# DRAFT TSMO ACTION PLAN

The TSMO action plan is the region's road map for carrying out transportation system and demand management strategies to improve travel for people and goods. This plan is part of the 2035 Regional Transportation Plan, a comprehensive regional investment strategy for transportation.

The Portland region is in an enviable position; a penchant for regional coordination and openness to new ideas has placed the region on the leading edge for "smart" investments in both transportation operations and demand management. This plan takes the next step by integrating these complementary elements of system management to better link opportunities for coordinated investments that maximize the efficiency of the existing transportation system.

This action plan was developed with guidance from the TransPort and the Regional Travel Options (RTO) Subcommittees of the Transportation Policy Alternatives Committee (TPAC), and builds upon previously completed Intelligent Transportation System (ITS) plans and the 2008-2013 RTO Strategic Plan. The action plan guides implementation of transportation management solutions over the next 10 years.

Full (10 year) implementation of the region-wide and corridor specific transportation demand management projects will mean investing approximately $23 million in capital improvements and up to $33 million a year for operations and maintenance.[1] Full implementation of the systems management and operation projects will mean investing approximately $350 million for capital improvements and annual operation and maintenance costs of up to approximately $11 million.[2]

TSMO investments include both capital improvements using intelligent transportation system (ITS) infrastructure and service strategies that provide traveler information and assistance, or respond to unexpected events. In most cases, TSMO services require ongoing investment in personnel to operate incident response vehicles, staff operations centers, or maintain travel information and public outreach programs.



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[1] Given that not all the projects will be implemented in the first year, the average annual operations and maintenance budget is estimated to be about $21 million a year.
Total cost = $14M + (10 x $21M) = $224M

[2] The annual operation and maintenance expense will reach $11 million after full implementation of the TSMO projects; however, the average cost over the 10-year period is estimated at $8 million a year since not all projects will be implemented during the first year of the plan.
Total Cost = $350M + (10 x $8M) = $430M

An effective TSMO program requires a managed program on an equal level to construction and maintenance programs. This presents public agencies with significant policy, organizational and budget challenges to successful implementation.

## Action plan organization

The action plan is organized into two distinct sections: regional investments and corridor investments. Regional investments include strategies that cross agency boundaries, benefit multiple agencies and/or require a shared commitment to ongoing system management. An example of regional investment is traffic incident management. Traffic incident management includes integration of emergency response and traffic management systems, and partnerships between transportation agencies and emergency services to provide a coordinated response to identify, respond to and clear incidents quickly. The system interfaces benefit both transportation and emergency service agencies, but traditional public agency budgets make it difficult to determine who should be responsible for the initial investments and ongoing system enhancements.

Corridor investments include both capital improvements and services that can be targeted and provided to a specific transportation corridor. For example, many arterials in the region lack the traffic detection and communications infrastructure to provide data and video images for a traveler information web site.

## Functional area analysis

The stakeholders and project team considered a wide range of TSMO strategies covering the broad spectrum of transportation operations and demand management including transit operations, regional multimodal traffic control, traffic incident management, congestion pricing, traveler information, intelligent vehicle initiatives, pedestrian/bicycle safety enhancements, and transportation demand management. The following near term priority investments should be considered in the first implementation phase. These priorities are based on analysis of the strategies, a comparison of benefit-cost and the current state of TSMO investment in the region.

### Regional multimodal traffic management

- Provides arterial and freeway multimodal traffic management and operations functions including signal timing, access management, arterial performance monitoring and data collection, active traffic management

### Traveler information

- Provides current and forecasted traffic condition information via a variety of sources including web site, 511 phone system, dynamic message signs, highway advisory radio and via private sources for in-vehicle navigation systems

### Traffic incident management

- Provides resources and builds partnerships to foster a coordinated, timely and efficient response to incidents. The strategies are aimed at reducing overall incident duration to restore capacity quickly and reduce secondary crashes.

### Transportation demand management (TDM)

- Maximizes investments in the transportation system and relieves traffic congestion by managing travel demand, particularly during peak commute hours. Supports and leverages capital investments in transit, trails, and other infrastructure by marketing travel options to potential riders and users and increasing the share of trips made by transit, walking, cycling and other travel options.

## Benefits

The region's experience with TSMO as well as that of agencies in other parts of the country demonstrates that TSMO strategies support many regional transportation goals, including:

- Improve travel time reliability
- Reduce crashes
- Improve transit on-time arrival
- Reduce delay
- Reduce fuel consumption
- Reduce air pollution and carbon emissions

Following are sample benefits specific to the Portland region that can be achieve through each of the functional areas.

### Regional multimodal traffic management

- An adaptive signal timing project installed in Gresham in 2007 reduced average travel times by 10 percent and saves over 74,000 gallons of fuel every year.
- A typical signal timing project in Portland saves over 300 metric tons of CO2 annually per retimed traffic signal[3].

[3] DKS. Monitoring and Verification Report: Estimated Project CO2 Savings. Portland Climate Trust Traffic Signal Optimization Project. December 27, 2009

- The transit signal priority project in the Portland metro area has the ability to reduce transit delay by 30 to 40% and improve travel time by 2 to 16% based on previous studies.[4]

### Traffic incident management

- The ODOT incident response program responds to over 12,700[5] incidents each year in the Portland metro area. Based on 2001 data, if all delay causing incidents in the Portland region were reduced by 5 minutes, over 270,000 hours of delay would be saved annually.[6]

### Traveler Information

- In 2008 the TripCheck web site was visited over 23 million times, and that number has grown steadily since 2002 when data was first collected. The record month for visits was December 2008 with almost 6 million visits. Surveys show that TripCheck information influences travel decisions for up to 60 percent of site visitors.
- The CarpoolMatchNW.org ride-matching web site has more than 11,000 registered users.

### Transportation demand management

- An individualized marketing project in North and Northeast Portland during the opening of MAX Yellow Line reduced auto trips by 9% and transit ridership grew 44% while ridership in a control group grew only 24%.
- Employer transportation programs are in place at 1,139 worksites in the region, and 924 of those include an employer-provided transit subsidy for employees. Surveys of employees indicate that the non-SOV mode share at these worksites exceeds 35%.
- A survey of residents in the Portland metro area found that nearly one out of five (19%) took action to reduce car trips because of what they saw, read or heard about the Drive Less/Save More campaign.

## Ongoing funding

The collection of TSMO strategies in this action plan requires a moderate investment in up front capital and continued funding for operations and maintenance for most of the projects. Total capital investment for the 10-year plan for the Portland metropolitan area is valued at

[4] ITS Benefits and Costs databases (http://www.itsbenefits.its.dot.gov

[5] 2006 incidents as noted on ODOT's website: http://www.oregon.gov/ODOT/HWY/ITS/project_COMET.shtml

[6] Bertini, Robert L. Rose, Michael W. El-Geneidy, Ahmed M. Portland State University. Using Archived Data to Measure Operational Benefits of ITS Investments: Region 1 Incident Response Program. June 2004.

approximately $378.5 million. However, it is important to consider the necessary operation and maintenance investment in addition to the capital investment. A commitment to sustaining an ongoing operating program that will provide quality service to the traveling public requires an ongoing and stable funding source. A successful transportation system operations program must be treated like a capital and/or maintenance program with a dedicated funding source. The annual operations and maintenance cost, if all of the TDM and TSMO projects in this plan are implemented, is estimated to reach about $39 million. However, the annual operations and maintenance budget will not begin at $39 million. The annual investment will grow gradually as projects are implemented, and could reach up to $39 million with full implementation.

## TSMO region-wide action plan

This section outlines the TSMO strategies that apply region-wide. These projects extend across agency boundaries and benefit multiple jurisdictions. Following this section, are the corridor specific projects which apply to particular geographic areas. The section is organized by the four functional areas: regional multimodal traffic management, traveler information, incident management and transportation demand management.

### Functional area: regional multimodal traffic management

The Regional Multimodal Traffic Management projects improve metropolitan mobility by applying 21st century technology solutions to actively manage the transportation network. It is clear that the existing network can be used more efficiently to improve mobility for people and goods while reducing the capital and social costs of large-scale infrastructure investments. This program area invests in highly congested transit, freight and emergency response corridors to improve on-time performance for buses, travel-time reliability for trucks, and response times for emergency responders. The program also builds the infrastructure for performance data that can supply traveler information such as real-time corridor travel times and congestion maps. This data will be further used by agencies to promote more efficient use of the transportation system.

The following bullets describe the projects identified in this functional area, as well as preliminary cost estimates and timeframes.

- **Operate and maintain regional ITS communications network**
  Improved coordination is necessary to insure effective management of the regional transportation system. Maintaining the regional ITS network allows for more efficient use of available resources and sharing of resources can reduce overall costs and increase project efficiencies. The first step in facilitating regional coordination is to enhance the operation and maintenance of the regional ITS communications network. As the existing ITS network

is expanded to include additional facilities and functions, the early projects will need reinvestment to insure that these critical links are adequate.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Operate and Maintain Regional ITS Communications Network | Ensure ITS capital investments are used as efficiently and effectively as possible. | High | Ongoing | $0 | $100K | TriMet/ TransPort |

- **Active traffic management regional concept of transportation operations (RCTO)**

  Active traffic management consists of a combination of strategies which vary in cost and capabilities. Active traffic management may include variable speed limit signs, lane control, reversible lanes, advanced signal systems, etc. Given the relatively high costs, lack of local implementation, and the limited number of national implementations of active traffic management, it is prudent to first conduct a preliminary study of the technology and potential locations or corridors where the technology benefits seem to be a good fit to the challenges.

  The first effort for active traffic management is to conduct a study to review the various strategies and determine those feasible. The next step is to identify the potential corridors for implementing active traffic management strategies based on current operational and safety challenges that could be addressed by active traffic management. Subsequent study(s) should focus on development of an active traffic management implementation plan and identifying specific elements appropriate for each of these corridors.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Active Traffic Management RCTO | Identify potential corridors for active traffic management implementation, and develop an implementation plan | High | 1-5 years | $350K | $0 | Metro |

- **Transit priority treatment performance measurement**

  Transit signal priority (TSP) has been employed and implemented by TriMet and the City of Portland along key arterials with major transit routes. TSP enhances transit service and thus encourages transit ridership. However, the field performance of TSP has not been

thoroughly studied. It is therefore necessary to establish a set of performance measures which will apply across all corridors with TSP implemented, and regularly monitor and evaluate the performance of TSP. This evaluation is necessary to determine the cost-effectiveness of expanding TSP to other corridors.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Transit Priority Treatment Performance Measurement | Enhance regional traffic signal coordination systems and support systems that respond to current conditions. | High | 1-5 years | $200K | $200K | TriMet |

- **Region-wide access management strategies**

  *Regional Concept of Transportation Operations (RCTO)*

  Access management consolidates or restricts access points to provide a safer environment for vehicles, pedestrians and bicycles. Access management can be expensive depending on access rights and right-of-way acquisition. Strategy plans are necessary to guide the implementation of access management and better allocate the limited resources spent on access management. Currently, ODOT does have access management regulations and standards, however, these standards only apply to state highways. This project aims to incorporate non-state highways into the access management strategy and generate stronger regional policy regarding access management. The first step of the process is to develop overall access management goals and objectives and to identify potential corridors for access management implementation. The next step is to develop a corridor specific access management strategy that provides a toolbox of techniques that may be applied as road improvement projects, development, or redevelopment occurs within the roadway corridor. The strategy is intended to be adopted by the jurisdictions that have responsibility for the roadway, permitting of driveways, land use regulations, local ordinances and site development requirements.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Region-wide Access Management Strategies | Improve safety and preserve capacity on regional facilities | High | 1-5 years | $500K | $0 | ODOT |

- **Enhance regional traffic signal system**
  Software upgrades or enhancements can provide new functionalities and provide a low cost solution to increasing system capabilities. Software updates can be implemented in various transportation elements including advanced signal operations, supportive GIS databases, incident management timing plans, etc. Additionally, capabilities in traffic signal systems such as automation of turn movement counts collection and automated collection of arterial travel times requires additional equipment and hardware upgrades of the signal system.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Enhance Regional Traffic Signal System | Enhance regional traffic signal coordination systems and support systems that respond to current conditions. | High | 1-5 years | $12M | $50K | ? |

- **Expand PSU ITS freight data collection**
  Expand Portland State University's existing web based ITS "count sensor" program beyond the freeway to some key arterials throughout the region. Create a repository of freight data (primarily truck data) from the region's Freight Data Collection project.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Implement Freight Data Collection System | Collect region wide freight data | High | 1-5 years | $50K | $100K | Port of Portland |

- **Congestion pricing/high occupancy toll lanes pilot project**
  Congestion pricing is one of the effective ways to reduce traffic congestion. It works by shifting rush hour highway travel to other transportation modes or to off-peak periods. High occupancy toll (HOT) lane is one form of congestion pricing, which carries additional benefits compared to traditional tolling methods. HOT lanes encourage carpooling and at the same time utilize unused capacity of carpool lanes. On top on that, implementing dynamic pricing would have the effect of diverting traffic across different modes, time and space. A pilot project will develop and implement congestion pricing and study the effect it may have on reducing traffic congestion.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Congestion Pricing/ High Occupancy Toll Lanes | Support systems that implement future pricing strategies (e.g., congestion, tolls, parking). | High | 1-5 years | $5 M | n/a | ODOT |

- **Active traffic management pilot project**
  This pilot project is the second step following the development of regional concepts and implementation plans for active traffic management. Based on the results of the preliminary study, this step includes field implementation of active traffic management on the priority corridor identified as a part of the study.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Active Traffic Management Pilot Project | Field prove ATM concept and show system benefit | Medium | 6-10 years | $5M | $100K | ODOT |

- **Next generation transit signal priority system**
  After evaluating existing transit signal priority (TSP) system, the next step is to develop new standards for buses communicating to the traffic signal system. This brings TSP to the next level, giving new capabilities and increasing the operational efficiency of TSP system.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Next Generation Transit Signal Priority System | Enhance regional traffic signal systems to support efficiency goals. | Medium | 6-10 years | $500K | $100K | TriMet/ TransPort |

- **24-Hour transportation operations coverage**
  Following the improvement in operation and maintenance of the regional ITS communications network, the next step is to implement 24-hour transportation operations centers (TOC) coverage. Providing 24-hour staff coverage across the entire Portland Metro area will allow quicker identification of traffic issues, expansion of traffic surveillance and facilitation of communication at all hours of the day.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| 24-Hour Transportation Operations Coverage | Expand traffic surveillance and facilitation of communication during late night/early morning hours. | Low | 6-10 | $0 | $100K | ODOT/ TransPort |

- **Automated speed enforcement**

  Speeding can negatively affect the safety of other road users, transit, pedestrians and bicyclists. The use of technology to help enforce speeds can reduce needed manpower as well as result in increased vehicle operator obedience. To achieve automated ticketing of vehicle speeding, the first step is to identify and install speeding cameras along corridors with common speeding problems. The information for vehicle speeding would be matched with the vehicle registration database to achieve automated ticketing of speeding. This would be achieved through software and hardware upgrades.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Automated Speed Enforcement | Provide a safe environment for transit, bicycling and walking | Low | 6-10 years | $1M | $100K | ODOT or others |

## Functional area: traveler information

Real-time traveler information provides travelers more accurate and comprehensive information for their route, mode, and time of day choice decision making. The information system may include system components transmitted via internet, radio, cell phone, or physically on the roadside. Currently, real-time traveler information system in the Portland Metro area includes dynamic message signs, highway advisory radio, traffic surveillance cameras, Tripcheck.com, TriMet trip planning tools and PORTAL.

The following bullets describe the projects identified in this functional area, as well as preliminary cost estimates and timeframes.

- **Portland Oregon Regional Transportation Data Archive Listing (PORTAL) enhancements**

  PORTAL is a traffic information system developed by Portland State University. The purpose of the system is to implement the U.S. National ITS Architecture's Archived Data User Service (ADUS) for the Portland Metro area. PORTAL shares U.S. Department of Transportation's vision to improve transportation decisions through the archiving and sharing of ITS generated data. As the regional traffic information data warehouse for the Portland Metro area, PORTAL requires continuous support, maintenance and upgrades. The next stage in PORTAL development is to link GIS data with PORTAL to provide more capabilities.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Portland OR Regional Transportation Data Archive Listing (PORTAL) Enhancements | Expand traffic surveillance and transportation system condition data collection capabilities. | High | Ongoing | n/a | $100K | PSU |

- **Multi-modal traveler data and tools**

  Provide and/or maintain data and tools to encourage and ease the use of travel options. While some Traveler Information shares real-time data with the travelling public, this action provides data and tools to the travelling public to pre-plan their mode and route. Examples include CarpoolMatchNW.org, and roadway bike-suitability data maintenance for bike maps and online trip planning tools.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Multi-modal traveler data and tools | Provide and/or maintain data and tools to encourage and ease the use of travel options. | High | Ongoing | $0 | $150K | Metro |

- **Park&Ride traveler information**

  Add Park&Ride feature to route planning tools such as TriMet's Trip Planner. The feature would incorporate Park&Rides into transit and rideshare travel, forecast the best times to find parking based on historical data, estimate travel times and provide real-time information on parking space availability. Capital cost will install parking censors to collect and share data.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Park&Ride Traveler Information | Add Park&Ride feature to route planning tools | High | Ongoing | $500K | $150K | Metro or TriMet |

- **TripCheck Travel Information Portal (TTIP) enhancement**
  TripCheck Travel Information Portal (TTIP) is a data exchange system that allows ODOT and other public jurisdictions to share traveler information data as well as provides an access point for private companies, which in turn repackage this travel information data. Currently, regional freeways are the main roadways with traveler information available on TTIP. The data exchange is capable of incorporating arterial roadways; however, equipment needs to be installed on arterial roadways to connect with the data exchange system. With this project, arterial travel information will be integrated into TTIP and region-wide coverage will be provided for incident, construction, traffic and weather information for both freeways and key arterials. ODOT's TripCheck website is the direct product of TTIP. It is envisioned that regional real-time traveler information could be accessed via one single central website for the entire region.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| TripCheck Travel Information Portal (TTIP) Enhancement | Provide current information that may affect roadway users and travel choices across all modes. | High | 1-5 years | $3M | $2M | ODOT |

- **Arterial performance measure Regional Concept of Transportation Operations (RCTO)**
  A natural expansion of the region's performance measurement capabilities, beyond PORTAL and other freeway based facilities, is to the major arterials across the region. Arterial performance measurement in the form of travel times, travel speeds, and potentially origin-destination data will support engineering and planning decision-makers, enabling more efficient investments of limited funds. Provision of this data in real-time or near real-time makes the data even more useful for transportation professionals and the traveling public.

  The first project using this TSMO strategy is envisioned to make use of media access control address (MAC) reading technology at strategic locations to cover the major arterials region wide. This data will be stored and used in a similar fashion to PORTAL. The arterial

performance data, such as real-time speeds, will be made available to the public in an easy to use end format, such as ODOT's TripCheck website. The data could be used to help predict travel times under recurring or non-recurring events.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Arterial Performance Measure | Expand traffic surveillance and transportation system condition data collection capabilities across all modes. | High | 1-5 years | $750K | $100K | Metro |

- **Transit performance measurement system**
  Following the expansion of arterial performance measure capabilities, the next step is to develop tools to improve data collection from TriMet's AVL system. This system will be used for comparisons with arterial performance measurement system. The transit data can be compared with vehicle data collected from the arterial performance measurement system to evaluate transit performance and the competitiveness of transit compared to other transportation modes.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Transit Performance Measurement System | Provide effective information to decision makers and agency staff to affect the investments that are made on the system. | High | 1-5 years | $350K | $50K | TriMet |

## Functional area: incident management

Effective incident management could reduce the effects of incident-related congestion by decreasing the time to detect incidents, the time for responding vehicles to arrive, and the time required for traffic to return to normal conditions. Efficient incident detection, communication and information exchange between various agencies and incident responders is critical.

The following bullets describe the projects identified in this functional area, as well as preliminary cost estimates and timeframes.

- **Incident management**
  Incident management comprises various strategies and elements to facilitate incident and emergency response. Incident management includes (but is not limited to) expanding designated incident response routes, installing surveillance equipment to provide improved incident detection, establishing target clearance goals, contracting with towing services for paid "dry-runs", adding vehicles and staff to the incident response fleet, and expanding incident training teams.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Incident Management | Expand traffic incident and event management capabilities to restore roadway capacity reduced by incidents, weather and construction | High | 1-5 years | $2M | $200K | ODOT |

- **Expand incident management teams/training**
  Together with implementing incident management strategies, it is necessary to expand incident management teams and provide training in order to enhance partnerships with transportation and emergency management agencies. Members of the incident management teams may include emergency responders, traffic operation center staff, non-transportation agencies associated with traffic incident management, private sector personnel, and others. The incident management teams would be responsible for coordinating traffic incident response, providing joint training, sharing lessons learned, and other functions to improve traffic incident management capabilities.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Expand Incident Management Teams/Training | Provide a coordinated response to traffic incidents | High | 1-5 years | $10M | $500K | TransPort |

- **Integrate voice and data networks**
  An improvement to inter-agency communication systems is a key element in incident management. This project includes enabling emergency information sharing between responders and integrating communications between transportation agencies and emergency management agencies. The information sharing would be facilitated by upgrading communication network (including video feed) between transportation operation centers (TOCs) and installing hardware equipment for incident and emergency responders. By implementing this project, better support and information exchange are possible in times of incidents and emergencies.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Integrate Voice and Data Networks | Improve communication and coordination between transportation agencies and emergency management agencies | Medium | 1-5 years | $10M | $500K | TransPort |

- **Emergency responders GIS system upgrades**
  GIS system would be upgraded to allow emergency responders to access up to date roadway information while en-route. This potentially includes responder equipment installation, central system upgrade, and sharing of surveillance or performance measurement data between agencies to speed response times and increase incident understanding prior to emergency response arrival.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Emergency Responders GIS System Upgrades | Provide better information and support for emergency management | Medium | 1-5 years | $200K | $50K | Metro |

- **Dynamic routing and preemption pilot project**
  Dynamic routing and preemption pilot project would enable emergency responders to establish a response route and enact signal preemption along the route before arriving at signals.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Dynamic Routing and Preemption Pilot Project | Enable emergency responders to establish a response route and enact signal preemption along the route before arriving at signals. | Low | 6-10 yrs | $500K | $75K | TVF&R |

## Functional area: transportation demand management

Transportation Demand Management for the Portland region is coordinated through the Regional Travel Options (RTO) Program. RTO carries out regional strategies to increase use of travel options, reduce pollution and improve mobility.

Regional travel options include all of the alternatives to driving alone – carpooling, vanpooling, riding transit, bicycling, walking and telecommuting. The program maximizes investments in the transportation system and relieves traffic congestion by managing travel demand, particularly during peak commute hours.

The following bullets describe the priority projects in this functional area, as well as preliminary cost estimates and timeframes.

- **Collaborative marketing**
  Continue the Drive Less/Save More regional collaborative marketing campaign that increases awareness and use of travel options and reduces drive-alone trips. Update regional Bike There! map and other collateral materials. Provide sponsorships for partner events and activities. Conduct outreach to the public. Support partner collaboration and coordination.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Collaborative Marketing | Continue regional collaborative marketing campaign that increases awareness and use of travel options and reduces drive-alone trips. | High | Ongoing | $0 | $975K | Metro |

- **Employer services**
  Implement and/or support outreach and technical support in a collaborative manner with RTO partners to help employers increase non drive-alone travel modes.*

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Employer Services | Implement and/or support outreach and technical support in a collaborative manner with RTO partners to help employers increase non drive-alone travel modes. | High | Ongoing | $0 | $1M | Metro |

*Additional investment in this strategy is appropriate in some corridors.

