West Portland Park neighborhood in the vicinity of the Dickinson Street corridor, south of Markham School

Land Use

- Relocating ramps in this area will create developable land and new land use potential.

This study may be incorporated into the Barbur/I-5 refinement plan (described earlier in this chapter), which identifies many of the issues described here.

Barbur Boulevard Crossings

Existing commercial areas along the west side of Barbur and south of I-5 are relatively inaccessible by pedestrians. Barbur presents a barrier to pedestrian access because of wide paved areas, limited crossing opportunities, and relatively high traffic volumes and speeds. Safer and more convenient pedestrian circulation is needed to support commercial uses, access transit service, and support a future town center.

Additional study is needed to determine the need and feasibility of new connections, within the context of the additional land use and transportation analysis being conducted as part of the Barbur and I-5 corridor refinement plan.

Central City Pedestrian Enhancements Study

Purpose: *Identify needed pedestrian improvements to address locations lacking pedestrian crossings, difficult bridge crossings, and access over freeways in the Central City*

The Central City Transportation Management Plan's (CCTMP) pedestrian policies and text note that the degree of pedestrian access is increased when the pedestrian network is "comprehensive in coverage, easily accessible, and without significant barriers and obstacles that would prevent its use." The pedestrian enhancements study should:

- Identify gaps and deficiencies in the pedestrian network
- Examine 'no pedestrian crossing' locations and identify appropriate measures to improve access
- Examine the need for underpasses and the potential for alternative pedestrian crossing opportunities
- Identify pedestrian access improvements to and across Willamette River bridges

- Identify pedestrian access improvements across I-5, I-84, and I-405
- Identify connections to and from surrounding neighborhoods
- Identify locations where pedestrian crossings need improvements and/or signal modifications
- Identify reconfigurations of ramp intersections to provide continuous sidewalks on both sides of SE Grand and SE Martin Luther King, Jr.

With the pending completion of the Central City Multimodal Safety project, many pedestrian access improvements in the Central City will be identified.

RTP Preferred System Studies

The RTP project list includes the following studies only in the 2020 Preferred System. There is no timeframe associated with these studies.

Third Track Connector Study

Purpose: *Study additional rail capacity to address growth in high-speed rail and commuter rail from North Portland to Vancouver, Washington.*

The 1999 Commuter Rail Feasibility Study evaluated the feasibility of regional commuter rail service operating on the existing freight rail lines. ODOT and the Washington Department of Transportation will jointly conduct a new Rail Capacity Analysis as part of the ongoing I-5 Transportation and Trade partnership. This study will examine possible commuter rail service between Portland and Vancouver/Woodland, and Portland and Camas/Washougal. It will consider the feasibility of commuter rail service on entirely new, separate, passenger-only rail lines for intercity passenger trains (including high-speed rail) and commuter rail trains. Potential ridership and infrastructure costs will also be examined. The study will likely find that a third rail line would be inadequate and two parallel passenger rail lines would be more feasible.

PORTLAND PLANS AND STUDIES

Refinement Plans

Central City Transportation Management Plan (CCTMP) Update

Purpose: *Update the CCTMP, including subarea access and circulation studies as needed*

City staff must review and update the CCTMP's policies, objectives, district strategies, and street classifications every five years. The review is limited to City Council directives, street

reclassifications, new programs, policy amendments, land use changes, and legal issues, and must include a citizen involvement component. The CCTMP street classifications were updated as part of the TSP process to make them consistent with RTP classifications.

MAX Light Rail Corridor Master Street Plan

Purpose: *Complete the master street plan for areas between NE Glisan and SE Stark, east of the Gateway regional center*

The RTP requires local jurisdictions to develop "conceptual new street plan maps" for "contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development." The maps are intended to provide guidance to property owners and developers, as well as more certainty to nearby residents. The street plans should identify street connections to adjacent areas in a manner that promotes a convenient and well-connected street system. The street plans should show extensions to existing streets, new street connections to provide adequate connectivity, and a reliance on through-streets rather than closed street designs.

Because the MAX light rail corridor has unique connectivity needs, it was not included in the Far Southeast Street Master Plan study. A higher level of street connectivity is desirable in dense, mixed-use areas to access multiple destinations and disperse vehicle traffic throughout the area. High levels of pedestrian activity also warrant a more densely spaced street grid to facilitate movement and attain high mode split targets for alternatives to single-occupant vehicles.