- **Rideshare services**
  Implement and/or support marketing, outreach, vanpool fare incentives, and services directed at residents and employees to encourage and incentivize ridesharing.*

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Rideshare Services | Implement and/or support marketing, outreach, vanpool fare incentives, and services directed at residents and employees to encourage and incentivize ridesharing. | High | Ongoing | $0 | $360K | Metro |

*Additional investment in this strategy is appropriate in some corridors.

- **Measurement**
  Implement and/or support strategies that support investment in cost-effective strategies by measuring program effectiveness and easing data sharing among partners.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Measurement | Implement and/or support strategies that support investment in cost-effective strategies by measuring program effectiveness and easing data sharing among partners. | High | Ongoing | $0 | $150K | Metro |

- **Regional Transportation System Management & Operations program**
  Support strategic and collaborative program oversight. Support meetings and activities of the RTO and TransPort Subcommittees of TPAC, administer RTO and TSMO grant programs. Develop equitable and sustainable funding plans, seek additional funds to leverage federal grants. Track and support the development of regional, state and local policies that advance TDM and TSM strategies.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| TSMO Program | Support strategic and collaborative program oversight. | High | Ongoing | $0 | $335K | Metro |

- **Parking management region-wide strategy incentive program**
  Implement a program that provides incentives for jurisdictions to implement parking strategies in urban areas. This could incorporate a "best practices" type of policy or case studies within the jurisdiction to determine optimal parking strategies. Parking strategies can include time restrictions (maximums), paid parking areas, limiting parking to encourage alternative transportation modes, as well as other strategies.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Parking Management Program | Provide incentives for jurisdictions to manage parking | High | 1-5 years | $0 | $100K | Metro |

- **Smartcard fare system regional concept of operations (RCTO)**
  A smartcard fare system would improve transit operating efficiency by accelerating boarding and fare payment and enhance attractiveness of the system by providing customers with more convenient and flexible payment options. This project would develop the approach and layout the processes to support implementation of the smartcard fare system.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Smartcard fare system RCTO | Improve transit operating efficiency | High | 1-5 years | $100K | $0 | TriMet |

- **Smartcard fare system pilot project**
  A smartcard fare system would improve transit operating efficiency by accelerating boarding and fare payment and enhance attractiveness of the system by providing customers with more convenient and flexible payment options. This pilot project would implementation of the smartcard fare system in conjunction with the Portland-Milwaukie light rail project.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Smartcard fare system pilot project | Improve transit operating efficiency | High | 1-5 years | $12M | $0 | TriMet |

- **Youth transit pass program – development stage**
  Overcome barriers to youth transit trips and increase the demand for transit region-wide in order to reduce miles driven by parents and among youth who have vehicles for their use. Develop agreements between TriMet, schools, and local governments to provide youth transit passes. This project could also could be incorporated with the development of a smart card fare system that can account the exact amount youth take transit trips. Work with schools to develop methods and agreements so that youth transit cards can be issued to students.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Youth transit pass program | Overcome barriers to youth transit trips and increase the demand for transit region-wide. | Medium | 1-5 years | $0 | $100K | Metro |

- **Youth transit pass program – pilot project**
  Implement a pilot project lasting 1 year (or longer) for the youth transit pass project that was developed in the project above. The pilot project could focus on one or multiple schools. The implementation component will be further defined as part of the development stage.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Youth transit pass program | Implement the youth transit pass program. | Medium | 1 year (6-10 years) | $0 | $15M | Metro |

- **Regional incentive system**
  Provide a method for incentives that can be used regionally or by local partners to manage demand with individuals. Creating a regional system would allow seamless incentive delivery and management.

| TSMO Project | Goal / Objective | Priority | Time-frame | Capital Cost | O&M Cost | Potential Lead Agency |
|---|---|---|---|---|---|---|
| Regional Incentive/Disincentive System | Provide a method for incentives used to manage demand with individuals. | Low | 6-10 years | $9M | $200K | Metro |

## Investment costs for region-wide projects

Table 1 shows the total costs if all the region-wide projects were to be implemented. The operations and maintenance cost is on an annual basis.

### Table 1: Estimate of Region-Wide Investment Costs

| Functional Area | 1-5 Years Timeframe | | 6-10 Years Timeframe | |
|---|---|---|---|---|
| | Capital Cost | Annual O&M Cost | Capital Cost | Annual O&M Cost** |
| Regional Multimodal Traffic Management | $18M | $450K | $6.5M | $850K |
| Traveler Information | $4.5M | $3M | $0 | $3M |
| Incident Management | $22M | $1.25M | $500K | $2M |
| Transportation Demand Management | $0 | $3M | $9M | $8.25M* |
| **Overall Cost (Region-wide Projects Only)** | **$44.5M** | **$7.75M** | **$16M** | **$14M*** |

*This assumes a one-time annual operations and maintenance cost of $5 million for the youth transit pass pilot project.

**The annual O&M cost for the 6 to 10 year timeframe includes those projects started in the 1 to 5 year time frame and continued through the 6 to 10 year timeframe.

## Corridor specific projects

In addition to the region-wide projects identified in this plan, several projects apply to specific facilities and are detailed in the corridor action plans that follow. The corridor mobility concept was developed by Metro as a new way to think about an integrated transportation system. The Portland area was divided into 23 unique corridors, see Figure 1. Each corridor focuses on the region's network of freeway and highways, and includes parallel networks of arterial streets, regional multi-use paths, high capacity transit and frequent bus service.

In following Metro's mobility corridor concept (which was in part designed to help planners and decision-makers understand existing conditions, identify needs and prioritize mobility investments) the projects in this action plan are allocated by mobility corridor.

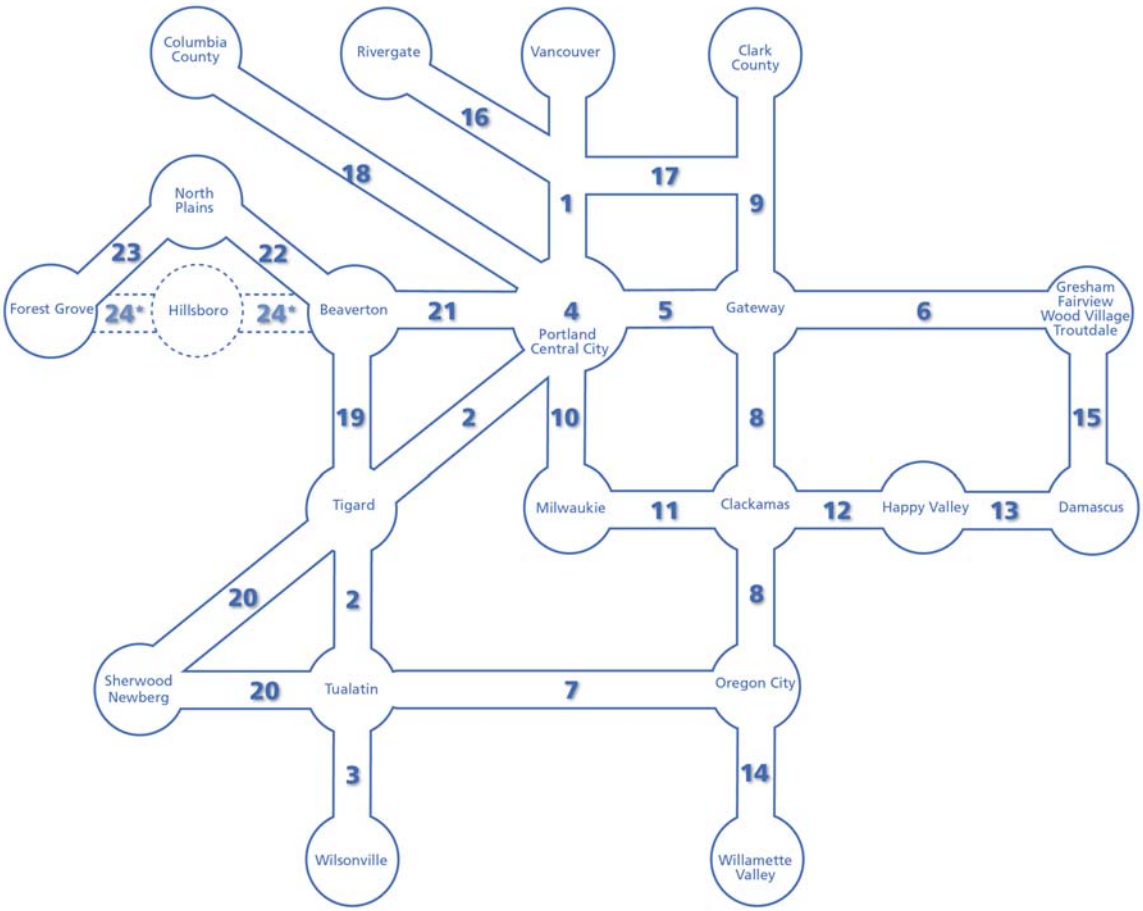



**Figure 1: Corridor index map**

## Maps of projects

For the corridor specific projects, maps were created to help illustrate project locations. The maps are broken into two categories: transportation system management and operations (TSMO) which includes the regional multimodal traffic control and traveler information related projects, and transportation demand management (TDM). Each category has its own set of maps to help illustrate the project locations and also show how the Portland region has developed, and will continue to develop in the future with respect to TSMO and TDM investments.

There are three maps that illustrate TSMO projects in the Portland region:

- Past - A map of TSMO investments around the Portland region in 2000 (Figure 2).
- Present - A map of current (2009) TSMO investments (Figure 3).

- Future - And a map of the region in 2020 illustrating all the planned TSMO investments (Figure 4). This future map incorporates all of the projects listed in the corridor action plans on the following pages. For more information about the project types shown in the legend of this map, the corridor action plans can be referenced.

Then the next four maps illustrate the TDM projects in the Portland region, both existing and planned:

- Existing (2009) map of rideshare efforts such as carpool and vanpool (Figure 5).
- Existing (2009) map of employer services and resulting drive-alone rates (Figure 6).
- Existing (2009) map of collaborative marketing efforts (Figure 7).
- A map of the region in 2020 showing all the planned TDM projects (Figure 8). Similar to the TSMO projects, all of the TDM projects in this map are also detailed in the corridor action plans and can be referenced for more information.

## Corridor Project Cost Estimate

Table 2 shows the cost estimate of implementing all of the corridor projects. The operations and maintenance cost is on an annual basis, depending when a project is implemented, that operations and maintenance cost is allocated from that point forward.

### Table 2: Estimate of Corridor Investment Costs

| Project Type | Cost | |
|---|---|---|
| | Capital Cost | Annual O&M Cost |
| Regional Multimodal Traffic Management/Traveler Information | $300M | $6M |
| Transportation Demand Management | $5.5M | $25.5M |
| **Overall Cost** | **$305.5** | **$31.5M** |

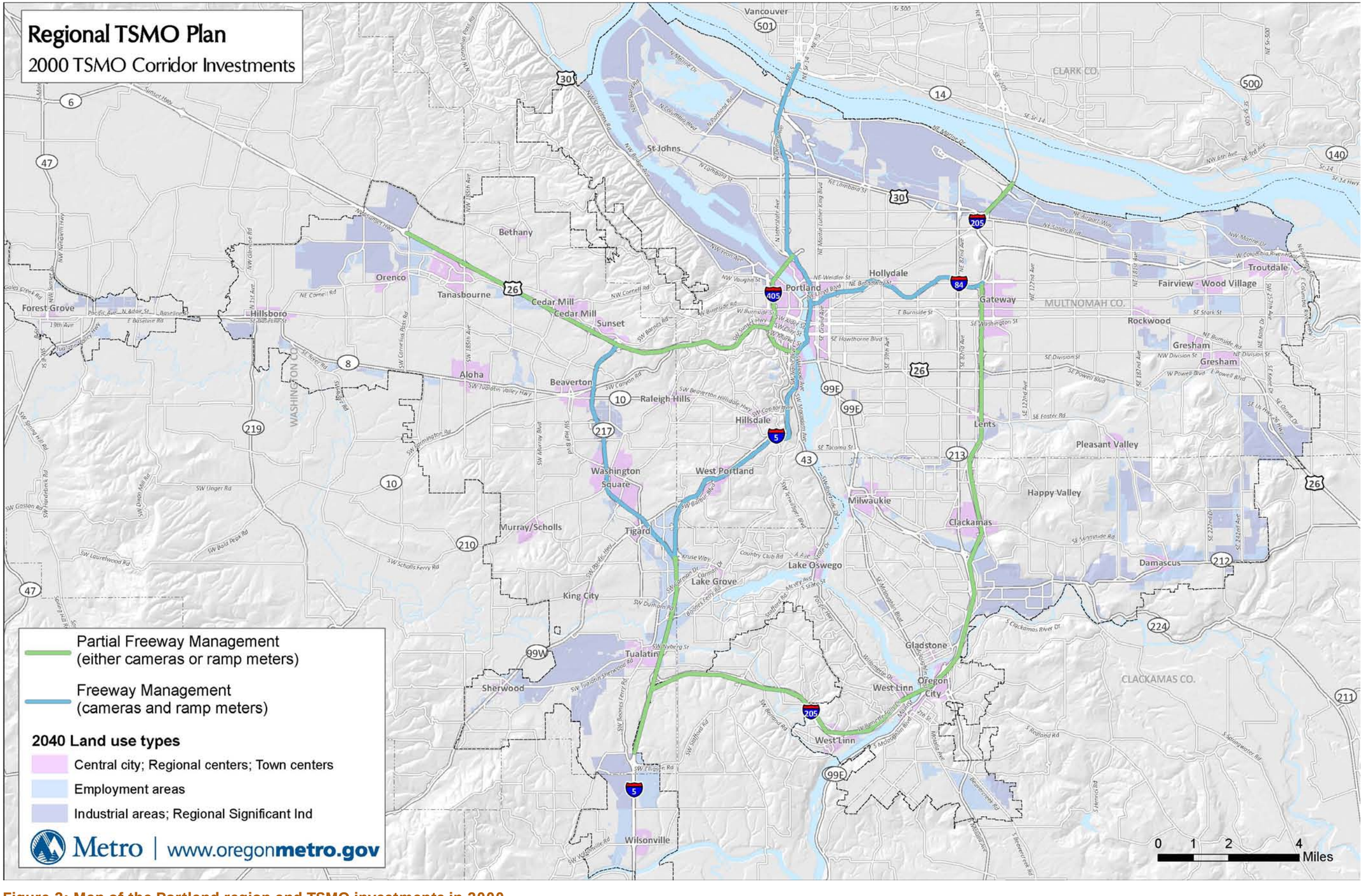



**Figure 2: Map of the Portland region and TSMO investments in 2000**

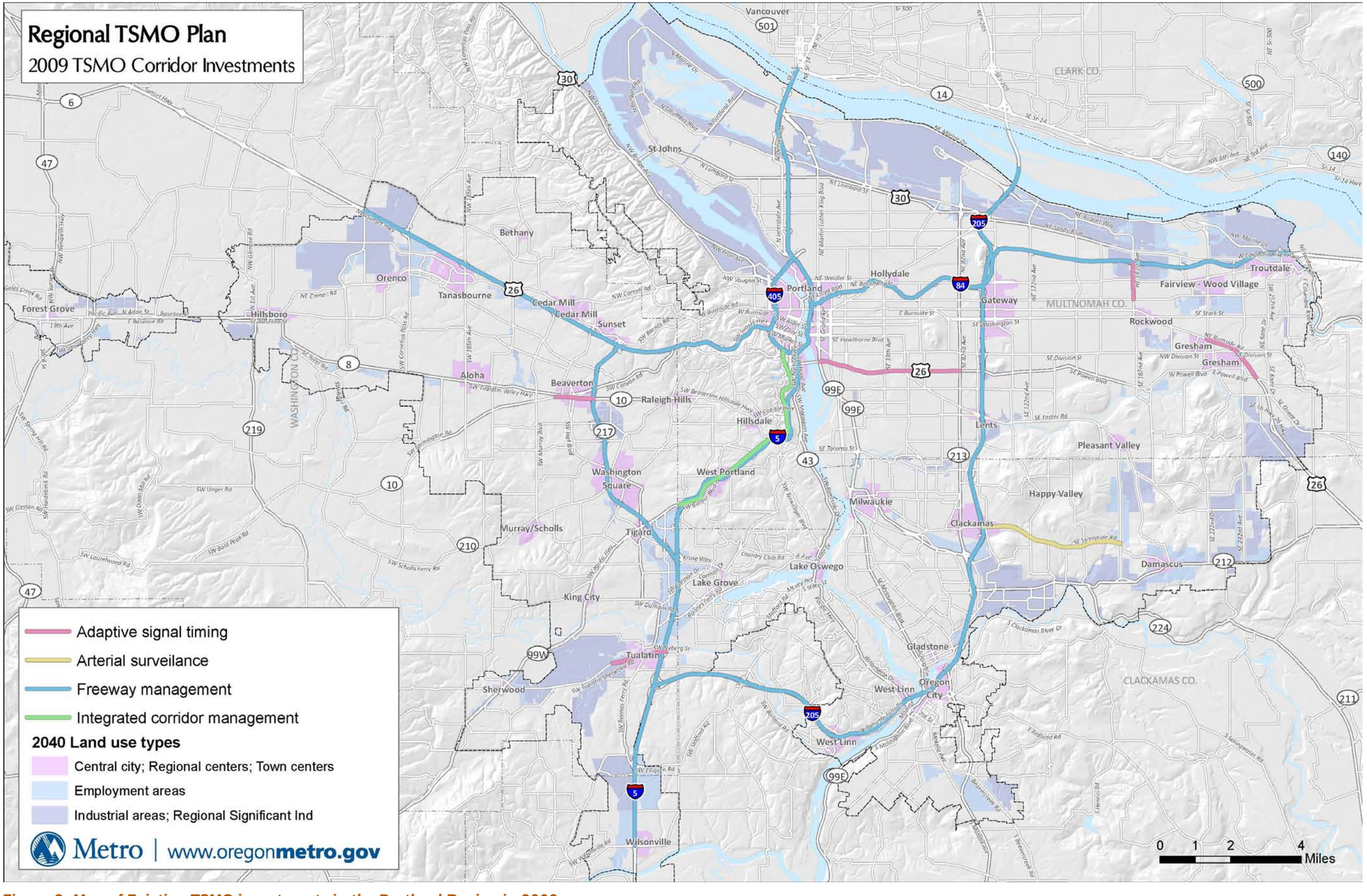



**Figure 3: Map of Existing TSMO investments in the Portland Region in 2009**

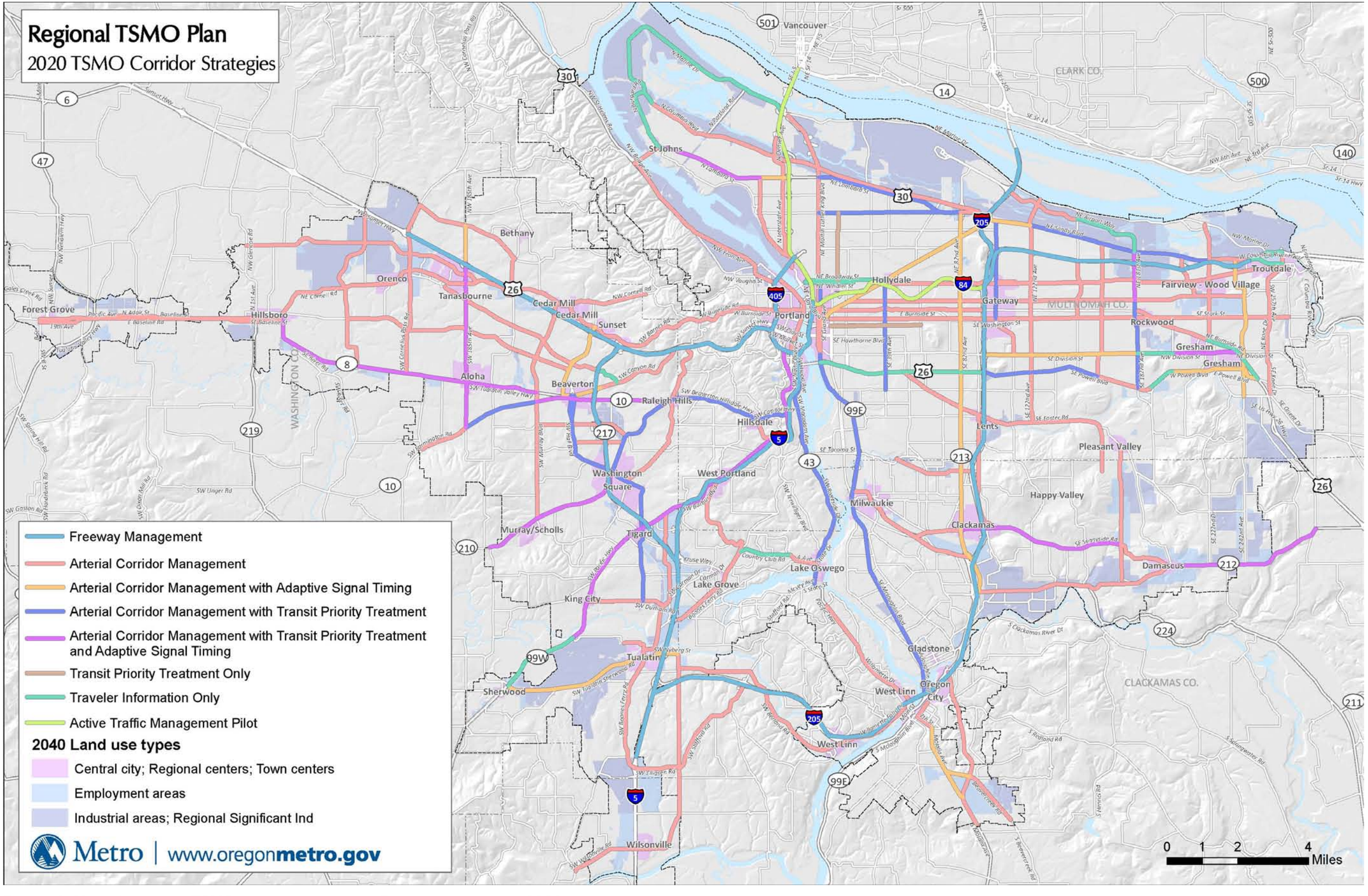



**Figure 4: Map of planned TSMO investments in the Portland region for 2020**

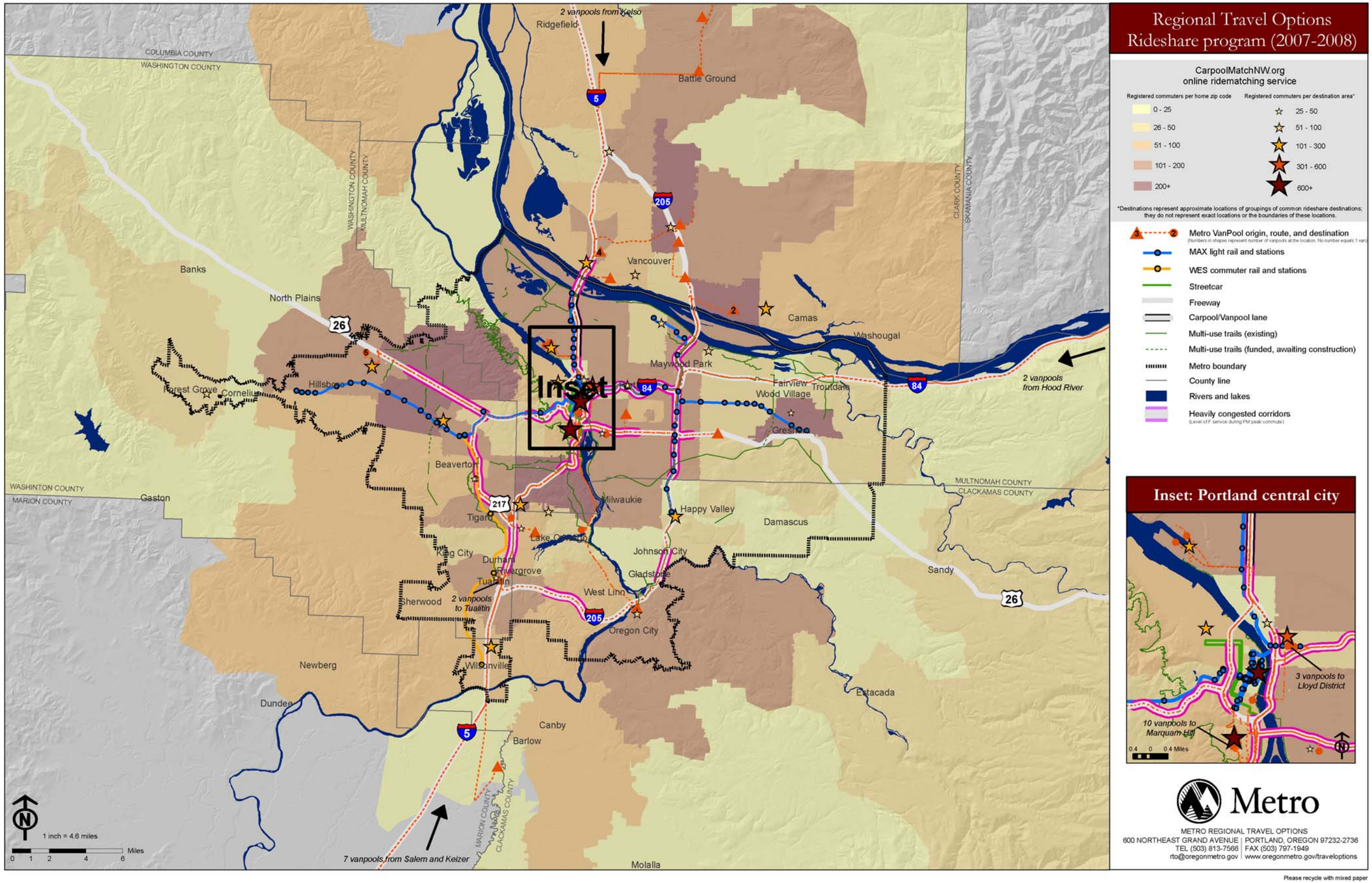



**Figure 5: Map of existing (2009) TDM rideshare efforts (carpool and vanpool) in the Portland region.**

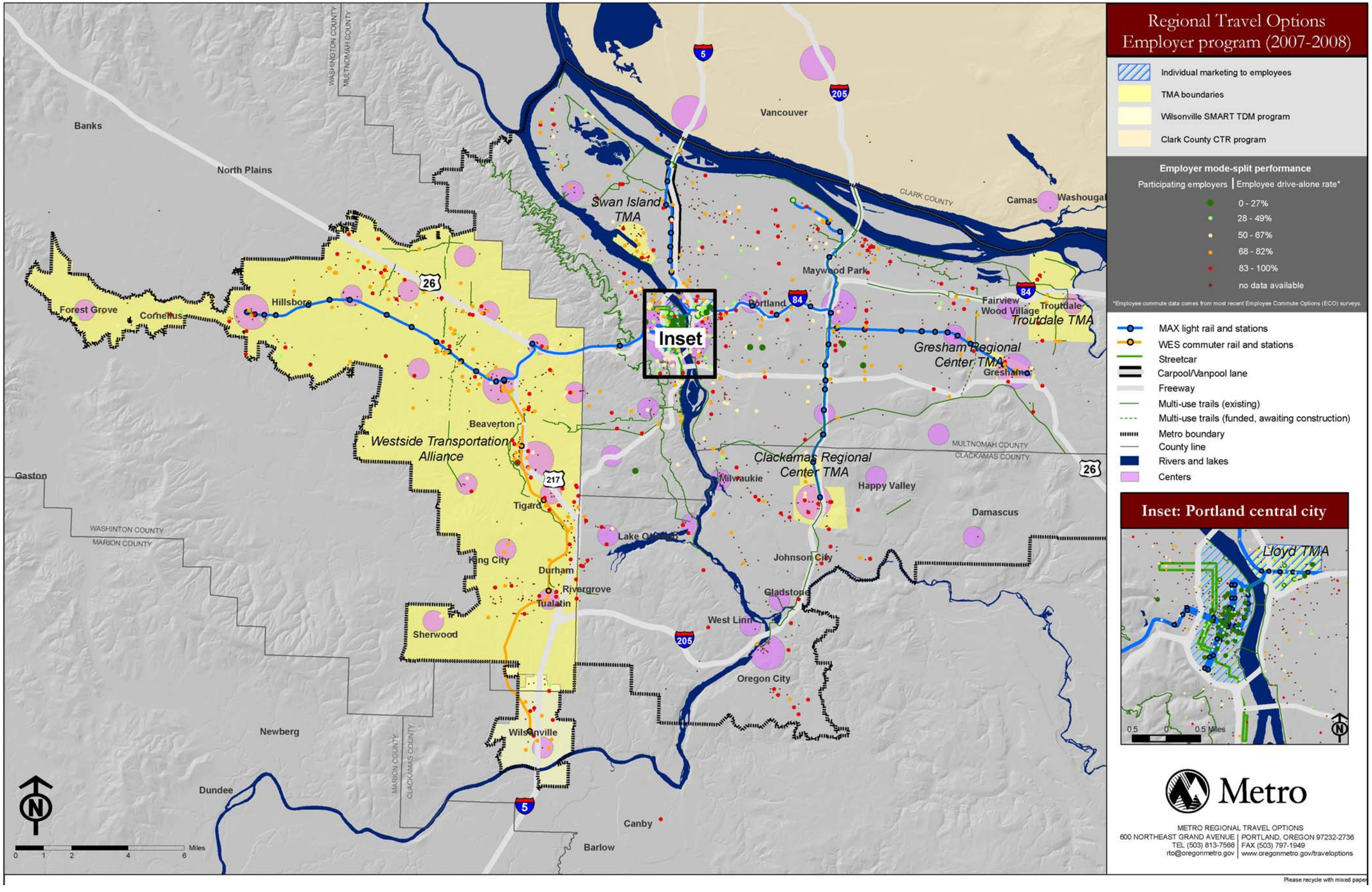



**Figure 6: Map of existing (2009) TDM related employer services and resulting drive-along rates in the Portland region.**

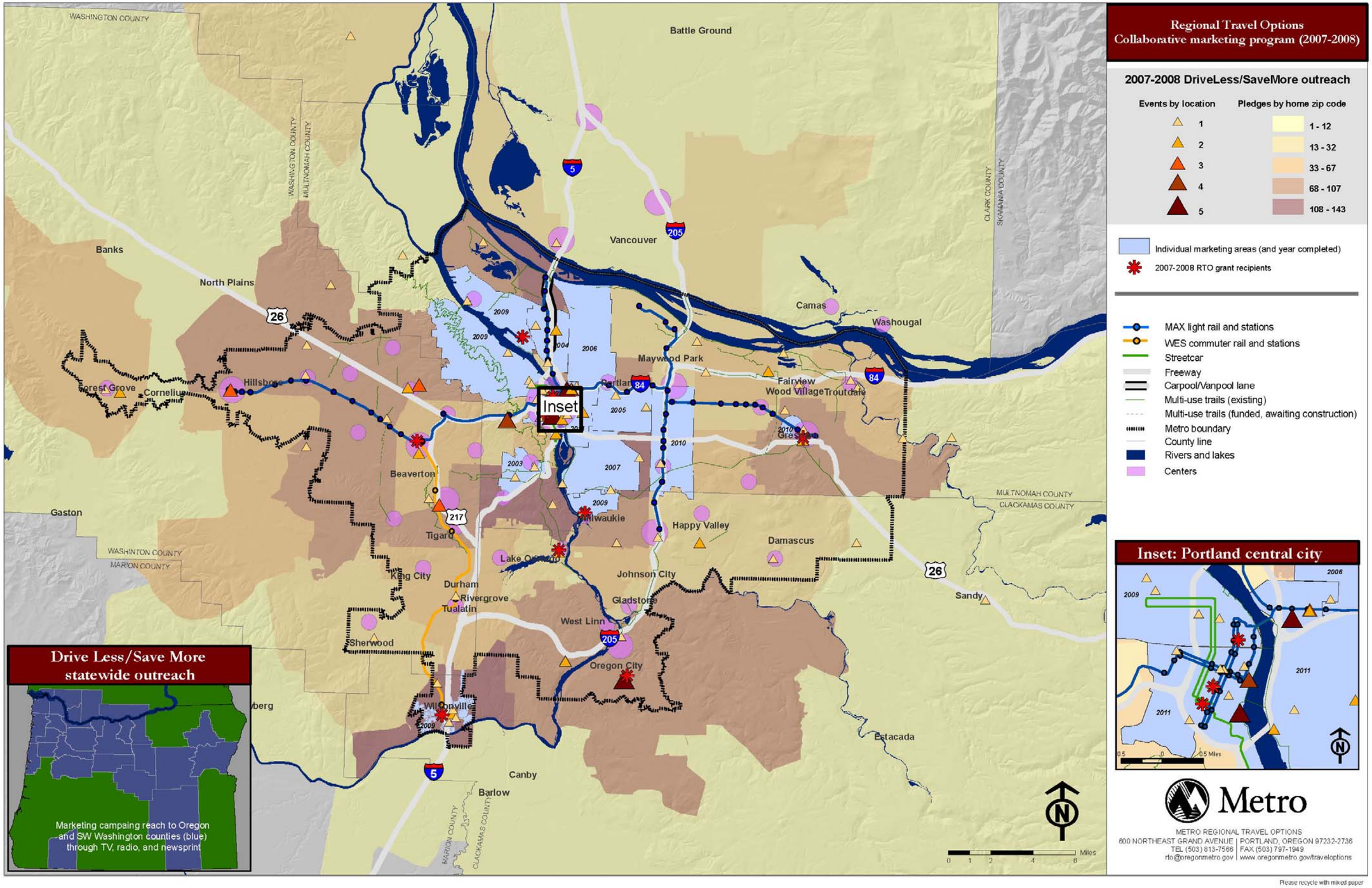



**Figure 7: Map of existing (2009) TDM related collaborative marketing efforts in the Portland region.**

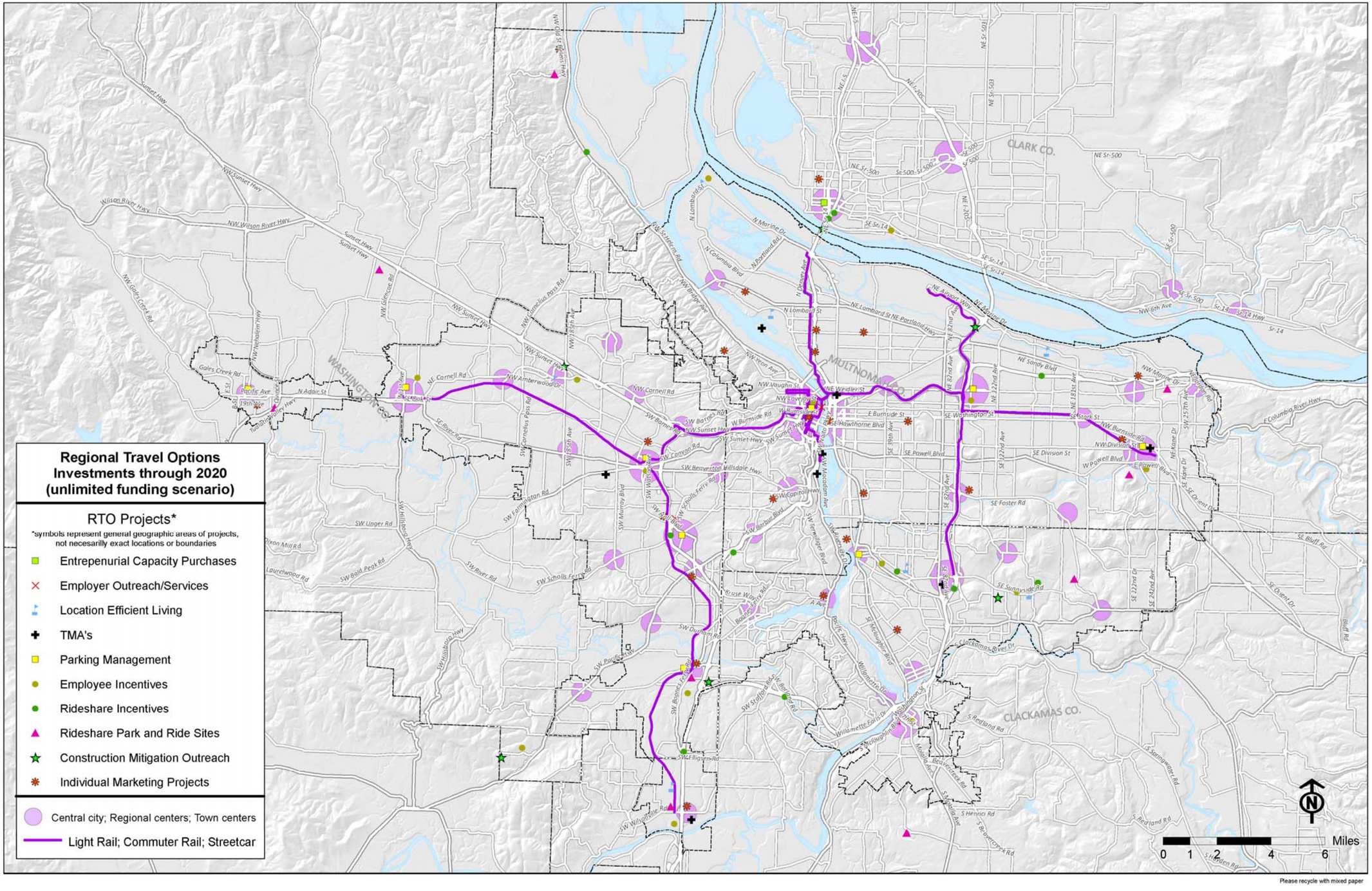
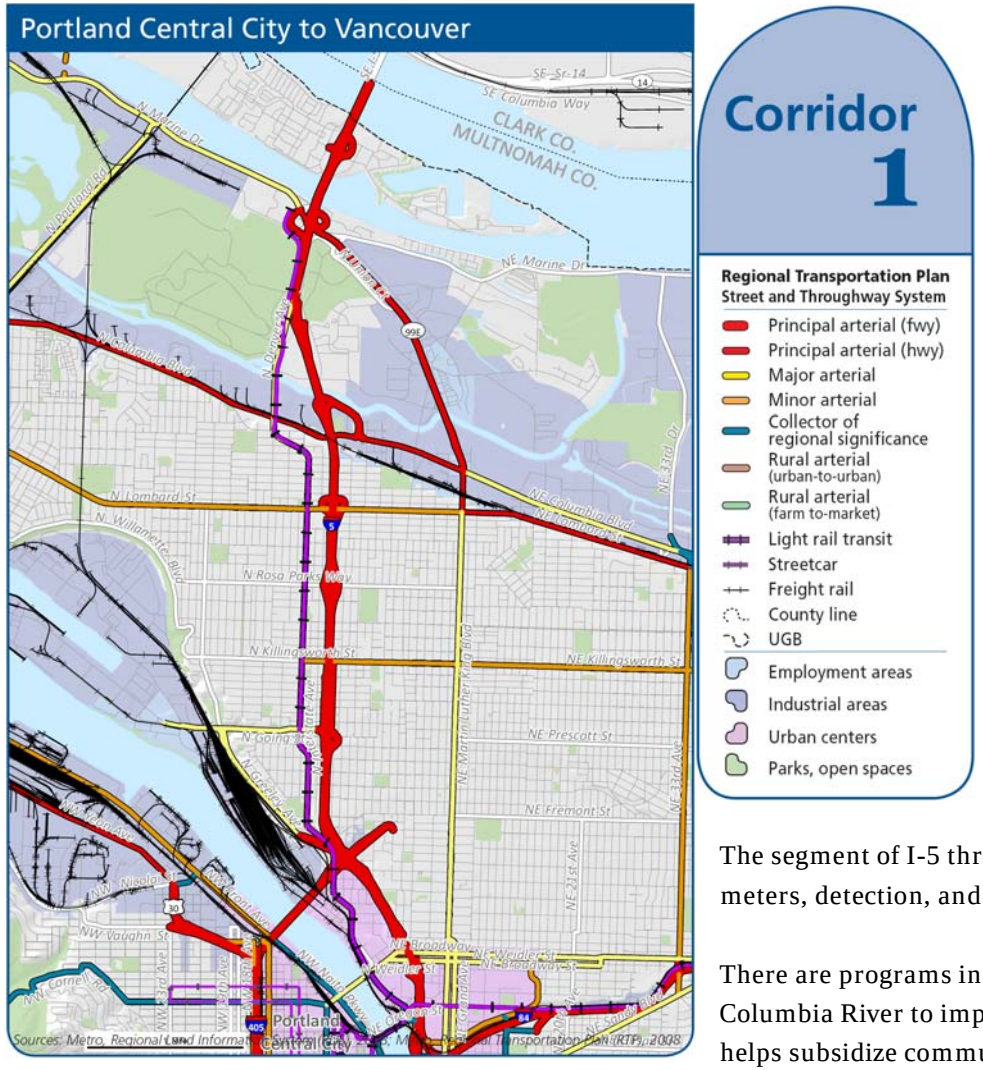



**Figure 8: Map of planned TDM projects for implementation by the year 2020 in the Portland region**




## *Corridor Summary*

The Portland Central City to Vancouver mobility corridor encompasses I-5**,** MAX light rail, and several parallel facilities that support auto, truck, transit and bicycle travel.. I-5 is a principal arterial freeway that accommodates both interstate and interregional travel. The key parallel arterials include **N Greeley Ave, N Denver Ave, N Interstate Ave, NE Martin Luther King Jr. Blvd, NE Vancouver Ave/NE Williams Ave**. This corridor combines residential, commercial, parks, and industrial areas. In the commercial and residential areas, the street network is well-connected; however, industrial areas are served by a discontinuous street network.

## *Where Are We Now?*

Currently three regional facilities in this corridor have coordinated signal timings updated within the last five years: N Interstate, NE Vancouver and NE Williams. Transit signal priority is located at select traffic signals along NE MLK, NE Vancouver, and NE Williams. Communications infrastructure exists along N Interstate Ave, NE MLK Blvd, and N Denver St. The segment of I-5 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

There are programs in place on both the Oregon and Washington sides of the Columbia River to improve mobility in the corridor. On the Washington side, C-TRAN helps subsidize commuter vanpools going through the area, and Clark County

coordinates TDM marketing and services to employees through the Southbound Solutions program. In Oregon, the Swan Island TMA and Lloyd TMA work with employers to reduce drive-alone rates among employees. Additionally, the Lloyd TMA offers the Lloyd Links individualized marketing program to district employees who live close to work, while the Swan Island TMA has developed a Location-Efficient Living program to help Swan Island employees and N/NE Portland residents live closer to where they work and work closer to where they live. Finally, the City of Portland sponsors Sunday Parkways events in North Portland to encourage biking and walking.

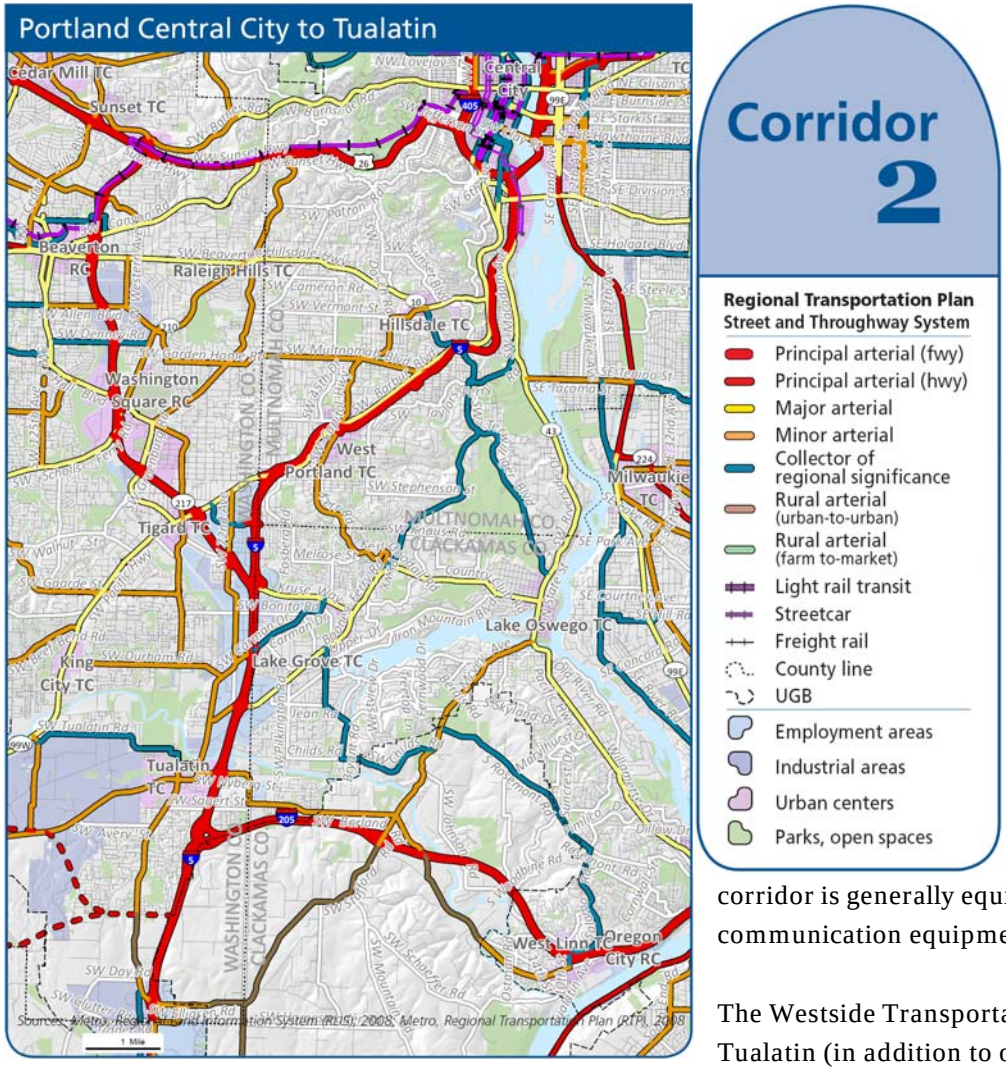
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | NE Vancouver Ave | Reliability & Traveler Information | 11+ yrs | $1,000,000 | $21,000 |
| | | | NE Williams Ave | | 11+ yrs | $950,000 | $19,000 |
| | | | N Greely/Denver Ave | | 11+ yrs | $1,900,000 | $40,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | NE MLK (Line 6) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $3,100,000 | $60,000 |
| | Transit Priority Treatment Only | Install/Expand transit signal priority capabilities at traffic signals. | NE 15th (Line 8) | Quality of Life & Reliability | 6-10 yrs | $280,000 | $6,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-5 | Reliability, Traveler Information, & Safety | 1-5 yrs | $400,000 | $8,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Residential Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. (in support of Portland/Multnomah County Climate Change Action Plan) | Trip origins in Vancouver, WA (neighborhood to be determined) | Quality of life | 1-5 years | $0 | $500,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Residential Individualized Marketing | (same as above) | Trip origins in Vancouver, WA (neighborhood to be determined) | Quality of life | 6-10 years | $0 | $500,000 |
| | Residential Individualized Marketing | (same as above) | City of Portland N/NE SmartTrips (Chautauqua to 82nd, N of I-84) | Quality of life | 1-5 years | $0 | $1,000,000 |
| | Residential Individualized Marketing | (same as above) | TBD (location based on relative impact on I-5 bridge | Quality of life | 6-10 years | $0 | $600,000 |
| | Employer Individualized Marketing | (same as above) | employers in Oregon with high number of employees living in Clark County, WA | Quality of life | 6-10 years | $0 | $200,000 |
| | Construction mitigation campaign | Public awareness campaign using Drive Less/Save More brand, leveraging existing campaign resources, focused on CRC construction, operation. | I-5 bridge | Quality of life | 1-5 years | $0 | $250,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-5 bridge | Quality of life | 6-10 years | $0 | $100,000 |
| | Rideshare incentives | Vanpool program (operated by C-TRAN) | I-5 bridge | Quality of life | 1-5 years | $3,150,000 | $930,000 |
| | Rideshare incentives | Vanpool program (operated by C-TRAN) | I-5 bridge | Quality of life | 6-10 years | $0 | $930,000 |
| | Employer Services | Implement and/or support outreach and technical assistance in a collaborative manner with RTO partners to help employers increase non drive-alone travel modes. | employers with high number of employees living in Vancouver, WA | Quality of life | through 10 years | $0 | $110,000 |
| | Transportation Management Associations | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. | Swan Island TMA | Quality of life | through 10 years | $0 | $75,000 |
| | Transportation Management Associations | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. | Lloyd TMA | Quality of life | through 10 years | $0 | (recorded under corridor 4) |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | north Portland/Swan Island | Quality of life | currently funded RTO grant | $0 | $25,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Entrepreneurial Capacity Purchases | Provide funding to regional or town centers to reduce drive-alone auto trips. Incentive based - centers earn additional funding for exceeding performance goals. (WSDOT program - GTEC) | Vancouver city center | Quality of life | 1-5 years | $0 | $920,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |







## *Corridor Summary*

The Portland Central City to Tualatin mobility encompasses I-5 and parallel arterials, that support auto, truck, transit and bicycle movement in and through the corridor. I-5 is a principal arterial freeway that accommodates interstate and interregional travel. The key parallel arterials include **SW Barbur Blvd (99W), SW Boones Ferry Rd/SW Terwilliger Blvd, SW Taylors Ferry Rd,** and **SW Macadam Ave (Hwy 43)**. This corridor is largely single-family residential uses and neighborhood-serving commercial with a mix of parks and open spaces. The hilly topography in this corridor is hilly contributes to the winding and discontinuous street network.