Citywide Master Street Plans

Purpose: *Complete master street plans for the following districts: Southeast, Far Northeast, North, Northeast, and Northwest*

The 2000 2014 RTP requires local jurisdictions to develop "conceptual new streets plan maps" for "contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development. The maps are intended to provide guidance to property owners and developers as well as more certainty to nearby residents. The street plans must identify street connections to adjacent areas in a manner that promotes a convenient and well-connected street system. The street plans must show extensions to existing streets, new street connections to provide adequate connectivity, and reliance on through streets rather than closed street designs.

Areas of the City without adopted street plans must be analyzed to determine where adequate connectivity does not exist. Some areas, such as inner Southeast, have high levels of street connectivity that exceed regional standards. Other districts, such as Northwest, exhibit high

street connectivity near the Central City, but poor connectivity in outlying areas where topography and industrial zoning may preclude connectivity. At a district level, the Far Northeast exhibits the lowest levels of connectivity for areas not covered by an adopted street plan.

Other Agency Common Priority Projects in Portland

This project is needed in order to collaborate with ODOT, the Port, Portland Parks and Recreation, and TriMet to identify common priority projects for the 2018 RTP. The 2018 RTP is proposed as a "major update." The City did not evaluate other agency proposed projects within Portland for the 2014 RTP, or the 2035 TSP update. This collaborative study, or three separate studies, would identify projects that the City and one or more of the other agencies agree should be advanced as priority projects in the 2018 RTP. The study will refine project evaluation criteria based on RTP and TSP adopted outcomes.

Citywide All-Modes Needs Analysis

Projected ODOT "Hot Spot" Locations Refinement Plan

This analysis will identify plan-level solutions for locations with safety and/current or projected capacity problems on or near State Highways. The study refinement plan will also develop and evaluate alternative performance measures, including alternative mobility targets, for State Highways, consistent with Action 1F3 of the Oregon Highway Plan, in collaboration with the Oregon Department of Transportation.

Through modeling and analysis, PBOT and ODOT have identified multiple locations with potential safety and/or projected capacity problems. The agencies have agreed that PBOT will identify feasible actions for addressing these safety and/or capacity programs along with a financially feasible implementation program, the appropriate micro- or meso-scale modeling and analysis tools based on the results of the alternative performance measures work, analyze potential alternative performance measures. After analyzing the locations based on the results of the alternative performance measure work, PBOT will recommend whether and what types of solutions are appropriate for each location for inclusion in the City's TSP. PBOT will also work with ODOT to develop and recommend alternative State Highway mobility targets for adoption by the City and the Oregon Transportation Commission. This refinement plan will be completed no later than the next major TSP update.

Studies

ODOT District Highways Evaluation

Purpose: *Assess the long-term design and functional needs of state highways inside the City.*

The City and ODOT are both interested in transitioning district highways within the City limits to Portland's jurisdiction and management. These may include Sandy Boulevard, NE/SE 82nd Avenue, N/NE Lombard, NE/SE Martin Luther King, Jr. Boulevard, and NE/SE Grand Avenue. Many of these highways have changed roles over time, as parallel state routes and limited-access highways were constructed. These district highways formerly served as through-routes, but now provide more local circulation and commercial access functions.

The City's interest in assuming jurisdiction is based on land use (implementing 2040 main street development); development review (giving one agency permit authority for buildings, driveways, etc.); street design (incorporating multimodal features, more calmed traffic), and operations (implementing signalization, parking control, etc.).

The City must evaluate the significant cost implications of assuming jurisdiction for these district highways. Many of the highways need reconstruction or are not built to the level of urban standards the City desires. Jurisdiction also includes a long-term responsibility for maintenance and operations.

Portland Central City Loop (RTP Mobility Corridor#4)

Purpose: *Evaluate the current and future operations, design, and proposed improvements of the I-5/I-405 freeway loop in the Central City, and consider alternative design concepts.*

The purpose of this study is to develop alternative design concepts for the inner freeway loop, addressing issues such as regional mobility; freight movements; access needs of Central City districts; minimization of physical barriers and impacts on the river; potential local street network improvements; and the role of alternative modes. The analysis should also evaluate changes to the transit system and the possible implications for land use in the district.