## *Where Are We Now?*

Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years. Transit signal priority is located at select traffic signals along SW Barbur Blvd. Communications infrastructure exists along SW Barbur; SW Barbur Blvd is also an incident management route equipped with cameras and vehicle detection. The segment of I-5 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

The Westside Transportation Alliance (WTA) works with employers in Tigard and Tualatin (in addition to other Washington County areas) and the Lloyd TMA works

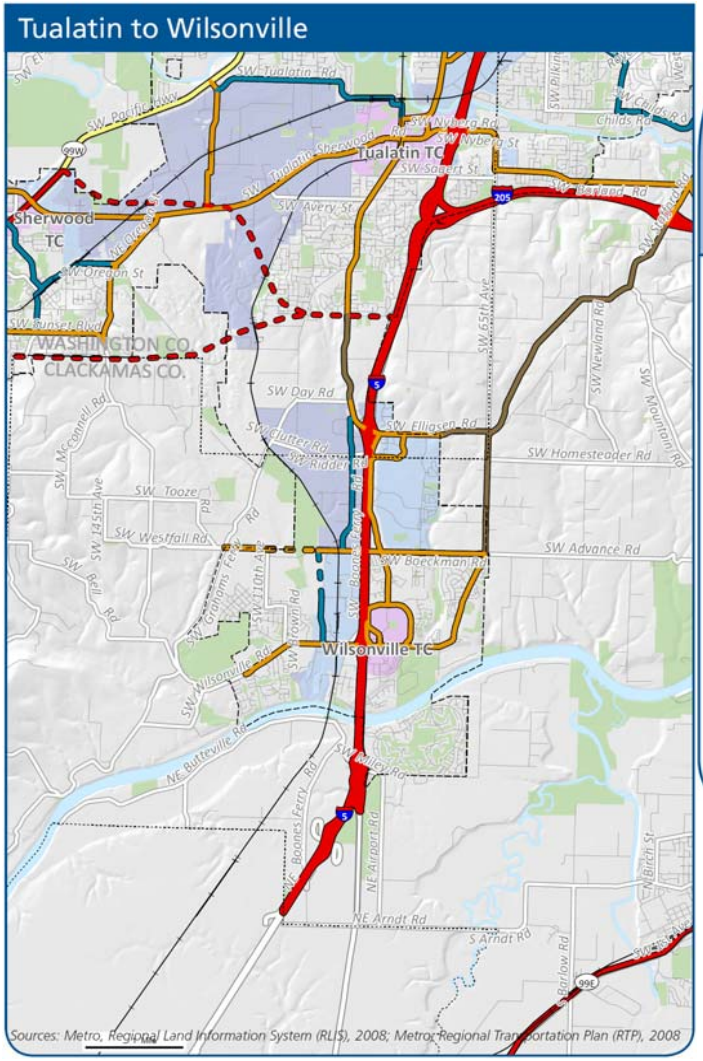
with employers in the Lloyd District. Both work to reduce employee drive-alone trips. Additionally, a study has been funded to assess the potential for a new TMA in Portland's South Waterfront. The City of Portland's Smart Trips Downtown program and the Lloyd TMA's Lloyd Links program offer individualized marketing to employees in these areas. There are also several bike-specific projects in the corridor including , a WTA program to install free bike racks for area businesses, and an update of the City of Tigard's 20-year old bike map.

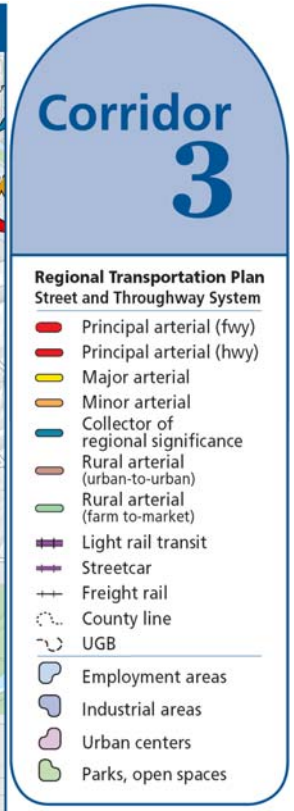
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Upper Boones Ferry Rd | Reliability & Traveler Information | 1-5 yrs | $1,300,000 | $25,000 |
| | | | Boones Ferry Rd/Capital Hwy | | 6-10 yrs | $4,600,000 | $90,000 |
| | | | 72nd Ave | | 11+ yrs | $1,600,000 | $30,000 |
| | | | Durham Rd | | 11+ yrs | $1,400,000 | $30,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | Tualatin Sherwood Rd | Reliability & Traveler Information | 1-5 yrs | $4,800,000 | $100,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | Hwy 43 (Macadam Ave) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $3,700,000 | $70,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | Hwy 99 (Barbur Blvd from Downtown Portland to Hwy 217) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $3,400,000 | $70,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-5 | Reliability, Traveler Information, & Safety | 1-5 yrs | $900,000 | $18,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | Country Club Rd | Traveler Information | 6-10 yrs | $700,000 | $14,000 |
| | | | Hwy 99, south of Tualatin | | 1-5 yrs | $1,100,000 | $20,000 |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. (in support of Portland/Multnomah County Climate Change Action Plan) | Supports new transit/trail facility from Central City Portland to Lake Oswego TC | Quality of life | 1-5 years | $0 | $500,000 |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. (in support of Portland/Multnomah County Climate Change Action Plan) | Tigard TC and adjacent neighborhoods | Quality of life | 6-10 years | $0 | $500,000 |
| | Individualized Marketing | (same as above) | Tualatin TC and adjacent neighborhoods | Quality of life | 6-10 years | $0 | $500,000 |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-5 | Quality of life | 1-5 years | $0 | $50,000 |
| | Rideshare incentives | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $50,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | I-5 | Quality of life | 1-5 years | $0 | $4,800 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare Park&Ride | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance serves employers. | Tigard, Tualatin and other parts of Washington County | Quality of life | through 10 years | $0 | (annual amount recorded in corridor 19) |
| | Transportation Management Associations (TMA) | Lower Macadam/Johns Landing TMA start-up. | Lower Macadam/Johns Landing | Quality of life | 6-10 years | $0 | $300,000 |
| | Car-share operations | Support 3 or more carsharing vehicles in developing centers. | Lake Oswego Town Center | Quality of life | 1-5 years | $0 | $200,000 |




## *Corridor Summary*

The Tualatin to Wilsonville corridor supports mostly north-south movement with I-5 as the major through facility. Other transportation elements in this corridor include Westside Express Service (WES) commuter rail, several parallel facilities that support not only auto and truck travel, but also bus service and bicycle facilities. I-5 is a principal arterial freeway that supports interstate and interregional travel. It also provides access to the Sherwood, Tualatin, and Wilsonville town centers, employment areas and industrial areas. The key parallel arterials include **SW Boones Ferry Rd, SW Grahams Ferry Rd, SW Stafford Rd,** and **SW 65th Ave**. East-west mobility in this corridor is limited with few overcrossings of I-5. The land use is mainly rural, however, in the urbanized areas there is significant employment and industry. The roadway network is a mix of farm-to-market roads and discontinuous residential streets.

## *Where Are We Now?*

Currently one regional facility in this corridor, SW Stafford Rd, has coordinated signal timing updated within the last five years. There is no transit signal priority installed and no communications infrastructure exists along the regional arterials. The segment of I-5 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

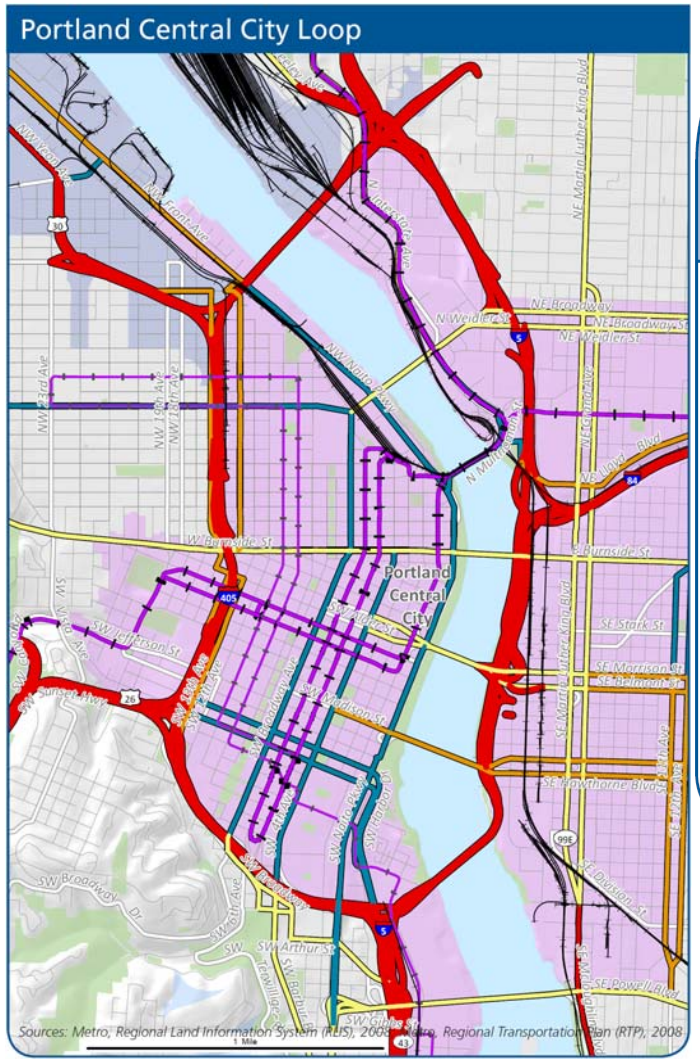
A limited amount of TDM services are available. The City of Wilsonville runs the

Wilsonville SMART Options program to encourage citizens to take transit, walk more, and they are hiring a bike/pedestrian coordinator to improve and expand their walking and biking programs.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | SW Boones Ferry Rd | Reliability & Traveler Information | 6-10 yrs | $2,400,000 | $50,000 |
| | | | SW 65th Ave | | 11+ yrs | $1,000,000 | $20,000 |
| | | | Wilsonville Rd (west of I-5) | | 11+ yrs | $700,000 | $14,000 |
| | | | SW Stafford Rd | | 11+ yrs | $1,300,000 | $30,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-5 | Reliability, Traveler Information, & Safety | 1-5 yrs | $500,000 | $10,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Wilsonville (RTO Subcommittee funded this project) | Quality of life | 1-5 years (starts 2010) | $0 | $278,100 |
| | Individualized Marketing | (same as above) | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-5 | Quality of life | 1-5 years | $0 | $25,000 |
| | Rideshare incentives | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | I-5 | Quality of life | 1-5 years | $0 | $4,800 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare Park&Ride | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $4,800 |
| | Construction mitigation campaign | Apply additional investment in TDM solutions to mitigate impacts to travelers of all modes during construction projects. | Areas impacted by I-5 to I-205 additional merge lane construction. | Quality of life | 1-5 years | $0 | $100,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Wilsonville SMART Options | The City of Wilsonville SMART Options Outreach Program works with Wilsonville area employers and residents to promote transit and other transportation options. The primary goals of the program are to increase awareness of transportation options available in Wilsonville and the region, reduce drive alone trips and increase communication between the City of Wilsonville, local businesses of all sizes, community organizations and regional partners. | Wilsonville | | through 10 years | $0 | $62,000 |
| | Car-share operations | Support 3 or more carsharing vehicles in developing centers. | Wilsonville Town Center | Quality of life | 1-5 years | $0 | $200,000 |




Corridor 4

Regional Transportation Plan
Street and Throughway System

- Principal arterial (fwy)
- Principal arterial (hwy)
- Major arterial
- Minor arterial
- Collector of regional significance
- Rural arterial (urban-to-urban)
- Rural arterial (farm to-market)
- Light rail transit
- Streetcar
- Freight rail
- County line
- UGB
- Employment areas
- Industrial areas
- Urban centers
- Parks, open spaces

## *Corridor Summary*

The Portland City Central Loop encompasses **I-5** and **I-405**, as well as **key throughway interchanges with I-84, US 26,** and **US 30**. The main parallel facilities in this corridor include **NW Front/SW Naito Parkway** and **NE Grand Ave/Martin Luther King Jr. Blvd**. There are seven freeway and arterial bridges crossing the Willamette River. MAX light rail, bus service and bicycle facilities support movement in and through the corridor. Additionally, streetcar connects between NW Portland and the South Waterfront District, with expansion to the eastside planned for 2011. On the west side of the Willamette, the primary land uses are high density office development, mid-rise residential and mixed use commercial. On the east side, warehouse and commercial uses are abundant. The street network in this corridor is compact, with abundant multi-modal access.

## *Where Are We Now?*

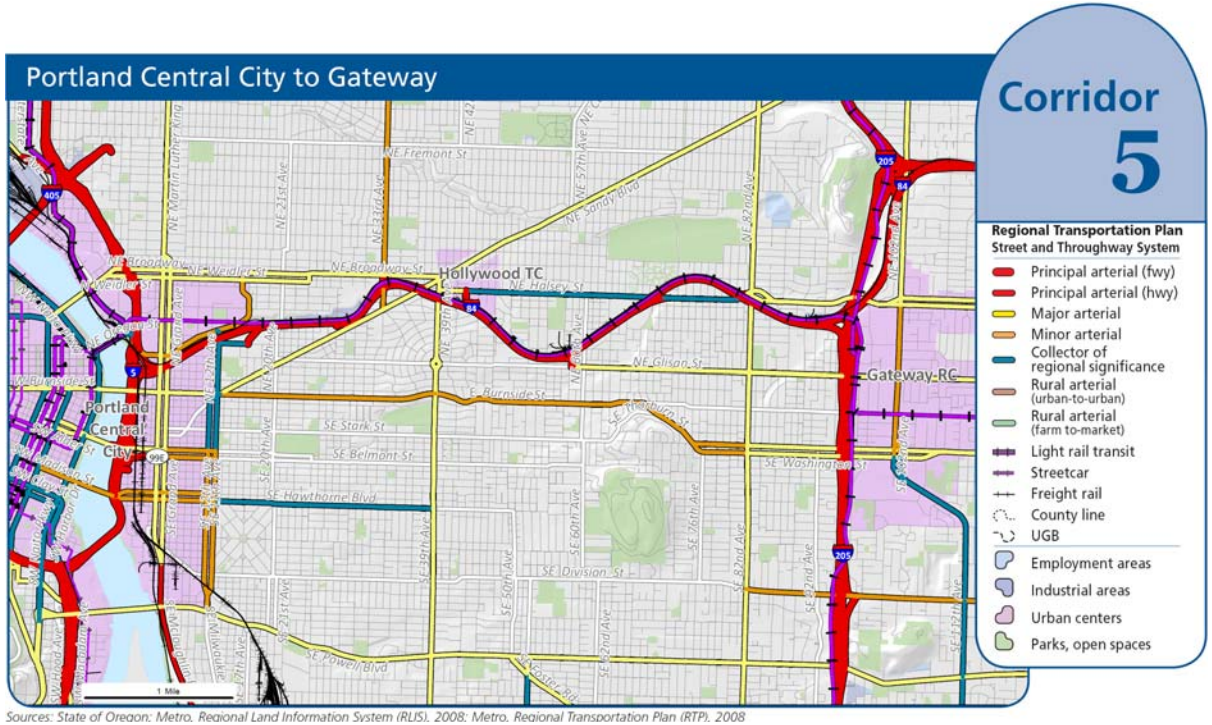
Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years. Transit signal priority is located at select traffic signals along NE/SE MLK Blvd, NE/SE Grand Ave, SE 11th Ave, and NW Glisan St just west of the Steel Bridge. Communications infrastructure exists along the main parallel facilities as well as several additional roadways in this corridor, with most traffic signals connected to the central signal system. The segment of I-5 and I-405 through this corridor are generally equipped with cameras, detectors, ramp meters, and communication equipment. The Lloyd TMA works with employers and employees to

reduce drive-alone trips. Additionally, a study has been funded to assess the potential for a new TMA in the South Waterfront. The City of Portland's Smart Trips Downtown program and the Lloyd TMA's Lloyd Links program offer individualized marketing to employees. Finally, Portland State University is currently building a new long-term bike storage facility.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | SW/NW Naito Pkwy | Reliability & Traveler Information | 1-5 yrs | $1,900,000 | $40,000 |
| | | | SE/NE MLK Blvd | | 1-5 yrs | $2,360,000 | $50,000 |
| | | | NE/SE Grand (south of I-84) | | 1-5 yrs | $1,400,000 | $30,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | NE Grand Ave (north of I-84) | Reliability, Traveler Information, | 1-5 yrs | $1,200,000 | $25,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | | | | & Quality of Life | | | |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-5 | Reliability, Traveler Information, & Safety | 1-5 yrs | $240,000 | $5,000 |
| | | | I-405 | | 1-5 yrs | $240,000 | $5,000 |
| **Traveler Information** | | | | | | | |
| | Railroad Crossing Information System | Implement communications between the at-grade railroad crossing and the traffic operations center and emergency management centers to inform emergency responders and general travelers when service will be interrupted. | SE Division St/8th Ave | Reliabilty, Traveler Information, & Safety | 6-10 yrs | $75,000 | $2,000 |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Neighborhoods along Portland Streetcar Loop (RTO Subcommittee funded this project) | Quality of life | 1-5 years | $0 | $726,090 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Transportation Management Associations (TMA) | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Lloyd District | Quality of life | through 10 years | $0 | $51,000 |
| | Transportation Management Associations (TMA) | TMA start-up | South Waterfront or another Central City area. | Quality of life | 1-5 years | $0 | $300,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | To be determined | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | To be determined | Quality of life | 6-10 years | $0 | $100,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |
| | End-of-trip bike facilities | Bike parking (short term and/or long term), bike stations, related bike services | Central City | Quality of life | 6-10 years | $100,000 | $100,000 |



Sources: State of Oregon; Metro, Regional Land Information System (RLIS), 2008; Metro, Regional Transportation Plan (RTP), 2008

## *Corridor Summary*

The Portland Central City to Gateway mobility corridor encompasses **I-84,** MAX light rail, parallel arterials, as well as bus service and bicycle routes that support movement in and through the corridor. I-84 supports interstate and interregional travel and connects with both I-205 and I-5. The key parallel arterials include **Broadway St, Halsey St, Weidler St, Sandy Blvd, Glisan St, Burnside St,** and **Powell Blvd**. The roadway network in this corridor is dense and serves a diverse land use pattern.

## *Where Are We Now?*

Currently one regional facility in this corridor, NE Glisan St, has coordinated signal timings updated within the last five years. SE Powell Blvd is in the process of converting to adaptive signal timing. Transit signal priority is located at select traffic signals along SE Powell Blvd, SE Division St, SE Hawthorne Blvd, NE Sandy Blvd, NE Weidler St, and NE Broadway St. Communication infrastructure exists along segments of NE Sandy Blvd, SE Powell Blvd, NE Glisan St, NE Halsey St, and NE Broadway St, as well as some non-regional roadways in this corridor. The segment of I-84 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

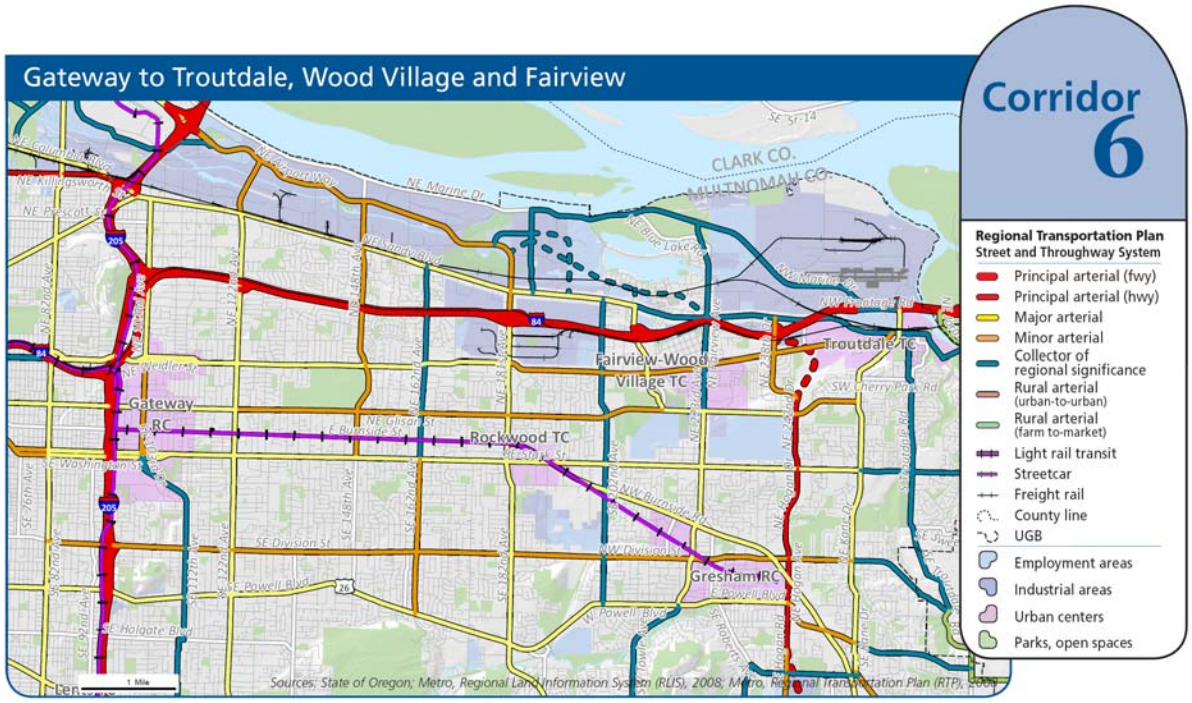
The Lloyd TMA works with employers and employees to reduce drive-alone trips, and they offer the Lloyd Links individualized marketing program to district employees who live close to work. Also, the City of Portland runs a Sunday Parkways event in Southeast and Northeast Portland to encourage use of alternative modes for all trips.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | NE Halsey St | Reliability & Traveler Information | 11+ yrs | $2,000,000 | $40,000 |
| | | | NE Glisan St | | 6-10 yrs | $180,000 | $35,000 |
| | | | SE Stark St | | 11+ yrs | $2,700,000 | $55,000 |
| | | | NE Burnside St | | 6-10 yrs | $3,100,000 | $60,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | NE Sandy Blvd | Reliability & Traveler Information | 1-5 yrs | $5,000,000 | $100,000 |
| | Transit Priority Treatment Only | Install/Expand transit signal priority capabilities at traffic signals. | SE Belmont St | Quality of Life & Reliability | 11+ yrs | $1,700,000 | $35,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-84 | Reliability, Traveler Information, & Safety | 1-5 yrs | $450,000 | $9,000 |
| | Active Traffic Management Pilot Project | Install active traffic management devices such as variable speed limit signs, lane use devices, and other ATM equipment, as a pilot project for the Portland region. | I-84 | Reliability, Traveler Information, & Safety | 6-10 yrs | $5,000,000 | $100,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | SE Powell Blvd (Ross Island Bridge to I-205) | Traveler Information | 1-5 yrs | $1,800,000 | $40,000 |
| | | | NE Weidler St | | 6-10 yrs | $1,500,000 | $30,000 |
| | | | NE Broadway St | | 6-10 yrs | $2,100,000 | $40,000 |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | NE Portland along North side of I-84 | Quality of life | 1-5 years | $0 | $333,333 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | To be determined - likely commercial areas along corridors parallel to I-84 | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | (same as above) | Quality of life | 6-10 years | $0 | $100,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Gateway Regional Center | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | Gateway Regional Center | Quality of life | 6-10 years | $0 | $100,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |

## Mobility Corridor 6: Gateway to Troutdale, Wood Village and Fairview




### *Corridor Summary*

The Gateway to Troutdale mobility corridor follows sections of **I-84,** and MAX light rail. I-84 provides both interstate travel and interegional access to the Portland International Airport, the Columbia Gorge, and points beyond. The MAX blue line connects Gateway regional center and Portland central city to Gresham regional center. The key parallel arterials include **Marine Dr, Sandy Blvd, Halsey St, Glisan St, Division St,** and **Powell Blvd**. However, the local street network is generally discontinuous, with many cul-de-sac and dead end streets.

### *Where Are We Now?*

Currently three regional facilities in this corridor have coordinated signal timings updated within the last five years: SE Division St, SE Powell Blvd and NE Sandy Blvd. Transit signal priority is located at select traffic signals along SE Division St and SE Powell Blvd. Communications infrastructure exists along segments of SE Division St, SE Powell Blvd, NE Airport Way, and E Burnside St. The segment of I-84 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

The Gresham Regional Center TMA works with employers, employees, and residents to reduce drive-alone trips. Additionally, the TMA runs a Bike Program which conducts safety outreach, gives away helmets and installs bike racks. The City of Gresham has begun to implement a city-wide bicycle way-finding program.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | NE Halsey St | Reliability & Traveler Information | 11+ yrs | $4,900,000 | $100,000 |
| | | | SE Stark St | | 1-5 yrs | $3,600,000 | $70,000 |
| | | | NE Glisan St | | 6-10 yrs | $4,500,000 | $90,000 |
| | | | SE Division St (160th to 190th) | | 1-5 yrs | $700,000 | $14,000 |
| | | | Airport Way I-205 to 158th | | 6-10 yrs | $1,500,000 | $30,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | SE Division St (I-205 to 160th) | Reliability & Traveler Information | 1-5 yrs | $1,000,000 | $20,000 |
| | | | SE Powell Blvd (Birdsdale to US 26) | | 1-5 yrs | $1,900,000 | $40,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | NE Sandy Blvd (east of 122nd) | Reliability, Traveler Information, | 6-10 yrs | $3,200,000 | $60,000 |

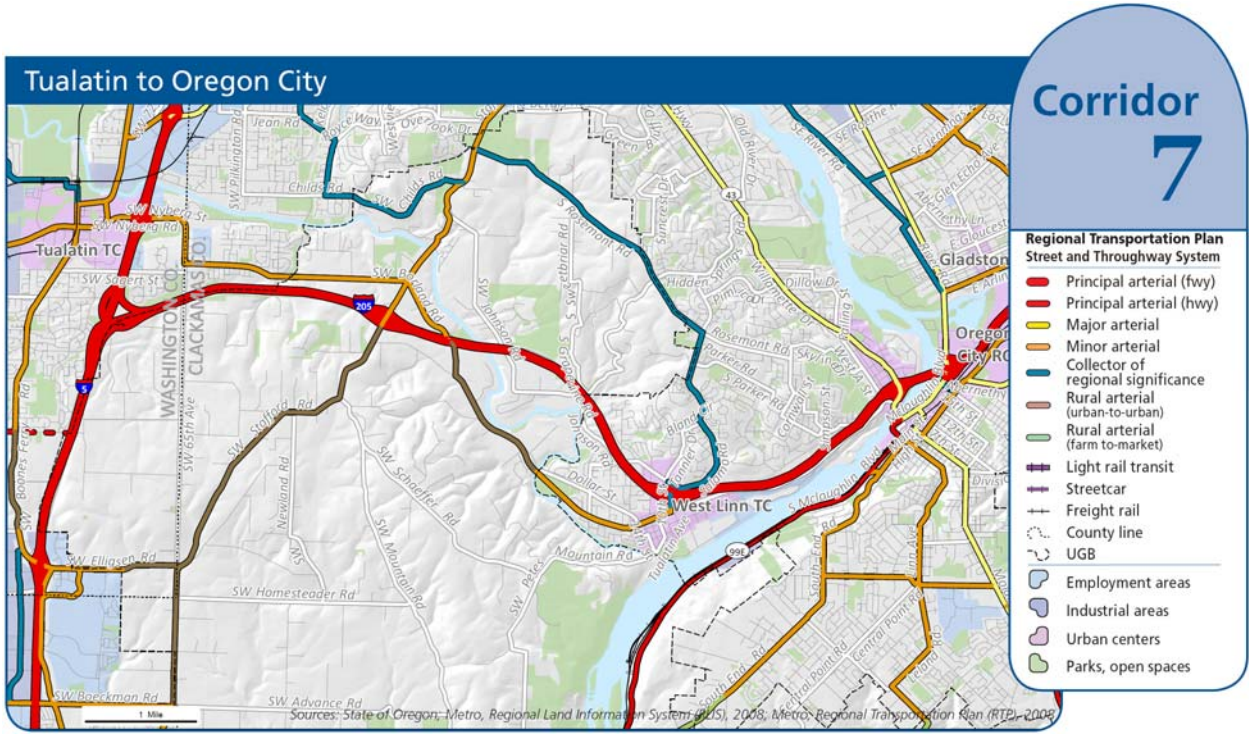
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | | | SE Powell Blvd (I-205 to 160th) | & Quality of Life | 1-5 yrs | $1,500,000 | $30,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | Division (Birdsdale to US 26) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $1,400,000 | $30,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-84 | Reliability, Traveler Information, & Safety | 1-5 yrs | $700,000 | $14,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | SE Powell Blvd (190th to Birdsdale) | Traveler Information | 1-5 yrs | $200,000 | $40,000 |
| | | | SE Division (182nd to Birdsdale) | | 1-5 yrs | $250,000 | $5,000 |
| | | | Airport Way (158th to Sandy) | | 11+ yrs | $1,100,000 | $20,000 |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Gresham Civic Station neighborhood (RTO Subcommittee funded this project) | Quality of life | 1-5 years | $0 | $130,000 |
| | Individualized Marketing | (same as above) | East Portland | | 1-5 years | $0 | $500,000 |
| | Individualized Marketing | (same as above) | Fairview / Gresham | | 6-10 years | $0 | $500,000 |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-84 | Quality of life | 1-5 years | $0 | $50,000 |
| | Rideshare incentives | (same as above) | I-84 | Quality of life | 6-10 years | $0 | $50,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | I-84 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | I-84 | Quality of life | 6-10 years | $0 | $4,800 |
| | Transportation Management Associations | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. | Gresham Regional Center | | through 10 years | | $75,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Gresham Regional Center | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | Gresham Regional Center | Quality of life | 6-10 years | $0 | $100,000 |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Match industrial/employment area north if I-84 with housing opportunities to the south. | Quality of life | through 10 years | $0 | $50,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |
| | Park&Ride Management | Implement parking management elements such as time limits, fees or changing spaces to carpool-only. | Gateway Transit Center | Quality of life | 1-5 years | $100,000 | $10,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Car-share operations | Support 3 or more carsharing vehicles in developing centers. | Gresham Regional Center | Quality of life | 1-5 years | $0 | $200,000 |

## Mobility Corridor 7: Tualatin to Oregon City




### *Corridor Summary*

The Tualatin to Oregon City corridor encompasses **I-205,** as well as parallel arterials, some bus service and bicycle routes. I-205 supports interstate, interregional, and intraregional travel and provides access to Oregon City, West Linn and Tualatin town centers. The key parallel arterials are **Willamette Falls Dr/Borland Rd**. North-south mobility is limited due to few overcrossings of I-205 and the Tualatin River. This corridor is mostly undeveloped with a mix of farm-to-market and discontinuous residential streets.

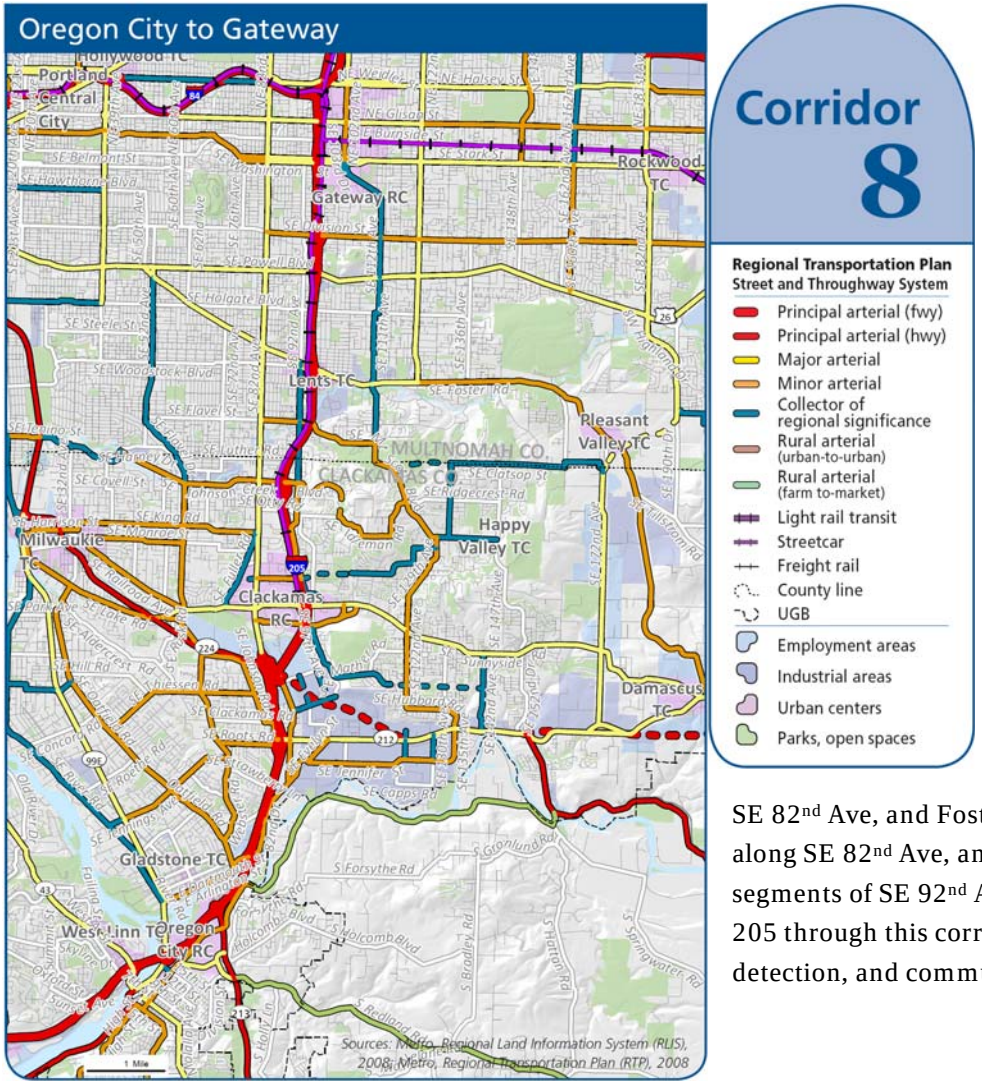
### *Where Are We Now?*

Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years, and no facilities are equipped with transit signal priority or communications infrastructure. The segment of I-205 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

The Westside Transportation Alliance (WTA) works with employers and employees in the Tualatin area (in addition to other Washington County areas) to reduce drive-alone trips, and, runs a program to install free bike racks for area businesses. Also, Clackamas County updated and is distributing their bicycle map.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Borland Rd | Reliability & Traveler Information | 11+ yrs | $2,000,000 | $40,000 |
| | | | Willamette Falls Dr | | 11+ yrs | $1,600,000 | $30,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-205 | Reliability, Traveler Information, & Safety | 1-5 yrs | $650,000 | $13,000 |
| **Traveler Information** | | | | | | | |
| | | no projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-5 | Quality of life | 1-5 years | $0 | $25,000 |
| | Rideshare incentives | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | I-5 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | I-5 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance serves employers. | Tigard, Tualatin and other parts of Washington County | Quality of life | through 10 years | $0 | (annual amount recorded in corridor 19) |




## *Corridor Summary*

The Oregon City to Gateway corridor provides access between Oregon City, Clackamas, and Gateway regional centers. The main freeway through this corridor is **I-205** which supports interstate and intraregional travel. In 2009, a new MAX light rail line opens to connect the Clackamas and Gateway regional centers with the Portland central city. The main parallel arterials through this corridor are **82nd Ave, 92nd Ave, 122nd/132nd Ave** and **Bob Schumacher Rd**. The area is largely urbanized, with a diverse mix of residential, commercial and industrial land uses. Many north-south arterial and collector streets move people and goods through and to local destinations; although topography and land use patterns lead to circuitous travel in some areas. The local street network is a blend of well-connected and discontinuous streets.

## *Where Are We Now?*

Currently two regional facilities in this corridor have coordinated signal timings updated within the last five years: SE 82nd Ave, and Foster Rd. Transit signal priority is located at select traffic signals along SE 82nd Ave, and Foster Rd. Communications infrastructure exists along segments of SE 92nd Ave/Bob Schumacher Rd, and SE 82nd Ave. The segment of I-205 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

The Clackamas Regional Center TMA works with employers and employees to reduce drive-alone trips. Additionally, Clackamas County updated and is distributing their bicycle map. Finally, the City of Portland is beginning a SmartTrips individualized marketing program for the residents and businesses surrounding the MAX Green Line in east Portland.

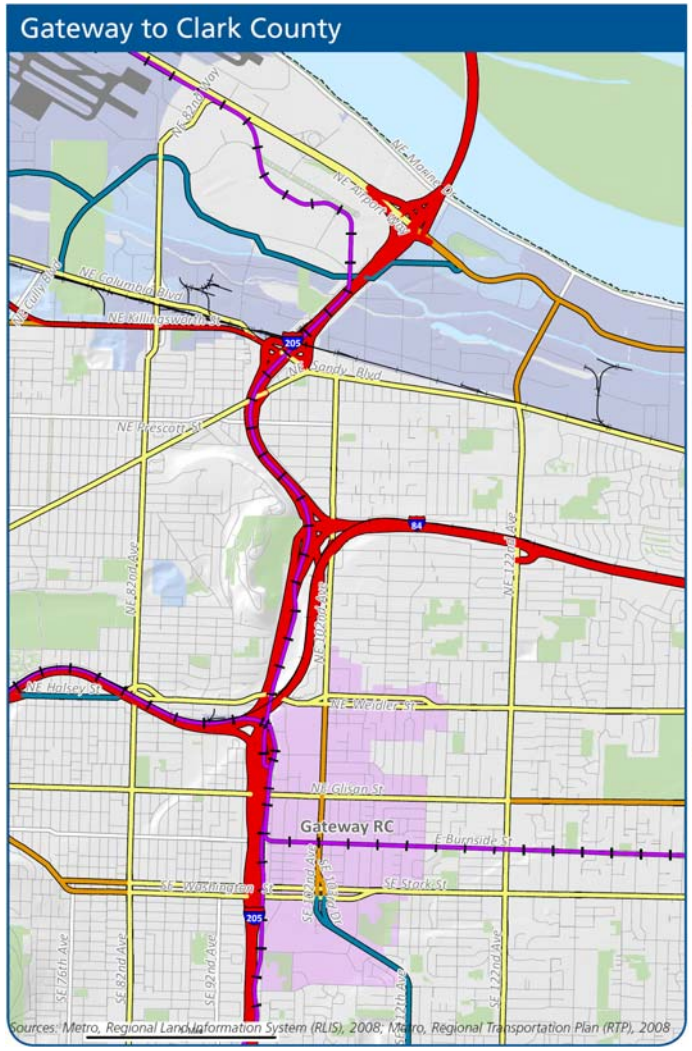
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | NE 148th Ave (I-84 to Stark) | Reliability & Traveler Information | 11+ yrs | $950,000 | $19,000 |
| | | | SE 92nd Ave/Stevens Way/Bob Schumacher | | 1-5 yrs | $1,300,000 | $30,000 |
| | | | SE 172nd (Foster to Hwy 212) | | 11+ yrs | $2,000,000 | $40,000 |
| | | | SE Foster Rd/SE 162nd | | 6-10 yrs | $4,500,000 | $90,000 |

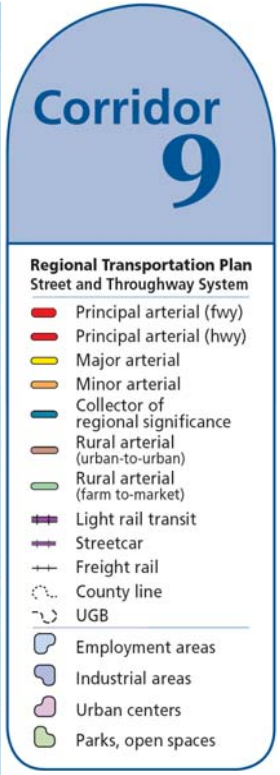
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | SE 82nd Ave | Reliability & Traveler Information | 1-5 yrs | $6,500,000 | $120,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-205 | Reliability, Traveler Information, & Safety | 1-5 yrs | $1,000,000 | $20,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Neighborhoods adjacent MAX Greenline alignment from Gateway south to Portland city limits. (RTO Subcommittee funded this project) | Quality of life | 1-5 years | $0 | $1,000,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | (same as above) | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | I-205 | Quality of life | 1-5 years | $0 | $25,000 |
| | Rideshare incentives | (same as above) | I-205 | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | I-205 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | I-205 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Transportation Management Associations | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. | Clackamas Regional Center | | through 10 years | | $75,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |
| | Last-mile services | Provide shuttles or demand-responsive transit to connect transit stops with significant destinations one to two miles away, especially at hours not served by current transit service. | MAX Green Line and Oregon City | Quality of life | 6-10 years | $500,000 | $500,000 |
| | Car-share operations | Support 3 or more carsharing vehicles in developing centers. | Clackamas Regional Center and Oregon City Town Center | Quality of life | 1-5 years | $0 | $200,000 |

## Mobility Corridor 9: Gateway to Clark County




### *Corridor Summary*

The Gateway to Clark County Corridor focuses on mainly north-south travel with access to the Gateway, Clackamas, and Oregon City regional centers. The main freeway through this corridor is **I-205** and the key parallel arterials are **NE 82nd Ave and NE 122nd Ave**. MAX light rail connects Gateway regional center to Portland central city, the Portland International Airport and Cascade Station area. Bus service and bicycle routes also support movement through this corridor. The corridor is largely urbanized with a diverse mix of residential, commercial and industrial land uses. A well-connected grid of arterial and collector streets move people and goods through the corridor and to local destinations. The local street network is a blend of well-connected and discontinuous streets.

### *Where Are We Now?*

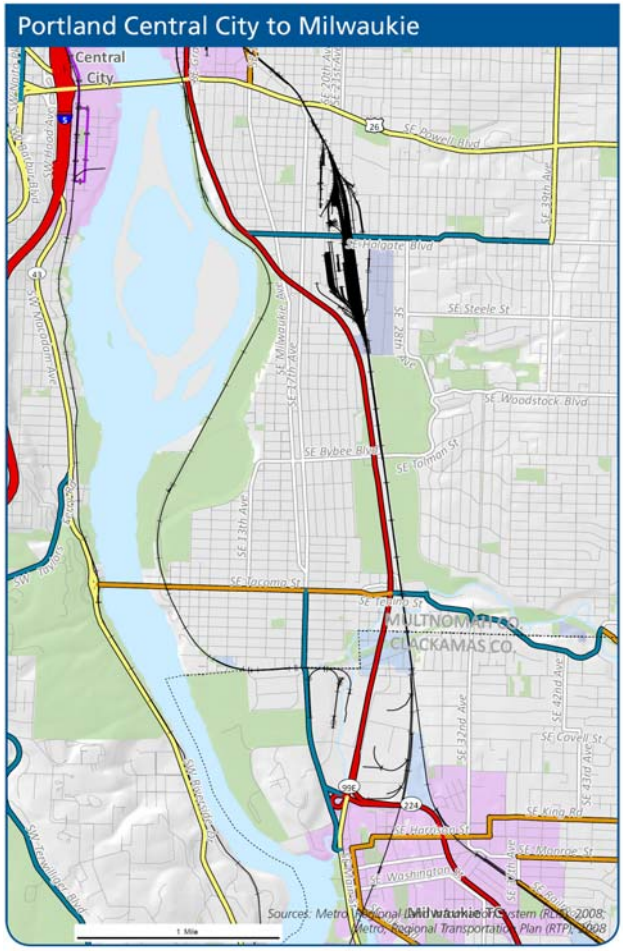
Currently NE 82nd Ave is the only regional facility in this corridor to update coordinated signal timings within the last five years. Transit signal priority is located at select traffic signals along NE 82nd Ave. Communications infrastructure exists along segments of NE 102nd and NE 82nd Ave. The segment of I-205 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

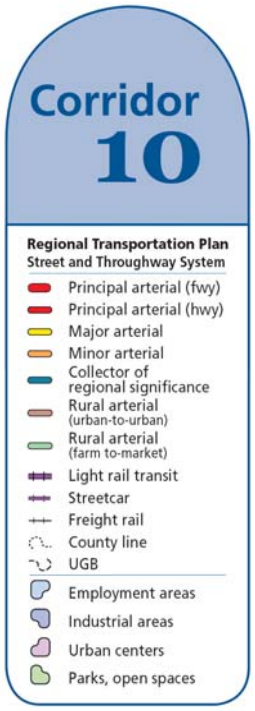
C-TRAN subsidizes commuter vanpools in the area, and Clark County coordinates TDM marketing and services to employees through the Southbound Solutions program.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | NE/SE 122nd Ave | Reliability & Traveler Information | 6-10 yrs | $2,600,000 | $50,000 |
| | | | SE 112th Ave | | 11+ yrs | $550,000 | $11,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | NE 82nd Ave | Reliability & Traveler Information | 1-5 yrs | $3,300,000 | $70,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | NE 102nd Ave | Reliability, Traveler Information, & Quality of Life | 11+ yrs | $1,800,000 | $35,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | I-205 | Reliability, Traveler Information, & Safety | 1-5 yrs | $320,000 | $6,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Construction mitigation campaign | Apply additional investment in TDM solutions to mitigate impacts to travelers of all modes during construction projects. | I-205 interchange with Airport Way | Quality of life | 1-5 years | $0 | $100,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | | 6-10 years | $100,000 | $50,000 |
| | End-of-trip bike facilities | Bike parking (short term and/or long term), bike stations, related bike services | PDX | | 6-10 years | $100,000 | $100,000 |

## Mobility Corridor 10: Portland Central City to Milwaukie




### *Corridor Summary*

The Portland Central City to Milwaukie mobility corridor encompasses **99E** (McLoughlin Blvd), parallel facilities, transit and bicycle routes that support movement in and through the corridor. 99E accommodates mostly intraregional travel between Beaverton, Portland, and Milwaukie/Clackamas. The key parallel arterial is **Milwaukie Ave/17th Ave.** East-west mobility in this corridor is limited by lack of crossings of 99E and the Union Pacific Railroad that parallels 99E . The corridor has a very diverse land use pattern with a well-connected local street network.