Numerous studies have evaluated the service capabilities of various existing segments of the inner freeway loop (such as the Greeley-Banfield segment and the Eastbank segment) and have recommended potential improvements. The freeway loop has not been evaluated as a whole system, however. Several recent planning activities indicate the need to evaluate the function and design of the entire inner freeway loop, given emerging land use and transportation objectives. These planning activities include the I-5 Transportation and Trade Partnership, the South Portland Circulation Study, the Rose Quarter Urban Design Plan and Development Strategy, the Lloyd District Development Strategy, and the Central Eastside Development Opportunity Strategy.

Brooklyn Neighborhood River Access

Purpose: *Study pedestrian and bike access from the Brooklyn neighborhood to the Willamette River.*

The 1991 Brooklyn Neighborhood Plan identifies improved access to the riverfront as a longstanding neighborhood priority. Objective 6A1 of the plan states: “Re-establish Brooklyn’s access and historic link to the Willamette River.”

McLoughlin Boulevard creates a barrier that separates the neighborhood from the river. Existing access from the neighborhood to the river is via the lower-level ramps at the Ross Island Bridge, where steep terrain limits easy access, or via Holgate Boulevard, where pedestrians can cross at a stoplight, but can reach the river only by descending a bramble-covered bank. Haig Park is undeveloped parkland between the river and McLoughlin Boulevard, south of the SE Franklin Street alignment and north of the SE Haig Street alignment.

The neighborhood concept plan identifies a pedestrian overpass bridging McLoughlin as a way to provide river access. A recent study investigated alternative crossing locations of McLoughlin Boulevard and access routes to the Springwater Trail, and provided rough cost estimates. That study may be detailed enough to identify a preferred alternative for an improvement project. The next step would be to determinate if the project responds to a transportation need rather than a recreational need to qualify it for inclusion in the TSP. Because the preferred alternative may impact private property and existing business operations, a City Council hearing on the report’s acceptance is also recommended.

Interjurisdictional Arterial Improvements Coordination

Purpose: *Develop a coordinated street improvement plan for arterial streets that transcend jurisdictional boundaries.*

This study would look at streets that cross jurisdictional lines, to identify changes in traffic volumes and traffic origins/destinations and to monitor how the streets’ classifications conform with their function and levels of regional traffic. Significant traffic growth is expected on streets that connect to other jurisdictions with planned population and/or employment growth. Evaluate pedestrian and bicycle access, mobility and improvements, especially where meeting jurisdictional boundaries.

Metro designates collector-level streets as part of the regional street system when a network of higher-classified streets is not present or lacks adequate capacity to carry regional traffic. Designated in the RTP as ‘collectors of regional significance’, these streets connect the regional arterial system and the local collector system and distribute neighborhood traffic to arterials. They have three purposes: 1) ensure adequate access to the primary and secondary land use components of the 2040 Growth Concept, 2) allow dispersion of arterial traffic over a number of lesser facilities where an adequate local network exists, and 3) define appropriate collector-level movement between jurisdictions.

The RTP designates some district and neighborhood collectors in Portland as collectors of regional significance. Examples of Portland streets that have this designation and extend beyond Portland boundaries are SW Taylors Ferry, SW Terwilliger, SE 52nd, SE 112th, SE Johnson Creek, and NW Cornell.

NE Glisan Street Transportation and Streetscape Study

Purpose*: Identify transportation and streetscape improvements that address commercial, pedestrian, bicycle, safety and neighborhood livability needs.*

Northeast Glisan been NE 67th and 82nd Avenues has been designated a main street in the Region 2040 Growth Concept. The TSP designated this segment of Glisan as a Community Main Street for street design purposes. The TSP contains one project, bike lanes, for NE Glisan.

Currently, this segment of Glisan stretches between two light rail stations at 60th and 82nd. The land use and zoning pattern is storefront commercial, consistent with its main street designation. NE Glisan has the potential to be a thriving commercial district with multimodal connections. Barriers that prevent Glisan from realizing its potential include heavy automobile use as an alternative to I-84 during peak travel times; difficult pedestrian crossings and inadequate sidewalks and large curb cuts, missing bike lanes, intermittent on-street parking, and a lack of street trees.