### *Where Are We Now?*

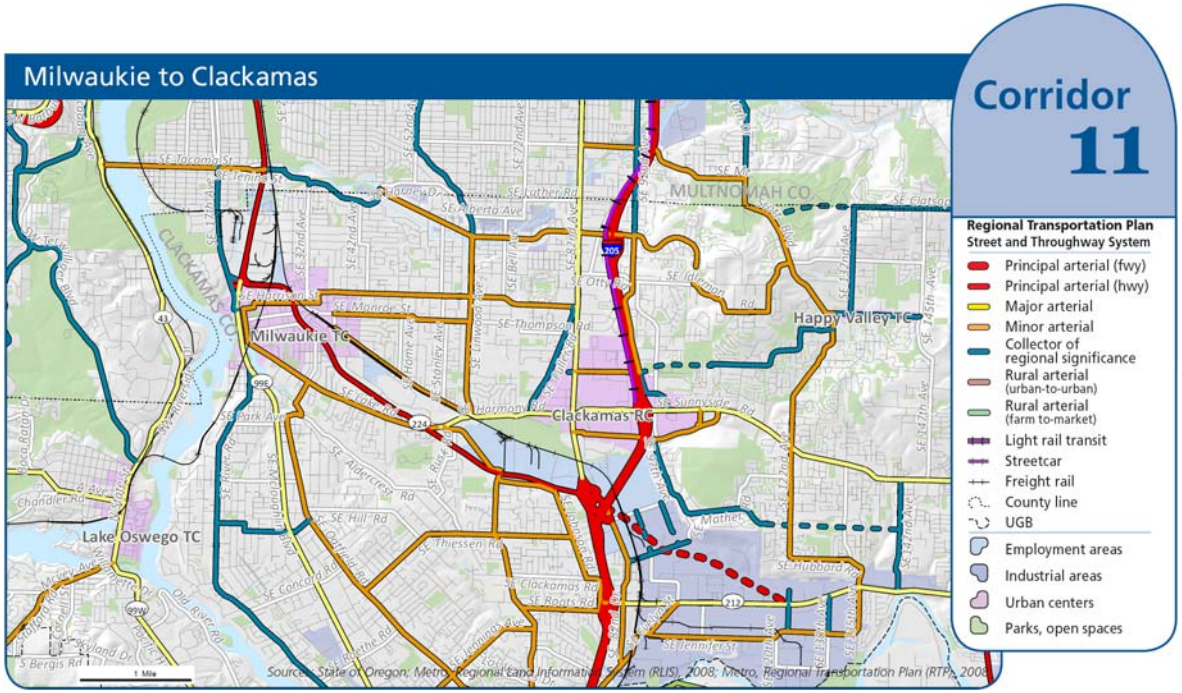
Currently two regional facilities in this corridor have coordinated signal timings updated within the last five years: a segment of SE McLoughlin Blvd, and SE 39th Ave. Transit signal priority is located at one traffic signal along SE McLoughlin Blvd, and at select traffic signals along SE 39th Ave. Communications infrastructure exists along SE McLoughlin Blvd, and a section of SE 17th Ave.

The City of Milwaukie recently completed an individualized marketing program for residents of the Ardenwald neighborhood.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | SE 17th (south of Tacoma) | Reliability & Traveler Information | 6-10 yrs | $480,000 | $10,000 |
| | | | NE/SE 39th Ave | | 6-10 yrs | $1,200,000 | $25,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | SE McLoughlin Blvd | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $2,700,000 | $50,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Neighborhoods near Portland/Milwaukie light rail. | Quality of life | 1-5 years | $0 | $500,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | (write in center) | Quality of life | 6-10 years | $0 | $100,000 |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |
| | Car-share operations | Support 3 or more carsharing vehicles in developing centers. | Milwaukie Town Center | Quality of life | 1-5 years | $0 | $200,000 |

## Mobility Corridor 11: Milwaukie to Clackamas




### *Corridor Summary*

The Milwaukie to Clackamas corridor encompasses **Hwy 224** and provides intraregional travel and access to the Clackamas regional center, Milwaukie town center and industrial/employment lands located along its length. The key parallel arterials include **Johnson Creek Blvd and Lake Rd**. North-south access is limited due to the lack of crossings of Hwy 224 and the Union Pacific rail mainline. Bus service and bicycle routes also support movement through this corridor. The local street network is generally discontinuous, with many cul-de-sac and dead-end streets, reflecting the largely suburban residential land use pattern in this corridor.

### *Where Are We Now?*

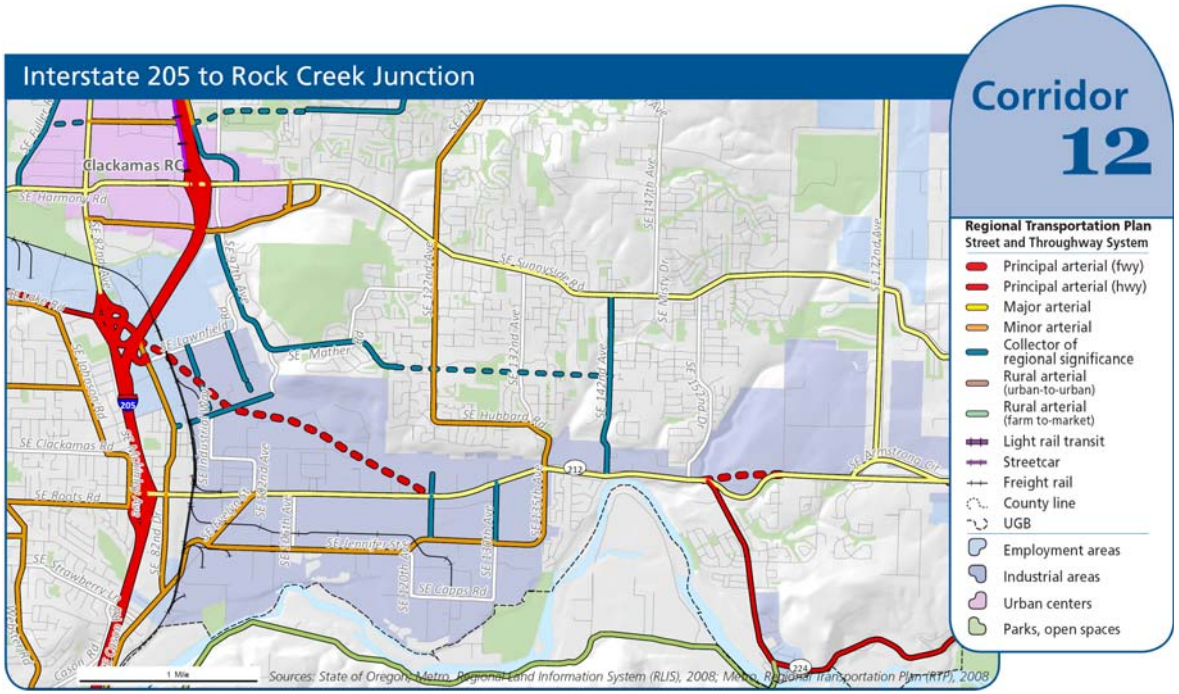
McLoughlin Blvd is the only regional facility in this corridor to have coordinated signal timings updated within the last five years. No facilities in have transit signal priority. Communications infrastructure exists along Hwy 224, and radio interconnect exists along McLoughlin Blvd.

The Clackamas Regional Center TMA works with employers and employees to reduce drive-alone trips. Additionally, the City of Milwaukie is beginning an individualized marketing program for residents of the Ardenwald neighborhood.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Johnson Creek Blvd | Reliability & Traveler Information | 1-5 yrs | $1,400,000 | $30,000 |
| | | | Lake Rd | | 11+ yrs | $45,000 | $1,000 |
| | | | Hwy 224 | | 11+ yrs | $1,600,000 | $30,000 |
| | | | Harmony Rd | | 11+ yrs | $8,200,000 | $160,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | Hwy 224, 99E, I-205 | Quality of life | 1-5 years | $0 | $25,000 |
| | Rideshare incentives | (same as above) | Hwy 224, 99E, I-205 | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | Hwy 224, 99E, I-205 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | Hwy 224, 99E, I-205 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Area in-between Milwaukie TC and Clackamas RC | Quality of life | through 10 years | $0 | $50,000 |

## Mobility Corridor 12: Interstate 205 to Rock Creek Junction




### *Corridor Summary*

The I-205 to Rock Creek Junction corridor encompasses the existing **Hwy 212** and **future Sunrise Corridor** limited access facility. Hwy 212 supports interregional travel to central and eastern Oregon, intraregional travel for neighboring communities, and access between Clackamas industrial area and I-205. The only parallel arterial along this corridor is **SE Sunnyside Rd**. Transit service and bicycle routes also support movement in and through the corridor. North-south access is limited by topography and development patterns. Local streets are discontinuous, with many cul-de-sac and dead-end industrial and residential streets.

### *Where Are We Now?*

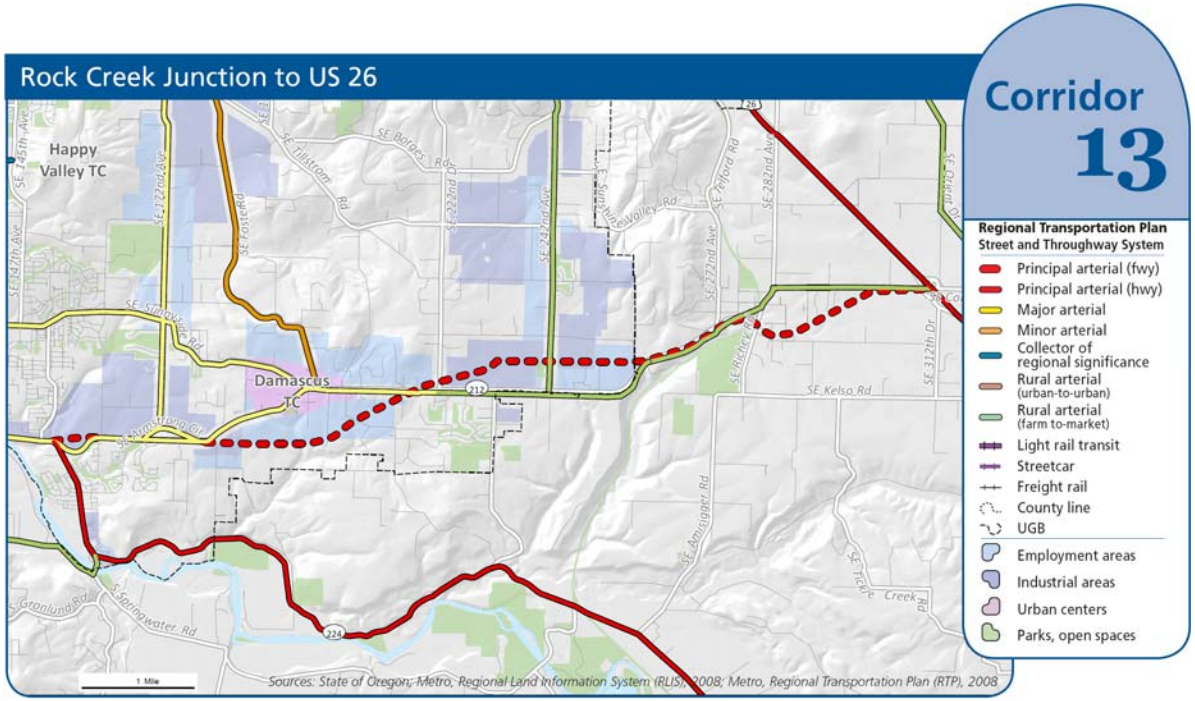
Traffic signals along SE Sunnyside Rd were upgraded to responsive signal timing within the last five years. There is no transit signal priority located in this corridor. Communications infrastructure exists along SE Sunnyside Rd, SE Sunnybrook Rd, and Hwy 212/224. Also, cameras are located along SE Sunnyside Rd between SE 82nd Ave and SE 162nd Ave.

The Clackamas Regional Center TMA works with employers and employees to reduce drive-alone trips. Additionally, Clackamas County updated and is distributing their bicycle map.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Hwy 212/224 | Reliability & Traveler Information | 6-10 yrs | $2,600,000 | $50,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | Sunnyside Rd (82nd to 122nd) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $3,240,000 | $65,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | Hwy 212, Sunnyside Rd., | Quality of life | 1-5 years | $0 | $25,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | (same as above) | Hwy 212, Sunnyside Rd., | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | Hwy 212, Sunnyside Rd., | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | Hwy 212, Sunnyside Rd., | Quality of life | 6-10 years | $0 | $4,800 |
| | Construction mitigation campaign | Apply additional investment in TDM solutions to mitigate impacts to travelers of all modes during construction projects. | I-205 to Hwy 212 construction | Quality of life | 1-5 years | $0 | $100,000 |
| | Construction mitigation campaign | (same as above) | Sunrise Hwy | Quality of life | 1-5 years | $0 | $100,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Match industrial/employment area along corridor with nearby housing opportunities. | Quality of life | through 10 years | $0 | $50,000 |

# Mobility Corridor 13: Rock Creek Junction to US 26




## *Corridor Summary*

Rock Creek to US 26 corridor encompasses the existing **Hwy 212** and **future Sunrise Corridor** limited access facility. Hwy 212 supports interregional travel to central and eastern Oregon, intraregional travel for neighboring communities, and access to I-205. There are **no parallel arterials** along this corridor. Once the Sunrise limited access facility is built, it will provide primary mobility and Hwy 212 will become a parallel arterial. Transit service and bicycle routes also support movement in and through the corridor. Land use is a mix of low density residential and farmland with mobility provided by a farm-to-market street network.

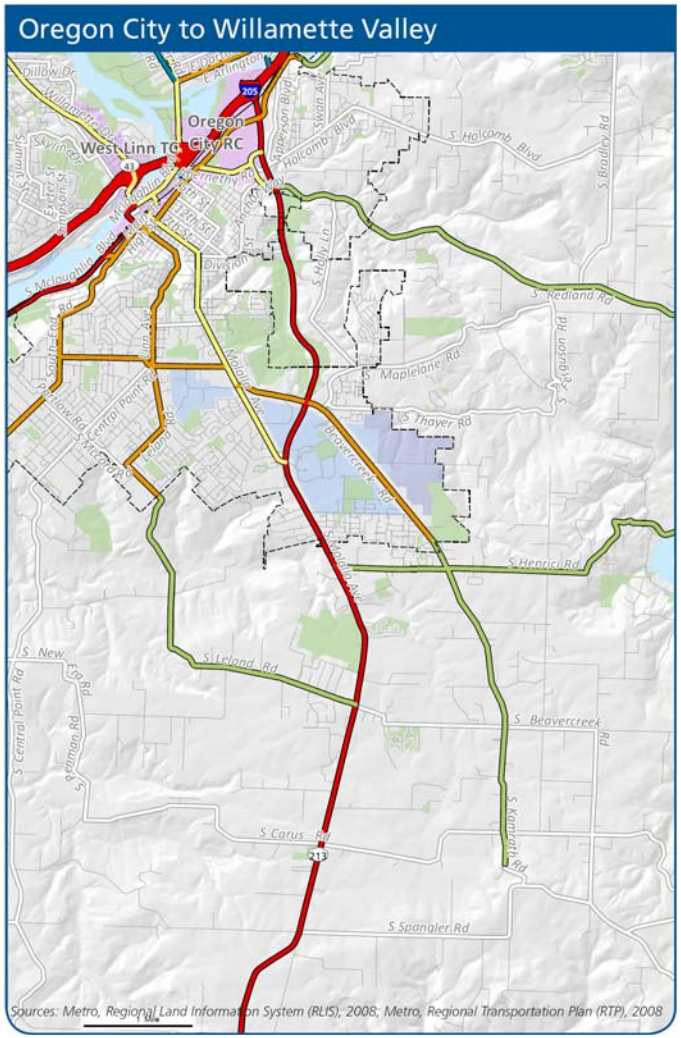
## *Where Are We Now?*

Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years. And there are no transit signal priority locations or communications infrastructure in this corridor.

Clackamas County updated and is distributing their bicycle map.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | Hwy 212, east of Damascus | Reliability, Traveler Information, & Quality of Life | 6-10 yrs | $3,400,000 | $70,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | Hwy 212, US 26 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | Hwy 212, US 26 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

## Mobility Corridor 14: Oregon City to Willamette Valley




### *Corridor Summary*

The Oregon City to Willamette Valley encompasses **Hwy 213** south of I-205, parallel arterials as well as bus service and bicycle routes that support movement in and through the corridor. Hwy 213 supports both intraregional and interregional travel between Oregon City and neighboring communities. The key parallel arterials are **Beavercreek Rd** and **Mollala Ave**. Land use in this corridor is both urban and rural. Within the urban area, the corridor has a diverse mix of land uses including commercial areas, institutional, and residential. The corridor outside the urbanized area is a mix of low density residential and farmland; its mobility provided by a farm-to-market street network. The local streets are well connected in the historic sections of Oregon City and discontinuous in the more recently developed sections.

### *Where Are We Now?*

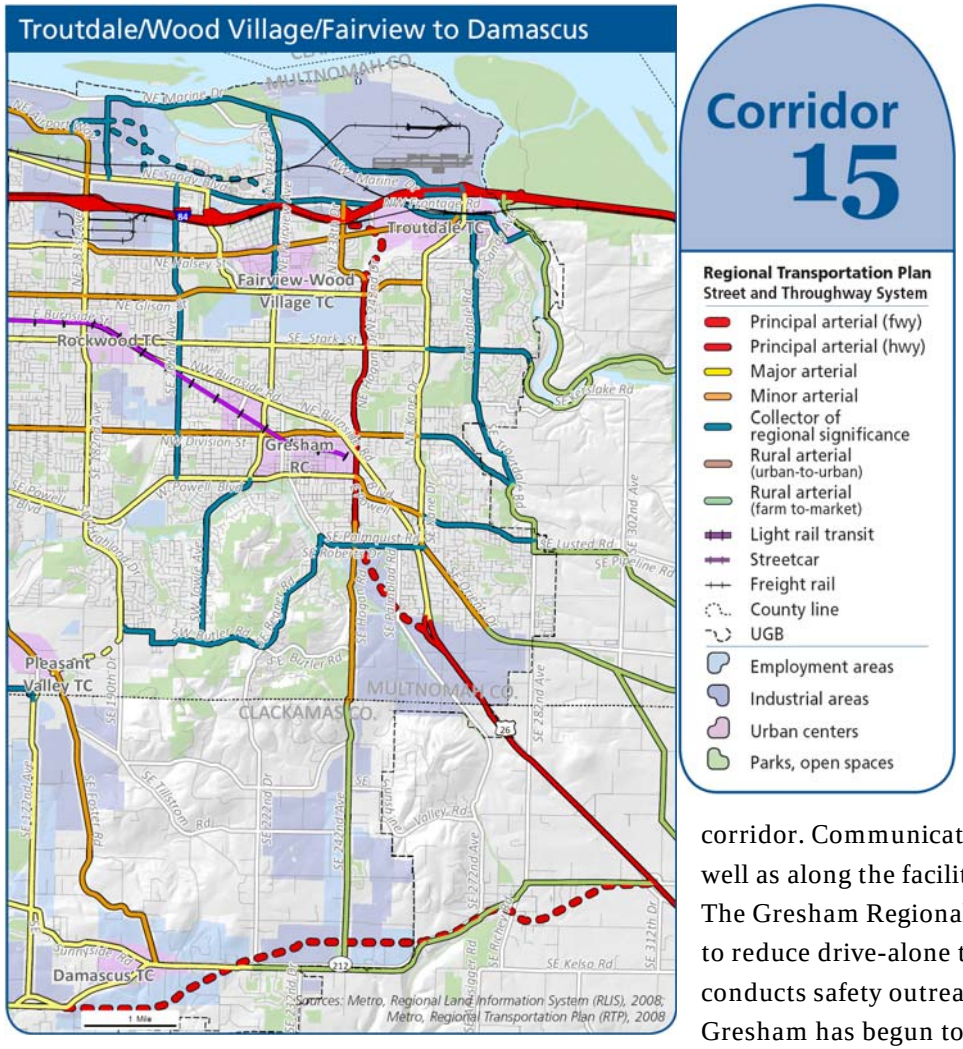
Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years. There are no transit signal priority locations in this corridor. Communications infrastructure exists along sections of Beavercreek Rd, Hwy 213, and Molalla Ave.

Clackamas County updated and is distributing their bicycle map.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Hwy 213 | Reliability & Traveler Information | 6-10 yrs | $2,500,000 | $50,000 |
| | | | Beavercreek Rd (south of Hwy 213 | | 11+ yrs | $950,000 | $19,000 |
| | | | Molalla Ave/Hwy 213 (to Henrici) | | 11+ yrs | $600,000 | $12,000 |
| | | | Washington St | | 1-5 yrs | $550,000 | $11,000 |
| | | | 7th Ave | | 1-5 yrs | $200,000 | $4,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | Molalla Ave (7th to Hwy 213) | Reliability & Traveler Information | 1-5 yrs | $1,700,000 | $35,000 |
| | | | Beavercreek Rd (between Molalla and Hwy 213) | | 6-10 yrs | $440,000 | $9,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Transportation Demand Management** | | | | | | | |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | Hwy 213 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | Hwy 213 | Quality of life | 6-10 years | $0 | $4,800 |

## Mobility Corridor 15: Troutdale/Wood Village/Fairview to Damascus







### *Corridor Summary*

The Troutdale/Wood Village/Fairview to Damascus mobility corridor encompasses the arterials and collector streets that provide access between I-84 and US 26, as well as transit and bicycle routes that support movement in and through the corridor. There are no freeways included within this corridor. The key arterials in this corridor include **SE 181st Ave, SE 202nd Ave, SE 238th/242nd/Hogan Dr** and **SE 257th/Kane Dr**. Although the corridor has a well-connected arterial and collector street grid, the local street network is generally discontinuous with many cul-de-sac and dead end streets. The majority of land use in this area is considered rural. The urbanized area has a mix of commercial and industrial uses.

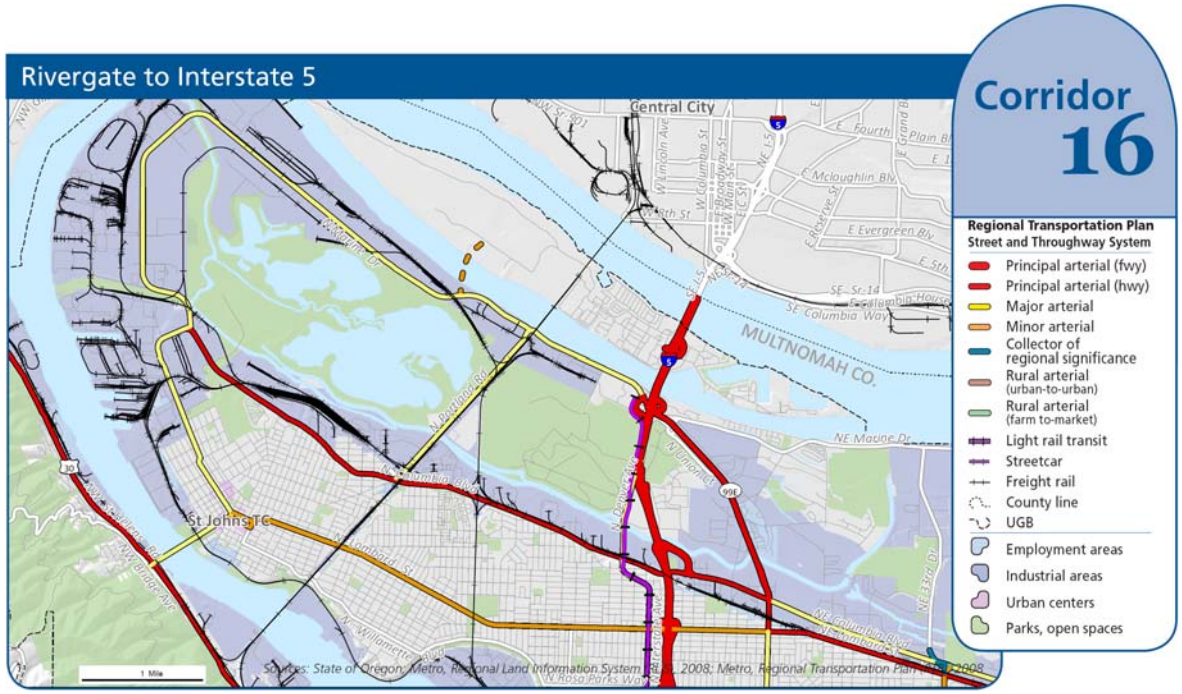
### *Where Are We Now?*

Currently one regional facility in this corridor has coordinated signal timings updated within the last five years, NE 242nd; and sections of Burnside Rd and 181st are equipped with adaptive signal timing. There is no transit signal priority located in this corridor. Communications infrastructure exists along 257th Ave, Glisan St, and 223rd as well as along the facilities with coordinated and adaptive signal timing.

The Gresham Regional Center TMA works with employers, employees, and residents to reduce drive-alone trips. Additionally, the TMA runs a Bike Program which conducts safety outreach, gives away helmets, and installs bike racks. The City of Gresham has begun to implement a city-wide bicycle way-finding program.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | 160th/162nd Ave | Reliability & Traveler Information | 6-10 yrs | $2,100,000 | $40,000 |
| | | | Burnside (122nd to 223rd) | | 1-5 yrs | $1,200,000 | $25,000 |
| | | | NE 207th Ave (Sandy to Glisan) | | 6-10 yrs | $850,000 | $17,000 |
| | | | 223rd Ave | | 1-5 yrs | $1,200,000 | $25,000 |
| | | | 257th/Kane Dr | | 1-5 yrs | $2,800,000 | $60,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | 238th/242nd Ave/Hogan Dr (Sandy to Palmquest) | Reliability & Traveler Information | 1-5 yrs | $3,600,000 | $70,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | NE 181st/182nd Ave (Glisan to Powell) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $2,000,000 | $40,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | NE 181st Ave(I-84 to Glisan) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $1,700,000 | $35,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | Burnside (223rd to Powell) - Adaptive signal timing is in place along this segment, traveler information will be added. | Traveler Information | 1-5 yrs | $950,000 | $19,000 |
| | Roadside Travel Time Information | Provide real-time traveler information on westbound US 26 for different routes (arterial and freeway) between Portland and Gresham. | US 26 | Traveler Information | 6-10 yrs | $100,000 | $15,000 |
| **Transportation Demand Management** | | | | | | | |
| | Transportation Management Associations | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. | Gresham Regional Center | Quality of Life | through 10 years | $0 | (annual cost recorded under corridor 6) |




## *Corridor Summary*

The Rivergate to I-5 corridor encompasses **N Columbia Blvd**, parallel arterials as well as bus service and bicycle routes the support movement in and through the corridor. The key parallel arterials are **N Lombard/St John's Bridge** and **N Marine Dr**. The corridor includes a combination of marine-dependant industrial activities, nature reserves, mixed used commercial and residential uses. Due to the industrial and marine port uses, this corridor carries high volumes of heavy vehicle traffic. In the residential and commercial areas the local network is dense and well-connected. The local street network in the industrial and open space areas provides accessibility to large lots and tends to be discontinuous.

## *Where Are We Now?*

Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years. Transit signal priority is located at select traffic signals along N Lombard St. Communications infrastructure exists along the St John's Bridge, N Oswego Ave/N Smith St/N Columbia Way/N Portland Rd, and N Marine Dr.

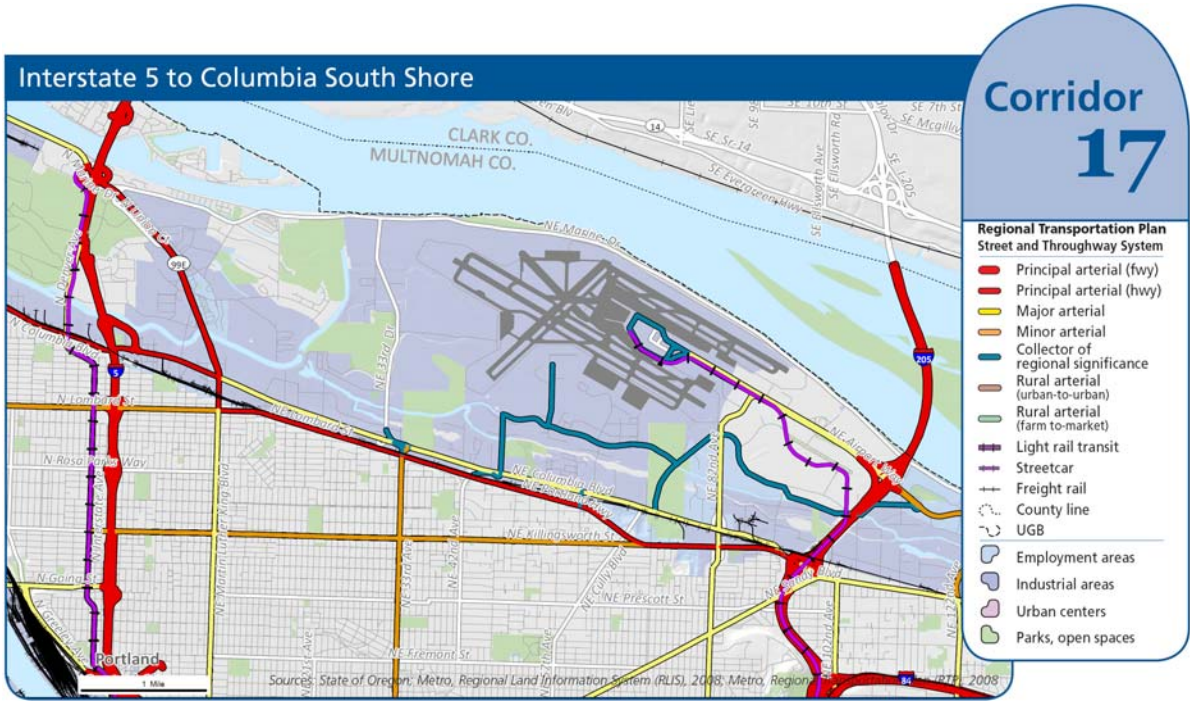
The City of Portland SmartTrips program began an individualized marketing program for residents of the N/NW Portland area. Also, the City of Portland sponsors Sunday Parkways events in North Portland to encourage use of biking and walking for all trips.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | N Columbia Blvd | Reliability & Traveler Information | 1-5 yrs | $2,300,000 | $45,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | N Lombard St (Greeley to I-5) | Reliability & Traveler Information | 11+ yrs | $750,000 | $15,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | N Lombard St (Richmond to Greeley) | Reliability, Traveler Information, & Quality of Life | 6-10 yrs | $3,200,000 | $60,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | N Lombard St (north of St Johns Bridge) | Traveler Information | 6-10 yrs | $2,200,000 | $45,000 |
| | | | Marine Dr | | 6-10 yrs | $2,200,000 | $45,000 |
| | Railroad Crossing Information System | Implement communications between the at-grade railroad crossing and the traffic operations center and emergency management centers to inform emergency responders and general travelers when service will be interrupted. | Marine Dr | Reliabilty, Traveler Information, & Safety | 1-5 yrs | $75,000 | $2,000 |
| **Transportation Demand Management** | | | | | | | |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Rivergate industrial/employment area with nearby housing opportunities. | Quality of life | through 10 years | $0 | $50,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Last-mile services | Provide shuttles or demand-responsive transit to connect transit stops with significant destinations one to two miles away, especially at hours not served by current transit service. | Rivergate | Quality of life | 6-10 years | $500,000 | $500,000 |

# Mobility Corridor 17: Interstate 5 to Columbia South Shore




## *Corridor Summary*

The I-5 to Columbia South Shore corridor encompasses **N/NE Columbia Blvd** and **N/NE Lombard St,** parallel arterials as well as bus service and bicycle routes the support movement in and through the corridor. The key parallel arterials through this corridor are **NE Marine Dr** and **NE Killingsworth St**. Land use is primarily industrial with the Portland International Airport (PDX) occupying a substantial portion of acreage. The MAX Red line connects between PDX and Beaverton town center. South of N/NE Lombard St is primarily residential. In the residential area, the local street network is dense and well-connected. The local street network in the industrial area provides accessibility to large lots and is discontinuous.

## *Where Are We Now?*

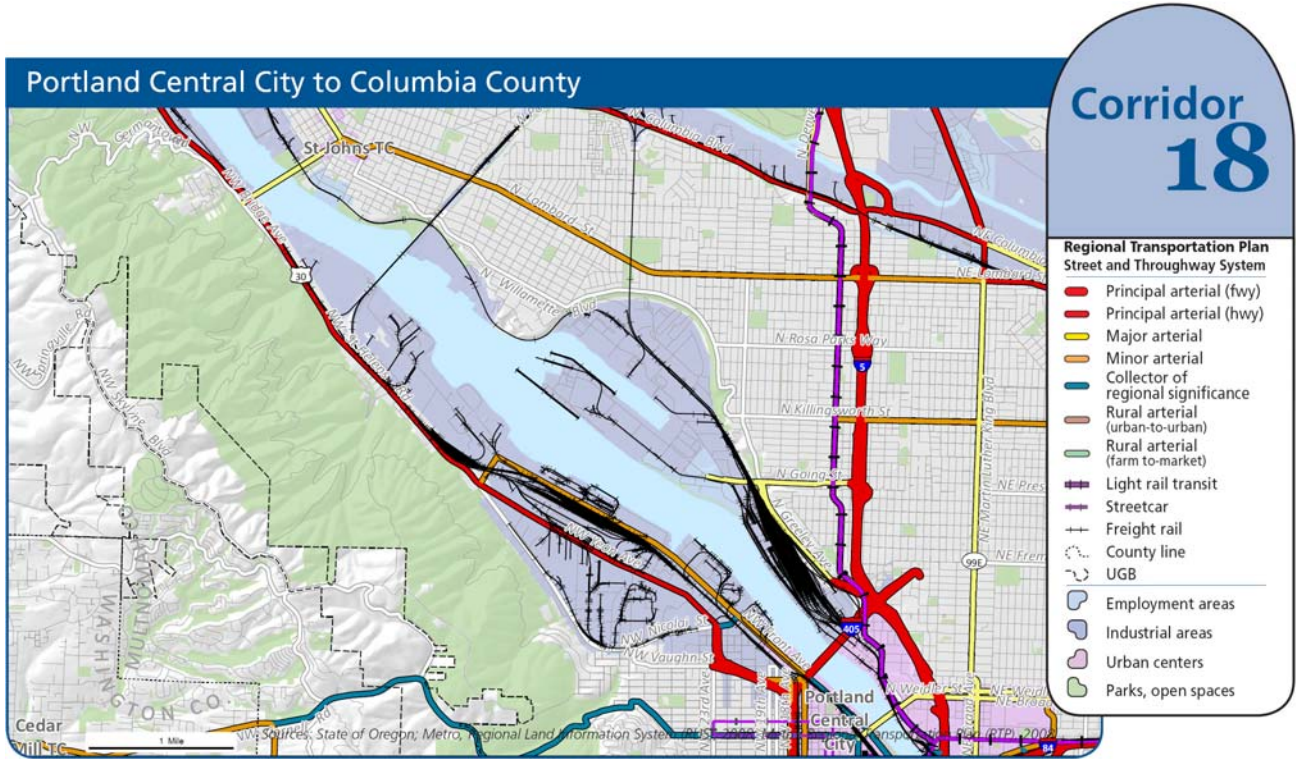
Currently two regional facilities in this corridor have coordinated signal timings updated within the last five years: NE Lombard St/NE Portland Hwy and NE Columbia Blvd. Transit signal priority is located at select traffic signals along NE Killingsworth St. Communications infrastructure exists along a segment of NE Killingsworth St.

The City of Portland sponsors Sunday Parkways events in Northeast Portland to encourage use of biking and walking for all trips. Additionally, the Community Cycling Center has been awarded a grant to reduce barriers for bicycling for historically under-represented populations.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | N/NE Columbia Blvd | Reliability & Traveler Information | 1-5 yrs | $3,100,000 | $60,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | N/NE Lombard St/NE Portland Hwy | Reliability, Traveler Information, & Quality of Life | 6-10 yrs | $2,600,000 | $50,000 |
| | | | N/NE Killingsworth St | | 6-10 yrs | $2,600,000 | $50,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | City of Portland SmartTrips will reach N/NE Portland residents between Chautauqua and NE 82nd Ave. Consider 1/3rd of the project will impact Corridor 5. The action is to implement and/or support intensive outreach to targeted neighborhoods or demographics that encourages travel options through delivery of local travel options information and services to interested residents. | NE Portland along North side of I-84 | Quality of life | 1-5 years | $0 | $333,333 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

## Mobility Corridor 18: Portland Central City to Columbia County




### *Corridor Summary*

The Portland Central City to Columbia County corridor encompasses **US 30,** parallel arterials as well as bus service and bicycle routes that support movement in and through the corridor. US 30 provides interregional travel between the Willamette Valley, Portland and Astoria. It also serves intraregional travel, particularly between Portland, Beaverton and Hillsboro. The key parallel facilities include **NW Front St/NW Naito Pkwy, NW Nicolai, N Lombard St,** and **NW Yeon Ave**. This corridor is home to heavy industrial uses including petroleum tank farms, manufacturing, warehouse/distribution, BNSF Lake Yard intermodal terminal, the Port of Portland/s Terminal 2 and Metro Council waste transfer station.

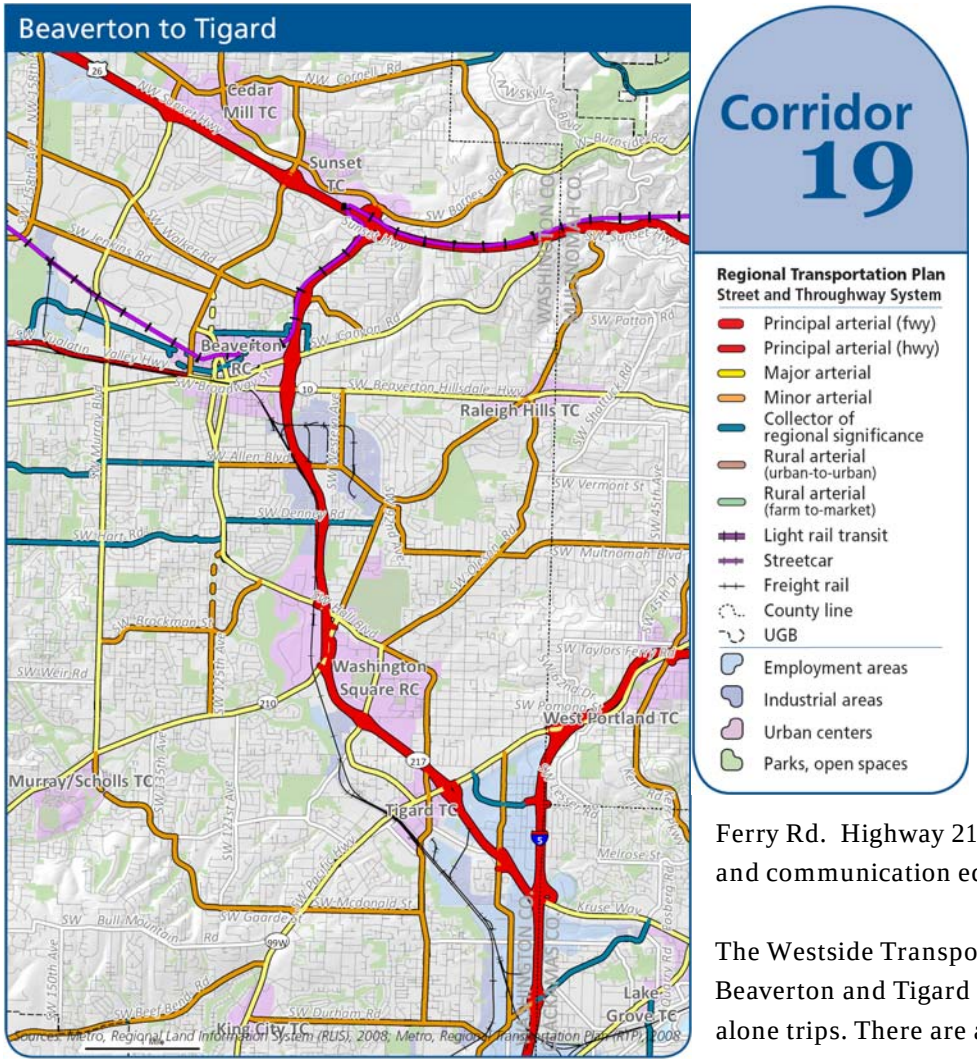
### *Where Are We Now?*

Currently NW Naito Parkway/NW Front St is the only regional facility in this corridor to have coordinated signal timings updated within the last five years. Transit signal priority is located at select traffic signals along NW Vaughn St. Communications infrastructure exists along US 30 (St Helens Rd) NW Naito Parkway/NW Front St, and NW 29th Ave.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Hwy 30/St Helens Rd | Reliability & Traveler Information | 6-10 yrs | $600,000 | $11,000 |
| **Traveler Information** | | | | | | | |
| No projects in this corridor | | | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | US 30 | Quality of life | 1-5 years | $0 | $25,000 |
| | Rideshare incentives | (same as above) | US 30 | Quality of life | 6-10 years | $0 | $25,000 |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | US 30 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | US 30 | Quality of life | 6-10 years | $0 | $4,800 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

## Mobility Corridor 19: Beaverton to Tigard




### *Corridor Summary*

The Beaverton to Tigard corridor encompasses **Hwy 217,** MAX light rail, Westside Express Service (WES) commuter rail, parallel arterials as well as bus service and bicycle routes that support movement in and through the corridor. Hwy 217 supports intraregional travel between Beaverton, Hillsboro, Portland, Tigard, Tualatin, and Wilsonville. The key parallel arterials include **SW Hall Blvd, SW Murray Blvd, SW Oleson Rd** and **SW Scholls Ferry Blvd**. Land use in this corridor is diverse and includes several commercial centers, employment and industrial area. The local street network is a patchwork of well-connected and discontinuous streets.

### *Where Are We Now?*

Currently three regional facilities in this corridor have coordinated signal timings updated within the last five years: SW Murray Blvd, SW Scholls Ferry Rd, and SW Hall Blvd (2 signals). There are no transit signal priority locations in this corridor. Communications infrastructure exists along SW Cedar Hills Blvd, SW Murray Blvd, SW Hall Blvd, and Scholls Ferry Rd. Highway 217 is generally equipped with cameras, ramp meters, detection, and communication equipment.

The Westside Transportation Alliance (WTA) works with employers and employees in Beaverton and Tigard (in addition to other Washington County areas) to reduce drive-alone trips. There are also several bike-specific projects in the corridor including the

WTA program to install free bike racks for area businesses, the City of Tigard's update of their 20-year old bike map, and TriMet installation of E-Access Bike Lockers at several transit facilities in the area.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | SW Murray Blvd | Reliability & Traveler Information | 6-10 yrs | $2,900,000 | $60,000 |
| | | | SW Oleson Rd | | 11+ yrs | $2,600,000 | $50,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | Cedar Hills Blvd | Reliability & Traveler Information | 6-10 yrs | $2,200,000 | $45,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | SW Hall Blvd | Reliability, Traveler Information, | 1-5 yrs | $3,700,000 | $70,000 |

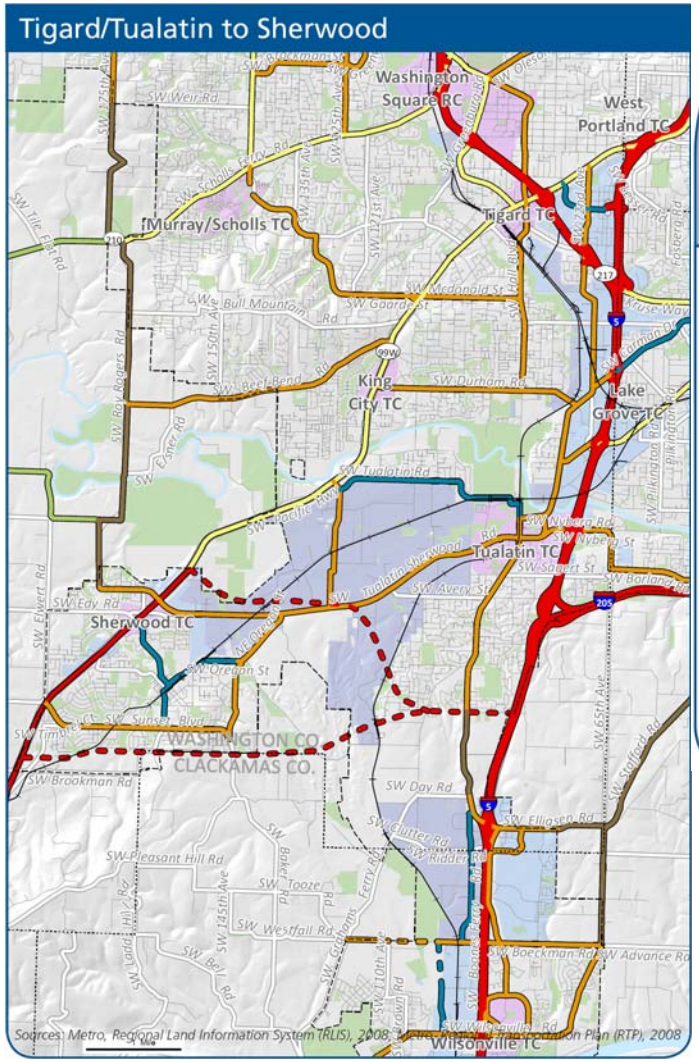
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | | | Scholls Ferry Rd (Hall to BH Hwy) | & Quality of Life | 1-5 yrs | $1,700,000 | $35,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | Hwy 217 | Reliability, Traveler Information, & Safety | 1-5 yrs | $600,000 | $12,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Neighborhood served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 1-5 years | $0 | $500,000 |
| | Individualized Marketing | (same as above) | Neighborhood served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |

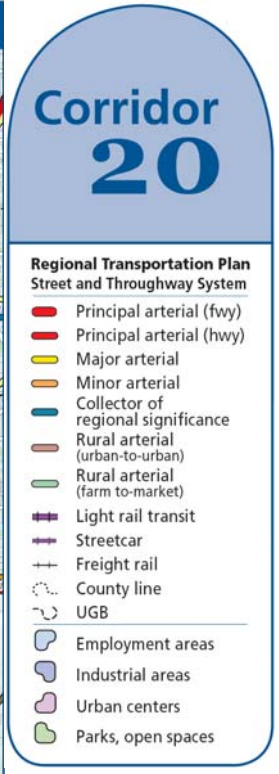
| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare incentives | Leverage regional rideshare services to encourage greater levels of carpooling and vanpooling by providing financial incentives to commuters. | For commuters on 217. | Quality of life | 1-5 years | $0 | $100,000 |
| | Rideshare incentives | (same as above) | For commuters on 217. | Quality of life | 6-10 years | $0 | $100,000 |
| | Employer outreach - additional resources | Leverage existing regional investment in employer services and TMAs to work with employers near corridor. | Employment sites near Highway 217 | | 1-5 years | | $200,000 |
| | Employer outreach - additional resources | (same as above) | Employment sites near Highway 217 | | 6-10 years | | $200,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance (WTA) provides employer services in Washington County, including this corridor. | Beaverton, Washington Square, Tigard and other parts of Washington County | Quality of life | through 10 years | $0 | $300,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance (WTA) provides employer services in Washington County, including this corridor. | Beaverton, Washington Square, Tigard and other parts of Washington County | Quality of life | through 10 years | $0 | $75,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Beaverton Regional Center | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | Beaverton Regional Center | Quality of life | 6-10 years | $0 | $100,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Washington Square Regional Center | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | Washington Square Regional Center | Quality of life | 6-10 years | $0 | $100,000 |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Tigard Town Center | Quality of life | 1-5 years | $0 | $100,000 |
| | Parking management | (same as above) | Tigard Town Center | Quality of life | 6-10 years | $0 | $100,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Bike Sharing | Provide funding to implement bikes for loan or rent. | Transit oriented developments, large employers, colleges, hotels and significant transit stops. | Quality of life | 6-10 years | $100,000 | $50,000 |

## Mobility Corridor 20: Tigard/Tualatin to Sherwood




### *Corridor Summary*

The Tualatin to Sherwood corridor encompasses **99W,** parallel arterials, as well as bus service and bicycle routes that support movement in and through the corridor. 99E supports inter- and intraregional travel inside the region and through the Willamette Valley. The key parallel arterials include **SW 72nd Ave/Boones Ferry Rd/Tualatin-Sherwood Rd, SW Hall Blvd,** and **SW Scholls Ferry Rd/Roy Rogers Rd.** These facilities provide access to Washington Square regional center, five town centers, and significant industrial and employment areas. Originally the arterial and collector street network were built as farm-to-market roads. As the area developed the roadway network lacks the continuous grid of more urbanized areas.