Glisan St was given a road diet between 62nd and 81st avenues, improving pedestrian crossing conditions. However, nothing has yet been done on this stretch specifically for bicycle safety.

Columbia Corridor Access Study

This study would identify priority connectivity needs for all modes along and across the Kenton rail line in Northeast Portland. North south access points across the railroad are currently limited to few locations, are substandard for all modes, and include several deficient bridges. If Union Pacific double-tracks the Kenton railroad line, north south access could be significantly impacted for freight, transit, bicyclists, pedestrians, and drivers. Traffic analysis has also indicated significant and growing freight delay along Columbia Blvd, improved pedestrian and bicycle access to transit is also needed to support a proposed bus line along Columbia Blvd. The study would identify key connectivity needs for all modes, and develop a proposal to work with Union Pacific, other public sector agencies, and private sector organizations to ensure ongoing connectivity needs are met.

Growing Transit Communities Investment Plan

This project will identify corridors within the City of Portland where the development of compact, transit oriented communities would be stimulated by targeted investments that support a high level of access to fast, reliable, and frequent transit service. It will then identify and prioritize the specific infrastructure, program and policy investments that are most needed in those corridors to produce the level and type of growth and mode shift targeted by the City and the region. The study will then develop funding and implementation strategies for the improvements. The project will result in an investment plan that will be a model for other jurisdictions in the region. It will be incorporated into future updates of the Transportation System Plan and the Regional Transportation Plan. This project is funded.

Enhanced Transit Corridors

This study will identify corridors needing higher transit capacity to accommodate projected growth and to support TSP outcomes including prosperity, equity, safety, and climate. The study will identify the general types of improvements needed in each corridor. The result will be projects for the next RTP and/or TSP.

This study will focus on frequent transit corridors within the City of Portland where projected population and employment growth and associated transit demand is expected to overwhelm the ability of conventional transit service to meet the demand. On the highest priority corridors, the project will determine the additional transit capacity needed to meet future demand, and will identify strategies and investments needed to improve transit operations enough to support that higher capacity. The study will consider "enhanced transit" strategies such as span of service, vehicle technology, longer span of service, higher capacity vehicles, proof-of-payment fare systems, headway-based operations, and enhanced transit signal priority. This study will build and expand on the Growing Transit Communities investment plan.

The study will evaluate multiple corridors, and will result in at least two enhanced transit projects (one in East Portland and one in “Inner Ring” neighborhoods).

The studies will:

- Involve PBOT, BPS, Trimet, Metro.
    - Evaluate and select the viable transit corridor for even more frequent or higher levels of service, preferably consistent with FTA Small Starts criteria.
    - Be mode neutral and will evaluate a small number of corridors based on projected ridership, development potential, relationship to existing transit, sustainability of operational costs, new funding mechanisms (including new value capture mechanisms), and linkage to affordable housing and other Portland Plan equity objectives.
    - Build from and relate to sidewalk and bike projects identified in the TSP, with an effort to use those projects as a local match.

- The result will be to recommend inclusion of at least one East Portland and at least one Inner Ring project for inclusion in the 2018 RTP. Prioritize East Portland project funding and timing.

Project-Specific Objectives:

- East Portland Project
  - Create enhanced next generation north-south transit service in East Portland, above and beyond the frequent service improvements currently contemplated with the 2015 Trimet Service Improvement Plans. Evaluate opportunities in Gateway, and on 82nd, 122nd, 148th and 162nd.
  - The project will examine the employment location and commute patterns of east Portland residents, and evaluate ways to improve transit access to jobs in the Columbia/Airport Way corridors and elsewhere in the region from east Portland.
  - Project timing: 5-10 years

- Inner Ring Project
  - Portland Streetcar will be a partner.
  - Create enhanced next generation higher capacity transit service in Inner Ring corridors projected to experience high levels of residential and/or job growth sufficient to exceed projected transit capacity, frequency, and reliability.
  - The project will build from analysis completed with the 2009 Streetcar System Concept Plan, and subsequent economic impact studies. Gather projected ridership and traffic data for corridors such as Grand/MLK, Division, Macadam, Sandy, Burnside/Stark, Broadway, 18th/19th, Belmont/Hawthorne, and Vancouver/Williams. Identify 2-3 corridors for further evaluation.
  - The project will examine transit demand, traffic and travel patterns in the highest demand corridors, and evaluate ways to improve transit frequency and reliability, from origins to destinations.
  - Project timing: 11-20 years.