### *Where Are We Now?*

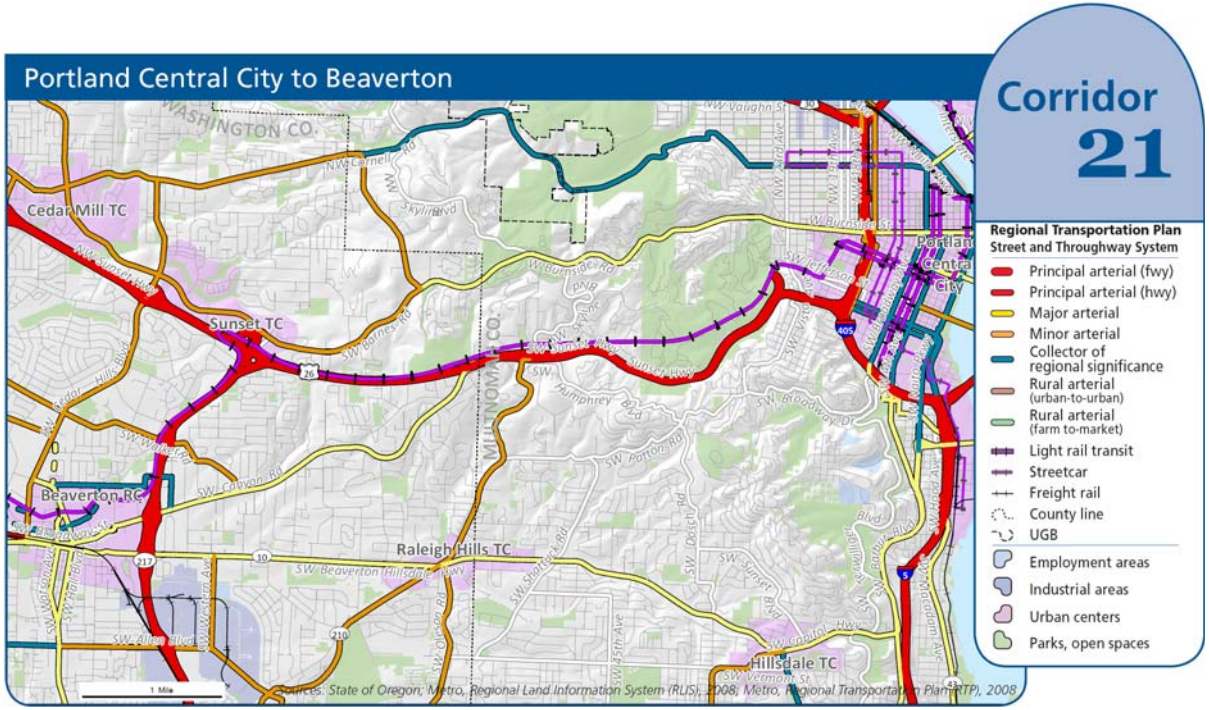
Currently no regional facilities in this corridor have coordinated signal timings updated within the last five years; however, a section of Tualatin Sherwood Rd is equipped with adaptive signal timing. There are no transit signal priority locations in this corridor. Communications infrastructure exists along sections of Scholls Ferry Rd and SW Tualatin Sherwood Rd. The Westside Transportation Alliance (WTA) works with employers and employees in Tualatin (in addition to other Washington County areas) to reduce drive-alone trips. There are also several bike-specific projects in the corridor including a WTA program to install free bike racks for area businesses and the City of Tigard's update of their 20-year old bike map.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | SW 72nd Ave | Reliability & Traveler Information | 11+ yrs | $1,700,000 | $35,000 |
| | | | Upper Boones Ferry Rd | | 11+ yrs | $1,300,000 | $25,000 |
| | | | Durham Rd | | 11+ yrs | $1,500,000 | $30,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | Tualatin Sherwood Hwy | Reliability & Traveler Information | 1-5 yrs | $3,400,000 | $70,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | SW Hall Blvd | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $1,900,000 | $40,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transity priority treatment. | SW Scholls Ferry Rd (River to Hall) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $4,200,000 | $80,000 |
| | | | Hwy 99W (from 217 to 124th) | | 1-5 yrs | $4,200,000 | $80,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | Hwy 99W (124th to Tualatin Sherwood Rd) | Traveler Information | 1-5 yrs | $1,200,000 | $25,000 |
| **Transportation Demand Management** | | | | | | | |
| | Construction mitigation campaign | Apply additional investment in TDM solutions to mitigate impacts to travelers of all modes during construction projects. | 99W construction to Newberg (per HB 2001 legislation) | Quality of life | 1-5 years | $0 | $100,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Tualatin industrial/employment area west of I-5 and housing west of I-5. | Quality of life | through 10 years | $0 | $50,000 |

## Mobility Corridor 21: Portland Central City to Beaverton




### *Corridor Summary*

The Portland to Beaverton corridor encompasses **US 26,** MAX light rail, parallel arterials, as well as bus service and bicycle routes that support movement in and through the corridor. US 26 supports intraregional travel between Beaverton, Gresham, Hillsboro, Milwaukie, Portland, Tigard and Vancouver. The key parallel facilities include **SW Beaverton-Hillsdale Hwy, W Burnside/SW Barnes Rd, SW Canyon Rd, and SW Cornell Rd/SW Miller Rd.** North-south mobility is limited due to few overcrossings of US 26, rugged topography and large areas of parkland. Land use in this corridor is mainly residential with a relatively high percentage of land dedicated to parks and open space. The local street network is discontinuous with many cul-de-sac and dead end streets.

### *Where Are We Now?*

Currently three regional facilities in this corridor have coordinated signal timings updated within the last five years: Beaverton Hillsdale Hwy (BH Hwy) Canyon Rd, and sections of Cornell Rd. Additionally, an adaptive signal timing project is underway for a segment of BH Hwy. Transit signal priority is located at select traffic signals along BH Hwy. Communications infrastructure exists along BH Hwy, Canyon Rd, and SW Allen Blvd. The segment of US 26 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment.

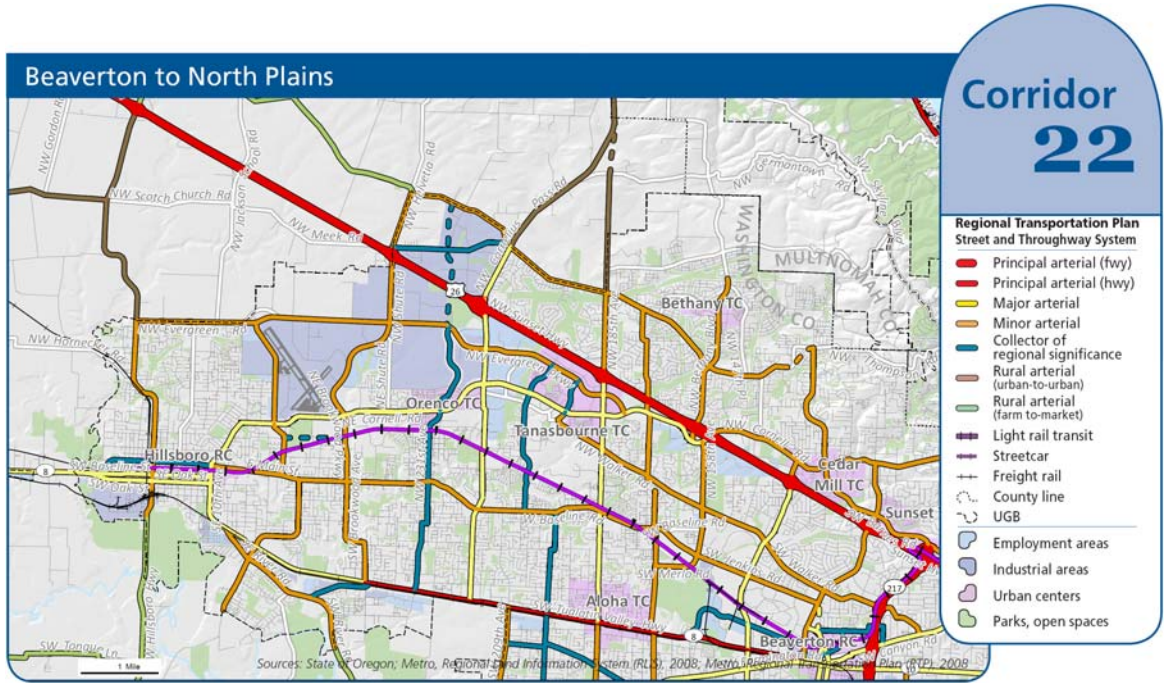
The Westside Transportation Alliance (WTA) works with employers in Beaverton (in addition to other Washington County areas) to reduce employee drive-alone trips. The City of Portland's Smart Trips Downtown program offers individualized marketing to employees in their service areas. There are several bike-specific projects in the corridor as well, with a WTA program to install free bike racks for area businesses, Portland State University currently building a new long-term bike storage facility, and TriMet installing E-Access Bike Lockers at several transit facilities in the area.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Canyon Rd (north of Walker) | Reliability & Traveler Information | 1-5 yrs | $1,600,000 | $30,000 |
| | | | Walker Rd (west of Hwy 217) | | 6-10 yrs | $700,000 | $14,000 |
| | | | Barnes Rd/Burnside | | 6-10 yrs | $2,100,000 | $43,000 |
| | | | Bertha | | 11+ yrs | $700,000 | $13,000 |
| | | | Allen Rd | | 11+ yrs | $2,300,000 | $45,000 |
| | | | Denny Rd | | 11+ yrs | $950,000 | $19,000 |
| | | | Cornell Rd | | 1-5 yrs | $1,700,000 | $35,000 |
| | | | Scholls Ferry Rd | | 6-10 yrs | $750,000 | $15,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | Canyon Rd (near Walker to Cedar Hills) | Reliability & Traveler Information | 6-10 yrs | $1,500,000 | $30,000 |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | Beaverton Hillsdale Hwy (Barbur Blvd to Scholls Ferry Rd) | Reliability, Traveler Information, & Quality of Life | 6-10 yrs | $3,700,000 | $70,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | Beaverton Hillsdale Hwy (Scholls Ferry Rd to Murray Blvd) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $2,500,000 | $50,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | US 26 | Reliability, Traveler Information, & Safety | 1-5 yrs | $400,000 | $8,000 |
| **Traveler Information** | | | | | | | |
| | Traveler Information Only | Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. | Walker Rd (east of Hwy 217) | Traveler Information | 1-5 yrs | $460,000 | $9,000 |
| **Transportation Demand Management** | | | | | | | |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Individualized Marketing | Implement and/or support intensive outreach to targeted neighborhoods that encourages use of travel options through delivery of local travel options information and services to interested residents. | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 1-5 years | $0 | $500,000 |
| | Individualized Marketing | (same as above) | Residents served by frequent transit service, other travel options and near commercial zoning. | Quality of life | 6-10 years | $0 | $500,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |

## Mobility Corridor 22: Beaverton to North Plains




### *Corridor Summary*

The Beaverton to North Plains corridor encompasses **US 26,** MAX light rail, Westside Express Service (WES), parallel arterials, as well as bus service and bicycle routes that support movement in and through the corridor. US 26 supports intraregional travel between Beaverton, Gresham, Hillsboro, Milwaukie, Portland, Tigard and Vancouver. The key parallel facilities include **NW Barnes Rd/Cornell Rd, NW Evergreen Pkwy, SW Jenkins Rd/Walker Rd, NW Union Rd, W Baseline Rd, and SW Tualatin Valley Hwy**. The corridor is a diverse mix of urban and rural land uses, with several commercial centers, employment and industrial areas in the urbanized sections. The local street network is a patchwork of well-connected and discontinuous streets. Farm-to-market roads provide mobility outside the urbanized areas.

### *Where Are We Now?*

Currently two regional facilities in this corridor have coordinated signal timings updated within the last five years: Cornelius Pass and Cornell Rd. There are no transit signal priority locations in this corridor. Communications infrastructure exists along segments of Cornell Rd, Baseline St and Oak St. The segment of US 26 through this corridor is generally equipped with cameras, ramp meters, detection, and communication equipment. The Westside Transportation Alliance (WTA) works with employers and employees in Beaverton (in addition to other Washington County areas)

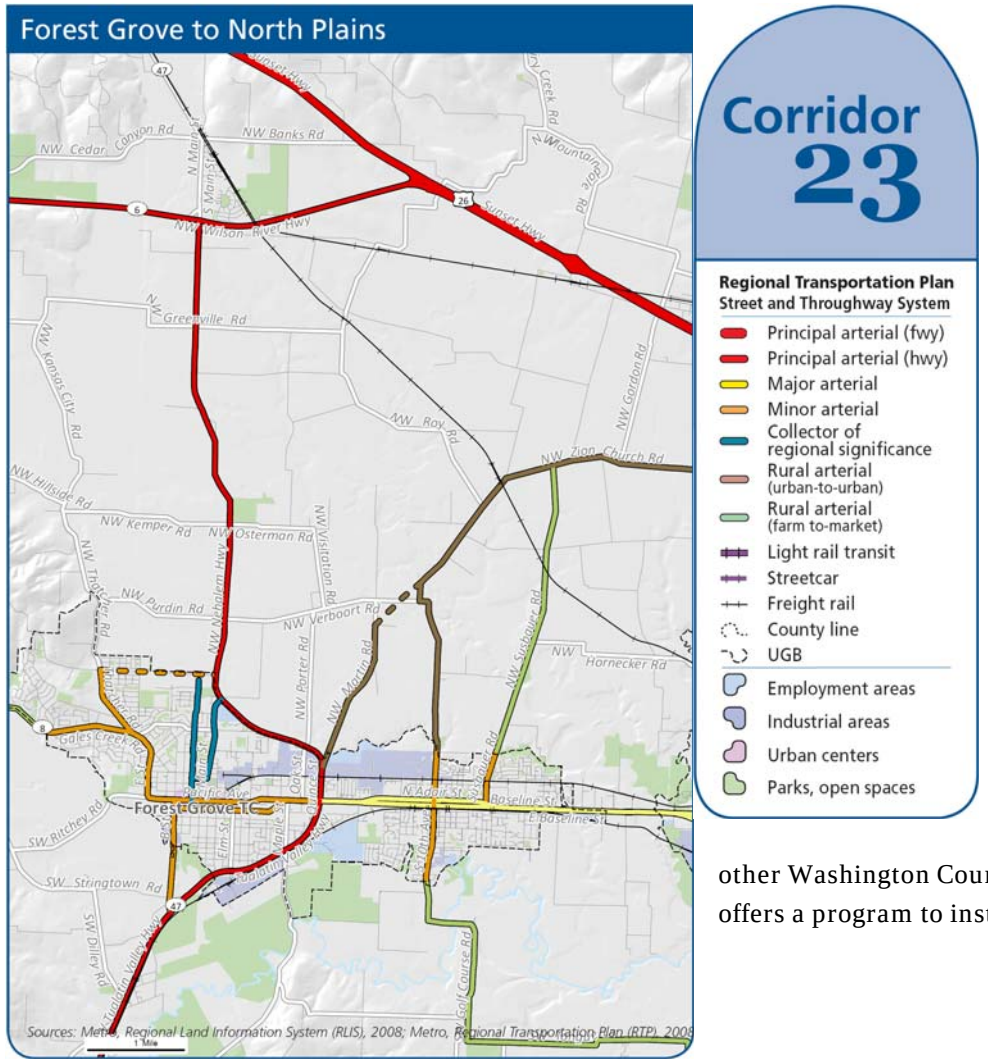
to reduce drive-alone trips. There are several bike-specific projects in the corridor including a WTA program to install free bike racks for area businesses and TriMet installation of E-Access Bike Lockers at several transit facilities in the area.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | Jenkins/ Baseline | Reliability & Traveler Information | 11+ yrs | $3,300,000 | $70,000 |
| | | | Walker Rd | | 11+ yrs | $2,600,000 | $50,000 |
| | | | Cornell Rd | | 1-5 yrs | $6,800,000 | $140,000 |
| | | | Evergreen | | 11+ yrs | $4,700,000 | $90,000 |
| | | | Cornelius Pass | | 1-5 yrs | $3,500,000 | $70,000 |
| | | | Brookwood | | 11+ yrs | $2,800,000 | $60,000 |
| | | | Shute Rd | | 11+ yrs | $9,300,000 | $180,000 |
| | | | Farmington (185th to 209th) | | 6-10 yrs | $800,000 | $16,000 |
| | ACM with Adaptive Signal Timing | Includes the ACM project with signal systems that automatically adapt to current arterial roadway conditions. | 185th Ave (US 26 to Union Rd) | Reliability & Traveler Information | 6-10 yrs | $1,200,000 | $25,000 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | ACM with Transit Priority Treatment | Includes the ACM project with transit signal priority added to traffic signals along a facility. | Farmington (Murray to 185th) | Reliability, Traveler Information, & Quality of Life | 6-10 yrs | $1,800,000 | $35,000 |
| | ACM with Adaptive Signal Timing and Transit Priority Treatment | Includes the ACM with both adaptive signal timing and transit priority treatment. | 185th Ave (US 26 to BH Hwy) | Reliability, Traveler Information, & Quality of Life | 1-5 yrs | $4,500,000 | $90,000 |
| | | | Farmington (Western to Murray) | | 1-5 yrs | $2,500,000 | $50,000 |
| | | | Tualatin Valley Hwy (Murray to Baseline) | | 1-5 yrs | $7,300,000 | $140,000 |
| | Freeway Management | Expand freeway vehicle detection to provide comprehensive freeway traveler information including travel speed, travel times, volumes, forecasted information, incident conditions, and weather conditions. | US 26 | Reliability, Traveler Information, & Safety | 1-5 yrs | $650,000 | $13,000 |
| **Traveler Information** | | | | | | | |
| No projects in this corridor | | | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | US 26 | Quality of life | 1-5 years | $0 | $4,800 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Rideshare Park&Ride | (same as above) | US 26 | Quality of life | 6-10 years | $0 | $4,800 |
| | Construction mitigation campaign | Apply additional investment in TDM solutions to mitigate impacts to travelers of all modes during construction projects. | Hwy 26 near Amberglen | Quality of life | 1-5 years | $0 | $100,000 |
| | Employee incentives | Targeted investment to add to employer services to incentivize non-SOV commutes. | to be determined | Quality of life | 1-5 years | $0 | $50,000 |
| | Employee incentives | (same as above) | to be determined | Quality of life | 6-10 years | $0 | $50,000 |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance (WTA) provides employer services in Washington County, including this corridor. | Beaverton and other parts of Washington County | Quality of life | through 10 years | $0 | (annual cost recorded under corridor 19) |
| | Location-efficient living | Support programs and strategies that promote and advance location-efficient living strategies. | Industrial/employment area with nearby housing | Quality of life | through 10 years | $0 | $50,000 |
| | Park&Ride Management | Implement parking management elements such as time limits, fees or changing spaces to carpool-only. | Sunset Transit Center | Quality of life | 1-5 years | $100,000 | $10,000 |

## Mobility Corridor 23: Forest Grove to North Plains




### *Corridor Summary*

The Beaverton to North Plains corridor encompasses **Hwy 47,** parallel arterials, as well as bus service and bicycle routes that support movement in and through the corridor. Hwy 47 supports intraregional travel between Forest Grove, Hillsboro and Beaverton. The key parallel facilities include **NW Martin Rd/Cornelius-Schefflin Rd, Kerkman/Dersham Rd, and Zion Church/Glencoe Rd.** The corridor is mostly rural farmland, with urban/suburban development tightly contained in the city of Forest Grove. The street network is a mix of farm-to-market roads and well-connected urban streets in the urbanized area.

### *Where Are We Now?*

No regional facilities in this corridor have coordinated signal timing updated within the last five years. Additionally, there are no transit signal priority locations nor communications infrastructure.

The Westside Transportation Alliance (WTA) works with employers and employees in Forest Grove (in addition to other Washington County areas) to reduce drive-alone trips. Additionally, the WTA offers a program to install free bike racks for area businesses.

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| **Regional Multimodal Traffic Management** | | | | | | | |
| | Arterial Corridor Management (ACM) | Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings. Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions. Also includes on-going maintenance and parts replacement. | TV Hwy | Reliability & Traveler Information | 1-5 yrs | $950,000 | $19,000 |
| **Traveler Information** | | | | | | | |
| | | No projects in this corridor | | | | | |
| **Transportation Demand Management** | | | | | | | |
| | Rideshare Park&Ride | Negotiate shared parking agreements with public and private parking lots, provide signage and, if needed, coordinate registration. | US 26 | Quality of life | 1-5 years | $0 | $4,800 |
| | Rideshare Park&Ride | (same as above) | US 26 | Quality of life | 6-10 years | $0 | $4,800 |

| Proj No. | Project Name | Description | Facility | Goal/Obj | Time-frame | Cost | |
|---|---|---|---|---|---|---|---|
| | | | | | | Capital | Annual O&M |
| | Transportation Management Associations (TMA) | Support public-private partnerships in regional or town centers that assist employees and/or residents increase use of travel options. Westside Transportation Alliance (WTA) provides employer services in Washington County, including this corridor. | Forest Grove and other parts of Washington County | Quality of life | through 10 years | $0 | (annual cost recorded under corridor 19) |
| | Parking management | Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions. | Forest Grove Town Center | Quality of life | 6-10 years | $0 | $100,000 |
| | Car-share operations | Support 3 or more carsharing vehicles for large student populations. | Forest Grove | Quality of life | 1-5 years | $0 | $200,000 |