Pleasant Valley Area Need and Feasibility Analysis

This study will conduct a high-level needs and feasibility analysis for several projects from the 2007 TSP and the 2014 RTP in the Pleasant Valley area. These projects include retrofits of Jenne Road, 174th Avenue, Barbra Welch Road, and Foster Road, as well as the extension of 174th Ave as proposed by the City of Gresham. The study will use updated transportation modeling from Metro and current population and employment growth projections to re access the need for these project as well as the identified solutions. The study will also access the feasibility of projects that call for new or widened roadways with full pedestrian and bicycle facilities along environmentally constrained corridors.

Industrial Lands Access Study

This study will identify, evaluate and prioritize potential industrial lands transportation access investments and revenue sources following adoption of the 2035 Comprehensive Plan and 2035 TSP.

Pedestrian Master Plan

The Pedestrian Master Plan established a 20- year framework for improvements that will enhance the pedestrian environment and increase opportunities to choose walking as a mode of transportation. The Pedestrian Master Plan Update includes a review of the City's pedestrian policies, pedestrian street classifications, pedestrian design guidelines, a list of capital projects and a set or recommended funding strategies.

Southwest In Motion

Develop a 5- year active transportation strategy for all of Southwest Portland. It will incorporate projects from the updated TSP project list, the Portland Bicycle Plan for 2030, the Barbur Concept Plan, the Southwest Corridor Plan, the SW Urban Trails Plan, the Barbur Concept Plan, and community-led Platinum Bicycle Facility Strategy in Southwest Portland. This project is funded.

Portland Central City Truck Loading and Parking Plan

This project will develop a comprehensive truck loading and parking strategy for the Central City to increase efficiency of the on-street loading system, increase compliance with City loading regulations, and balance commercial loading and parking needs with other uses in the public right-of-way. This project will recommend strategies and street design options applicable to the Central City. This project is funded.

Hayden Island

In coordination with regional, state and federal partners, develop and evaluate access options to Hayden Island from Marine Drive. Access would include Pedestrian, Bike, Transit, Auto and freight to support the Hayden Island Plan.

Cordon Pricing

Study the implementation of a cordon pricing system within Central Portland. While the scope of the study would include the effectiveness of drawing various different boundaries, one boundary studied should include from I-205 to Skyline Blvd, Columbia River south to the southern City limits. Due to federal regulations, the interstates themselves would not be tolled, but vehicles would be tolled upon exiting the interstates to enter the cordon area. The study scope would include:

- Boundaries

- Pricing level

- Payment collection strategies

- Projected impacts on VMT, GHG, congestion, transit loads, mode share, etc.

- Possible use of funds, including mitigating impacts

Broadway Weidler Corridor Plan Update

Update the 1996 Broadway Weidler Corridor Plan and extend the study area so it includes the corridor from the Willamette River to Hollywood Town Center. This will be a comprehensive corridor study assessing the full range of transportation needs and prioritizing solutions. Areas of focus include pedestrian and bicycle safety and access, transit speed and reliability, traffic management, business district vitality, streetscape environment, freight access, traffic signals and crossings, access management, and parking management. This study will be coordinated with the ODOT Rose Quarter Interchange Project currently under development.

Lombard Corridor Transportation and Streetscape Plan

This collaborative study with ODOT will develop a transportation and streetscape plan for N/NE Lombard St from N Woolsey Ave to NE Martin Luther King, Jr Blvd. Areas of focus include pedestrian and bicycle safety and access, transit speed and reliability, traffic management, business district vitality, streetscape environment, freight access, traffic signals and crossings, access management, and parking management. The plan will also include a concept plan and feasibility assessment for reconfiguration of the Lombard/I-5 interchange to improve safety and circulation for all modes.

Northwest District Access and Circulation Study

Prepare an access and circulation study for the NW District neighborhood. Consider street reconfigurations and improvements including pedestrian and bicycle safety and access, travel directions, travel lanes, traffic control, and transit mobility and circulation. Identify and recommend changes to street classifications and identify near-term projects to improve safety, access, and circulation for all modes.